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Prenatal Alcohol and Other Drug Exposures in Child Welfare Study: Final Report

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Submitted to

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Preface Note on Equity and Reducing Disproportionality in Child Welfare

Substance use and how it affects entry of children and families into the child welfare system is an imperative social, cultural, and public health issue that is intrinsically linked to the past and present impact of racial/ethnic inequities. This report describes a study that was not originally designed to address inequities and disproportionality; however, the effect of child welfare's response to prenatal substance exposure on families of color is important context for the study's findings and implications.

President Biden's Executive Order "Advancing Racial Equity and Support for Underserved Communities Through the Federal Government"—issued on his first day in office—set the tone for his Administration's commitment to advancing equity for all, including people of color and others who have been historically underserved, marginalized, and adversely affected by poverty and inequality. Children's Bureau Associate Commissioner Aysha E. Schomburg noted in an April 2021 webinar that "the Children's Bureau has made it a top priority to promote racial equity, and we are committed to using our full expertise and resources to address disproportionality in the child welfare system and support jurisdictions in their work to do so."

Racial and socioeconomic disparities exist within the child welfare system.[1] In particular, Black and American Indian/Alaska Native families are disproportionately represented. Black families are overrepresented in reports of suspected maltreatment and are investigated by child protective services at higher rates than other families. Black and American Indian/Alaska Native children are at greater risk of having substantiated cases of maltreatment and being placed in out-of-home care than other children. Once in out-of-home care, these children and families are less likely to receive services, and they experience higher rates of placement disruptions, longer times to permanency, and more frequent reentry into care than do White children.

Poverty, which also is disproportionately common in communities of color, carries further implications for families' involvement in the child welfare system. Poverty is often mistaken for neglect, which results in increased reports of child maltreatment and out-of-home placements. Low-income families are more likely to be investigated for child maltreatment and to have substantiated findings of child abuse and neglect than families with higher incomes—despite a lack of evidence that maltreatment itself is more prevalent.

Children affected by parental substance use—including children born prenatally exposed to substances—have historically been removed from their homes regardless of families' protective factors. A disproportionate number of Black and low-income women are reported to child welfare because of substance use during pregnancy. Children exposed to substances associated with Black and low-income populations, such as crack cocaine, have higher rates of placement in out-of-home care than do children associated with other substances. These patterns occur despite evidence that even small amounts of alcohol—an exposure initially studied in a large sample of children of mostly White, middle-class women—can cause significant damage to a child's brain. Often children may have been prenatally exposed to alcohol because parents were unaware of risks but are otherwise very capable parents. Current identification processes for prenatal exposures largely involve in-hospital toxicology

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[1] Child Welfare Information Gateway. (2021). *Child welfare practice to address racial disproportionality and disparity*. U.S. Department of Health and Human Services, Administration for Children and Families, Children's Bureau. https://www.childwelfare.gov/pubPDFs/racial_disproportionality.pdf

testing conducted at birth, which identifies presence of drugs (but not alcohol) and does not speak to parenting capability.

Keeping families together is a growing and critical federal priority. Legislation such as the Family First Prevention Services Act aims to maintain families of origin by providing appropriate supports and services. Services tailored to address the needs of families are a crucial component to help children safely remain with their parents. When a child is identified as affected by prenatal exposures, child welfare agencies can provide in-home services that help parents care for and bond with their children. Substance use treatment services centered on the relationship between the parent and child can help families remain intact. Specialized parenting education and training can help parents effectively address child behavioral challenges, such as those that may present in children prenatally exposed to alcohol. Community-based supports, and a family's own strengths and resources, can protect children and avoid the trauma of removal from their home.

Unfortunately, although identifying children with prenatal substance exposure can connect families to services designed to keep them intact, some states have policies that stipulate that a prenatally exposed child is sufficient evidence to substantiate child maltreatment and remove the child from the home. Black and low-income families are more likely to get caught up in state policies to remove children after prenatal testing reveals substance exposure, regardless of capacity to parent.

As our country grapples with growing awareness of racial, ethnic, and social inequities, federal agencies must continue to study, describe, and improve their understanding of families with substance use issues in the child welfare system as well as the prenatal and postnatal consequences of substance use. This report describes the methods and findings from a descriptive study of policies, knowledge, practices, and needs concerning children with prenatal exposure to alcohol and other drugs in child welfare. The study helps to illuminate where there are risks and gaps in child welfare systems' efforts to support parents and serve children who may face future developmental challenges. The study did not collect data to examine disproportionality with respect to child referrals for prenatal substance exposures and the rippling effects on existing disparities in the child welfare system. Similarly, the study's scope did not include asking critical stakeholders about how racial and other biases may affect decision making related to prenatal exposures and parental substance use; this omission should be addressed in all future work on this topic.

Our knowledge about the risk of prenatal exposure and the propensity to remove exposed children—especially from Black and low-income families—obliges our child welfare systems to take a deliberate and evidence-informed approach. We believe that child welfare agencies can approach prenatal substance exposures with cultural humility and an equitable lens that engages minority and historically disadvantaged stakeholders, families, and allied professionals in developing trainings, structures, and policies for screening, evaluation, and service provision. The project team is working with an advisory group of diverse stakeholders to guide the development of resources based on the study findings. Advisory members include professionals and individuals from vulnerable and underrepresented groups with lived experience. The goal of this focused collaboration is to ensure fewer children are removed from their homes due to prenatal substance exposure, including prenatal alcohol exposures, and to support better outcomes for children and families.

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Children's Bureau, Administration for Children and Families

The Prenatal Alcohol and Other Drug Exposures in Child Welfare Project Team
James Bell Associates and ICF

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Executive Summary

Introduction and Background

Research shows that prenatal substance exposure (PSE)— and, in particular, prenatal alcohol exposure (PAE)—can result in long-term neurodevelopmental impairments in children that continue into adulthood. These impairments can also present significant challenges for parents and caregivers. CW agencies and staff have the responsibility and the means to help identify PSE among children in care and get needed services to families, but their practices to do so—especially for older children and for alcohol exposures—have been largely unknown. This report seeks to address this missing information. Throughout this document, PSE includes PAE unless otherwise specified.

In 2016, the Administration for Children and Families (ACF) contracted with James Bell Associates (JBA) and its partner ICF (hereafter referred to as the team) to help conduct the Prenatal Alcohol and Other Drug Exposures in Child Welfare (PAODE-CW) study; the Centers for Disease Control and Prevention (CDC) was also a partner agency for the study. The primary objective of this study was to examine the current state of CW practice regarding identification of and service referrals for children with PSE, with a strong focus on exposures to alcohol. This study focused on how CW agencies can obtain important information about PSE when children come into contact with the CW system, and how they use this information to provide services to support affected children and strengthen their relationships with parents and/or caregivers.

The study and its implications should not be construed as addressing the issue of surveillance of women who use substances during pregnancy. This research acknowledges that oversurveillance—and other structural/systemic racism and bias in response to parental substance use and PSE seen across legal, medical, social service, and CW systems—may exacerbate existing racial and socioeconomic disparities in the CW system.

The study sought to answer two overarching research questions:

1. What are the current knowledge, policies, and practices in place in CW agencies and related organizations[2] for the identification of children with PSE and/or diagnosed with a resulting condition (such as a Fetal Alcohol Spectrum Disorder [FASD])?
2. What type of training and dissemination activities are used currently, and what consensus is there, if any, among CW professionals in the studied settings, regarding practice changes that are likely to improve identification and documentation of children with PSE and resulting conditions in the CW system?

The study examined federal and state policies guiding CW PSE identification and care; CW staff awareness and knowledge of PSE and practices to identify affected children and families; how PSE information is shared and documented; and how CW agencies interact with caregivers and allied service providers in supporting children and families. The population of interest was children already involved in the CW system. The study also focused on related facilitators and barriers, identified potentially promising practices, and explored perceptions of gaps and needs to enhance practice.

The team conducted a cross-sectional mixed-methods descriptive study in 22 local CW agency sites across 5 geographically dispersed states. The study included the following data sources:

- State level (5 states): Interviews with CW directors and review of state policy documents pertaining to PSE
- Agency site level (22 agency sites): Interviews with CW staff and directors (*N* = 171), survey of CW staff (*N* = 271), and review of local agency-level policy documents (where available)
- In-depth level (2 in-depth states): Interviews with local agency data staff (*N* = 13), survey of allied PSE-relevant service providers (*N* = 21), focus groups or interviews with caregivers (*N* = 48), and review of local agency case files (*N* = 212)[3]

This study has limitations. Its findings are descriptive and not generalizable to other CW agencies. Data availability (e.g., certain policy documents) was somewhat limited, and select data collection occurred only in two states. Data collection took place over 2 years, in part because the COVID-19 pandemic delayed final data collection. Finally, this study collected little data about how CW response to PSE once these children and their families became known to the system intersects with racial and socioeconomic equity issues, which should be a vital focus for future research.

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[2] Related organizations could include providers and programs that deliver services to children and families served by the CW system, such as medical providers, mental health programs, public health programs, and family and caregiver organizations.

[3] Case record reviews were ultimately completed in only one state/four sites because of COVID-19 pandemic restrictions during planned data collection in the other in-depth state/four sites.

Key Findings

Throughout the report, findings are presented that draw from aggregate descriptive analyses of data sources discussed above. Where relevant, the full report also presents findings by subgroup (e.g., state, role, contextual factor). For this Executive Summary, some key findings are below.

Laws and Policies

Drawing on our review of state laws, statewide CW agency policies, procedures, and forms, and interviews with CW staff and directors, we identified state activities in response to CAPTA/CARA legislation[4] and explored how state legislation and CW agency policies related to PSE were interpreted and applied by CW staff. Findings include the following:

- **States reported policy revisions and enhanced collaborative partnerships in response to CAPTA/CARA legislation.** Agency directors across the five states described revising policies and activities to avoid automatic family entry into CW when they are notified of infants with PSE, primarily through "alternative response" processes. States also made efforts to coordinate activities among CW, service providers, and other relevant agencies to offer service referrals to families of newborns affected by PSE, in keeping with plans of safe care required by CARA legislation.
- **Defining prenatal exposure as child maltreatment may be a barrier to providing supportive services to families.** Services and support for families may be more difficult to prioritize when prenatal exposure is defined as child maltreatment. Interviews suggest that staff may focus on collecting information oriented towards allegations that align with their state's definition of child maltreatment. New or revised policies directing alternative responses when CW is notified of children with PSE were strategies used by study states to divert families from Child Protective Services (CPS) investigations and help them to engage in needed treatment.

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[4] The Child Abuse Prevention and Treatment Act (CAPTA), originally enacted on January 31, 1974 (P.L. 93-247), is federal legislation that provides funding and guidance to state public CW systems. This act has been amended several times and was last reauthorized on December 20, 2010, by the CAPTA Reauthorization Act of 2010 (P.L. 111-320). It was amended in 2015, 2016, and 2018, and most recently, certain provisions of the act were amended on January 7, 2019, by the Victims of Child Abuse Act Reauthorization Act of 2018 (P.L. 115-424). The Comprehensive Addiction and Recovery Act (CARA) of 2016 amended CAPTA in sections 106(b)(2)(B)(ii) and (iii) subsections (b)(2)(B)(ii), requiring states to have "policies and procedures (including appropriate referrals to child protection service systems and for other appropriate services) to address the needs of infants born with and identified as being affected by substance abuse or withdrawal symptoms resulting from prenatal drug exposure, or a Fetal Alcohol Spectrum Disorder, including a requirement that health care providers involved in the delivery or care of such infants notify the child protective services system of the occurrence of such condition of such infants…such notification shall not be construed to I.- establish a definition under Federal law of what constitutes child abuse or neglect; or II. - require prosecution for any illegal action."

- **State CW agency policies guiding identification of children with PSE focused on infants.** Laws and policies mainly addressed very young children—typically newborns—reported by hospitals. No states in the study required CW staff to collect information on a mother's substance use while pregnant.
- **Policies regarding needs assessments and ongoing support were limited.** The study found no policies to determine if older children had undetected exposures, such as to alcohol. However, all states in our study had general engagement practices to promote family participation throughout all cases, and all assessed child needs throughout the case, reflecting possible touchpoints for PSE identification, assessment, and service provision.

Staff Training and Knowledge

We analyzed CW staff interviews and surveys to examine reports of PSE training and perceptions of knowledge related to PSE and PAE. Findings shed light on how CW staff in diverse roles and locations learn about PSE, the scope of their PSE knowledge and understanding, and their perceived training needs. These findings include the following:

- **Most CW staff reported participating in training related to PSE, typically through the state CW agency.** Eighty-four percent of CW staff reported having participated in training on PSE topics, most often accessed through the state CW agency (60 percent). One-fifth (21 percent) reported no or minimal training; however, interviewed staff most frequently discussed training related to exposure to substances other than alcohol and training that was focused on plans of safe care.
- **Most CW staff stated a high level of awareness about the effects of PSE, yet many displayed inaccurate knowledge about the effects of PAE.** When asked about their level of knowledge, most staff rated their knowledge of PSE as intermediate—a response consistent across all states and role categories. When this question focused on their PAE knowledge level, just over half of respondents rated their knowledge as intermediate. The team also found that many staff seemed to underestimate the potential long-term effects of PAE relative to those of other substances.
- **CW staff raised targeted needs and requested more training.** CW staff reported wanting additional training in several key areas, including indicators of PSE (48 percent), long-term effects of PSE (33 percent), how to identify children who may be affected (23 percent), and appropriate services or interventions for children with PSE (23 percent).

Identifying Children With PSE

In examining interviews and surveys with CW staff, the team explored the extent and the ways in which CW staff identify children in their caseload with PSE, the factors associated with whether and how these children are identified, and CW staff's perceptions of gaps and opportunities to more effectively identify children in care affected by PSE. Findings include the following:

- **CW staff estimated that fewer children were prenatally exposed to alcohol than other types of substances.** Survey respondents estimated that roughly half of children in contact with their agency were exposed to drugs other than alcohol and that just one-third of children in contact with their agency were exposed to alcohol. This seems to discount research indicating that most drug users consume alcohol, so children who are exposed to any substance also are at high risk of alcohol exposure. Twenty-two percent of interview respondents mentioned barriers to identifying children with PAE, which may contribute to possible misestimation of alcohol effects.
- **CW staff reported inconsistent assessment for PSE, which may contribute to missed identification of children with FASDs or other effects.** Forty percent of CW staff indicated that they assess for PSE with “some” children in their agency. Slightly more staff (46 percent) reported that they assess for PSE with “most” children in their agency, and 12 percent of staff did not routinely assess PSE. This breakdown varied by staff role, with staff working in ongoing case management more likely to report assessing “most” children for PSE compared with staff in other roles, such as investigation.
- **CW staff reported on a variety of methods they use to gather information on PSE.** The most common were hospital reports of either a positive toxicology screen for newborns or a mother’s positive drug test at the time of giving birth (93 percent). CW staff survey respondents perceived that the top three most accurate sources of PSE information were birth records (81 percent), other medical records (64 percent), and developmental assessments (42 percent).
- **Interviews with CW staff highlight a need for CW agencies to improve practices for identifying PSE.** Suggestions from CW staff commonly included better training for CW staff on effects and expression of PSE across development; enhanced information sharing between medical providers and CW agencies; improved training on how to interview parents; modification of existing tools or the creation of new ones to screen for PSE; and more education about PSE for the community and families.

Service Referrals

The study team explored information about service referrals and service provision for children who are already involved in the CW system and may be at risk for or showing signs of PSE. We conducted interviews and surveys with CW staff members, primarily analyzing data from those who had a role in ongoing case management. The team also examined these topics from the perspective of surveyed allied services providers (e.g., medical providers, mental health and substance use treatment program partners, developmental assessment organizations) from two states. Findings include the following:

- **When PSE is a concern, most CW staff reported that they would refer to developmental and early intervention services along with medical providers.** When CW staff know or suspect effects of substance exposure, 70 percent of interviewees reported making referrals to their state or local developmental assessment agency that also delivers early intervention services, and 45 percent recommended medical appointments. Nearly a quarter of all interviewed staff reported that they were unaware of local services specifically targeted for children with PSE.

- **Many CW staff indicated their state agency guides staff to share information with service providers, but the type and scope of information specific to PSE exchanged across systems varied.** Although most interviewed staff reported on formal policies or guidance related to sharing information with service providers, only 30 percent of CW staff said that most information about PSE is shared with service providers. From service provider surveys collected in two states, only one-third reported communicating results of children's services back to the CW agency.
- **CW staff mentioned areas of need and described opportunities to enhance practice regarding case planning and services for children and families affected by PSE.** Both staff and providers raised the need for CW staff to be better trained to sensitively and culturally appropriately inquire about PSE with families, and for tools to help match child and family needs to appropriate referrals and effective interventions.

Documentation

The study sought to understand more about where and how PSE and related factors are documented, drawing from detailed reviews of 212 CW case records in one state. The team oversampled case records to include children with known indicators suggestive of PSE and PAE; it found these findings to be consistent with the results of interviews with local area directors, frontline staff, and ongoing case management staff from across five states, and interviews with local area data staff from two states. Findings include the following:

- **PSE information was found throughout intake, investigation, and ongoing documentation of reviewed files but was not consistently located in a single report or location.** Across all reviewed intake or investigation documentation, reports of PSE were in 48 percent of all reviewed cases; 55 percent of reviewed ongoing documentation contained reports of PSE.
- **Case record reviews and staff reports indicate that PSE information was typically included in case files' narratives**. Nearly two-thirds (64 percent) of all PSE information was found in narrative report sections of case records, making systematic tracking and reporting difficult. Aligning with reviews of case records, CW staff did not report one consistent location where information about PSE could be found but cited varied reports that were primarily narrative in nature.
- **Across the case record, reports of PSE most often relied on drug tests to assess exposure.** Aligned with staff reports of PSE identification, case record reviews found that reports of PSE most frequently related on maternal drug test at birth or during pregnancy or positive toxicology report of an infant to assess exposure. Such methods almost certainly result in an under-reporting of alcohol exposure, as this type of exposure does not appear on toxicology screens.

Caregiver Services and Supports

Through analysis of focus groups and interviews with foster and adoptive parents in two states, along with interviews with CW staff in all five states, the team learned how the CW system trains, informs, and supports caregivers about PSE and related concerns. Findings include the following:

- **Among the caregivers who had cared for a child with PSE, few reported that they were fully prepared to do so.** Nearly 9 in 10 caregivers had cared for at least 1 child with PSE, yet one-third reported that they were not at all prepared to care for a child with PSE, despite some training related to PSE or FASDs; only 18 percent reported being fully prepared.
- **Formal or in-depth training on PSE, including FASDs, was limited.** Forty-three percent of caregivers reported receiving training on PSE during their initial orientation, but this was described as brief and limited. All in-depth PSE training was reported to be offered during ongoing trainings that caregivers could participate in if interested; 84 percent of caregivers reporting wanting additional training on PSE and FASDs.
- **Many caregivers reported receiving limited information related to a child's PSE status from CW staff.** One-fourth of staff and one-third of caregivers discussed legal limitations to how much and which types of PSE information could be shared with caregivers. When shared, PSE information was reported to be most prevalent for newborns. Many respondents discussed sharing PSE-related information back to CW learned from observations or medical providers, and a few discussed seeking information related to PSE directly from biological parents.
- **Caregivers and CW staff were largely unaware of PSE-related supports for caregivers.** Two-thirds of CW staff members were unaware of PSE-related training opportunities for caregivers, and only one interviewed staff member was able to name any local support services specifically targeted to those caring for children with PSE. Caregivers were also largely uninformed of available services for themselves and frequently cited challenges in getting needed services for children in their care.

Conclusions

This multisite, mixed-methods descriptive study examined gaps in understanding CW policies and practices related to PSE. Set in geographic and demographically diverse CW systems in five states, the study addressed current CW policies, practices, and knowledge among staff and caregivers. The study had a particular interest in a potentially large population of older children in CW whose exposure to substances, particularly alcohol, may be unrecognized at birth. By identifying potential promising practices—and gaps in policies and practice— this study can, the team hopes, spur actions to improve identification of and service provision for children and families.

Study results point to five areas of opportunity to improve CW policies and practices—and to strengthen future research. Each potential area of improvement also includes suggested action steps; illustrative examples are included below and the full range of possible actions are included in the report.

1. **CW systems have a timely opportunity to preserve families and prevent maltreatment by providing tailored, equitable services to children with PSE and their families—including older children.** Federal legislation has contributed to state efforts to prevent entry into the CW system by keeping children safely at home. Yet supports and service referrals may not be tailored to the unique challenges of families parenting children exposed to substances, particularly alcohol. Significant service needs may go unaddressed if a child's exposure to alcohol is not recognized, or if agency staff are unaware of its potential implications. Possible action steps are as follows:
    - States can leverage federal funding to support family preservation and more effectively deliver prevention services for children and families affected by PSE.
    - Future research can seek to understand the perspectives and needs of birth parents of children with PSE.
2. **CW staff need guidance and training to identify children with PSE, particularly those who had been exposed to and affected by alcohol.** This study found that CW policy assumes that hospitals will accurately, fairly, and comprehensively identify children exposed to substances; this assumption can result in racial and socioeconomic disparities in reporting, an under-reporting of alcohol exposure, and misperceptions of the prevalence of substance exposure among children in care. Current data collection and documentation practices for children in care, including inconsistent collection of information about maternal substance use during pregnancy, exacerbate this need for additional guidance and training around PSE identification. Possible action steps are as follows:
    - CW agencies can train staff to understand why PSE identification is an essential part of their roles and responsibilities and to help staff recognize moments when they can sensitively inquire about mothers' substance use during pregnancy.
    - State and local CW policymakers can develop policies and procedures to help staff systematically screen all children in care.
3. **A focus on drug exposures may inadvertently de-emphasize the importance of identifying and addressing needs of children prenatally exposed to alcohol.** Staff reported less awareness, knowledge, and training on alcohol exposure compared with that of other substance exposures, and alcohol exposure was largely absent in agency policies related to PSE identification and services. Though not studied by this research, bias against drugs more commonly used in communities of color (e.g., cocaine) may lead staff to disregard alcohol exposures and may contribute to systemic inequities in CW response to PSE in families of color (e.g., removals affected by attitudes towards specific substances). Action steps could include the following:

   - CW agencies can train staff on the long-term effects of specific types of substance exposure, discuss unconscious biases toward the use of various substances, and address inequitable responses to families of color and those affected by poverty.
   - Training and agency policies can emphasize the lifelong effects of PAE, services that can help address challenges, and indicators that a child may be affected.
   - Researchers can design studies to better understand CW agency policies and practices in response to different types of substances of exposure and how those responses may contribute to inequitable treatment of communities of color.

4. **Improving identification of PSE by CW agencies could reduce challenges for caregivers parenting children, including those whose alcohol exposures had not been recognized.** This study found that CW agencies may not provide adequate information and resources to help caregivers understand and address the needs of children with PSE. These gaps in training may leave caregivers unprepared to parent these children and their unique challenges. This lack of support may be a particular barrier for relative caregivers, which may disproportionally affect caregivers of color. Potential action steps include the following:
   - CW agencies can make available to caregivers in-depth training that emphasizes the neurocognitive effects of PSE behind child behaviors and effective parenting strategies to support family functioning. CW agencies could also offer referrals to child-focused interventions.
   - CW can provide to relative and foster caregivers life-changing concrete supports such as respite care, subsidies, and connections to peer and advocacy groups.
5. **Stronger documentation and information sharing is vital to identify children with PSE and support their well-being.** Policies and procedures suggest that thorough assessments of child needs did not occur until the child was placed out of home. Without information on a child's known or potential PSE status, service providers may lack important context for identifying the child's needs and possibly mitigating the need for removal. Seeking and sharing information with service providers throughout the CW process could promote better identification of children affected by PSE, particularly those with alcohol exposure. Such documentation also allows for tracking the number of children with PSE at federal, state, and local levels.
   - CW agencies can review their case processes to identify steps that can promote PSE identification and documentation of PSE indicators and inform service referrals.
   - To facilitate improved care of children with PSE, CW agencies can leverage existing partnerships to create consistent documentation and information sharing.
   - National datasets, such as the National Child Abuse and Neglect Data System (NCANDS), can be updated to require expanded PSE information.

Identification and care of children affected by PSE and their families are shared public health responsibilities. Yet, CW is recognized as a critical system in developing strategies to screen, refer, and deliver service plans to reduce the negative effect that PSE may have on children and to support families. Based on the results of this study, the CW system—federal, state/agency, and individual CW professionals—may benefit from a more comprehensive array of activities and resources to better recognize children affected by PSE and to more fully provide services to promote their safety, permanency, and well-being. Examples could include the following:

- **Federal Level.** At a federal level, there could be a stronger policy focus on preserving families of children with PSE, particularly children exposed to alcohol, as an extension of existing federal prevention efforts. The government could develop resources to help state agencies improve staff training and improve services for children in their care. To improve identification during the case process and monitor service needs, funds could be allocated to develop resources to help state agencies use their continuous quality improvement processes to examine relevant touchpoints. In partnership with state and local governments, the federal government could support capacity building of agencies delivering medical treatment, substance abuse treatment, and developmental and mental health services, to encourage greater collaboration with CW. The federal government could fund and facilitate studies of the PSE-related training and supports implemented by CW agencies. Finally, federally sponsored CW data systems could be updated to include information on children's PSE history.
- **State or Agency Level**. States can promote prevention-oriented approaches and strongly (re)consider the potentially negative impacts of automatic response to PSE as a type of child maltreatment. CW leadership could revise training requirements for caseworkers and caregivers to embed and ensure PSE-related knowledge and skill development. Agencies could consider allocating resources for supervisors to help coach CW workers to reinforce new practices for identification, service matching, and supporting birth parents and caregivers. Agencies can build and strengthen partnerships with state agencies and community child and family service providers to improve identification of and services for children at risk of PSE who are already in care. Efforts could also include strengthening or developing culturally competent services for children and families affected by PSE. Agency data teams can work toward incorporating easily found information elements about PSE risk and indicators (especially alcohol) into agency data systems. Including specific substance exposure data elements in state data systems would be crucial to reliable and important information sharing among staff and outside partners.
- **Individual CW Professional Level.** Individuals working within CW can seek to learn more about the long-term effects of PSE, particularly alcohol, to support families of children with PSE. CW staff could research local programs and organizations that provide available and appropriate services to children and families experiencing the effects of PSE. CW professionals could be encouraged to obtain PSE history for all children on their caseloads. Finally, CW professionals could reflect on potential personal biases and how such preconceptions may influence how they identify and care of children with PSE.

Glossary of Selected Terms[5]

CAPTA: 2018 (P.L. 115-424). The key federal legislation addressing prevention in child abuse and neglect is the Child Abuse Prevention and Treatment Act (CAPTA), which was originally enacted in 1974. It has been amended several times in the last 37 years and was most recently amended and reauthorized on December 10, 2010, by the CAPTA Reauthorization Act of 2010 (P.L. 111-320).

CARA: 2016 (P.L. 114-198). The Comprehensive Addiction and Recovery Act of 2016 (CARA) adds various requirements to CAPTA. They include addressing the health and substance use disorder treatment needs of the infant and family by developing an infant Plan of Safe Care for all newborns affected by all substance abuse (not just illegal substance abuse, as was the original requirement). CARA also requires states to report in the NCANDS the number of infants identified as being affected by substance abuse or withdrawal symptoms resulting from PSE or a FASD; the number of infants with Plans of Safe Care; and the number of infants for whom service referrals were made, including services for the parent or caregiver.

FASDs: *Fetal alcohol spectrum disorders* is an umbrella term that encompasses several diagnostic categories (not a clinical diagnosis itself) related to the adverse effects resulting from in utero exposure to alcohol, including fetal alcohol syndrome (FAS), partial fetal alcohol syndrome (pFAS), alcohol-related neurodevelopmental disorder (ARND), alcohol-related birth defects (ARBD), and finally, neurobehavioral disorder associated with prenatal alcohol exposure (ND-PAE), a mental health diagnosis added to the *American Psychiatric Association Diagnostic and Statistical Manual* (5th edition) in 2013.

PAE: Prenatal alcohol exposure occurs when a woman drinks any amount of alcohol while pregnant.

PSE: Prenatal substance exposure occurs when a woman uses drugs or drinks alcohol during pregnancy. Drugs may be prescription medications or illegal substances and can include nicotine, alcohol, marijuana, opioids, cocaine, and methamphetamine, among others. Although PSE could include the commonly used nicotine as well as other less common toxic substances, nicotine is not addressed in this report.

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[5] See the full glossary in appendix A for additional terms.

Introduction

Prenatal exposures to alcohol and other drugs, including prescription drugs, can result in medical and long-term neurocognitive effects (Mattson et al., 2019; Oei, 2018; Preece & Riley, 2011). Although prenatal substance exposure (PSE)[6] may be identified at birth, some exposures— particularly to alcohol—will not be identified until later (Coles, 2011). Yet recognizing children who are substance exposed is important to avoid negative long-term outcomes such as poor academic performance, mental health challenges, and juvenile justice involvement (Streissguth et al., 2004). When hospitals notify the child welfare (CW) system of a child's known or suspected exposure, this information can help determine the child's care (U.S. Department of Health and Human Services, 2021). However, research suggests there may be older children in the care of CW, such as those affected by prenatal alcohol exposure (PAE), who are not recognized (Chasnoff et al., 2015; Coles, 2011). The prevalence of children with PAE involved with CW has been estimated to range from 10 to 28.5 percent (Chasnoff et al., 2015; Smith et al., 2007), as compared with 2 to 8 percent in the general population (May et al., 2014; Umer et al., 2020). Timely identification of and service delivery to children with PSE can lead to better quality of child health, improved social and educational outcomes for children, improved family functioning, reduced child maltreatment, and fewer adverse life events such as injury, school failure, and chronic disease (Bertrand, 2009; Jirikowic et al., 2010; Olson et al., 2009a; Petrenko, 2015; Streissguth et al., 2004). Given that the CW system could be serving unidentified children with PSE who may need services and interventions to address the long-term effects of exposure, it is critical to understand CW agency policies and practices that address the needs of these children. More broadly, it is necessary to examine the knowledge, policies, current practices, and needs of CW agencies and professionals pertaining to identification, referral, and care of children with prenatal exposure to alcohol and other drugs (Richards et al., 2020).

In recognition of the limited information on typical CW agency policies and practices related to PSEs, the Administration for Children and Families (ACF) contracted with James Bell Associates (JBA) and their partner ICF (hereafter referred to as the team) to assist them in conducting the Prenatal Alcohol and Other Drug Exposures in Child Welfare (PAODE-CW) study; the Centers for Disease Control and Prevention (CDC) was also a partner agency. The objective was to examine the current state of CW practice regarding identification of and service referrals for children with PSE, with a strong focus on exposures to alcohol.

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[6] Definitions of terms and acronyms are provided in the glossary in appendix A.

The study explored two overarching questions:

1. What are the current knowledge, policies, and practices in place in CW agencies and related organizations[7] for the identification of children with prenatal substance exposure and/or diagnosed with a resulting condition (such as a Fetal Alcohol Spectrum Disorder [FASD])?
2. What type of training and dissemination activities are used currently, and what consensus is there, if any, among CW professionals in the studied settings, regarding practice changes that are likely to improve identification and documentation of children with PSEs and resulting conditions in the CW system?

This research attaches importance to the effects of racial and socioeconomic disparities that exist within the CW system, although they are not a focal point of this study (Harp, 2020). This study recognizes that a disproportionate number of Black and low-income women may be reported to CW because of substance use during pregnancy (Chasnoff, 1990; Chasnoff et al., 2018; Rebbe et al., 2019). It likewise acknowledges that those children exposed to substances that may be more commonly used among minority communities—but that are not more harmful to the child (e.g., cocaine, amphetamines)—may have higher rates of removal than those children exposed to substances more prevalent in White communities (e.g., alcohol, opioids; Rebbe et al., 2019; Prindle et al., 2018). These factors must be considered in future steps to address PSE if the CW field is to avoid oversurveillance, disproportionate involvement, and disparate outcomes for children and families of color.

To address the two research questions, the project gathered descriptive data from diverse state and local CW agencies in five states.[8] Data collection focused on exploring federal and state policies guiding CW PSE identification and care; awareness and knowledge of PSE among CW staff members and their practices to identify affected children and families; how PSE information is shared and documented; and how CW agencies interact with caregivers and allied service providers in supporting children and families. The study explored related facilitators and barriers, identified potentially promising practices, and gathered perceived gaps and needs to enhance practice. While all types of substances are considered, more attention was paid to the role of alcohol given the gravity of its long-term effects.

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[7] Related organizations could include providers and programs that deliver services for children and families served by the CW system, such as medical providers, mental health programs, public health programs, and family and caregiver organizations.

[8] States, sites, and participants were granted confidentiality to foster open discussion about practices. Descriptive information about the states and sites can be found in exhibit 4, and participants in exhibits 6 through 10.

"Of all the substances of abuse (including cocaine, heroin, and marijuana), alcohol produces by far the most serious neurobehavioral effects in the fetus."—Institute of Medicine, 1996, p. 36

Although only five states were studied, the team hopes that the results shed light on how CW agencies across the country approach and address PSE and that they will inform future efforts.

Orientation to the Report

The report begins with an overview of key background literature and study design and methods.[9] This portion is followed by chapters that present findings grouped by targeted areas from the study's conceptual framework (see chapter 2, exhibit 1). Each chapter begins with the study questions that are addressed in the chapter, a summary of key findings, and a brief overview of related research literature. Key findings appear next, along with quotations from respondents to illustrate findings. Detailed data tables supporting the findings are presented in appendices. Where appropriate, the report also discusses federal policy and regulations as they relate to the topic. The report concludes with a discussion of implications and suggested next steps.

- Chapter 1 gives a brief overview of key literature related to the effects of PSE and opportunities to support children with PSE who have been brought to the attention of CW.
- Chapter 2 shows the study conceptual framework and describes data collection methods and analyses.
- Chapter 3 focuses on the policies that were identified among the participating five states, and it comments on what may contribute to CW agency practice in identifying, assessing, and referring children potentially affected by PSE.
- Chapter 4 explores what staff know about PSE, including PAE, and how they know it, as well as perceived training needs and recommended enhancements from CW staff.
- Chapter 5 breaks down how, and the extent to which, CW staff across the five states identify or assess PSE, including history of maternal substance use during pregnancy.

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[9] Note that for terms commonly referred to with acronyms throughout the report, the full term along with the acronym is given at first mention in each chapter. These terms are also defined in the glossary in appendix A.

- Chapter 6 discusses the extent of, and in what ways, information about PSE is used to inform service needs and referrals in the five states; what services are available; and the extent to which PSE information is shared among providers and agencies during ongoing case processes.
- Chapter 7 highlights where and how consistently information about PSE is documented in the examined CW systems and the extent to which this information is useful for reporting and decision making.
- Chapter 8 presents the extent to which, and in what ways, CW systems train, inform, and support caregivers about PSE-related matters.
- Chapter 9 discusses cross-cutting themes and findings and presents implications for further study.

Additional methodological details and data tables were presented in a set of technical appendices submitted to the Children's Bureau.[10]

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[10] The *Technical Appendices* and *Topical Appendices* were prepared for internal project documentation but may be available by request from the Children's Bureau.

1. Understanding Prenatal Substance Exposures and the Need for Study in Child Welfare Systems

This chapter gives a brief overview of the literature related to the effects of prenatal substance exposures (PSEs), with a focus on prenatal alcohol exposures (PAEs) and the scope of the issue in child welfare (CW). The chapter draws connections from PSE literature to shed light on issues critically important to the CW field, including underestimated and missed identification of children with PSE including PAE, racial and socioeconomic inequities, and the importance of helping families and children with PSE receive appropriate services and prevent undue CW involvement.[11]

Challenges of Identification and Care

Prenatal exposure to substances may have short- and long-term effects on children. Withdrawal symptoms may occur when the newborn's exposure to substances used by the mother during pregnancy is discontinued. Withdrawal can cause dysregulation of the autonomic and central nervous system, with effects that are evident at birth or soon after and that may

Summary of Background

- Research shows that PSE—and PAE in particular—can result in long-term neurodevelopmental impairments in emotion regulation, behavior, and cognitive functioning.
- Younger children may appear to be developing typically yet have underlying impairments resulting from PAE (including Fetal Alcohol Spectrum Disorders [FASDs]) that manifest as they grow older (e.g., behaviors such as impulsivity, hyperactivity, and distractibility); this progression can be challenging to parents.
- Currently, identification of PSE largely entails toxicology screening performed by hospitals at birth, which may contribute to removals and disproportionality in CW.
- PAE tends to go underrecognized in CW populations because of the reliance on hospital screenings at birth, which do not commonly identify alcohol exposure.
- CW agencies and staff have the responsibility to help identify PSE and get needed services to families, but their practices have been largely unknown to date.

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[11] These issues are discussed in depth in chapter 9, where attention is given to how study findings intersect.

persist for months (Kocherlakota, 2014). The growing prevalence of opioid use may have contributed to the increased numbers of newborns affected by neonatal abstinence syndrome (NAS), a condition that can cause such symptoms as tremors, irritability, and a high-pitched, inconsolable crying (Atkins & Durrance, 2020; Kocherlakota, 2014). Children who experience NAS may also be at higher risk for seizures, brain bleeding, and even stroke (Jansson & Patrick, 2019; Preece & Riley, 2011). Although the short-term effects of PSE to drugs such as opioids are apparent, less evidence exists on the long-term effects on children (Lambert & Bauer, 2012; Messinger et al., 2004; The National Academies of Sciences, Engineering, and Medicine, 2017).

> *"Of all the substances of abuse (including cocaine, heroin, and marijuana), alcohol produces by far the most serious neurobehavioral effects in the fetus."—Institute of Medicine, 1996, p. 36*

PAE produces the most serious enduring consequences. PAE can lead to a range of lifelong effects, including diagnosis of an FASD[12] (Turchi & Smith, 2018). These adverse effects can include neurobehavioral impairments in emotions, behavior, and cognitive functioning (National Center on Birth Defects and Developmental Disabilities, 2021). The cell death and the structural and physiological damage that prenatal exposure to alcohol can cause to the brain impair growth and development; impair gross motor, fine motor, and language and communication skills; cause deficits in attention, memory, and impulse control; negatively affect social skills and relationships; and hinder adaptive skills (Hagan et al., 2016; Jirikowic et al., 2020; Mattson et al., 2011).

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[12] *Fetal Alcohol Spectrum Disorders* (FASDs) is a term encompassing several diagnoses related to alcohol exposure during the prenatal period, including Fetal Alcohol Syndrome (FAS), Partial Fetal Alcohol Syndrome (PFAS), Neurobehavioral Disorder Associated with Prenatal Alcohol Exposure (ND-PAE), Alcohol-Related Neurodevelopmental Disorder (ARND), and Alcohol-Related Birth Defects (ARBD).

When an FASD goes unrecognized, long-term negative effects may lead to severe lifelong consequences. They can include school failure, co-occurring medical and mental health issues, and disrupted caregiving situations (Coles & Black, 2006; Streissguth et al., 2004; Young et al., 2009). Yet alcohol exposure may be difficult to identify. Abnormal facial features may be present in less than 20 percent of children with FASDs (Kuehn et al., 2012). Young children may appear to develop normally, as deficits in higher level cognitive functioning may not be apparent until school age (Olson et al., 2007). When the effect of alcohol exposure on the child is unknown, caregivers may perceive that the child is deliberately disobedient (Petrenko et al., 2016) rather than understanding the child has a brain-based cognitive disability that may lead to poor social information processing and difficulties in memory and attention—which may occur despite normal-range IQ (Diaz et al., 2016; Greenbaum et al., 2009). In contrast, early identification and stable home environments act as protective factors for adverse adult outcomes among individuals with FASDs (Streissguth et al., 2004).

Medical tests are routinely used to identify PSE at birth, but alcohol exposure is not easily recognized in newborns. A blood, urine, or meconium test may be used with pregnant women, on a recently delivered mother, or on a newborn. Yet toxicology tests of the mother and newborn used to identify substances such as opioids,

Common Challenges Among Children With an FASD

FASD symptoms can vary from child to child, but common challenges include a blend of physical defects, intellectual or cognitive abilities, and challenges functioning with daily life. Some examples of challenges include the following:

- Distinctive facial features
- Heart defects
- Learning disorders
- Trouble processing information
- Difficulty with problem solving
- Challenges identifying consequence(s) of decisions
- Poor social skills
- Poor concept of time
- Difficulty with impulse control
- Trouble adapting to change
- Impaired executive functioning

In addition to these challenges, individuals with FASDs also report high rates of negative outcomes later in life, including:

- Educational disruption
- Substance use problems
- Inappropriate behaviors
- Involvement with the criminal justice system and incarceration
- Mental health disorders

(Mattson et al., 2019, Streissguth et al., 2004) methamphetamines, and cannabis vary in accuracy, and not all substances are included in all toxicology panels used by hospitals—this inconsistency may lead to missed cases of PSE if newborns do not show obvious effects (Chasnoff et al., 2018; Drescher-Burke, 2007). Because alcohol metabolizes relatively quickly compared with other substances, it is generally not detected by these routine toxicology screens (Center for Substance Abuse Treatment, 2010). The reliance on and limitations of medical testing to determine PAE can result in low rates of identification of an FASD at birth by hospital staff (Coles et al., 2000). Because polysubstance use is common, and most drug users, including pregnant women, also consume alcohol, children who are exposed to any type of substance also may be at risk for alcohol exposure (Davie-Gray et al., 2013; England et al., 2020; Falk et al., 2008; Waite et al., 2018).

An overreliance on hospital reports to identify PSE may contribute to oversurveillance of pregnant women and disproportionate identification of children of color with PSE. The over-representation of families of color in CW is well established (Harp, 2020). This disparity may begin with hospital reports to CW of newborns who have PSE. Even when testing indicates similar rates of substance use during pregnancy of all groups, Black women may be more likely to be reported to CW (Chasnoff, 1990). Women of lower socioeconomic status may be more likely to be reported (Chasnoff et al., 2018), as are those who give birth in hospitals with a high proportion of patients with Medicaid (Rebbe et al., 2019), where Black women are disproportionally represented (Harp, 2020). The racial and socioeconomic disparities in hospital testing may lead to subsequent reports of families of color to CW (Ellsworth et al., 2010; Roberts & Nuru-Jeter, 2012).

Importance of Understanding How Children With PSE Are Identified and Cared for in CW

There may be many children affected by unrecognized exposures, particularly to alcohol. The symptoms at birth and diagnoses such as NAS can assist researchers seeking to understand the prevalence in CW of children with prenatal exposure to substances such as opioids (França et al., 2016). Yet because of the difficulties identifying PAE in children at birth, and the lack of national data on the prevalence of FASDs, it is more challenging to estimate the number of children in CW who have been exposed to alcohol. Popova et al. (2019) reviewed international studies of children in care with FASDs, estimating that 25 percent of children in CW care worldwide may have an FASD. A study by Chasnoff et al. of children who were or had been in CW found 28.5 percent met the criteria for an FASD. Though the sample for the Chasnoff study may not be representative, as it was comprised of children referred for behavioral assessments, over 80 percent of children diagnosed with an FASD were not recognized upon entry to the CW system (Chasnoff et al., 2015).

Given that the CW system could be serving children with an unidentified PSE, who may require services to address long-term effects, we must understand agency practices that address the needs of these children.

Service referrals may help avoid the need for family involvement with CW on a long-term basis. Passed in 2016, The Comprehensive Addiction and Recovery Act (CARA) amended the CAPTA Reauthorization Act of 2010.[13] One requirement of CAPTA/CARA is that service referrals must be offered to meet the needs of infants who have been prenatally exposed and the needs of their parents. Services to families such as home visiting may support parents and prevent child maltreatment (Levey et al., 2017), avoiding child entry to the foster care system and trauma that may occur when children are removed from their home (Sankaran et al., 2018). When families must become involved with CW, intensive education, reframing, and support may help parents build child-specific parenting skills and maintain the relationship with their child (Burry & Wright, 2006). Referrals to substance use treatment services for parents, particularly those approaches that are family focused and oriented toward the parent–child relationship, have been found to be effective in preventing maltreatment and promoting family reunification (Maltais et al., 2019).

Information on current PSE-related policies and practices may help support future studies and efforts to reduce disproportionality and disparity for families of color. CW agencies may not have the power to reduce hospital disparities in testing and reporting newborns with PSE, but they do have the responsibility to avoid unnecessary child removals when children are reported to CW. Efforts to prevent out-of-home placement may be particularly important to avoid the historical—and current—harm to children of color and their families. Overall, the risk of experiencing termination of parental rights are highest for Native American and African American children (Wildeman et al., 2020). Understanding CW policies and practices related to children with PSE may identify points along the

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[13] In 2003 the Child Abuse Prevention and Treatment Act (CAPTA) was enacted. This legislation required hospital and medical professionals to refer infants affected by illegal/illicit substances to CW agencies. These requirements include (1) addressing the medical and substance abuse treatment needs of the infant and affected family; (2) monitoring plans to determine the extent to which appropriate referrals and services are being provided to the child and family; and (3) developing Plans of Safe Care for all infants affected by substance abuse. The 2010 reauthorization of CAPTA expanded the requirement to include infants diagnosed with an FASD. Recently, the Comprehensive Addiction and Recovery Act (CARA) that passed in 2016 amended the CAPTA Reauthorization Act of 2010 to remove the terms *illegal* and *illicit* so that infants affected by misuse of prescription drugs also would be covered. CARA also requires states to report in the National Child Abuse and Neglect Data System (NCANDS) the number of infants identified as affected by PSE. In the future, these data can inform estimates of the prevalence of PSE and allow agencies to track outcomes of prenatally exposed infants over time.

case process where providing services can help children remain safely in the home. Though outside the scope of the current study, findings may lay the foundation for future researchers to understand case processes that contribute to service inequity for families of color (Lovato-Hermann et al., 2017) and/or may contribute to poorer outcomes, such as the reduced likelihood of reunification with families for Native American and Black children (Sieger, 2020).

> Current systemic/structural inequities related to substance use and removal must be considered if the CW field is to avoid oversurveillance, disproportionate involvement, and disparate outcomes for children and families of color.

Gaps in Information and Opportunities to Support Children With PSEs in CW

There is a lack of information on current policies and practices used to provide service referrals—which impedes understanding of practices that could better support children and their families. CW has historically focused on treating the symptoms, rather than the root causes, of child maltreatment. The Family First Prevention Services Act (FFPSA)[14] offers the opportunity to fund services that promote family preservation, such as substance use treatment and in-home parenting skill training, to prevent children's removal from the home (Milner & Kelly, 2020). If prenatal exposures and related effects are identified, then the child's behavior can be appropriately contextualized for the parent as neither purposeful misbehavior or forgetfulness but rather the result of a brain-based injury (Bertrand & Dang, 2012). This explanation could accompany targeted supports, training, and guidance to lessen the stress of the situation and reduce potential maltreatment (Burry & Wright, 2006; Flannigan et al., 2021). However, few, if any, studies investigate the use or effectiveness of these strategies, which could facilitate the goals of FFPSA and promote access to services that can improve functioning for families caring for children with PSE.

How older children are identified is important to understand, as it is the first step for service referrals. There are effective services for children prenatally exposed to alcohol that can help them

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[14] U.S. Department of Health and Human Services. (2018). The *Family First Prevention Services Act* (H.R. 5456, P.L. 115-123).

grow, learn, and thrive (Jirikowic et al., 2010; Petrenko, 2015). These services are offered by different systems of care and include medical support and diagnosis; developmental therapies including physical, occupational, and speech-language therapies; mental health services for behavior development or other mental health needs; education programs focused on language and literacy, mathematics, life skills, and special education; interventions to enhance attention, metacognition, and self-regulation; and programs focused on safety and physical movement (Jirikowic et al., 2010; Petrenko, 2015). Further, parent training programs that explain brain-based impairments and help parents understand that behavioral issues are due to prenatal brain damage have been shown to be effective (Kable et al., 2016). Identifying PAE in children even at older ages and connecting families with these services can help to mitigate the effects of PAE.

Although this study considers all types of substances, it gives more attention to the role of CW identification of alcohol exposures given the gravity of their long-term effects.

To date, the training and knowledge of CW staff—and their PSE-related practices working with families—has been largely unknown, yet it may be critical for improved family functioning. Staff understanding of long-term effects of prenatal exposures is important, as it informs staff assessments of the child's needs and patterns of interactions in the family. Children prenatally exposed to alcohol can have difficulty paying attention, controlling their impulses, and regulating their behavior; they can easily forget previously learned material and struggle to understand cause-and-effect relationships as well as learn from their own experiences (Bertrand & Dang, 2012; Coles et al., 1997; Henry et al., 2007). Because these children often appear to have normal ranges of intelligence, these behaviors can be misinterpreted as defiance or purposeful misbehavior and can lead to extreme, and repeated, frustration on the part of the caregiver (Petrenko et al., 2016). Because of the parenting challenges associated with PSE, children with unrecognized PSE may be at higher risk for unnecessary removal from the home by CW staff because of misinterpretation of child and parent interactions (Olson et al., 2009b). For example, if caseworkers do not know that children with FASDs may have neurocognitive deficits that can lead to difficult behaviors, they may perceive parent frustration as evidence of poor parenting skills. Greater understanding of long-term effects may help CW staff reframe the frustration parents may experience as a logical response to challenging behaviors, and this frustration can be addressed through parenting strategies that have been shown to be effective in caring for children with FASDs (Bertrand, 2009; Burry & Wright, 2006).

When caseworkers understand FASDs, they can reframe parent frustration as a logical response to challenging behaviors that can be effectively addressed with tailored parenting strategies.

Caregiver training and supports are also critical for improved functioning of children with PSE, yet little is known about how these caregivers are supported within CW. Children prenatally exposed to substances who are placed in temporary care may be at a higher risk of placement moves (Flannigan et al., 2021; Smith et al., 2007). It may be that the neurobehavioral effects of FASDs can increase the likelihood of placement disruption because of caregivers who are unequipped for the complex needs of these children (Petrenko et al., 2016; Rhodes et al., 2001). Unfortunately, placement changes may further increase problematic behaviors of the child (Bada et al., 2008; Rubin et al., 2007). The cycle of placement changes and resultant reductions in child functioning may further disrupt a child's social relationships, which may already be challenging for children with an FASDs to form and maintain because of difficulties in communication and reading social cues (see sidebar on page 18). As described above, improved caregiver education on the effects of PSE may reduce caregiver stress and improve adult–child interactions (Olson et al., 2009b; Petrenko et al., 2016).

Information about current CW policies and practices can inform suggestions that may help prevent maltreatment and preserve families. CAPTA/CARA federal legislation mandates that drug- and alcohol-affected infants be referred to CW for child and family services; however, current data indicate an over-reliance of maternal and newborn toxicology reports from hospitals at the time of delivery, which (1) overlooks exposures that do not commonly manifest at birth (i.e., alcohol) and (2) may contribute to biased testing of disadvantaged or minority populations, exacerbating disparities present in the CW population. Identifying older children who are not recognized at birth may be critical to meet service needs. Children with PSE have impairments that present significant parenting challenges, which can be mitigated by identification and appropriate interventions (Bertrand, 2009). Studies show that children (and their families) who are identified and receive interventions have better developmental outcomes and fewer lifelong negative consequences (Streissguth et al., 2004). Understanding CW policies and practices can inform action steps to more effectively identify children who may be adversely affected by PSE. In turn these action steps can help lower the risk of child maltreatment, get families the services they need to potentially reduce child removals, and increase the likelihood of reunification of children with their families.

CW is recognized as a critical system in developing strategies to screen, refer, and deliver treatment plans to reduce the negative effect that PSE may have on children (Olson et al., 2009a). It is a clear priority to determine optimal practices for CW staff to know when to refer a child for a thorough screening. Given that it is often not possible to detect FASDs or other prenatal drug exposures by physical features, positive toxicology screens, or behaviors in the newborn period (Center for Substance Abuse Treatment, 2010; Chasnoff et al., 2018; Drescher-Burke, 2007), CW agencies should—

1. Develop viable guidelines for obtaining prenatal history and recognizing child behaviors or problems that indicate the need for an evaluation referral.
2. Create training for caregivers, biological parents, and professionals on initial and ongoing needs.

That said, to advance proposals on policies and training supports that can feasibly work in diverse state and local CW agency contexts, we must first study and understand the current practices, the effects of those current practices (including facilitators and barriers), and where needs and gaps exist.

The subsequent chapters in this report describe the methods used by the Prenatal Alcohol and Other Drug Exposures in Child Welfare (PAODE-CW) project to investigate these study areas, present key findings, and discuss implications and suggested action steps to support CW agencies to enhance their policies and practices.

2. Prenatal Alcohol and Other Drug Exposures in Child Welfare Study

This chapter describes the methods of the Prenatal Alcohol and Other Drug Exposures in Child Welfare (PAODE-CW) study. Specifically described are (1) study design, including design process, conceptual framework, and site selection; (2) methods, including instrument development, study approvals/agreements, data collection procedures, data sources, and recruitment; and (3) data analysis.[15]

Additional details on the study design, methods, and analysis are included in appendix D. Appendix E (exhibits E1 through E6) contains supporting data regarding the final sample and sample sizes broken down by method.

Summary of Design and Methods

- This project conducted a cross-sectional mixed-methods descriptive study[20] in 22 local child welfare (CW) agency sites across 5 geographically dispersed states.
- Methods included interviews with state and local CW agency directors and staff, surveys of CW staff, and document review in all sites/states.
- Two states participated in additional data collection: interviews with CW data system staff, surveys of service providers, and focus groups or interviews with caregivers caring for children with prenatal substance exposures (PSEs).
- Case record reviews took place in one state.
- Descriptive analyses were conducted at the aggregate level (across all states, sites, and participants); they are presented by subgroups where relevant (e.g., state, role, contextual factor).

Study Design

The team conducted multiple activities to ensure that the PAODE-CW study design was rigorous and feasible and that it yielded meaningful information for policy and practice improvements.

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[15] A primary objective of this chapter is to discuss methods and procedures in enough detail to preserve such information for future activities and uses. Additional methodological details were submitted to the Children's Bureau and the Centers for Disease Control and Prevention in a separate *Technical Appendix,* and secondary data analyses were submitted in a separate *Topical Appendix*.

Literature Reviews

Early in the design process, the team prepared two reports summarizing peer-reviewed research and gray literature.[16] The *Review of the Knowledge Base* presented extant research on PSEs within the CW population and identified elements of the CW system pertinent to the identification, care, and documentation of children with PSE; this review was subsequently published (Richards et al., 2020). The *Review of Designs and Instruments* described methods applied in other studies to study PSE, including designs, sampling, data sources, and data collection.

Expert and Stakeholder Consultation

The team convened an 11-member Expert Technical Work Group (ETWG) and hosted several virtual meetings with organizational stakeholder groups, caregivers with lived experience (including a birth mother of a child with PSE), and other federal agency partners. ETWG members and stakeholders have diverse expertise in fields of research methods, medicine (e.g., neurodevelopmental effects of PSE), mental health, child development, substance use, and CW (see appendix B for a list of consultants and their areas of expertise). Experts and stakeholders were consulted during study development and throughout the duration of the project. The areas in which experts and stakeholders consulted are listed in the sidebar.

Areas of Expert and Stakeholder Consultation

- Conceptual framework
- Research questions
- Design options
- Methods and instruments
- Data analysis
- Implications

Exploratory Study Findings

The team reviewed and considered, in conjunction with the ETWG, the key findings from the 2014–2016 exploratory study (Usher et al., 2016)[17] when developing the design and methods of the current study. The exploratory study, funded by the Children's Bureau and led by PAODE-CW partner organization ICF, examined similar research questions in one CW agency site in a single jurisdiction.

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[16] Examples of gray literature include conference abstracts, presentations, proceedings, and publicly available reports (such as white papers, evaluation reports, and briefs).

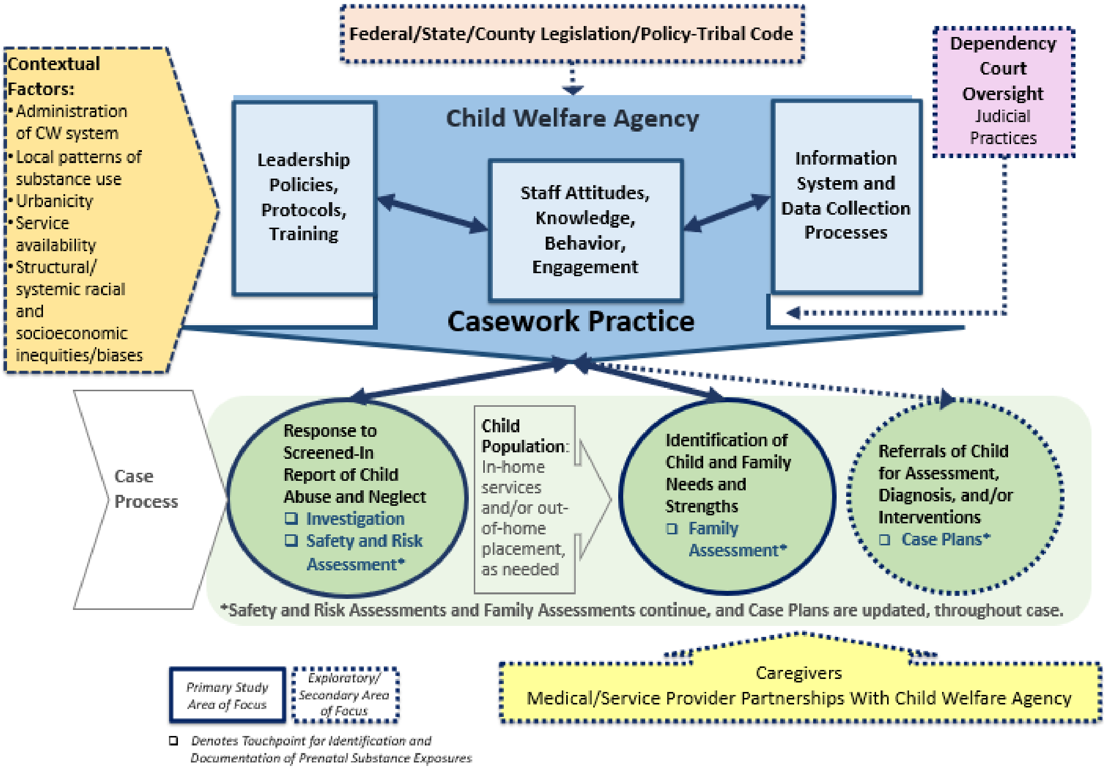
[17] The evaluation report, *Prenatal Alcohol and Other Drug Exposures: An Exploration of Child Welfare Practices and Policies,* was submitted to the Children's Bureau in September 2016.

The team integrated insights from the exploration into the conceptual framework, design decisions, and measurement strategies used in the current study.

Conceptual Framework

The conceptual framework is presented in the form of a systems map (exhibit 1). The framework notes process components and factors identified by literature reviews and expert consultations that are likely to affect CW practices related to identifying and caring for children with PSE who are involved in the CW system.[18] The components outlined with a solid blue line illustrate the primary areas of focus for the study, which largely centers on CW agency and casework practice (in blue arrow) and the case process related to identification of PSE for children and families once involved in CW (in light green rectangle).

Exhibit 1. Conceptual Framework and Study Areas of Focus



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[18] The framework does not include all factors that could affect CW agency response to PSE, only those that are the focus of study. For example, the framework does not depict factors affecting decisions to refer families to CW because of substance use.

Research Questions

The team specified six key constructs from the framework, presented in exhibit 2, and corresponding research subquestions that were refined in collaboration with federal project leadership and the ETWG. The two overarching research questions are listed below, and the full list of subquestions by key construct are presented in appendix C.

1. What are the current knowledge, policies, and practices in place in CW agencies and related organizations[19] for the identification of children with PSE and/or diagnosed with a resulting condition (such as a Fetal Alcohol Spectrum Disorder [FASD])?
2. What type of training and dissemination activities are used currently, and what consensus is there, if any, among CW professionals in the studied settings, regarding practice changes that are likely to improve identification and documentation of children with PSE and resulting conditions in the CW system?

Exhibit 2. Key Constructs and Example Research Subquestions

Key Construct	Definition and Examples	Example Research Subquestions
State legislation/policy[a]	Legislation and statutes, policy	How have state plans/processes related to federal legislation (e.g., Comprehensive Addiction and Recovery Act, 2016) influenced local CW policies and procedures for children with PSE?
Dependency court oversight[a]	Judicial interactions and practice with CW agency and child/family related to PSE	To what extent do judicial orders influence the child's case plan and services in regard to identification of PSE?
CW agency policies and procedures	Formal written policies/guidance related to PSE	What agency guidance directs staff to share information on a child's PSE status with pre-adoptive families? What type of information is shared?
CW staff knowledge and practice	Training, knowledge, attitudes, and practice of staff related to PSE	How do CW staff obtain information about PSE? What training and information dissemination methods increase their knowledge of PSE?
Agency data system and documentation	Organization, use, and quality of PSE information	Where in the data system is PSE-related information entered? How consistently is this information entered?

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[19] Related organizations could include providers and programs that deliver services for children and families served by the CW system, such as medical providers, mental health programs, public health programs, and family and caregiver organizations.

Key Construct	Definition and Examples	Example Research Subquestions
Child and family services and supports	Access and referrals to appropriate PSE-related screenings, services, and supports	What assessment/diagnostic services are available for children with PSE? Are those services accessible and timely? How do CW agencies support caregivers of children with PSE, in regard to child-specific information on PSE status?

[a] Exploratory/secondary area of focus.

Selected Design

The team presented to federal leadership the study options designed to address these questions. The current design was selected in April 2017. The team applied a cross-sectional mixed-methods descriptive design[20] to examine policies and practices in multiple state and local CW agencies or regions ("sites") in each of five geographically dispersed states.

A separate component of the project explored tribal CW agency policies and practices in a collaborative case study design, conducted with a single tribe (see box on next page). The tribal case study and findings appear in a separate report.[21] The remainder of this report solely pertains to the PAODE-CW descriptive study.

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[20] This design is cross-sectional (i.e., studies one point in time), mixed-methods (i.e., combines quantitative and qualitative approaches), and descriptive (i.e., describes the characteristics of the population or phenomenon studied, focuses on the "what" of the research topic more than the "why"). This design is well suited for examining practices in different contexts. The mixed-methods design allowed the team to triangulate (corroborate) patterns observed across sites and states and to use different methods to complement understanding of complex practices (Zheng, 2015).

[21] *Tribal Child Welfare Systems' Experiences With Prenatal Exposure to Alcohol and Other Drugs: A Case Study* was submitted to the Children's Bureau, Administration for Children and Families (ACF), in August 2021.

Tribal CW Practice and PSE

A critical and independent component of the PAODE-CW project explored tribal CW approaches to identify and care for children with PSE and their families. Working with tribal researchers and stakeholders, the team conducted a **collaborative case study** in one tribal CW agency, applying process mapping and interviews to gain understanding.

Informants described services and identified needs and strengths. Notably, with recent intentional agency shift toward family preservation and relationship-based services, tribal agency staff reported successfully supporting pregnant women with services that mitigate risk and assist mothers with maintaining or regaining custody of their children.

Tribal Child Welfare Systems' Experiences With Prenatal Exposure to Alcohol and Other Drugs: A Case Study summarizes key findings and recommendations.

Methods

The objective for the selection of states and sites within states was to ensure that the sample reflected the diversity of how CW systems are administered, geographical range, and how states were approaching the issue of PSE in CW populations. Thus, the team employed a purposive sampling strategy.

Site Selection

Candidate states and sites within states were initially identified by applying a sampling strategy at each level of site selection.[22] The site selection plan produced a sample of states and CW agencies that displayed a range of characteristics (e.g., county or state CW administration, geographic region) while also ensuring inclusion of at least a few states and sites where practices of interest were known to be present (both positive and negative). For example, practices of interest in this study reflected the presence of efforts to address PSE, such as early implementation of Plans of Safe Care, known interest in advancing state policy to address FASDs, and known local research and clinical centers focused on PSE. The team prepared a matrix representing the sampling frame (all 50 states) and data reflecting

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[22] The sampling strategy combined maximum variation and criterion-i sampling strategies, designed to reflect diverse variations that emerge from different conditions (e.g., urban and rural sites) and predetermined criteria of importance (e.g., CW practices of interest), respectively (Palinkas et al., 2015).

the state selection criteria listed in exhibit 3. The frame was reviewed with federal project leadership to select candidate states and identify replacement states as needed.

Exhibit 3. Criteria Considered for Site Selection

Level	Criteria
State[a]	• Geographic region • CW administration type (e.g., state or county administration) • Legislated policy or practice • Substance use prevalence • State contextual factors (e.g., caseload, waiver state) • Unique factors (e.g., strong data system, CFSR[b] timing) • Presence of efforts to address PSE (e.g., known research/clinical FASDs centers)
Site	• Geographic region • Access to services • Presence of efforts to address PSE

[a] Data sources contributing to state selection include publicly available federal reports/databases, a survey of key informants that included ACF regional office staff, and gray literature such as evaluation reports. [b] Child and Family Services Reviews.

Recruitment

Selected states received a formal invitation letter from the Associate Commissioner for the Children's Bureau of the ACF, Department of Health and Human Services. During initial conversations, state teams learned that, upon completion of the study, their state and local agency sites would receive a summary of select findings from data collected in their state and an invitation for their participating staff to take part in an online training facilitated by an expert on the topic of PSE. State teams also discussed how the team would protect confidentiality (preserve anonymity) of the states, sites, and participants in study reports, to promote openness and honest commentary on their practices. Of the six states initially invited to participate, one declined and another was withdrawn because of competing demands and timing. Because of resource and time constraints, one alternative state was selected, and the sample was reduced from the proposed total of six to five states.

After a state consented to participate, the team worked with state leadership to identify four to five local sites in that state that reflected the site-level selection criteria listed in exhibit 3. Sites were composed of single, local, county-level CW agencies or, in a few cases, multiple local CW agencies in a localized area of the state. For example, in state 1, sites were CW service areas that included numerous counties. The team contacted local agency leaders to invite participation and answer questions about the study. In total, 22 local sites agreed to participate. Exhibit 4 displays characteristics of the participating states and sites.

Exhibit 4. States and Sites in the Study and Key Features of Their Participation

Characteristics	State 1	State 2	State 3	State 4	State 5
Region of U.S.	Midwestern	Mountain	Southeast	Mid-Atlantic	Western
CW administration	State administered	County administered	State administered	County administered	State administered
Site number and characteristics	5 sites 4 of 5 regional service area offices and state central intake office The 4 regional offices served 90% of the state's counties; 46% of the state's counties are rural, 45% are urban, and 8% are metropolitan	4 sites 4 county agencies 1 county is metropolitan, 2 are urban, and 1 is rural	4 sites 3 regions serving 35 counties and 1 county agency The county agency is metropolitan; 2 regions are primarily urban, and 1 is primarily rural	5 sites 6 county agencies 2 counties participated as 1 site 3 of the counties are urban, and 3 are rural	4 sites 3 regions and 1 county agency 3 field offices serve both urban and metropolitan counties, and 1 serves a rural county
Category of data collection	Base methods	Base methods	Base and in-depth methods	Base methods	Base and in-depth methods
Additional approvals[a]	Did not require	Did not require	State-level IRB[b] and data agreement	State-level IRB	State-level IRB and data agreement
Dates of data collection	Sept 2018	April–May 2019	Oct–Nov 2019	July–Aug 2019	Oct–Nov 2020[c]
Mode of data collection	Onsite	Onsite	Onsite	Onsite	Virtual

[a] Approvals from the Office of Management and Budget (OMB) and were obtained for relevant study information collection across the five states. All data management and storage was regulated under a privacy impact assessment and data monitoring and security plan approved by the ACF Office of the Chief Information Officer.

[b] Institutional Review Board. [c] Rescheduled from March 2020 because of COVID-19 pandemic.

Methods

All 22 sites completed a set of common ("base") methods. Two states (states 3 and 5) were asked to participate in additional ("in-depth") methods at their eight participating sites (see exhibit 5 for an overview).

Exhibit 5. Overview of Base and In-Depth Study Design and Methods

Base Methods Conducted at All 5 States/22 Sites	
State-level data	• Review of state policy documents pertaining to PSE • Interview with state CW director(s)
Site-level data	• Review of local area policy documents (where available) • Interviews with CW staff and directors • Survey of CW staff
Additional In-Depth Methods at Subset of 2 States/8 Sites	
Site-level data	• Review of local CW agency case files[a] • Interviews with local area data staff
Ancillary data	• Survey of allied PSE-relevant service providers • Focus groups or interviews with caregivers

[a] Ultimately completed in only 1 state/4 sites because of COVID-19 pandemic restrictions.

Instruments and data collection tools (i.e., surveys, interview and focus group protocols) were developed for all methods listed in exhibit 5. The team completed revisions after cognitive testing and consultant review. The final instruments and data collection methods received approval from the Office of Management and Budget (OMB Control Number 0970-0511) and multiple Institutional Review Boards (IRBs); the ACF Office of the Chief Information Officer approved the data management and security plan (see appendix D for more details).

Data Sources and Instruments[23]

Policy Document Review. Documents guiding CW staff practices related to identification and care of children with PSE were determined by conducting an online search of state CW websites and a search

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[23] A *Technical Appendix* submitted to the Children's Bureau and the Centers for Disease Control and Prevention provides more detail and includes copies of instruments.

of Child Welfare Information Gateway,[24] and by inquiring about documents with interview participants. The team collected the documents, reviewed them, and coded their information in spreadsheets (see appendix D for more information).[25] Obtained documents included state laws that guided agency practices, publicly available CW agency policy manuals, and forms (those that were used to document and summarize CW case information referred to in agency policy manuals).[26]

Interview Protocols. The team devised interview protocols for four types of CW agency respondents. Some interview questions were uniquely tailored to each type of respondent, based on their role within the CW agency. Individual interviews were conducted in person, by teams of two data collectors, except in state 5, where interviews took place virtually. Interviews took approximately 40 to 60 minutes to complete. Exhibit 6 presents the topics and details regarding the targeted sample. Interview items were primarily semistructured and open-ended. Responses to the few close-ended quantitative items asked during interviews were recorded in an Interviewer Note-Takers Spreadsheet following interviews for quick analysis (i.e., for preparation of brief reports for each site and state shortly after data collection).

Exhibit 6. Interview Topics and Targeted Sample

Interview Protocol	Topics	Targeted Sample
State CW director[a]	• State policy and legislation related to the Comprehensive Addiction and Recovery Act (CARA) and implementation of the act • Formal policy and legislation pertaining to the identification of children affected by PSE, including court practices, service provision, and documentation of PSE • Screening and health services provided to children involved with CW in the state • Formal state policies pertaining to sharing information between the CW agency and medical and service providers	One director at each CW state agency with oversight of PSE practices

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[24] The Child Welfare Information Gateway is a website sponsored by the Children's Bureau, ACF, that gives access to print and electronic publications, websites, databases, and online learning tools for improving CW practice.

[25] The *Technical Appendix* further describes document review, coding, and analysis.

[26] The team identified very few distinct policy documents and practice tools at the site (local CW agency level); therefore, review and coding were limited to documents outlining practices expected to be applied statewide.

Interview Protocol	Topics	Targeted Sample
Local area director[b]	• Local policies as well as agency and individual practices related to identification and documentation of children with PSE • Training received by staff and training needs • Estimates of PSE in the CW population • Provision of or referral to services related to PSE[d] • Court's influence on these processes • Gaps and opportunities to improve practices to identify, document, and obtain services for children	One to two local area directors at each site[c]
CW staff[b] Three versions: (1) frontline, (2) ongoing case management, and (3) frontline/ongoing case management staff	• Same topics as local area director interview above, but tailored language to role	Between six to eight staff at each site, in the following roles: Frontline, intake, investigation Ongoing case management Staff with combined responsibilities
In the Two In-Depth States Only:		
Local area data staff[b,e]	• Structure of the CW information management system • Types and location of data elements related to PSE • Typical case practices for recording data • How agencies use PSE-related data • Challenges, gaps, and opportunities to enhance documentation	One to two staff with data system responsibilities at each of the eight sites

[a] Conducted virtually before each site visit. [b] Interviews were virtual in state 5 because of travel restrictions during the COVID-19 pandemic. [c] Some sites consisted of two county agencies, or a county and a city agency, so more than one local area director was interviewed. [d] Not asked in frontline-only version of the interview. [e] These responses informed the case record analysis, providing the context needed to fully understand the structure and purpose of documentation.

Surveys. In addition to the interviews, online surveys were developed for two categories of respondents: CW staff and service providers. The surveys had similar topics to the interviews and were similarly structured, but language was tailored to the respondent group. Survey items were a mix of closed- and open-ended items. Surveys also included case scenarios; there, respondents reviewed and then responded to questions with information regarding how they might identify PSE and manage service referrals. Surveys were administered online and took approximately 20 to 30 minutes to complete. Exhibit 7 presents details on the surveys and their administration.

Exhibit 7. Survey Topics and Targeted Sample

Survey	Topics	Targeted Sample
CW Staff Survey	• PSE training and knowledge • Practices to identify and provide referrals and services for children with PSE • Information-sharing processes between CW agency and service providers • Common practice in response to case scenarios to identify and refer children with indicators of PSE and PAE • Gaps and needs	12 to 24 CW staff with diverse roles at each site, including: • Frontline worker • Ongoing/case management • Supervisor/manager • Hotline/intake • Child Protective Services (CPS) investigative • Family needs assessors • Permanency • Prevention
In the Two In-Depth States Only:		
Service Provider Survey	• Same topics as CW Staff Survey above, but tailored language to role	3 service providers at each of 8 sites who commonly work with the CW agency in service of children with PSE, including: • Medical providers (primary care, pediatrician) • Mental health professionals (psychologist, behavioral specialist) • Program managers (home visiting, early intervention)

Focus Groups and Interviews with Caregivers. The team asked eight sites to invite foster and adoptive caregivers to participate in focus groups (state 3) or interviews (state 5). Focus groups and interviews sought to confirm information obtained from caseworkers about how data related to PSE is communicated to foster and adoptive families and about these families' knowledge and training needs related to PSE. The focus group took approximately 90 minutes, and the virtual individual interviews were about 60 minutes. In focus groups, interactive features allowed participants to place stickers on posters to indicate relevant trainings they had participated in, and, to encourage participation and increase comfort levels, participants held up colored cards to indicate levels of agreement. Exhibit 8 displays the topics and details regarding the sample.

Exhibit 8. Caregiver Focus Group and Interview Topics, and Targeted Sample

Protocol	Topics	Targeted Sample
Caregiver Focus Group/ Interview[a]	• Caregiver training (general and PSE-specific) • Knowledge of PSE • Exchange of information with CW caseworkers • Experience with services provided or recommended by a CW agency for children or family • Recommendations for additional services or supports	Eight caregivers at each of the eight sites, including: • Kinship/extended family • Foster care • Adoptive

[a] Planned in-person focus groups were modified to individual virtual interviews in state 5 because of travel restrictions during the COVID-19 pandemic.

Case Record Review Access Database. The team developed a case record review tool to examine information-gathering and documentation practices relevant to PSE in child and family case records. A two-part Microsoft Access database collected and documented data from (1) the initial hotline call or referral through the assessment, or investigation findings from that referral ("Intake"); and (2) the time that a case was opened until it was closed because of family stability, child reunification, child adoption, or transfer to another agency or jurisdiction ("Ongoing case management"). The team used specific criteria to select cases for review. The database captured PSE-relevant information for the children and family from the case. Exhibit 9 presents the topics and types of documents reviewed and details regarding sampling.

Exhibit 9. Case Record Review Topics, Documents, and Sample

Instrument	Topics	Types of Documents	Targeted Sample
Access database to collect data elements from case record reviews	• Background case information (e.g., previous agency involvement) • Child-specific demographic and case information (e.g., child age, race/ethnicity, type of allegation, placement type) • Information about maternal substance use • Information about PSE (e.g., documented diagnosis) • Related services (e.g., developmental and medical assessments, mental health services, educational services)	• Hotline/intake reports • Foster care or family case plans • Safety assessments • Family functioning assessments • Plans of safe care • Caseworker contact notes • Medical documentation • Educational documentation	220 cases from each in-depth state; 55 cases sampled from each of 4 sites in in-depth states All cases must have one child with open/active CW case, and been opened to CW for at least 90 days, and Cases that met criteria in one of three categories: • A referral related to positive toxicology of a newborn (*n* = 15) • A referral related to parental substance abuse (*n* = 15) • Where the child has a medical condition that may suggest PSE (e.g., Attention-Deficit/ Hyperactivity Disorder, an FASD) (*n* = 15) 10 cases randomly selected from the entire pool of case files

Data Collection

Training. All interviewers completed a 2-day instrument and procedures training and a 2-hour training tailored to each state. Case record reviewers received a half-day virtual training and a 1.5-day in-person training, which included reliability and validity checks. Appendix D gives additional details about training.

Participant Recruitment. CW state agency leadership identified the state CW director interview participant(s) and designated a local point of contact (liaison) at each site. This local study liaison applied selection criteria provided by the study team to identify participants for the interviews and surveys (see exhibits 6 and 7). This method resulted in an intentionally diverse mix of CW agency roles, such as intake staff and ongoing case managers. Depending on preference or state IRB regulations, the local study liaison either provided the study team with contact information or contacted participants directly to schedule data collection.

In the two in-depth states, the local study liaison also helped to recruit and schedule foster and adoptive caregivers to participate in focus groups (state 3) or interviews (state 5). Caregivers were eligible for inclusion if they were currently or had in the last year cared for a child served by one of the CW agency sites, with priority given to those who had cared for a child with known PSE or known related special needs. Participants received a $40 Visa gift card; for those participating in focus groups, food and beverages were provided. The local study liaison for both in-depth states also identified three to five medical and other service providers who partner with or receive service referrals from the CW agencies to participate in the service provider survey.

Data collection site visits. Teams of 2 study staff conducted site visits to 18 sites in 4 of the 5 states for data collection. Because of COVID-19 pandemic travel restrictions at the time of data collection, all interviews in state 5 took place via teleconferences. Each visit included individual interviews with a local area director and CW staff in all in-person data collection states. In state 3, focus groups of caregivers were also conducted during the site visit. The team sent CW staff and service provider surveys to participants via email links that remained open for 3 weeks. At the conclusion of each site visit, interviewers developed a brief site visit summary that captured observations about contextual factors. See appendix D for additional details on site visits.

Exhibit 10 shows final participant numbers and sample sizes. (See appendix E for sample sizes and response/participation rates broken out by states, and by method and instrument.)

Exhibit 10. Study Sample, by Method and State

Number and percentage of participants or cases

Method	State 1	State 2	State 3	State 4	State 5	Total
State CW Director Interview[a]	2	1	2	1	1	**7**
Local Area Director Interview	5	4	6	6	5	**26**
CW Staff Interviews - Total	26	29	22	33	19	**129**
Frontline	15 (58%)	12 (41%)	10 (45%)	15 (65%)	9 (47%)	**61** (47%)
Ongoing Case Management	10 (38%)	11 (38%)	9 (41%)	12 (52%)	9 (47%)	**51** (40%)
Frontline/ongoing case management staff	1 (4%)	6 (21%)	3 (14%)	6 (26%)	1 (5%)	**17** (13%)

Method	State 1	State 2	State 3	State 4	State 5	Total
Local Area Data Staff Interview[b]			4		9	**13**
CW Staff Survey[c]	76	70	36	52	37	**271**
Service Provider Survey			11		10	**21**
Caregiver Focus Group			24			**24**
Caregiver Interview[d]					21	**21**
Case Record Review			212 cases		---[e]	**212 cases**

[a] In two states, two state CW directors participated together in one interview. [b] Of the 13 individuals interviewed with the data staff interview protocol, 6 were in CW agency roles comparable to that of a data administrator or data specialist. Two ongoing case management staff were asked select questions from the data staff interview protocol in state 3. Two frontline and three ongoing case management staff were administered questions from the data staff interview in state 5. [c] See exhibit E1 in appendix E for a breakdown of CW staff survey participants by role and state. [d] Caregiver interviews were conducted in lieu of focus groups because of the COVID-19 pandemic. [e] Case record reviews were planned and identified in two states but only conducted in one state because of the COVID-19 pandemic.

Onsite case record reviews. Staff at the participating in-depth state (state 3) and local CW agencies identified 55 case records for review at each of 4 sites from that state.[27] Exhibit 9 presents details about the sample.[28] (See exhibit E6 in appendix E for final number of cases, by sampling categories.)

Agency staff provided printed case records (ranging from 50 to more than 500 pages per record) to trained case record reviewers who coded data onsite. Case record reviewers abstracted data elements (i.e., specific text references or other data points were identified), coded, and entered in an Access database. Case record reviewers reached a target of 90 percent reliability in paired reviews before they were coded, and team members undertook ongoing checks to confirm that this threshold maintained. Additional details regarding case record reviews, training and reliability and validity checks, and the coding system are presented in appendix D.

Analyses

The team conducted descriptive analyses within method (i.e., survey, interview, case record review, and focus group) and at multiple levels (aggregate, state, and site), depending on the study question being addressed. Qualitative data were analyzed applying content analysis and theme identification (Williams & Moser, 2019; Vaismoradi et al., 2016); the data also were examined for frequency of code

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[27] Two states (state 3 and state 5) agreed to in-depth data collection, including case record reviews, but because of the timing of COVID-19 pandemic restrictions, this component could not be completed in state 5.

[28] The final sample included 212 records. During data collection, the team discovered that some duplicate records had been pulled and some records were incomplete, resulting in a slightly smaller sample than the anticipated 220.

applications, code presence, and code co-occurrence to identify saliency and relative strength of themes. The team examined quantitative data with descriptive statistics including frequencies, averages, percentages, and measures of variation. Descriptive data presented by subgroups were produced to explore data by type of informant (e.g., staff role), data source, or contextual factor (e.g., by state- vs. county-administered CW systems), as relevant. The team employed cross-tabs to explore relations among constructs of specific interest.

Given the relatively small sample sizes, study design and objectives (i.e., descriptive, not comparative), and the nature of the data (i.e., primarily qualitative), statistical tests of difference and multivariate analyses were not appropriate and not used. The study questions and data are not appropriate to compare states or sites in a way that statistical testing would be meaningful.

Instead, the team examined descriptive patterns in stages to explore potential variation and to make decisions about unit/level of analyses for final reporting and presentation of data. As an initial stage, during data collection, a subset of quantitative and qualitative data elements from CW staff interviews and surveys were analyzed by site to produce summary site-level reports and an aggregated report at the state level. Quantitative data elements included staff reported training in PSE, estimated scope of PSE within the population served by the agency, knowledge indicators of PAE, sources of information to identify PSE, and availability of community services. Qualitative elements included document review of policies, staff perceptions of needed enhancements, practice highlights, and inclusion of quotations from CW staff and directors. The analysis team reviewed these data for observed variation and patterns of missing data. Simple cross-tabs explored differences by subgroups. Very little variation was observed across the sites within states, which informed the decision to aggregate data up to the state level.[29] For example, a typical pattern was demonstrated for the survey data element "received training on the effects of PAE on child development" (a categorical variable of yes/no). The percentage of respondents, by site, indicating they had received training ranged from 71 percent to 100 percent (with only three sites with under 80 percent).

During the subsequent stage after full data collection, the team also reviewed the state-level data and the five state reports; similarly, relatively few data elements showed sizable differences, and common themes and implications were noted across states. A typical example of low variation across state (or conversely, high convergence across states) can be seen in themes related to training gaps reported in qualitative interviews. For example, a similar percentage of staff noted that training is needed on general information about substances and their effects (with percentages of 37, 29, 19, 23, and 27,

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[29] The *Technical Appendix* provides examples of data elements and site-level findings that were reviewed by the analysis team to consider the extent of site- and state-level variation. The team used this review to determine the level (unit) of analysis and reporting.

respectively, across states 1 through 5). The review helped inform decisions to analyze the data for final reporting primarily in aggregate (across all participants, sites, and states) and to examine key data elements for observable differences at the state level, and by important subgroups or contextual factors, depending on the research question. The team established that, in final reporting, the team would present aggregated results and present state differences only when notable and when contextual characteristics from policy reviews helped to inform interpretation of differences. Therefore, any analyses showing sizable or meaningful differences by state are either described in the body of this report or presented in the supporting data tables in appendix F.

The team applied methods triangulation (Noble & Heale, 2019; UNAIDS, 2010) to explore data obtained through multiple methods, and examined the convergence and divergence of results from similarly worded items to generally corroborate findings. The team also used triangulation to explore complementary dimensions of aspects under study to ensure that interpretation and presentation of findings were rich, robust, and comprehensive (Cohen & Crabtree, 2006; Patton, 2001).

Additional technical details regarding qualitative analysis (document review, interviews, open-ended survey items), quantitative analysis (surveys), and case record reviews appear in appendix D.

Study Limitations

The study provides an in-depth examination of PSE policies and practices in five geographically diverse CW contexts. The study presents key data from which policy and practice recommendations can be drawn. The study team worked closely with the Expert Technical Work Group and federal leadership to ensure optimal study design, given available resources and study time frames. As with any study, limitations and drawbacks are inevitable. Below, we discuss study limitations related to the study design, its limited focus on equity issues, drawbacks with data collection methods/measures, and the extended time frame. Chapter 9 suggests ideas about how future research may address these issues by building upon the lessons from this and other prior studies.

One key limitation is that the study is descriptive and not generalizable and cannot delineate causal relationships based on the findings. Only 22 local CW agencies across 5 states were included in the study. Although states and sites reflect a range of diversity in factors often operating in CW systems (e.g., factors such as agency administration, geography, context including urbanicity, race/ethnicity of CW involved families, and access to services), the states and sites were purposively selected. Findings, therefore, are not representative of or generalizable to CW agencies across the United States or even within the participating states. Despite achieving relatively high response rates and desired sample sizes with each of the 22 sites, samples remain relatively small compared with the total CW workforce in the United States. So, findings should be interpreted with some degree of caution. They are not designed to be representative; rather, they are descriptive in nature.

This study collected little data pertaining to racial and socioeconomic equity issues. For example, the case record reviews did not sample based on race/ethnicity, and data were not analyzed to examine possible disproportionality based on race/ethnicity. The team did not explore CW staff attitudes toward and approach to screening for PSE among families of color, nor decision making regarding subsequent removals based upon information about substance use and PSE. This area would be an important focus for future research because studies attest to racial and socioeconomic disparities in hospital screening of PSE and subsequent reports to CW (Ellsworth et al., 2010; Roberts & Nuru-Jeter, 2012). Future practice guidance could help facilitate CW staff obtaining prenatal exposure histories for all children, which may reduce disparities in involvement in CW that can result from an over-reliance on hospital reporting and potentially biased CW decision making.

There were some limitations with data availability and instrumentation. The policy document review was limited by the fact that different sites and states had varying availability of policy documents, which makes comparisons of policy information incomplete. Data collection also did not include a comprehensive analysis of the training systems used by each site and state. Instead, team members gleaned information related to available PSE training from interviews and from what data were available on public websites. Therefore, the study was not able to systematically compare the training systems for the sites and states included in the study, which limited conclusions about the quality and context for training systems at the time of data collection.

Certain data collection only occurred in two states. As with any study that involves multisite data collection, a balance must be struck between the breadth and depth of data collection given the availability of resources. As such, data collection methods for case records, service providers, and caregivers only allowed for an in-depth examination with a subsample of states because of the time- and resource-intensive nature of these efforts. Data collection with caregivers and service providers occurred in two states; case record reviews were planned for two but occurred in only one state.

Data collection occurred over nearly 2 years. For a variety of reasons (e.g., protracted time frame in obtaining state IRB approval and data-sharing agreements for in-depth states and the COVID-19 pandemic occurring during the second in-depth state), the time frame for active data collection unexpectedly extended across 25 months. This extended period may make contexts within which CW agencies and allied service providers operated less comparable than if all data collection occurred in a shorter time frame—and without the major challenges caused by the pandemic. Revisions were made to instruments before state 5's data collection to include new questions related to the possible effect of

COVID-19 on service delivery, and the team adapted to conduct data collection virtually instead of in person.[30]

Data Presentation

The following six chapters present study questions and findings from mixed-methods analyses grouped by study construct and/or key practice areas related to CW practice and PSE: laws and policy; staff training and knowledge; identification; service referrals; documentation; and caregiver knowledge and training.[31] Selected data are presented in exhibits (tables and figures). Quotes are integrated to illuminate concepts and provide deeper context for key findings. Information regarding source, sample and sample size, analysis method, and patterns of missing data are presented as appropriate. Supporting data for all findings discussed but not exhibited in the chapters are presented in detailed exhibits in an appendix, organized in order of the chapter topic.

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[30] Modifications were designed to inquire about typical practices prior to and during the COVID-19 pandemic. The team reviewed responses to understand changes in practices and services resulting from the pandemic. Participants in state 5 indicated that changes were primarily related to the mode of providing CW services (i.e., shift to virtual) and noted no meaningful effect on PSE identification during the pandemic. Analyses for this final report drew from data speaking to typical practice in this state.

[31] This report presents the study details and primary data speaking to the overarching research questions (see appendix C) and serves as the final report for the contract. Planned additional products, including journal articles and resources for the CW field, that offer additional analyses and information from the study are underway.

3. Laws and Policies Guiding Child Welfare Response to Prenatal Substance Exposures

This chapter reviews state legislation and agency policy documents that guide child welfare (CW) staff activities in identifying and caring for children who are or may be affected by prenatal substance exposures (PSEs), in the five study states. These policies are important to understand as written guidance directs staff activities and decision making throughout the time a child and family are involved with CW. For example, when a report of potential child maltreatment is made, agency policies and procedures will direct staff in the type of information they must collect from the caller, what information must be entered in the information management system, and whether an investigation should ensue.

Related Study Questions

- What activities have occurred in response to CAPTA/CARA 2016[33] legislation in the five study states?
- How do policies guide identification of children with PSE?
- How do policies guide needs assessment, service referrals, and information exchange for children with PSE?

Summary of Findings

- State CW agency directors across the five states described efforts to offer voluntary services to families and avoid the need for foster care when they are notified of infants with PSE.
- Laws and policies in all five states focused on very young children reported by hospitals; notably, no policies focused on requiring collecting information on mother's substance use while pregnant.
- There were no policies in the five states to determine if older children had undetected exposures, such as to alcohol, but all had engagement practices to promote family participation, and all assessed child needs throughout the case.

Background

Leading up to this study, it has been largely unclear at the state and local level what types of written policies have been developed related to children with PSE and how these documents guide CW staff activities. An exploratory study of PSE practices in CW, conducted in one agency, found no formal CW agency policies that addressed identification of children with PSE. Lack of clear policies appeared to contribute to varied practices (Usher et al., 2016). The absence of information on policies and practices prevents PSE stakeholders and policymakers from understanding how and when children are identified, particularly those who are no longer newborns.

To receive federal funding, states must meet requirements set by federal legislation (Child Welfare Information Gateway, 2019a), but how they do so differs from state to state. To meet new mandates, the state may change laws, regulations, and CW agency policies and procedures—all forms of increasingly specific guidance that directs CW staff tasks. The guidance includes the following:

- State legislation: Laws passed by the state's legislature that govern the state's CW agency (Child Welfare Information Gateway, 2015a).
- State regulations: Describe how legislation is operationalized, by defining agency activities that are required statewide (Child Welfare Information Gateway, 2018).
- CW agency policies: Outline the goals, roles, and responsibilities of CW staff; based on and may directly refer to state laws and regulations (Amann, 2001).
- CW agency procedures: Delineate the specific steps and processes that staff must use to perform tasks (Amann, 2001).
- CW agency forms: Operationalize processes through formal documentation; guide data gathering, documentation, and interpretation.
- CW agency practice guidance: Provides additional topic-specific materials and/or best practice recommendations; application of this information is suggested but not required

To understand the written guidance in the five states,[32] the team reviewed publicly available documents in place at the time of site visits. Exhibit 11 lists, by state, the type of documents.

Exhibit 11. Reviewed CW State Policy Documents

	State 1	State 2[a]	State 3	State 4[a]	State 5
State legislation	√	√	√	√	√
State regulations	–	√	–	–	–
CW agency policies	√	–	√	√	√
CW procedures	√	–	√	√	√
CW forms	√	√	–	√	√

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[32] States, sites, and participants were granted confidentiality to foster open discussion about practices. Descriptive information about the states and sites can be found in exhibit 4, and participants in exhibits 6 through 10.

	State 1	State 2[a]	State 3	State 4[a]	State 5
CW practice guidance	√	–	√	√	–

[a] County-administered CW system

States 1, 3, and 5 use a centralized structure featuring state-level operation and delivery of CW services. States 2 and 4 are state supervised but administered by counties that may develop their own policies—but each state delivered some statewide services (e.g., intake hotlines).

The team found various types of statewide CW agency guidance in place at the time of the study. Policies, procedures, and forms were applied statewide for states 1, 4, and 5. Practice guidance was incorporated in policy and procedure manuals in states 1, 3, and 4. State 2 did not have statewide CW policies, procedures, or practice guidance, though forms for child protection investigations were used across the state. Because of the absence of statewide policies, state regulations directing CW agency activities were reviewed in state 2. State 3 forms were available only in the agency's management information system and were not accessible to the study team for review.

Key Findings

The primary data sources for this chapter are state laws as well as statewide CW agency policies, procedures, and forms. Secondary data sources are interviews with CW staff and directors, which the team used to identify state activities in response to CAPTA/CARA[33] and to understand how state legislation and CW agency policies are interpreted and applied by CW staff. Data are analyzed and presented across states. The objective is to understand what policies and practices are present across states representing diverse CW contexts by key categories.

Findings presented below fall within three categories: state activities in response to new CAPTA/CARA requirements; state laws and CW agency policies referencing children with PSE; and CW agency policies addressing needs assessment and service referrals for children. Supporting data describing details of the policy documents review and methods can be found in appendix F (exhibits F1 through F3).

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[33] The Child Abuse Prevention and Treatment Act (CAPTA), originally enacted on January 31, 1974 (P.L. 93-247), is federal legislation that provides funding and guidance to state public CW systems. This act has been amended several times and was last reauthorized on December 20, 2010, by the CAPTA Reauthorization Act of 2010 (P.L. 111-320). It was amended in 2015, 2016, and 2018, and most recently, certain provisions of the act were amended on January 7, 2019, by the Victims of Child Abuse Act Reauthorization Act of 2018 (P.L. 115-424).

State Activities in Response to CAPTA/CARA

State CW directors reported using several strategies to avoid automatic entry of families into the CW system when newborns with PSE are reported. CAPTA/CARA requires notification of the CW agency when an infant with PSE is identified (e.g., by hospital staff) so that a plan of safe care can be developed and referrals, such as early intervention services for the newborn, can be made if needed. However, such referrals do not mean that states must or should define PSE as a type of child maltreatment.[34] In states 1, 3, and 4, which define PSE as child maltreatment, the local area directors described policy revisions for CAPTA and CARA that directed "alternative response" processes for families of newborns with PSE who were determined to be at lower risk of child maltreatment. The alternative response process avoids child protection investigations that could lead to mandatory services or placement of the child in foster care.[35] An overview of state policy/process changes to meet CARA 2016 requirements is presented in appendix F.

> *"When I wrote the code for this, I deliberately placed all substance-exposed infant referrals into an alternative response tract . . . you cannot remove a child from their home just because the child has been born substance exposed."—State CW Director*

All five states made efforts to coordinate activities among CW, service providers, and other state agencies to offer service referrals to families. Plans of safe care must meet the needs of infants with PSE and their families by offering service referrals—including those for substance use treatment.[36] State CW directors in all five states described collaborations with other service providers

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[34] The Comprehensive Addiction and Recovery Act (CARA) of 2016 amended CAPTA in sections 106(b)(2)(B)(ii) and (iii)Subsections (b)(2)(B)(ii), requiring states to have "policies and procedures (including appropriate referrals to child protection service systems and for other appropriate services) to address the needs of infants born with and identified as being affected by substance abuse or withdrawal symptoms resulting from prenatal drug exposure, or a Fetal Alcohol Spectrum Disorder, including a requirement that health care providers involved in the delivery or care of such infants notify the child protective services system of the occurrence of such condition of such infants . . . such notification shall not be construed to I.-establish a definition under Federal law of what constitutes child abuse or neglect; or II. - require prosecution for any illegal action."

[35] States may create CW systems that use "alternative responses" when allegations of child maltreatment are determined to involve low to moderate risk, and "investigative responses" for reports of more severe child maltreatment that may lead to the CW agency asking the court for legal custody of the child.

[36] The Comprehensive Addiction and Recovery Act (CARA) of 2016 amended CAPTA in sections 106(b)(2)(B)(iii); it requires the development of a plan of safe care for the infant born and identified as being affected by substance abuse or withdrawal symptoms or Fetal Alcohol Spectrum Disorder to ensure the safety and well-being of such infant following release from the care of health care providers. The plan should include addressing the health and substance use disorder treatment needs of the infant and affected family or caregiver.

to develop plans. These joint efforts offered both opportunities and barriers. State CW and local area directors in states 1, 2, and 5 described cooperative activities to improve communication between the agency and other providers in identifying families and offering timely and appropriate service referrals.

> *"We're trying to create more of a public health approach, so there's a web of support for families."—State CW Director*

Some state CW directors described barriers in their work with other entities. Laws in state 4 designated hospitals to initiate the development of plans of safe care, but the director of state 4 reported that the hospitals did not do so, despite the legislative mandate and CW agency efforts to train and support them. Laws in state 3 designated service providers and the CW agency as jointly responsible, but the CW director of state 3 likewise described uneven participation by other service providers. Separate financial streams and operational authority of different state agencies could prove to be a barrier. The state 3 director reported that because another state agency delivered substance use treatment services, the CW agency did not have access to funding or control over these services; therefore, it was more difficult to deliver these services to families before they were placed under the formal care and placement responsibility of the state.

> *"Drug treatment for families who are not under active child protection case services . . . are (administered by) the Department of Behavioral Health . . . there's a lot of bureaucratic obstacles to get services for these families."—State CW Director*

Four of the five states had implemented additional data collection processes to meet new CAPTA/CARA requirements. States were instructed as part of the federal legislation to submit 2018 federal fiscal year data to the National Child Abuse and Neglect Data System (NCANDS)[37] and report the number of infants identified as substance affected, the number of plans of safe care that were developed for these infants, and the number of infants and their families who received service referrals.[38] States 1, 2, 3, and 4 were collecting these data; state 5 was still planning and piloting.

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[37] Guidance on amendments made to the CAPTA by Public Law 114-198, the CARA of 2016, is available at https://www.acf.hhs.gov/cb/policy-guidance/pi-17-02

[38] The CARA of 2016 amended CAPTA in sections 106(b)(2)(B)(ii) and (iii) by adding these requirements to Section 106(d) Annual State Data Reports: (18) The number of infants—(A) identified under subsection (b)(2)(B)(ii); (B) for whom a plan of safe care was developed under subsection (b)(2)(B)(iii); and (C) for whom a referral was made for appropriate services, including services for the affected family or caregiver, under subsection (b)(2)(B)(iii).

State CW directors described limitations to their data systems as a barrier to reporting this newly required information, and they noted challenges in collecting quality data. State 2 had not yet began inputting information, as it was "waiting for [the] data system to be built." Instead, staff recorded new information on paper. The state CW director of state 4 reported a lack of specificity about data collection efforts, which prevented understanding the types of substances to which children were exposed. The state CW director in state 1 reported using its quality assurance processes to improve consistency in their agency processes, including how staff apply new data and the ways staff respond to reports of prenatal exposures without additional allegations of maltreatment.

> *"I can tell you how many substance-exposed infants I have by year, but I can't tell you whether it's alcohol or opioids or meth or cocaine or whatever it may be."—State CW Director*

State CW directors in two states described efforts to share data between systems. The CW director of state 3 reported requesting ongoing nightly data from the state public health department to identify newborns affected by PSE and associated medical information (e.g., diagnoses, prematurity), to identify and create plans of safe care more quickly. The public health agency agreed to share information only on infants who had been taken into CW agency custody. The state 5 CW director described piloting a process to share data between the agency, the hospital, and the community service provider, to facilitate identifying infants and developing plans of safe care and providing service referrals to families quickly; however, this initiative was not implemented at the time of the interview.

State Agency Policies Guiding Identification of Children Prenatally Exposed to Substances

State laws and CW agency policies mandated that only very young children with PSEs be identified by medical providers. A review of the five states' laws found in four states references to PSEs in areas of the laws defining child maltreatment. Exhibit 12 details the state definitions of child maltreatment related to PSE.

Exhibit 12. State Legislation Defining PSE as Child Maltreatment

Types of substance exposures, identification methods, and ages of children described in legislation, by state

State Legislation Defines PSE as Maltreatment (Yes/No)		Type of Substance Exposures in Law Defining Maltreatment		Identification Methods Described in Law Defining PSE as Maltreatment			Age(s) of Children in Law Defining PSE as Maltreatment
		Illicit drugs	Alcohol	Medical testing	Withdrawal symptoms	PSE diagnosis, including FASDs[a]	
State 1	Yes	Yes	No	Yes	No	No	Newborn/infant[b]
State 2	Yes	Yes	No	Yes	No	No	Child at birth
State 3	Yes	Yes	Yes	Yes	No	No	Newborn
State 4	Yes	Yes	Yes	No	Yes	Yes	Within 4 years following child's birth
State 5	No	N/A – Does not define PSE as a type of child maltreatment					

[a] Fetal Alcohol Spectrum Disorders (FASDs). [b] State 1 category of child maltreatment included newborns prenatally exposed to substances, and children environmentally exposed to substances such as methamphetamine.
Source: Document review of publicly available laws; *N* = 5 study states.

Four of five states defined PSE as a type of child maltreatment. Of these states, all four definitions of child maltreatment included prenatal exposure to illegal drugs, and two states included prenatal alcohol exposures (PAEs). To identify children, three of four state laws described medical testing; one state described withdrawal symptoms and medical diagnoses related to PSE, which included Fetal Alcohol Spectrum Disorders (FASDs). Three states referred to children with PSE as *newborns* or *infants*; one state referred to children up to age 4.

CW agency policies, procedures, and practice guidance referencing PSE were applied only to newborns or very young children. Exhibit 13 gives an overview of CW agency guidance.

Exhibit 13. CW Agency Guidance Referencing Children With PSE

Guidance according to age of child and types of substances, by state

State	Age of Child the Policy Applies to	Policies/procedures Direct Collecting Retrospective Information From Mother on Substance Use During Pregnancy			Practice Guidance Gives Information on Effects of Exposure	
		Drugs	Alcohol	Use of validated screens	Illicit drugs	Alcohol
State 1	Newborn/ infant[a]	Discouraged	Discouraged	No	No	No
State 2[b]	--	--	--	--	--	--
State 3	Newborn	Suggested	Suggested	Suggested	Yes	Yes
State 4	Within 4 years following child's birth	Suggested	Suggested	Suggested	Yes	Yes
State 5	Infants	No	No	No	No	No

[a] State 1 category of child maltreatment included newborns prenatally exposed to substances, and children environmentally exposed to substances such as methamphetamine. [b] No statewide CW agency policy found.
Source: Document review of CW agency policies, procedures, and practice guidance addressing PSE; *N* = 5 states.

Four of the five states had CW agency policies addressing children with PSE (one state did not have statewide CW agency policies). In these four states, policies and procedures addressed only newborns (three states) or very young children (one state). Both states 3 and 4 offered information on the long-term effects of prenatal drug and alcohol exposure within practice guidance found in the state's policy and procedures manual.

Notably, in the five states, no policies were found requiring staff to collect information from the mother on her use of substances during pregnancy. Policies and procedures for states 3 and 4 suggested collecting maternal information on mother's use of drugs and alcohol during pregnancy, and referred to validated instruments (e.g., the CAGE, 4Ps)[39] to obtain this information; however, this

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[39] CAGE is a four-item acronym reflecting items about alcohol use: Cut down (have you tried to cut down alcohol consumption?), Annoyed (have others gotten annoyed by your drinking habits?), Guilty (have you felt bad or guilty about use?), and Eye-Opener (do use alcohol early in the morning?). The 4Ps addresses factors in alcohol use: Parents (parental history of alcohol use), Partner (partner use of alcohol), Past (any drinking problems in the past), and Present (level of current drinking). See O'Connor et al., 2018; Young et al., 2006.

information was within practice guidance and was not mandated. The investigation policy for state 1 discouraged collecting information from the mother, as this information was not sufficient evidence to substantiate PSE maltreatment as defined by the state, which required a positive medical test to make a finding.

During interviews, staff from the five states referred to current laws and policies to explain their practice. State 1 defined prenatal exposures to drugs—but not alcohol—as child maltreatment. This narrow definition sometimes made it difficult for staff to imagine how they would identify or work with children exposed to alcohol. As one staff member explained, “The way our laws are . . ., I don’t think I’ve ever assessed a case because mom drank during her pregnancy, because it’s considered legal.” When asked how staff might identify children prenatally exposed to alcohol, a local area director replied, “I really can’t tell you how these folks would handle that because we don’t have a category of abuse that fits.” Of the 118 staff who referred to any CW agency policy during interviews, 60 referred to policies that were applied to newborns (see appendix F, exhibit F3).

Policies Guiding Needs Assessment, Service Referrals, and Information Sharing for Children Prenatally Exposed to Substances

Among the five states, there were no policies found directing service referrals for older children suspected of or known to be prenatally exposed to substances. As described above (exhibit 13), policies for service referrals for children prenatally exposed to substances were directed toward infants and very young children, and they were incorporated into policies addressing development of plans of safe care.

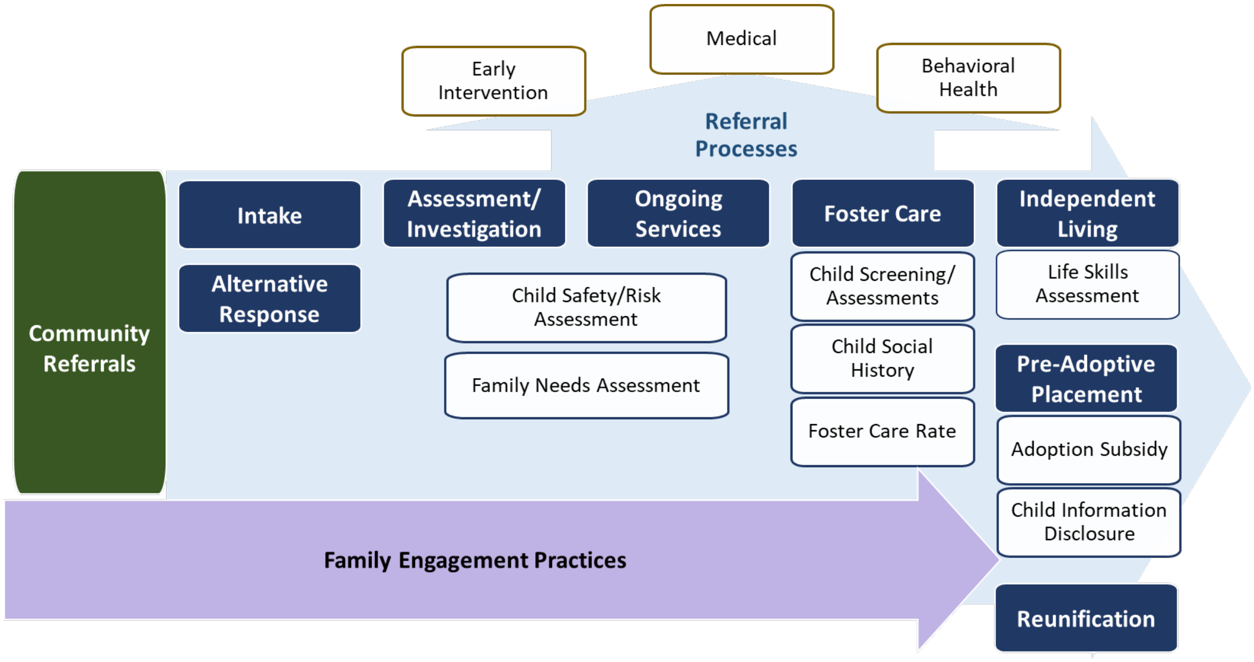
Although no specific service referral policies for older children with PSE existed among the five states, there were policies guiding structured processes that could be used to take care of the child’s needs and make service referrals. Such policies involved CW staff gathering, documenting, and sharing information on the child’s medical, developmental, mental health, and behavioral needs to make decisions to promote the child’s safety and well-being. Some agency guidance or processes featured routine referrals of children at specific points in the case process; others were more specific to an individual child’s needs.

Exhibit 14 presents an overview of these activities. As part of each activity, information is gathered in a structured process or assessment; each could be a potential “touchpoint” for staff members to fold in assessment of PSE across the course of a child’s case. The policies and procedures guiding each of these activities and their potential as PSE touchpoints are further described below.

Among the five states, CW agency policies directed staff to engage families throughout the case. Practices that emphasize involving families in case planning and decision making are used to obtain better information on family needs, decrease the adversarial relationship with the CW agency, and improve child safety and permanency (Morris & Connolly, 2012). Two of the five study states used Family Team Decision Making (FTDM; Crea et al., 2008), and two states used Solution Based Casework (Antle et al., 2012).

Exhibit 14. Activities Used by the CW Agency to Gather, Review, and Apply Information on the Child in Case Planning

Possible touchpoints for PSE information gathering



Investigation and Ongoing Case Management Services

Child Safety/Risk Assessment. Policies and procedures applied to all families coming into contact with the CW agency included collecting information to assess the child's safety and risk of future maltreatment. When families had ongoing involvement with the CW agency, procedures used to assess safety/risk would be repeated at intervals throughout the case. None of the five states had policies directing staff to collect information on maternal substance use during pregnancy as part of the child safety/risk assessment, or to inquire about the possibility that a child could have been prenatally exposed to drugs or alcohol. All five states had policies directing systematic collection of information on parental substance use—for all types of allegations of child maltreatment. Checkboxes on forms documenting parent use did not record alcohol use specifically; rather, they used general terms ("substance use") or merged substances ("alcohol/substance use"). There were no policies directing staff to collect information on maternal use during pregnancy.

In cases of allegations that were not related to newborns reported for PSE, there were no policies directing staff to inquire about a child's known or potential exposures to substances. In states 2 and 4, instructions guided staff to use information on known child PSE as an indicator of the severity of parental substance use. There were no policies directing staff to collect information on maternal use during pregnancy.

Family Needs Assessment/Case Planning. All state policies directed staff to repeat and extend processes used during the investigation, to substantiate allegations and determine child safety/risk. State 4 undertook these processes and introduced an additional procedure to obtain and document information on the caregivers' strengths and needs (e.g., parenting capacity) and the child's needs (e.g., development indicators). None of the five states' assessment methods specifically addressed PSE.

Early Intervention/Developmental Assessment. The Keeping Children and Families Safe Act of 2003[40] outlined provisions and procedures for states to make referrals to early intervention services, funded under part C of the Individuals With Disabilities Education Act, for children under age 3 who are involved in a substantiated case of child abuse or neglect. All five states had policies guiding staff to refer children under age 3 to their state's early intervention system.

Foster Care Placement

Child-Specific Assessment Processes. When children were placed in foster care, all five states initiated screening processes, conducted by the agency, and made referrals to external service providers for additional screening and/or services. Three states used structured forms to collect information on the child's social history, which included the child and birth family's medical background. If the child was adopted after birth or later in childhood, this information would be provided to the adoptive family. State 4 conducted a systematic assessment of all children placed in foster care using a validated instrument (i.e., Child and Adolescent Needs and Strengths [CANS]) which assessed needs and strengths in areas such as school, mental health needs, and risk behaviors. State 4 also referred

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[40] Keeping Children and Families Safe Act of 2003 (P.L. 108-36) amended the CAPTA, the Adoption Opportunities Act, the Abandoned Infants Assistance Act, and the Family Violence Prevention and Services Act. The legislation mandated changes to state plan eligibility requirements for the CAPTA state grants, including provisions and procedures for referral of a child under age 3 who is involved in a substantiated case of child abuse or neglect to early intervention services funded under part C of the Individuals With Disabilities Education Act.

to this assessment as a *trauma screening*. State 5 screened children for developmental and mental health needs via validated tools tailored to the age of the child (e.g., Ages and Stages Questionnaire, Denver Developmental, Pediatric Symptoms Checklist, Global Appraisal of Individual Needs – Short Form).[41] States 3 and 4 incorporated trauma screening. State 3 partnered with a private contractor, who conducted trauma, mental health, behavioral, and developmental screening. State 5 conducted a trauma screening using the Screen for Child Anxiety Related Disorders (SCARED). State 3 provided every school-aged child in foster care with a diagnostic educational assessment conducted by a contracted educational professional, who evaluated the child's reading and math skills.

Medical Examinations. The P.L. 110-351 Fostering Connections to Success and Increasing Adoptions Act of 2008 requires state CW agencies to work with their state Medicaid agency to make a plan to coordinate health care for children in foster care; this plan ensures screenings, assessments, and follow-up treatment. Medicaid provides health care benefits for children, called Early and Periodic, Screening, Diagnosis, and Treatment (EPSDT) services (Child Welfare Information Gateway, 2015b).[42] These include medical examinations that cover developmental screening as well as preventive and early intervention services.

Policies for all five states mandated referrals for medical examinations for children in foster care. Forms used to refer children for medical examination were found for state 5 and state 1; neither form referred to a child's known or potential PSE status. The state 1 form had a checkbox labeled "alcoholic" for family background, while the state 5 form had no family medical history fields.

To obtain health information on the child, State 2 used a form that did not have a specific field for a child's known or potential PSE status. There was, however, space to document information on a child's family health background, which included a field to record parent history of substance use.

Foster Care Rate Setting. For all five states, the team found descriptions of procedures used to grant foster care providers a higher subsidy rate when a child's needs would require more time and supervision. These processes featured reviewing a child's medical, behavioral, developmental, and academic needs, and medical diagnoses, though no policies explicitly referenced a child's known or suspected PSE.

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[41] See https://www.childwelfare.gov/topics/systemwide/assessment/family-assess/sources/ for information about the tools and assessments mentioned in this chapter.

[42] The EPSDT is a federal benefit program under Medicaid that provides health care entitlement services for children who are enrolled in Medicaid. Each state administers its own EPSDT program, which is financed by funds from both the state and the federal government.

Mental Health Service Referrals. All five states had policies describing eligibility and referral processes for mental health and behavioral services. Children who needed further mental health and behavioral support could be identified by earlier screening processes, such as trauma screening conducted by private contractors in state 3. In state 5, foster caregivers and caseworkers could request mental health and behavioral services from the state's department of health; to determine whether these services would be delivered, the department of health would conduct screening using the CANS. In state 5, staff wanting to refer children with intensive mental health and behavioral needs to a therapeutic services contractor were instructed to complete a referral form that contained an extensive list of child medical, social, cognitive, and behavioral/emotional indicators, such as sleep problems, poor social skills, and low educational performance. The form had a checkbox for indicating if a child had a PAE-related diagnosis.

Exiting Care of the CW Agency

Independent Living. The team identified policies in all five states that described procedures used to assess the child's needs to create an independent living plan for youth in foster care aged 14 and above. These procedures reflected requirements of P.L. 106-169, the Foster Care Independence Act of 1999,[43] which requires states to deliver supports to youth in foster care transitioning to self-sufficiency. Four states directed staff to the Casey Ansell Life Skills Assessment to identify needs and tailor supports to youth, though only two mandated its use. Because youth who are adversely affected (e.g., with an FASD) may require additional supports for activities of daily living (see page 18), attention to PSE in preparing plans could be beneficial, yet the team did not find policies that specifically addressed the effects of a child's risk or known prenatal exposures.

Adoption Subsidy. Adoption subsidy application processes exist for all five states. These subsidies may be granted to families who adopt children from the U.S. CW system who may require more intensive care and professional services. For families to be eligible for adoption subsidies, staff gather all documentation of their children's special medical, behavioral, and mental health needs that would require enhanced supervision and additional medical care, such as copies of psychiatric examinations. This application offers an opportunity to include vital information related to a child's PSE status.

Adoption Disclosure of Child Information. When a child was placed in foster care or when a child's permanency goal included adoption, policies in states 1, 2, and 3 directed staff to begin to document

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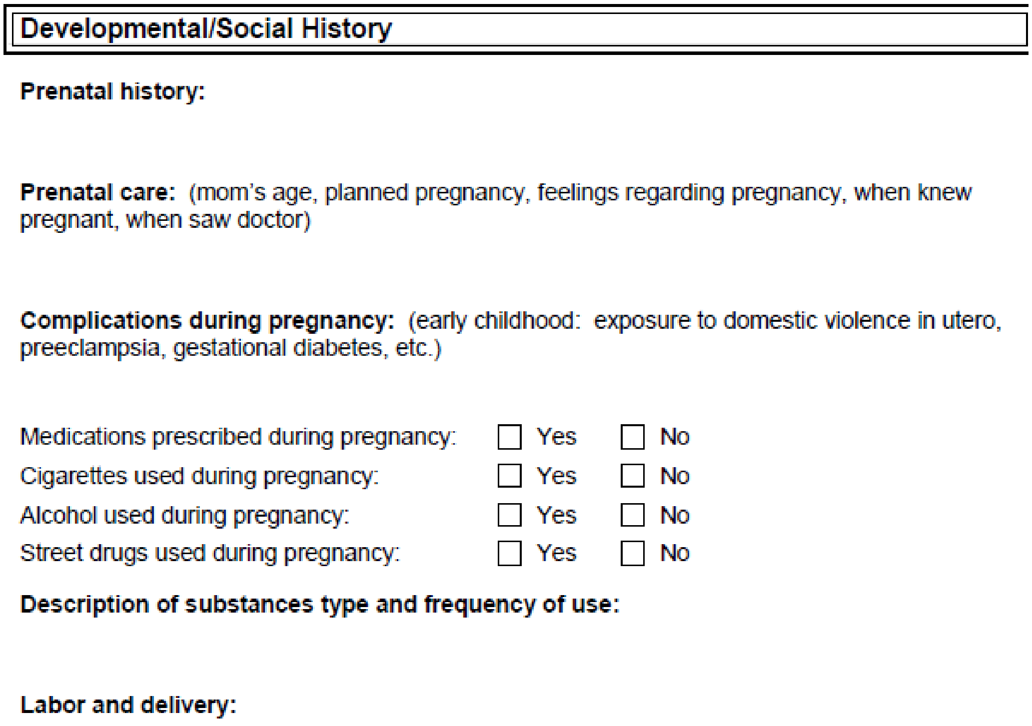
[43] P.L. 106-169, the Foster Care Independence Act of 1999, amended part E of title IV of the Social Security Act to give states funding to help children make the transition from foster care to self-sufficiency. It revised the John H. Chafee Foster Care Independence Program to provide states with flexible funding, which allows states to provide services to help children who were likely to remain in foster care until age 18 make the transition to self-sufficiency.

the child's social history. If the child was adopted later in the case process, the social history and additional information on the child would be shared with the adoptive family. At both of these points (foster placement, adoption disclosures), PSE-related information could inform the care of the child. Forms used to document this information that would be shared with adoptive parents were found for states 1, 3, 4, and 5. The state 1 form had specific fields to record labor and delivery information on the child as well as the mother's use of substances during pregnancy (see exhibit 15).

Exhibit 15. Form to Record Child Information for Adoptive Families

State 1 form included in state manual



Developmental/Social History

Prenatal history:

Prenatal care: (mom's age, planned pregnancy, feelings regarding pregnancy, when knew pregnant, when saw doctor)

Complications during pregnancy: (early childhood: exposure to domestic violence in utero, preeclampsia, gestational diabetes, etc.)

Medications prescribed during pregnancy: ☐ Yes ☐ No
Cigarettes used during pregnancy: ☐ Yes ☐ No
Alcohol used during pregnancy: ☐ Yes ☐ No
Street drugs used during pregnancy: ☐ Yes ☐ No

Description of substances type and frequency of use:

Labor and delivery:

State 3 policy directed staff to document, on a form that would be used to inform adoptive families about the child, the types and frequency of substances used by the mother during pregnancy. This form included a checkbox for "Prenatal alcohol/drug use" of mother. State 4 prompted the worker to provide the types of substances a mother used, though it did not direct specific information on the mother's use during pregnancy. A form used to document information in state 5 included checkboxes that included "Maternal use of alcohol during pregnancy" and "Mother's alcohol or drug addiction."

Implications

Policies directing CW staff to collect information on potential substance exposures, embedded within routine areas of practice, may help identify older children with PSEs that are not recognized at birth. CAPTA/CARA 2016, state laws, and CW agency policies created may overly rely on the role of medical providers and medical tests in identifying PSE—and thus reinforce the incorrect assumption that all children with PSE are identified at birth. Staff referenced existing policies to explain their practice related to children with PSE, yet there was no guidance directing what to collect, how to collect, and how to use information to identify those children with PSE who were not recognized at birth. This lack of guidance could result in a missed opportunity to deliver services that can facilitate the safety and well-being of children; it may particularly affect children exposed to alcohol, as alcohol is generally unable to be identified through toxicology tests, and exposed newborns may not show effects at birth (Drescher-Burke, 2007). There are brief screening tools that can accurately assess maternal substance use during pregnancy (Anthony et al., 2010; Chasnoff et al., 2007). Frequently used tools, such as the AUDIT, TWEAK, the 4-Ps, and CAGE,[44] have been recommended by clinical researchers for use in CW systems to identify caregivers who are potentially affected by substance use and whose children may be at risk for PSE (Anthony et al., 2010; Young et al., 2006). Although screening tools and structured processes cannot be used for or take the place of comprehensive diagnostic assessments conducted by professionals, they may be an important first step in the evaluation and referral process (Paley & Auerbach, 2010). Screening tools and systematic gathering of information could help staff review medical, developmental, mental health, and behavioral indicators that may suggest a child may be affected by PSE, which could help staff determine whether a referral for a more thorough diagnostic assessment should be made (Burd et al., 2011).

Defining prenatal exposure as child maltreatment may be a barrier to providing supportive services to families. CAPTA/CARA 2016 mandates states offering service referrals, including substance use treatment for caregivers, for all families of infants reported for PSE. This is the case for both families who will have ongoing contact with the CW agency and families in which no allegation of child maltreatment is found; however, services and support for families may be more difficult to prioritize when prenatal exposure is defined as child maltreatment. Interviews suggest that staff may focus on collecting information oriented toward allegations that align with their state's definition of child

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[44] Alcohol Use Disorders Identification Test (AUDIT); TWEAK is a five-item acronym reflecting items about alcohol use, including Tolerance, Worry about drinking, Eye-opener (drinking in morning), Amnesia (blackouts), and Cut down on drinking (K/C). See O'Connor et al., 2018; Young et al., 2006; and https://www.childwelfare.gov/topics/systemwide/assessment/family-assess/sources/ for more information.

maltreatment. Study states with new or revised policies directing alternative responses when CW is notified of children with PSE may be diverting families from Child Protective Services (CPS) investigations. However, states may wish to reconsider defining prenatal exposure as a type of maltreatment, as studies have found that it may not decrease rates of newborn exposures to narcotics and may reduce participation in substance use treatment (Atkins & Durrance, 2020).

Services to families may require increased focus on needs assessments earlier in the case process. If reports of PSE result in investigative processes, staff may emphasize information that helps determine the child's safety and risk of future maltreatment. The child's safety is paramount; yet processes and instruments used to assess safety and risk may not adequately uncover service needs (Van der Put et al., 2017). The importance of information on a child's known or possible PSE status is reflected in state policies and forms focused on sharing information on a child's PSE with pre-adoptive families, but how this information is collected is not clear. While PSE or PAE may not pose an immediate safety threat, it may heighten a child's risk for future maltreatment (Sun et al., 2007). Children's needs may include co-occurring medical conditions, poor school performance, challenging behaviors, and difficult social relationships. Earlier identification of PSE can improve the safety and well-being of children and may also offer opportunities to increase support to caregivers—who may need help to successfully parent and meet their child's needs (Burry & Wright, 2006).

Agencies may find value in reviewing procedures, forms, and data entry screens to consider adjustments that prompt staff to gather, document, and use information on prenatal exposures. Asking retrospective questions of the mother and revising checkboxes on forms or data screens (e.g., NCANDS) to indicate *alcohol use* specifically, as opposed to generically indicating mother's use of "substances," can be valuable documentation of a child's potential risk of FASDs. Including electronic case file data fields that reveal maternal use of substances during pregnancy in ongoing case management processes can prompt staff to continue to ask questions throughout the case. Deliberately collecting and reviewing information to assess whether a child may be showing effects of undetected PSE, particularly PAE, could be built on existing processes that occur throughout the case process. For example, procedures used to determine foster care subsidy rates could also be an opportunity to review behavioral issues that may be present in children exposed to alcohol. Youth with unrecognized PAE may have difficulties with academic progress and social relationships; these issues could be deliberately explored during processes used to develop independent living plans.

Involving the broader CW system to facilitate collecting, sharing, and using information could improve outcomes for children who may experience high rates of PSE. Structured information sharing, via forms that include information on a child's known or suspected exposures, could prompt service providers to question whether the child may be showing long-term effects. This could lead to more targeted assessments by medical providers, referrals for additional diagnostic services, and services for specific neurocognitive challenges that may affect children exposed to substances, particularly alcohol.

Information from the mother could be sought using current engagement strategies described in CW agency policies. Legislation and CW agency policies may reference testing and medical diagnoses as critical evidence for court cases, which could cause information from the mother to be overlooked or discouraged. Yet obtaining information about substances such as alcohol is critical for identifying children who may be affected by FASDs (Bakhireva et al., 2018). To get accurate information from mothers, agencies could consider building on family engagement practices they already use. These practices involve families in shared decision making and case planning, which may enhance the child's safety and increase the likelihood of reunification with the family (Lambert et al., 2017; Morris & Connolly, 2010). Studies show that families value their involvement in decisions about their child's care, even when the child is placed out of the home (Morris & Connolly, 2010). Agency policies could build on their existing engagement practices, such as Family Team Meetings, to partner with the mother, to determine if there may be child needs related to PSEs. These practices can help collect important information on a child's background and facilitate diagnosis of FASDs (Bakhireva et al., 2018).

4. Staff Training and Knowledge Regarding Prenatal Substance Exposures

This chapter explores what child welfare (CW) professionals know about prenatal substance exposures (PSEs), including prenatal alcohol exposure (PAE), and how they know it, as well as their perceptions of training and practice needs.

Background

Professionals who work with populations at high risk for PSE need to be aware of its signs, symptoms, associated conditions, and the short- and long-term effects. For professionals in CW, the ways in which PSE intersects with CW involvement and outcomes are critically important (Paley & Auerbach, 2010; Olson et al., 2009a). Yet PSE knowledge is uneven among CW staff and allied professionals[45] (Chasnoff et al., 2018; Lloyd et al., 2018; Usher et al, 2016; Wedding et al., 2007).

Even with knowledge, professionals may find it difficult to apply PSE information to their work with children and families (Wedding et al., 2007). They may not understand the need to universally obtain prenatal exposure history for all children in their caseload. Professionals benefit from in-depth training to obtain a

Related Study Questions

- What PSE training is available to CW staff, and where do CW staff obtain information about PSE?
- What do CW staff know about PSEs and PAEs, in particular?
- What are the training gaps and needs identified by CW staff to enhance knowledge and practice?

Summary of Findings

- Most (84 percent) CW staff surveyed reported having participated in training on PSE topics, most often accessed through the state CW agency (60 percent). One-fifth of interviewees (21 percent) reported no or minimal training.
- Most CW staff self-report a high level of awareness about the effects of PSE, yet many displayed inaccurate knowledge about the effects of PAE.

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[45] Allied professionals are individuals and agencies that support child welfare agencies with aspects of PSE identification and care, such as mental health, developmental assessment providers, and medical providers.

PSE history, identify children affected by PSE, and more effectively refer caregivers to appropriate intervention and care (Chasnoff et al., 2015; Henry et al., 2007; Olson et al., 2009a). There has been a lack of information in the child welfare field about the level of PSE knowledge among CW staff, how they obtain information about PSE, and how they apply this knowledge to identify and work with families and children who have experienced PSE (Richards et al., 2020).

Summary Findings (continued)

- CW staff raised targeted needs and requests for more training in many areas, including indicators of PSE (48 percent), long-term effects of PSE (33 percent), how to identify (23 percent), and appropriate interventions (23 percent).

Key Findings

Findings described in this chapter draw from all five states[46]—171 interviews and 271 surveys of CW staff across 22 agencies. Given high agreement across the two data sources, some findings are presented from a single source. Findings shed light on how CW staff in diverse roles and locations learn about PSE, the scope of their PSE knowledge and understanding, and their perceived training needs.

The key findings presented below fall within three categories: staff PSE training, scope of PSE knowledge and understanding, and perceived needs. Supporting data organized by state, staff role and years of experience, and method can be found in appendix F (exhibits F4 through F21).

Staff PSE Training

Most[47] CW staff (84 percent) reported having participated in training on PSE topics. Across both the survey and interview, most staff (82 percent and 79 percent, survey and interview staff, respectively) reported having training on PSE topics. Less than a quarter (16 percent and 21 percent, survey and interview staff, respectively) reported no or minimal training. Endorsement of participating in PSE training was consistent across staff roles. Most staff in four states reported having had training in PSE, but fewer staff in one state reported having PSE training. When interviewees were asked

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[46] States, sites, and participants were granted confidentiality to foster open discussion about practices. Descriptive information about the states and sites can be found in exhibit 4, and participants in exhibits 6 through 10.

[47] The following terms are used to reflect intentional approximations of frequency: *few* (about 10 to 25 percent of participants), *some* (about 26 to 50 percent of participants), *many* (about 51 to 75 percent of participants), and *majority/most* (about 76 to 90 percent of participants).

about training on PAE specifically, less than two-thirds (62 percent) responded that the PSE trainings they attended included specific information on PAE.

Most staff received PSE training through the state CW agency. The state CW agency was the source of the most PSE training (60 percent), followed by undergraduate and/or graduate school (41 percent) and the local CW agency (34 percent). Continuing education units (21 percent) and other knowledge or training sources (20 percent) were less frequent. In interviews, over three-quarters (83 percent) indicated that training was made available by the CW agency, and over half described that other training was available by external partners and organizations (52 percent).

The participating state agencies varied in their initial and ongoing professional development training requirements and in the training content that addresses PSE. For example, one state offers multiple PSE training opportunities targeted to different roles and levels of staff experience—and even offers one course specifically on Fetal Alcohol Spectrum Disorders (FASDs)—while another state delivers more general training about substance-exposed infants in its initial caseworker training and a few related voluntary professional development opportunities on the same topic. Exhibit 16 summarizes current training and professional development offerings in two study states and illustrates some of the variation in topics, availability, and modality. A Practice Highlight on the next page notes an additional training event in state 2.

Although many local area directors (69 percent) knew of internal PSE training available to their staff, many did not. Interviewed staff indicated that PSE information is included in the base/orientation training for CW staff; however, they often described this information as “pretty general.”

Exhibit 16. Training and Professional Development Offerings

Training in two selected state agencies

State	Content Areas and Modalities	Staff Level	Frequency
State 2[a]	Online topic-based training, including— - Understanding parental substance abuse and ensuring safety - PSE effects and considerations for CW practice - FASDs - Implications of the opioid crisis - Plans of safe care Case-based series on working with families with substance use Communities of practice on PSE	Separate offerings for— - Caseworkers - Supervisors and managers - Case aides - Foster, kinship, and adoptive parents Offerings targeted to level or years of experience	Varies, but multiple times a year
State 3[b]	High-level summary training about identifying PSE and PAE Trainings on— - Maternal substance abuse - Plans of safe care	Caseworker	Initial training period Annual professional development

Sources: [a] Online 2021 training catalog. [b] Personal communication with state CW training manager, 2021.

Practice Highlight: Training and Professional Development

In a rural part of state 2, a regionally based multidisciplinary task force on PSE offers an important training and professional development opportunity. This taskforce, which includes members from the local CW and public health agencies, regularly hosts a symposium that brings together hospital-based researchers and providers to educate CW staff, allied service providers, and the wider community, including parents involved with the CW system. Because this taskforce recognizes the potential for underestimation of PAEs, FASDs is often a central topic.

PSE training in CW primarily focuses on newborn exposures to substances other than alcohol. During the period of study data collection, participating states and local agencies were focused on meeting federal requirements related to CAPTA and 2016 CARA regulations and implementation of processes to develop plans of safe care (see chapter 3 for a detailed discussion). Moreover, the study also coincided with urgent national attention on addressing the "opioid epidemic" that was seen as driving increasing rates of referrals to CW (Lynch et al., 2018; Patrick et al., 2015). As a result, interviewed staff often mentioned state and agency training and professional development opportunities that specifically focused on current parental substance use and identification of substance-exposed newborns (e.g., focus on the behaviors, effects, and care needs for infants affected by Neonatal Abstinence Syndrome [NAS]).

The team often had to prompt interviewees to consider and respond with details about training specific to alcohol exposure and effects such as FASDs, which are rarely identifiable in newborns (Coles et al., 2000; Coles, 2011). Once prompted, staff expressed common themes related to a lack of training on alcohol effects and to identifying child and family needs and services for those who are affected:

> *"I would like to learn more about alcohol especially, because they [trainings offered by state] don't really focus on alcohol. . . . Because of the opioid epidemic that we're in, it's like alcohol kinda gets pushed back."—Frontline staff*
>
> *"We've had trainings on plans of safe care, like, how we're supposed to handle those cases . . . but not so much [on] how it affects the child."—Frontline staff*

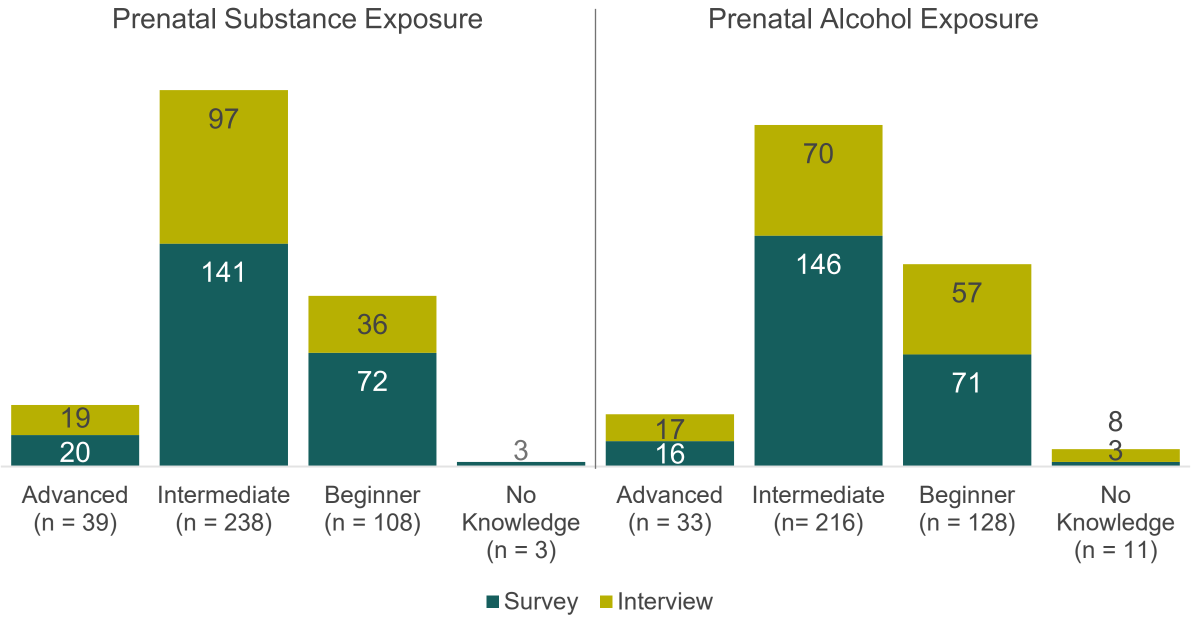
Scope of PSE Knowledge and Understanding

Most staff report that they have a high level of awareness of PSE effects. When asked about their level of knowledge, most staff rated their knowledge of PSEs as intermediate—a rating consistent across all states and role categories. When this question focused on their PAE knowledge level, just over half of respondents rated their knowledge as intermediate (see exhibit 17). One frontline staff member noted the limitations of the nonmedical role, stating: "I think it would be interesting to know more about PAE, but at the same time, we're not doctors, so the team can know only so much about it. We're still relying on getting all the information from the doctor or the pediatrician."

As one might expect, the level of self-reported knowledge increased as staff gained experience in the CW field and at the agency. Across roles, close to half of staff in nonsupervisory positions reported having 1 to 5 years of experience at the CW agency, and supervisors had more years of experience.

Exhibit 17. Self-Reported Knowledge Level of PSE and PAE

Number of CW staff reporting advanced, intermediate, or beginner knowledge levels or no knowledge of PSE and PAE, respectively



Source: Closed-ended questions from CW staff interviews and CW staff surveys in all five states; *N* = 152 interviews and 271 surveys (13% of survey responses [35] were missing).

Many staff have the misperception that abnormal facial features will be present for children affected by PAE. Survey respondents were asked to complete a “true/false” 9-item quiz on PAE and child development. Almost all (90–99 percent) staff correctly answered 5 of the 9 questions, and many (74–99 percent) correctly answered 8 of the 9 questions (see exhibit 18). Those with less experience in CW (0–5 years) had the lowest mean number of correct answers, and those with the most CW or agency experience (>20 years) had the highest mean number of correct answers. Responses to 2 survey items illustrated that staff overestimate the presence of abnormal facial features for children with PAE (i.e., children with an FASD). Over half of staff (64 percent) incorrectly believe that most children with an FASD have distinct facial features and, when asked to identify the effects of PAE on a child, a high proportion of staff cited abnormal facial features (85 percent).

Over half of staff (64 percent) incorrectly believe that most children with an FASD have distinct facial features.

Ongoing training from the CW agency may be especially necessary to ensure consistent awareness and knowledge. For example, staff in state 3 identified indicators of PAE as a knowledge gap, most often rated their PAE knowledge at a beginner level (63 percent), and had the lowest mean number of correct answers to the "true/false" PAE quiz. This state also had the lowest percentages of staff with more than 10 years of experience at the agency and in CW overall. Turnover/new staff may be one contributor to knowledge gaps (Paley & Auerbach, 2010; Willis et al., 2016).

Exhibit 18. Percent of Correct Answers on CW Staff Survey PAE Knowledge Quiz

Number and percentage of survey respondents who responded correctly to true/false survey items in PAE knowledge quiz

Survey Item	Number (Percentage)
Women only need to avoid hard liquor during pregnancy; beer and wine are okay. (False)	234 (99%)
Alcohol can harm an embryo or fetus at any time during pregnancy. (True)	231 (97%)
There is no cure for Fetal Alcohol Spectrum Disorder, although treatment can mitigate some effects. (True)	227 (96%)
A woman can have one or two drinks a day without causing harm to her baby since she isn't binging. (False)	223 (94%)
Women who drink early in pregnancy but stop drinking are not at risk for having a child with a Fetal Alcohol Spectrum Disorder. (False)	214 (90%)
Alcohol use during pregnancy is the leading known cause of developmental disability and birth defects in the United States. (True)	208 (88%)
Fetal Alcohol Spectrum Disorders occur only if the mother is an alcoholic during pregnancy. (False)	203 (86%)
Of all substances of abuse, alcohol produces the most serious neurobehavioral effects in the fetus. (True)	176 (74%)
Most children with a Fetal Alcohol Spectrum Disorders have unusual facial features. (False)	85 (36%)

Some staff underestimate the potential long-term effects of prenatal exposure to alcohol relative to other substances. Staff were asked an open-ended question: "What type of PSE is most harmful?" Research has shown that alcohol is the most harmful to the developing fetus and that the infants have significant long-term neurodevelopmental effects (Institute of Medicine, 1996). Only one-quarter of staff

(24 percent) correctly answered “alcohol.” The largest proportion (39 percent) of staff identified multiple or all substances, followed by opioids (7 percent) and methamphetamine (4 percent). When considering percentages by state, the percentage of respondents selecting alcohol ranged from 11 to 39 percent and those selecting multiple or all substances from 30 to 48 percent. Respondents from one state selected methamphetamine more than any other state (13 percent), and cocaine and benzodiazepine were mentioned only in a different state, perhaps reflecting the prenatal exposures with which those places have the most experience. Responses to this question reflected the range of knowledge that staff had on this topic. Typical responses focused on substances other than alcohol, such as this response from a CW staff member with child protective services/investigative and family needs assessment responsibilities: “I would have to say drugs are more harmful because they have the worst effect on a child. I am not sure what effects alcohol have to a child because I do not have any training or understanding on its effects.”

Again, ongoing training may help to address these types of misperceptions. For example, staff from state 2 (a state with more developed training) were most likely to indicate alcohol as the most harmful effect, as stated below:

> *“Alcohol. It is legal and difficult to test for at birth. There is a misconception of how harmful it is, and there are lots of groups who say that it is okay to have a drink when you are pregnant.”—Staff member with director/administrator responsibilities*

Perceived Training Needs

CW staff raised targeted needs and requests for more training across a range of topics. When asked whether there were any gaps or areas for training related to PSE and PAE (see exhibit 19), almost half of respondents wanted to know more about the indicators of PSE and PAE. Some wanted to learn more about the long-term effects of PSE and PAE. Staff expressed that this knowledge would help them to better identify children who may be affected and to educate and help support parents and caregivers.

Approximately one-quarter of CW staff raised other gaps or areas of interest, such as general information about different substances; identification of affected children, including how to ask mothers about their substance use during pregnancy; and information, resources, or training on treatment, services, and diagnosis. The number of staff who mentioned indicators of PSE and PAE as a knowledge gap varied by state, with far more state 3 staff (71 percent) than state 5 staff (35 percent; data not shown) citing this area as a knowledge gap.

Exhibit 19. Perceived Training Needs and Requests

Number and percentage of CW staff raising need, and example quotes

Training Needs	*n* (%)	Example Quotes
Indicators of PSE and PAE	83 (48%)	*"More training on those real basic indicators; we're just hungry for any of that."*—Local area director "*Our agency needs more training in those topics that can tell us about how to look for it in different developmental stages and different ages of children."*—Frontline staff
Long-term effects of PSE and PAE	57 (33%)	*"What kind of effect does that have on them later? Because I have no idea."*—Ongoing case management staff *"I would like to know more about the long-term effects because we focus, especially in assessments, on the here and now."*—Frontline/ongoing case management staff
Identification processes	39 (23%)	"*I think we need to be trained on what type of questions to ask*."—Ongoing case management staff *"Knowing what I'm supposed to look for would be really helpful."*—Frontline staff
Resources, tools, and services	40 (23%)	*"It would be great if hospitals would share the information that they give parents, to teach us about what to look out for."*—Frontline staff "*We need to have more information on appropriate services to treat these children. I believe there are training opportunities; however, new staff are not adequately or appropriately trained on this topic."* –Frontline staff *"I would rather have more training on how to do more of the services after it's [PSE] already happened."*—Ongoing case management staff
Educate and support caregivers	22 (13%)	*"I think it would be helpful to know exactly what to share with foster parents about prenatal exposure and what that looks like."*—Frontline staff *"I'd like to learn a lot more to be able to educate parents on the dangers of all this, and I can't share this information if I'm not taught this information." —Ongoing case management staff* *"What do the caretakers need to do to help this child when they get home?"*—Frontline staff

Training Needs	*n* (%)	Example Quotes
Enhanced methods of training, including ongoing training and training conducted by experts	46 (27%)	"*I really think to learn it, ongoing training is what's important . . . reviewing information at different points instead of having a training here and then 5 years down the road.*"—Frontline/ongoing case management staff "*I would probably benefit from local experts from the medical field and experts that do our child assessments to collaborate and have a joint training with all of our staff.*"—Local area director "*I think if we had an expert come in to talk about PSE, what it looks like, what are the symptoms, what would be a good line of questioning/observation depending on the age of the child. Those are tools that case managers and supervisors can latch onto immediately.*"—Local area director

Source: Interviews of all staff and directors across the five states; *n* = 171.

Implications

Despite widespread awareness, CW staff have key misperceptions about prenatal substance effects that likely affect practice and offer important targets for improvements. Most respondents rated their PSE and PAE knowledge as intermediate, and most responded correctly to seven of the nine true/false items in PAE knowledge quiz. Yet most CW staff falsely believed that all, or almost all, children with an FASD have unusual facial features (over 70 percent of children with an FASD do not), which may result in underestimation of FASDs (Kuehn et al., 2012). Some staff tended to incorrectly perceive that the substances that result in worse long-lasting effects were those substances they see most in their served population—opioids, methamphetamines, cocaine, etc.—rather than those substances known to cause lifelong, significant neurodevelopmental effects, such as alcohol. Research suggests that polysubstance use is frequent, and alcohol is often overlooked or underestimated (Davie-Gray et al., 2013; Falk et al., 2008).

More in-depth and ongoing training on PSE and PAE should be provided. Most CW staff participated in trainings related to PSE topics, yet gaps and misinformation emerged. There is a need for additional PSE-related training for staff and a particular focus should be given to FASDs. Trainings specifically related to indicators of exposure, effects on child development, and appropriate and available interventions for affected children would be helpful. It is well established that CW agencies have high rates of staff turnover (Willis et al., 2016; also suggested by the analysis of years of experience at study states presented in appendix E, exhibit E2), which emphasizes the importance of ongoing training on PSE over time versus one-time instruction. Self-guided trainings, such as prerecorded webinars, may help address this issue. Given that some local area directors were unaware of the training available to their staff, it is also important to make directors and staff aware of the available PSE trainings and ensure that they encourage participation.

Staff and directors need resources regarding PSE indicators and effects to support both their own knowledge and their practice with families. In addition to in-depth training, CW staff require informational materials to which they can refer at any point in a CW case. Staff spoke about the challenges of infrequent trainings on PSE. They indicated wanting information, resources, or instruction on indicators of PSE, including how to sensitively ask mothers about their substance use while pregnant, the effects of PSE throughout a child's life, and the types of services available to children affected by PSE and their families, to help to fill these gaps between trainings. These materials would not only assist the staff in solidifying their own knowledge and awareness but also build competency in discussing the presence of PSE with caregivers and recognizing presenting behaviors and needs of children who are or may be affected by PSE.

5. Identification of Children With Prenatal Substance Exposures

This chapter examines how, and the extent to which, child welfare (CW) staff across the five study states identify or assess prenatal substance exposures (PSEs), including history of maternal substance use during pregnancy.

Background

An estimated 400,000 infants affected by PSE are born in the United States each year (Young et al., 2009). Child-serving systems, such as the CW system, have implemented mostly fragmented approaches to identifying children with PSE and responding to their unique needs (Young et al., 2009). Elevated estimates of substance use and PSE among families receiving CW services underscore the importance of identifying these children through coordinated and evidence-based approaches. CW staff are well positioned to inquire about known or suspected PSE as part of their ongoing information-gathering assessments and interactions with biological parents and children across each phase of case management—from intake to investigations and ongoing case management. During each phase, CW staff have an opportunity to assess and help connect children and families to appropriate PSE information, resources, and services.

CW agency policies and processes may be applied to standardize staff activities used to address prenatal

Related Study Questions

- To what extent do CW staff identify children in their caseload as at risk for or affected by PSE?
- How do staff describe CW agency and their own practices to identify children with PSE?
- What factors are associated with whether and how CW staff identify children with PSE?
- What do CW staff perceive as gaps and opportunities to more effectively identify children at risk of or affected by PSE?

Summary of Findings

- Identification by hospitals at the time of birth was the top reported method for either identifying or suspecting PSE, reported by 93 percent of interviewed staff.
- Twenty-two percent of interview respondents mentioned barriers to identifying children with prenatal alcohol exposure (PAE).
- CW staff indicated inconsistent assessment for PSE, with 40 percent indicating that they assess for PSE with “some” (40 percent) or “most” (46 percent) children in their agency, while 12 percent of staff did not routinely assess PSE.

Summary of Findings (continued)

- CW agency survey respondents perceived the top three most accurate sources of PSE information were birth records (81 percent), other medical records (64 percent), and developmental assessments (42 percent).

exposures. Studies suggest that organizational policies influence staff practice and behavior (Zellman et al., 1997). A lack of policies and processes can result in divergent staff practice, which may reflect individual knowledge and biases (Drescher-Burke, 2007; Lloyd et al., 2018). Although federal legislation such as CAPTA and CARA[48] require states to develop policies and procedures around PSE for infants, studies have shown a lack of awareness of this legislation among CW and health care professionals (Chasnoff et al., 2018; Lloyd et al., 2019). A study of PSE practices at one local CW agency found no formal policies that addressed identification of children with PSE, which appeared to contribute to varied practices (Usher et al., 2016). Yet systemically identifying children for PSE is the first step in enabling CW agencies to provide the appropriate services and supports needed for these children and their families.

It is unclear whether, and how, CW agencies identify children with PSE, but a reliance on hospital reporting may lead to under-identification overall and disparities for families of color. Limited studies addressing CW and PSE indicate that hospital data may be the primary method of identifying exposed children (Richards et al., 2020). Usher et al. (2016) reported that CW staff relied on hospital medical tests conducted at birth to recognize that a child had been exposed. An overreliance on hospital reports to identify PSE among children in care may be problematic. Such dependence on hospitals, medical tests, and diagnoses at birth may also lead to under-identification of children, particularly those exposed to alcohol, which is not included on many toxicology screens (Drescher-Burke, 2007). Research has shown racial and socioeconomic disparities in hospital screening of PSE and subsequent reports to CW (Ellsworth et al., 2010; Roberts & Nuru-Jeter, 2012). Relying on hospital reports rather than utilizing established CW policies or practices to identify children prevents broader understanding of how and when children are identified, particularly those who are not screened as newborns.

To identify children who are exposed to substances who were not recognized at birth, all child developmental professionals, including child welfare professionals, should collect a maternal history of substance use during pregnancy. The limitations of medical testing and a lack of symptoms at birth can make gathering information on substances a mother may have used during pregnancy especially important to identify children with PSE, particularly for those exposed to alcohol. The American College of Obstetricians and Gynecologists recommends the use of validated questionnaires (e.g., SURP-P,

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[48] See chapter 1 and the glossary for definitions of CAPTA and CARA.

WIDUS, 5Ps Questionnaire, CRAFFT, NIDA Quick Screen and NIDA-Modified ASSIST[49]) to accurately assess for maternal substance use during pregnancy; however, few of these tools are widely employed (Anthony et al., 2010; Chang et al., 2019; Chasnoff et al., 2007). Tools such as the AUDIT, TWEAK, and CAGE[50] also have been recommended for use in CW systems to identify caregivers who are potentially affected by substance use (Young et al., 2006); however, there are few valid instruments tested in CW settings to screen children for PSE, to determine if they are appropriate for referral to a medical professional for a full diagnosis. Despite this lack of validated tools specific to pediatric populations, the American Academy of Pediatrics, in *Bright Futures*, recommends obtaining a prenatal history of alcohol exposure for all pediatric patients and suggests doing so during prenatal visits, well-child visits for any new patients, and all patients for whom there is a concern of neurodevelopmental or behavioral issues (Hagan et al., 2017).

Structured processes may help staff gather evidence and assess if children who are not recognized at birth may be affected by PSE. Although screening tools and structured processes cannot be used for—or take the place of—comprehensive diagnostic assessments conducted by professionals, they may be an important first step in the evaluation and referral process (Paley & Auerbach, 2010). Screening tools and systematic gathering of information could help staff review medical, developmental, mental health, and behavioral indicators that may suggest a child may be affected by PSE, which could help staff determine whether a referral for a more thorough diagnostic assessment is warranted (Burd et al., 2011). Whether CW agencies use tools or other structured processes to screen children for potential PSE, and then make referrals to medical professionals for diagnosis, has not yet been examined.

As noted in chapter 3, no formal policies guided CW staff to screen those children with PSE who were not identified at birth; however, all state CW directors interviewed for this study (seven directors across five states) indicated that there were formal policies/legislation about reporting PSE. State CW directors described efforts to engage the medical community to establish methods for medical providers to report newborns affected by PSE. These efforts were in large part driven by changes in state law and local agency policy in response to CAPTA/CARA. State CW directors also reported using several strategies to avoid automatic entry of families into the CW system when newborns with PSE are

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[49] SUR-P is the Substance Use Risk Profile-Pregnancy; WIDUS is the Wayne Indirect Drug Use Screener; 5Ps is an abbreviation for a five-item screener with items related to Parents, Peers, Partner, Pregnancy, and Past; CRAFFT is an acronym for a five-item screener with items related to Care, Relax, Alone, Forget, Friends, and Trouble; NIDA Quick Screen and NIDA-Modified ASSIST is a two-stage screen that first asks about frequency of use of four substances (alcohol, tobacco, prescription drugs, illegal drugs) followed by lifetime use of a longer list of nine substances; for listing and further information regarding these tools see O'Connor et al., 2018.

[50] See footnote 44 for details about these tools and O'Connor et al., 2018.

reported. Strategies included revising policy to direct families of newborns with PSE to “alternative response” when they were determined to be at lower risk of child maltreatment.

Study interviews and surveys in the five states clearly show that CW staff are generally expected to inquire about parents’ substance use history as part of family needs assessments and investigative decision making, probably because of the known high incidence of substance use disorders among families involved with the CW system. Even if validated PSE screening tools are not widely used by CW staff, they have an opportunity to inquire about maternal substance use during pregnancy while gathering information for substance use asesessments. This is a critical opportunity to document what is learned about substance exposure in a child’s case record. The case record may become an important data source for later diagnosis and intervention, should that child later show symptoms of associated conditions such as Fetal Alcohol Spectrum Disorders (FASDs) and need to qualify for other services later in development.

Key Findings

This chapter examines PSE identification practices across 22 CW agency systems in five states.[51] Data derive from 271 CW staff surveys and 152 interviews of CW staff—including local area directors, frontline staff, ongoing case management staff, and frontline/ongoing case management staff—to explore the extent to which agencies gather information on PSE and the methods used for doing so.[52] Additional detail about the study sample and analytic methods can be found in chapter 2 and appendices D and E.

The key findings presented below fall into five categories: perceived prevalence of children prenatally exposed to substances; reported PSE assessment practices and ideal timing to assess for PSE; CW staff-reported methods for gathering information on PSE; variation in PSE information-gathering methods, and suggested enhancements for PSE identification. Supporting data tables organized by state, staff role, and phase of case management can be found in appendix F (exhibits F22 through F31).

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[51] States, sites, and participants were granted confidentiality to foster open discussion about practices. Descriptive information about the states and sites can be found in exhibit 4, and participants in exhibits 6 through 10.

[52] Findings from interviews with data staff and state CW directors are not included in this chapter, as they were not asked specific questions about PSE information-gathering practices.

Perceived Prevalence of Children Prenatally Exposed to Substances

CW staff estimated that fewer children were prenatally exposed to alcohol than to other types of substances. CW staff gave wide-ranging prevalence estimates of children's prenatal exposure to alcohol and other drugs. Survey respondents aggregated across all five states estimated that approximately one-third of children in contact with their agency were prenatally exposed to alcohol (mean = 34 percent; median = 30 percent; range 0 to 99 percent) and roughly one-half of children were prenatally exposed to drugs other than alcohol (mean = 52 percent; median = 50 percent; range 5 to 99 percent).

Twenty-two percent of interview respondents mentioned barriers to identifying PAE that may contribute to both wide-ranging perceptions and possible underestimates of prevalence. These barriers included the relative difficulty in getting child protective services (CPS) involved for cases with alcohol because it is a legal substance, and how alcohol is more challenging to identify in drug screens because it leaves the body more quickly than other drugs.

> *"Honestly, I don't know if it's a testing issue . . . like opioids, like methamphetamines, cocaine . . . we definitely get a call on those, but I don't think we've ever received a call regarding alcohol exposure."—Frontline/ongoing case management staff*
>
> *"The way our laws are . . . I've never assessed a case because mom drank during her pregnancy, because it's considered legal. And even if the child had [an FASD], I don't think we get involved . . . never done a child abuse assessment for [FASDs]." —Frontline staff*

Reported PSE Assessment Practices and Ideal Timing to Assess for PSE

CW staff across five states indicated inconsistent assessment for PSE during all phases of case management. Forty percent of interview respondents said they assess for PSE with "some" children in their agency, 46 percent assess PSE with "most" children, and 12 percent did not routinely assess PSE. Comparisons of the reported frequency of assessing for PSE revealed that ongoing case management staff were more likely than frontline staff or staff who perform both frontline/ongoing case management staff duties to report that they assess PSE with "most" children who enter their CW agency. This finding may reflect the more extensive time frame that ongoing case management staff have in working with children to gather PSE-related information. Frontline staff and staff who perform both frontline and ongoing case management duties were more likely than ongoing case management staff to indicate that they assess PSE with "some" children.

"[We] do a full assessment with parents. . . . We will ask, 'Were you using when you were pregnant?' When you're interviewing parents, they'll say, 'I started using at 16,' and then we can go back and put the pieces together. Well, they were pregnant from ages 20 to 21 . . . so, they were clearly using during that time."—Ongoing case management staff

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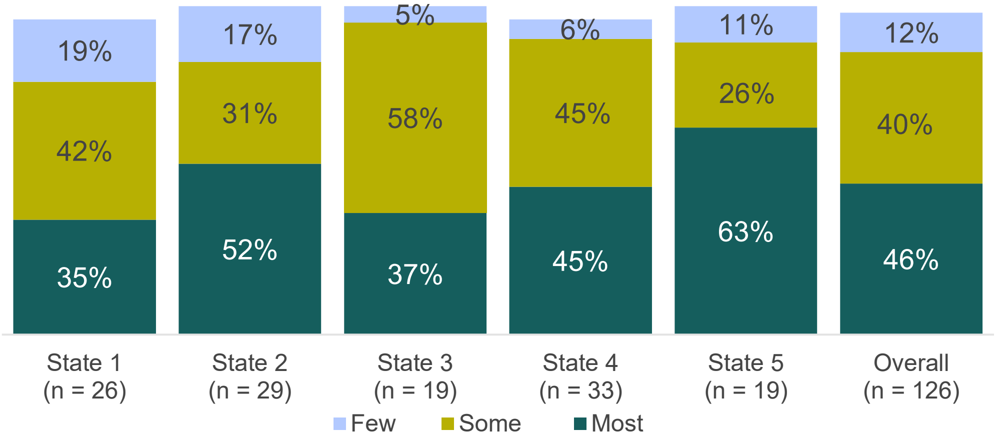
There was some variation in reported practices for assessing PSE across states. More than one-half of interview respondents from three states were more likely to indicate that they assess PSE with "most" children (exhibit 20). The comparatively higher proportion of staff from two states that indicated most children are assessed for PSE may reflect hospital practices; interview respondents from these states often discussed such efforts whereby hospitals routinely tested children at birth. The largest proportion of staff (63 percent) who indicated they assess "most" children for PSE were from a state where PSE is listed on the intake tool, which may be one possible explanation for higher staff self-reported assessment.

Exhibit 20. Assessment of PSE for Children Who Come Into Contact With the CW System

Percentage of staff who self-reported assessing few, some, or most children, by state



Source: Closed-ended questions from interviews with frontline staff, ongoing case management staff, and frontline/ongoing case management staff in all five states; *n* = 126.

Most[53] CW staff indicated that the ideal point to assess for a child's history of PSE would be early in case processes, such as during child protection investigations of screened-in cases (44 percent) or during intake/screening of allegations of child abuse and neglect (30 percent; exhibit 21). Fewer survey respondents identified later points in case management as being ideal time frames to assess for PSE, such as during a needs assessment for mandatory services (7 percent) or during service planning (6 percent). Interview respondents also commonly described earlier in a CW case as being most ideal for identifying PSE to best meet a child's needs; however, some respondents also noted how ongoing case management staff, compared with intake/investigative CW staff, were uniquely positioned to obtain more accurate information from mothers about their substance use history because they had more time to build rapport (creating a less adversarial situation) and trust. According to one ongoing case management staff member, "I think it's important to gather [information on PSE] as soon as possible so that we can ensure that we're meeting the child's needs developmentally and medically and being able to provide the caregivers and parents with appropriate tools to be able to meet the child's needs." Data on what point in the CW process is most effective to obtain PSE information, and if this timing is universally effective across local agencies, would inform future guidance.

Exhibit 21. Most Ideal Point to Assess or Identify a Child's History of PSE to Alcohol or Other Drugs

Percentage of surveyed staff endorsing specific time point

Ideal Point in Case	Number (Percentage)
Child protection investigations of screened-in reports to determine occurrence/assess for risk of abuse and neglect	119 (44%)
Intake/screening of allegations of child abuse or neglect	82 (30%)
Family/child needs assessment for mandatory services	19 (7%)
Service planning during ongoing case management	15 (6%)
Other	4 (1%)

Source: CW staff survey, respondents from all five states; *N* = 271.

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[53] The following terms are used to reflect intentional approximations of frequency: *few* (about 10 to 25 percent of participants), *some* (about 26 to 50 percent of participants), *many* (about 51 to 75 percent of participants), and *majority/most* (about 76 to 90 percent of participants).

Reported Methods for Gathering Information on PSE

The most common method by which information on PSE was gathered were hospital reports of either a positive toxicology screen for newborns or a mother's positive drug test at the time of delivery. A majority of interviewed staff (93 percent) indicated that PSE was identified at birth by hospitals that subsequently called in a referral to CW agencies. Across all five states, identification by hospitals at the time of birth was the top reported method for either identifying or suspecting PSE. Five percent of respondents from two states indicated that "all hospitals test for PSE" if there was any sort of suspicion.

This is not surprising given that state CW directors often described efforts to set up processes for medical providers to report newborns affected by PSEs that were driven by changes in state law and local agency policy in response to CAPTA/CARA. State CW directors also reported using several strategies to avoid automatic entry of families into the CW system, such as policy revisions that directed "alternative response" processes for families of newborns with PSE.

"We have 100 percent universal [hospital] testing. . . . If mom is discharged and the referral comes, we are going to get [cord testing], on every child . . . there really would not be a time for babies who are born substance exposed that we would not know."—Local area director

"I can't say that in the 13 years that I've been doing CPS that I've ever had a referral come in for prenatal exposure that wasn't for a substance-exposed infant."—Frontline staff

CW staff also described other methods that might lead them to identify or suspect PSE, such as looking for behavioral indicators; reviewing a child's case records; assessing developmental milestones; conducting CW screenings or assessments not specific to PSE (e.g., safety or risk assessments, family assessments, parental substance use assessments); having a mother disclose information to a caseworker about prenatal substance use; the identification of cognitive impairments or learning disabilities; collateral sources providing information; and lastly, examining a child's physical characteristics (exhibit 22). Although there were slight differences reported by state, these methods of PSE information gathering remained largely consistent.

Exhibit 22. PSE Information-Gathering Methods

Number and percentage of CW staff who reported using each method

Method	Number (Percentage)
Identified at birth by a hospital	142 (93%)
Behavioral indicator(s)	117 (77%)
Case record documentation	117 (77%)
Developmental milestone(s)	111 (73%)
CW screening or assessments	95 (63%)
Mother provides information	81 (53%)
Cognitive indicator(s)	70 (46%)
Collateral source	67 (44%)
Physical characteristics	45 (30%)

Source: Interviews with local area directors, frontline staff, ongoing case management staff, and frontline/ongoing case management staff across all five states; *n* = 152.
Note: See appendix G for the definitions used for each PSE information-gathering method for coding.

As with interview data, survey data revealed an emphasis on the use of birth records (such as hospital toxicology reports) to identify PSE. Survey respondents identified the top three commonly reviewed sources of information to determine whether a child had been prenatally exposed to alcohol or other drugs; they were birth records (71 percent), conversations with mothers (49 percent), and other medical records (46 percent). Surveyed staff were asked to indicate their perceptions of the top three most accurate sources of information that can be used to determine whether a child has been prenatally exposed to alcohol or other drugs; they were birth records (81 percent), other medical records (64 percent), and developmental assessments (42 percent). Birth records and other types of medical records can be very accurate and reliable sources of information to identify PSE, which highlights the importance of information sharing between CW staff and medical professionals, a topic that chapter 6 explores further.

Survey respondents rarely cited conversations with birth mothers as an accurate source of information; this finding was echoed during interviews, where 16 percent of respondents expressed concerns about the mother providing accurate information about substances she may have used while pregnant. This theme is reflected in the following quote from a frontline worker: “People’s natural instinct is to lie because they’re ashamed and scared that you’re going to take their baby away, so the biggest thing is getting past that resistance.” These concerns reflect the importance of staff building rapport and trust with mothers and learning effective ways to ask about potential substance exposure in utero—and asking *all families*, to reduce stigma.

> *"When . . . you're not coming in on a high horse like, 'I'm better than you, and I know what's best' but more like, 'Life is tough'—when you have that kind of rapport with parents . . . you get a lot more information from them."—Ongoing case management staff*

Staff reported that ongoing case management rather than the intake phase allows more time for trust building. They discussed how questions related to PSE can be gleaned during a substance use history assessment when asking a mother to describe her history of use and linking this information to questions about the development of the children to see if PSE might be of concern.

Practice Highlight: Hotline Call Center Prompts Questions for PSE

State 1 instituted a change to its statewide child abuse and neglect call center whereby a screen pops up every time a child in the household is under the age of 1. This screen prompts the intake caseworker to ask if the child has any symptoms of withdrawal or anything to indicate the child is experiencing symptoms of substance withdrawal. If the caseworker checks "yes" on the intake screen, information fields appear that require a certain type of safety plan for the child. The hotline staff also are prompted to inquire about prenatal care or if the baby was born full term and healthy. This state has also established strategies to avoid automatic entry of families into the CW system, such as policy revisions that direct "alternative response" processes to help connect families of newborns with PSE to appropriate supports and services.

This type of systematic screening by hotline call centers can help create more equity and consistency with CW case practice. Instituting standardized screening processes may help ensure that children and families are being treated similarly regardless of race or socioeconomic status and help limit biases by driving consistent and fair decisions.

This study found a lack of widely used or formalized, structured assessments of PSE for children who come into contact with the CW system—despite federal laws such as CAPTA and CARA. Of the 152 interviews conducted with frontline and ongoing case management staff in the five states, less than 5 percent mentioned using a PSE-specific tool or checkbox to inform PSE screening, identification, or case planning. This aligns with the document review and state CW director data discussed in chapter 3 regarding the lack of policies and procedures and the limited use of structured assessments or forms to note presence of PSE (see exhibit 15 for an exception whereby adoptive families receive formal information about PSE in one state). A few respondents from three states described a PSE-specific tool or assessment. Intake supervisors from two states indicated that PSE was listed on the intake tool used by the hotline call centers. A statewide hotline call center instituted a practice whereby they routinely ask about withdrawal symptoms for any child under the age of 1 (see Practice Highlight on next page).

Less than 5 percent mentioned using a PSE-specific tool or checkbox to inform PSE screening, identification, or case planning.

Staff from one state also reported that PSE was listed on their intake tool. One frontline staff member noted: "Within our intake tool, we have an actual box that you check that is specifically for substance exposure that's evident at birth. But if it's an unborn child, we just screen it as an unborn intake." One caseworker described how, when a child is born with positive toxicology, CW agency staff collaborate with hospital staff to document a withdrawal score:

> *"I believe it's the Finnegan scale on withdrawal symptoms. . . . If I have a baby that's going through withdrawals or whatever, I always document that information. And the hospital shares [the withdrawal scale] information with us."—Frontline staff*

In one state, a statewide decision-making tool was developed in response to the large volume of calls the state CW agency was receiving from hospitals for infants with PSE (see Practice Highlight on next page). This state is using the tool to help caseworkers decide whether a child should be "screened-in" (i.e., an active case opened by the CW agency) or placed on a differential response track.[54] The substance exposure decision-making tool specifies information such as what type of information must be collected and what contacts should be made.

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[54] Sometimes referred to as alternative response, DR is a CW systems reform that enables child protective services to differentiate its response to reports of child abuse and neglect based on several factors. Typically, the differentiation is to provide preventative services when appropriate (e.g., for families considered low risk for abuse and neglect). (Child Welfare Information Gateway, 2020a).

Practice Highlight: Decision-Making Tools for Infants With PSE

In response to an influx of calls from hospitals mandated to report infants exposed to a substance, state 4 created a decision-making tool to help caseworkers decide whether a child should be screened-in or placed on a differential response track. Staff noted this tool became particularly important with the rise of the opioid crisis, when mothers in treatment were receiving methadone. Caseworkers described their struggles to make decisions because it can be difficult to obtain a urine analysis on the baby, and a meconium test can take several weeks for a result. The decision-making tool contains a flow chart that specifies information such as what types of information must be collected and what contacts must be made to make case decisions. One frontline staff member described:

"The [decision-making tool] guides workers to just kind of a step-by-step of what's expected during the assessment. . . . It goes through mandated contacts . . . and gives you a time frame for what we do once we start the assessment. So, we're obviously mandated to talk to mom and see the [child] . . . get the cord . . . get pediatric records . . . send out letters to the pediatrician."

Such tools may be useful as states develop standardized policies in response to the CAPTA/CARA requirements that CW agencies respond to newborns identified as affected by exposure to both illegal and legal drugs. These tools may help create more equity and consistency with CW case practice, while directing children and families to appropriate services and supports.

Variation in PSE Information-Gathering Methods

The methods by which CW staff obtain information about PSE varied by factors including phase of the case, staff role, and child age—offering important insights about possible touchpoints for improved identification. The team analyzed PSE information-gathering methods by phase of CW case management[55] to identify any differences between the methods used during intake and those employed during ongoing case management. The most common method used to gather relevant PSE information for the intake phase was reports made by hospitals at the time of a child's birth (84

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[55] The "intake" phase of case management refers to hotline call centers, intake processes, and the initial investigation phase of a case. This thematic code was used to highlight instances in which the interview respondent described practices specific to the intake phase of case management. "Ongoing case management" refers to the management of the case once it has been screened-in and in-home services or out-of-home services are being provided to a family. This thematic code was used to highlight instances in which the interview respondent described practices specific to the ongoing phase of case management.

percent); common methods used to gather relevant PSE information during the ongoing phase of case management were more evenly distributed and included behavioral indicators (49 percent), case records (48 percent), and developmental milestones (41 percent).

PSE information-gathering patterns reported by different CW positions (staff with both frontline and ongoing case management responsibilities) indicated that identification at the time of birth by hospitals was the most common way PSE was recognized, with at least 90 percent of respondents citing this method. However, local area directors were most likely to indicate that a child or family's case records were the most common source of this information (96 percent), and ongoing case management staff also commonly cited a child's case record as a source of PSE information (90 percent). Compared with other positions, staff who held both frontline and ongoing case management roles (often supervisors) were more likely to cite developmental assessments and CW screenings and assessments as methods for suspecting PSE in children (100 percent and 82 percent, respectively).

> *"The only time that prenatal drug exposure would allow us to get involved is if the child was positive at birth. And so, we're not asking those questions of a 17-year-old. . . . We [refer] a lot of our kids . . . to therapy and those kind of things."*
> *—Frontline staff*

The team also analyzed PSE information-gathering patterns by a child's age to see if staff tended to change PSE-identification methods depending on the child's age. Because of the high reported frequency of hospital reports identifying PSE at birth, it is not surprising this method was most commonly referenced for younger children[56] compared with older children.[57] Also, as noted in chapter 3, laws and CW agency policies for the five states in our sample described only very young children with prenatal exposures as being identified by medical providers. **The most reported methods referenced for older children were more evenly distributed across different PSE information-gathering methods, with behavioral indicators being the most common across the full sample.** Ten percent of interview respondents also reported that they were not likely to assess for PSE with older children.

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[56] "Younger child" thematic code was applied to highlight descriptions of policy and practice that reference babies, toddlers, preschoolers, or generic descriptions of "younger children."

[57] "Older child" thematic code was applied to highlight descriptions of policy and practice that reference elementary school-aged children or children aged 13 and older. This code was also applied for teenagers or youth who have aged out of the foster care system or for generic descriptions of "older children."

Practice Enhancements Needed for PSE Identification

CW staff described their perceptions of needs and suggestions for CW agencies to improve practices to identify PSE (exhibit 23). Suggestions commonly included improved training for CW staff on effects and expression of PSE; better information sharing between medical providers and CW agency; improved training on how to interview parents; modification of existing tools or the creation of new ones to screen for PSE; and more education about PSE for the community and clients.

Exhibit 23. Suggestions to Better Identify and Support Children With PSE

Themes and examples from CW staff

Improve training for CW staff on effects and expression of PSE
"Additional training and services for social workers would be beneficial to understand the effects and expression of behavior for children who have been prenatally exposed to substances and [more training on how to] support in regard to case management."—Ongoing case management staff
Increase CW staff awareness of the benefits (for themselves and their clients) of identifying children with PSE/PAE for appropriate diagnosis and targeted care
"In our line of work, we could always have additional support. . . . I think being able to provide caregivers additional respite for some of the children would be beneficial in maintaining the stability of the child in that home." —Ongoing case management staff
Better data-sharing collaboration between medical providers and CW agency
"Receiving more information at the prenatal visits for these mothers. Because a lot of times, when we are getting the phone calls, they're already giving birth and they're already at a hospital. And then they'll tell us, 'Oh, and then at her prenatal visit she tested positive for something.'"—Frontline staff
More training on how to interview parents in a nonjudgmental way and enhance family engagement
"Ways to better engage families so they're more willing to talk with us and give us good information and not lie . . . we can help you get you services and make sure the baby is safe."—Local area director
Creation of universal screening tools for staff to use (e.g., checklist stating what to look for with older youth)
"[Local health department] is working on the universal screening tool . . . for hospitals and for social services."—Frontline/ongoing case management staff
Adding question(s) about PSE onto existing form(s) (e.g., hotline intake form, prevention assessment, substance use assessment)

"As far as strategies . . . we need some formal processes and maybe some forms that go with the initial report form when workers go out to take an initial report. . . . I think that's when we're going to discover [PSE]."—Local area director
Enhance community awareness and education about PSE
"We need a boost in education for the community as a whole, so that it's not on one agency identifying it. . . . Everyone needs to work together to identify something that is plaguing our community."—Frontline/ongoing case management staff worker
More education for clients
"We have a lot of methadone and suboxone clients. That's where a lot of our substance-exposed infants come from. . . . The big misconception are people who are like, 'What do you mean, it's prescribed medication? How is it hurting my baby?'"—Frontline staff

Source: Interviews with local area directors, frontline staff, ongoing case management staff, and frontline/ongoing case management staff across all five states; *N* = 152.

Implications

Variation exists in the extent to which CW staff consistently think about and truly assess for PSE. Interviews and survey data found shortfalls in the extent to which CW staff assess for PSE and the methods used to gather information related to it. Overall, CW staff indicated low levels of assessment for PSE. Although CW staff estimate, on average, 50 percent of children on their caseload have PSE, inconsistent PSE assessment persists.

Although CW staff estimate, on average, 50 percent of children on their caseload have PSE, inconsistent PSE assessment persists.

Identification of PSE was largely focused on infants or younger children. As noted in chapter 3, among the five states in the study sample, CW agency policies, procedures, and practice guidance referencing PSE were applied only to newborns or very young children. Similarly, because of the high reported frequency of hospitals identifying PSE at birth, it is not surprising that PSE information gathering most often referenced infants or younger children rather than older children. It also is important to note that hospital testing at the time of birth would rarely detect PAE; this is consistent with the finding that many of the FASD cases are not being captured (Chasnoff et al., 2015) in foster placement. For older children, caseworkers sometimes described a clinical culture of focusing on the "here and now" to mitigate current risk and safety factors, with less attention given to an older child's birth history—despite PSE lifelong cognitive and behavioral effects such as impulsivity and attention problems (Henry et al., 2007). These cognitive and behavioral effects common for PAE create additional challenges for caregivers of children with PSE, increase the risk of maltreatment, and increase rates of misdiagnoses (e.g., conduct or oppositional-defiant disorder; Chasnoff et al., 2015; Jaudes & Mackey-Bilaver, 2008).

It is important to note that hospital testing at the time of birth would rarely detect PAE.

CW staff's focus on infants may be driven by CAPTA/CARA federal requirements that CW agencies report the number of infants identified as being affected by PSE and the number who received a plan of safe care and service referrals. As chapter 2 notes, no formal policies guided CW staff to screen for PSE children who were not identified at birth. All local CW policies were directed toward actions taken in response to hospital identification of newborns with PSE—with no specific policies to screen older children for PSE. However, because of PAE's lifelong effects and because PAE is unlikely to be discovered by a toxicology screen at birth, additional future federal guidance should consider emphasizing the importance of assessing for both historic PSE and possible neurobehavioral effects of PAE with older youth to ensure correct diagnoses, treatment, and services for youth and families.

Ongoing case management staff were more likely than frontline staff to report that they assess PSE with most children who come into contact with their CW agency, despite the fact that CW staff (including both ongoing case management and frontline staff) stated that earlier in a case is the ideal time to assess for PSE. CW staff often indicated that CPS investigations were the best point to identify prenatal exposure, yet during an investigation involving a toddler, many types of information that may lead someone to suspect a prenatal exposure (e.g., developmental assessments, observations of a child) were not rated as "critical" sources of information on surveys. The sources of information that CW staff commonly reviewed during an investigation were not always the sources reported to be the most accurate (e.g., conversations with a mother) or informative about a prenatal exposure; this may suggest a need for training to ensure that assessments are happening earlier in the lifespan of CW case management—and that these assessments focus on the most fruitful sources of information. Such sources could include developmental assessments and observations of children to ensure a focus on suspected PSE with older children and not just newborns or infants.

Hospitals might consider adopting universal screening policies to help remove bias from clinical practice.

Heavy reliance on hospital reports to identify PSE raises important concerns—including those about conscious or unconscious racial profiling—about how hospitals make decisions on which mothers and infants to test for substances. In a few interviews, CW staff noted how positive toxicology tests were left to the discretion of hospitals. Notably, staff from two states mentioned having suspicions of possible racial profiling (by race or socioeconomic characteristics) by hospitals. The team did not directly ask about racial profiling; rather, a few CW staff shared anecdotes. That said, other research has shown racial and socioeconomic disparities in reports of PSE to CW (Roberts & Nuru-Jeter, 2012) and racial differences and disproportionate rates of testing for drug use between Black and non-Black women (Kunins, et al., 2007; National Advocates for Pregnant Women, 2021). Future studies might consider reviewing decision protocols used by hospitals to inform drug testing at the time of birth, to ensure fair, equitable, and transparent testing procedures. Hospitals might consider adopting universal screening policies to help remove bias from clinical practice.

Compared with exposure to other types of substances, PAE is less likely to be identified, and CW staff underestimate its prevalence and effects (Chasnoff et al., 2015). There are no firm actual PAE prevalence numbers available, so the accuracy of staff estimates cannot be determined at this time. Staff perceptions of PAEs as less likely than other prenatal exposures is consistent with the findings of Chasnoff et al. (2015) that over 80 percent of children with an FASD in foster care are missed when they first enter the system. While PAE prevalence is unknown, CW staff would seemingly be less likely to identify PAE if those staff members believe that the incidence is low; they may thus not even suspect it or look for it. Currently, the best estimates are from studies that show that the incidence of PAE for children placed in out-of-home care is about 17 percent (Lange et al., 2013). It could very well be much higher, considering the already described research confirming that 80 percent of children diagnosed with an FASD were not identified as having an FASD upon initial entry into foster care (Chasnoff et al., 2015).

Interview respondents mentioned barriers to identifying PAE, including the fact that it is harder to identify in hospital screenings. Staff surveys often show that birth records are most reviewed and perceived to be the most accurate sources of information to identify PSE; however, birth records are unlikely to document PAE because alcohol, unlike other substances, often will quickly leave mother's system before showing up on a urine or blood test. Qualitative data revealed that staff largely rely on toxicology reports at intake to identify exposure and neonatal effects (e.g., Neonatal Abstinence

Syndrome). However, less attention is paid to identifying possible alcohol exposure, particularly among older children. The high rates of comorbidity between alcohol and other drug use (Falk et al., 2008; Staines et al., 2001), even among pregnant women (England et al., 2020), suggest that both should be considered for CW-involved children and adults, so that their needs can be assessed and appropriate services delivered.

Despite clinical consensus that screening for PSE is important, this study found a lack of widely used or formalized structured assessments of PSE for children in the CW system, especially for PAE, a known teratogen with lifelong effects (Noor & Milligan, 2018). Given these known effects, CW agencies may want to consider enhancing training, practices, and policies to emphasize the importance of assessing for PSE, stressing the long-term effects of PAE, for both younger and older children across all phases of case management.

This study found that CW staff often lacked an appreciation for the potential benefits of identifying children with PSE/PAE. Additional training and resources could enhance CW staff awareness of the benefits of identifying children with PSE/PAE and making appropriate diagnostic and service referrals. Because alcohol-exposed children can be difficult to parent—because of challenging behaviors such as impulsivity, hyperactivity, and distractibility—they face an increased risk for child maltreatment (Bertrand & Dang, 2012; Turchi & Smith, 2018). Additional training may help encourage CW staff to give caregivers more information about how to understand a child's behavior, which might help ensure permanent placements and reduce future maltreatment.

6. Service Referrals for Children Prenatally Exposed to Substances

This chapter examines ways in which information about prenatal substance exposures (PSEs) is used to inform service needs and referrals, availability of services, and information sharing among providers and child welfare (CW) agencies.

Related Study Questions

- How do CW staff apply information about PSE to inform service referrals? What referrals and recommendations are made?
- What information about PSE is exchanged among CW staff and service providers?
- What do staff and providers recommend to enhance service provision and information exchange?

Summary of Findings

- When PSE is a concern, most CW staff across all five states made referrals to developmental/early intervention services and medical providers, most frequently for children aged 0–3 years.
- CW staff are less aware of PSE-relevant services for older children, particularly for PAE. About one-quarter did not know of or stated there were no PAE services.

Background

When entering the CW system, children and families can be served most effectively if children who are at risk for or affected by PSE are recognized. The agency's assessment of a child's and family's needs and corresponding referrals[58] to services can help to properly identify associated conditions such as Fetal Alcohol Spectrum Disorders (FASDs) or Neonatal Abstinence Syndrome (NAS). This could set the family on a path to care for the child appropriately (Chasnoff et al., 2015; Jirikowic et al., 2010; Petrenko, 2015).

Prompt and tailored services can help parents and caregivers address child neurodevelopmental and behavioral challenges associated with PSE, particularly effects of prenatal alcohol exposure (PAE). In

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[58] The term *referrals* in this chapter refers to the process of identifying and connecting caregivers and children to specific service providers, based on evaluated need for assessments, interventions, or therapies.

turn, this can reduce family conflict; lower risk of maltreatment; help maintain biological family units and reduce or avoid undue involvement with CW systems; and promote child health, development, and well-being (Chasnoff et al., 2015; Milner & Kelly, 2020). Appropriate identification and services can also benefit caregivers of children in out-of-home care (Petrenko et al., 2019).

Summary of Findings (continued)

- Only 30 percent of CW staff said that most information about PSE is shared with service providers. From service provider surveys (collected in only two states), only one-third of respondents reported communicating results of children's services to the CW agency.
- Both staff and providers raised the issue of the need for CW staff to be better trained to sensitively inquire about PSE with families, and to have tools to help match child and family needs to appropriate referrals and effective interventions.

Federal legislation (i.e., CAPTA, 2010, and CARA, 2016)[59] requires states to address service needs among infants affected by PSE, including PAE, through plans of safe care and referral to early intervention. Developmental screening as required by CAPTA/CARA should be in place for all children younger than age 3 in cases with substantiated abuse, but these processes are at different stages of implementation across states and localities (Gardener, 2014). These plans for infants and young children may include developmental assessments and early intervention services (Casey Family Programs, 2017). Yet the legislation does not address specifically the need to identify children beyond infancy and attend to their needs.

Services to accurately diagnose and treat the effects of PAE, especially among older children, are necessary yet may not always be available; however, evidence-based interventions do exist (Bertrand, 2009; Reid et al., 2015). To avoid inappropriate referrals, children with documented alcohol exposure effects typically need neuropsychological and psychoeducational evaluation to determine strengths and needs (Chasnoff et al., 2015) and to identify the most effective services to avoid the long-term effects that can occur without appropriate treatment (Olson et al., 2007). The scarcity of skilled professionals who can accurately diagnose FASDs and other associated conditions in young and older children can result in waitlists and long wait times (Astley, 2010; Petrenko, 2015). Referrals for educational and medical interventions, anticipatory guidance to prepare caregivers for possible future difficulties, mental health services, and developmental therapy may be necessary and beneficial for children with an FASD

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[59] See the glossary in appendix A for a description of this legislation.

in foster care (Jirikowic et al., 2010; Petrenko et al., 2011), particularly when specialized diagnostic services are not promptly accessible (Hoffman et al., 2016).

CW agencies could gather and document information that helps CW staff and families/caregivers appropriately recognize children who are affected by PSE and are in need of services. Agencies have the means to apply this information in case planning and referrals for further assessment and diagnosis (if warranted), services, and supports for parents, caregivers, and children. However, previously, not much has been known about the practices that CW agencies implement to ensure appropriate referrals, particularly across the age span and in relation to different substance exposures. More information is important to understanding how CW staff work with allied service providers to ensure coordinated care and strong supports for children and families (Richards et al., 2020).

Key Findings

Findings described in this chapter draw from multiple sources of data that include information about service referrals and service provision for children who are already involved in the CW system (i.e., with an active/open case). Data reported on CW agency practices derive from the 171 interviewed staff across the five states and surveys of 271 CW staff in diverse roles from all five states.[60] Most of the data presented in this chapter derive from the set of interviews with staff who had ongoing case management and/or oversight or direction of ongoing case management for children.[61] Results from surveys from a small sample of 21 diverse allied service providers in the two in-depth states (states 3 and 5) are also presented. Service provider results are called out in blue highlight boxes. Findings explore (1) types and availability of service referrals and service recommendations; (2) information exchange between CW and allied service providers; and (3) opportunities for practice enhancements.

The key findings are presented below in three categories: service referrals and factors that may affect them, information exchange among CW staff and service providers, and perceived needs to enhance CW agencies' provision of service referrals and ongoing care. Supporting data organized by these categories and presented by state and method can be found in appendix F (exhibits F32 through F41).

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[60] States, sites, and participants were granted confidentiality to foster open discussion about practices. Descriptive information about the states and sites can be found in exhibit 4, and participants in exhibits 6 through 10.

[61] Data collection was tailored to roles and responsibilities; in state 5, some service-related items were replaced with items about documentation, when the COVID-19 pandemic resulted in slight modifications to collection in that state. Staff with only frontline responsibilities and a small subset of staff with ongoing responsibilities were not interviewed about some aspects of service referrals and provision.

Types and Focus of Service Referrals by CW

When asked to describe CW agency practices regarding service referrals for children when PSE is a concern, CW staff often initially focused on parental substance use treatment. This finding reflects a common observation noted by the study team during data collection in all five states, not a data element from analysis. In interviews, CW staff and directors were asked about the services that were available and commonly referred to for children who were prenatally exposed to substances including alcohol. Interviewers from the study team observed that CW staff often launched into a response that focused on treatment services for parents who may be misusing substances (e.g., referrals to addiction treatment and recovery centers), and staff had to be prompted to consider services focused on needs for children who were exposed. This immediate response may reflect parent substance use treatment as a first, foundational service, provided as standard practice to meet case planning and service needs for newborns and infants with known substance exposures (e.g., as required by CAPTA/CARA). Yet it also suggests that potential effects from substance exposures on the child are not top-of-mind when CW staff consider the most salient needs and possible service referrals for the child or family.

Potential effects from substance exposures on the child are not top-of-mind when CW staff consider the most salient needs and possible service referrals for the child or family.

This focus on substance use treatment and family needs is illustrated in the response from a local area director: “We have to have the plan-of-safe-care meeting with the whole family, including any formal or informal supports, to go over the results of the mother’s substance abuse assessment. We might refer to . . . prevention services for the family for low-level issues like maybe housing, parenting skills, budgeting. . . . Now, if the family needs treatment, we would first try to do family preservation case and work a case plan and make sure they’re meeting their treatment plan or supervision goals . . . learning parenting skills.”

Regarding child-focused services for PSE, CW staff most often referred children and caregivers to developmental and early intervention services and medical providers. When directed to describe child-focused service practices when there is suspected or known effects of prenatal substance exposures, interviewed staff in these five states most commonly cited making referrals to their state or local developmental assessment agency that also provides early intervention services (discussed by 70 percent of staff) and medical appointments (e.g., developmental pediatricians, discussed by 45 percent of staff; exhibit 24). These two "go-to" services, if they are performed as standard practice and include comprehensive attention to PSE (including PAE), can result in high-quality assessments and are likely to help identify needs and appropriate care for at least younger children.[62] Other child-focused services for children with PSE that were less often noted (generally mentioned by less than one-third of interviewees) included mental health, physical therapies (e.g., occupational, speech, vision), and behavioral therapy. The Practice Highlight on page 98 describes a potential promising practice: an assessment specialist embedded in CW settings to facilitate wide-ranging and matched referrals.

Exhibit 24. Types of Service Referrals for Children With PSE

Number and percentage of CW staff endorsing referrals, overall and by state

Types of Service Referrals	State 1 (*n* = 17)	State 2 (*n* = 22)	State 3 (*n* = 16)	State 4 (*n* = 26)	State 5 (*n* = 16)	Overall (*N* = 97)
Developmental assessors/early intervention	13 (76%)	14 (64%)	14 (87%)	18 (69%)	9 (56%)	68 (70%)
Medical providers	12 (71%)	7 (32%)	7 (44%)	10 (38%)	8 (50%)	44 (45%)
Mental health	11 (65%)	7 (32%)	4 (25%)	6 (23%)	6 (37%)	34 (35%)
Physical/occupational/speech/vision therapy	4 (23%)	11 (50%)	5 (31%)	6 (23%)	6 (37%)	32 (33%)
Behavioral therapy	13 (76%)	8 (36%)	4 (25%)	2 (8%)	3 (19%)	30 (31%)

Source: Interviews with state CW directors, local area directors, ongoing case management staff, and frontline/ongoing case management staff who were interviewed about service referrals in all five states; *n* = 97.

Across all five states, almost a quarter of interviewed staff said they were unaware of local services specifically targeted for children with PSE (e.g., diagnostic clinics or specialized assessment or treatment centers for FASDs and/or NAS)**.** Staff perception of specialized services did show some variation by state. In one state (state 5) where more services are widely known to be available (i.e., this state has a university-based clinical and research center focused on PSE-associated

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[62] However, note that many general developmental, behavioral, or medical assessments do not include obtaining a PSE history, especially for alcohol, which is helpful in gaining a more targeted understanding of child needs and tailoring effective, specialized services and interventions (Chasnoff et al., 2015; Olson et al., 2015).

conditions and specific state policy interests in identifying children with FASDs), few[63] staff said that there were no specific services known for children with PSE, whereas in another state (state 1), which is generally known to have fewer PSE-specific services and is largely rural, more than half of staff reported not knowing of such services.

Regarding older children with PSE, almost a third of staff across the five states said that services were primarily available and accessed through schools (e.g., Individual Education Plans, special education programs). In a few cases, staff responses implied that school-based service provision may be adequate to address the needs of older children who are affected by PSE and suggested a reliance on this system to take up responsibility to provide services. One ongoing case management staff noted the difference in service availability for older children, stating: "We . . . do a better job when they are first born . . . and they are positive for substances. We straight-up go to the [local Early Intervention (EI) service]. If we have an older kid, we are . . . more lax about that, because if they're older than 3, we can't do [EI service]. I think we have a better policy when they are babies than when they are older."

When presented with a standardized case scenario, only some staff indicated that they would refer a school-aged child for a specific assessment of diagnosis of prenatal alcohol effects. When presented with a scenario of a 13-year-old child with clear signs of PAE (i.e., neurodevelopmental and behavioral indicators of an FASD and probable alcohol exposure in utero), most CW staff from these five states indicated that they would refer this child for initial screening to identify potential mental health or behavioral issues and for medical/physical exams (exhibit 25). Just over a third (34 percent) of staff recognized the potential need for specialized assessment, indicating that they would definitely refer the school-aged child for a specific assessment of diagnosis of prenatal alcohol effects (e.g., FASDs).

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[63] The following terms are used to reflect intentional approximations of frequency: *few* (about 10 to 25 percent of participants), *some* (about 26 to 50 percent of participants), *many* (about 51 to 75 percent of participants), and *majority/most* (about 76 to 90 percent of participants).

Exhibit 25. Service Referrals When PAE Indicators Are Present

Number and percentage of CW staff indicating likelihood of referring to services in case scenario of a school-aged child

In response to case scenario, what referrals would be provided by a typical staff member as part of the case planning/service referral process:	All children referred/ Would definitely refer[a]	Might refer	Probably would not refer/Would not refer[a]
Medical examinations/physical health check/ medical treatment exam	220 (81%)	17 (6%)	4 (1%)
Initial screening to identify potential developmental or learning issues	196 (72%)	35 (13%)	10 (4%)
Initial screening to identify potential mental health or behavioral issues	224 (83%)	17 (6%)	0
Initial screening to identify potential speech, physical therapy, and/or occupational needs	138 (51%)	71 (26%)	31 (11%)
In-depth assessment/diagnosis of mental health or behavioral issues	175 (65%)	61 (22%)	3 (1%)
In-depth assessment/diagnosis of intellectual, learning, developmental, and/or cognitive issues	166 (61%)	62 (23%)	13 (5%)
In-depth assessment/diagnosis related to speech, physical therapy, and/or occupational needs	106 (39%)	88 (32%)	46 (17%)
Referral for specific assessment of diagnosis related to PAE	92 (34%)	81 (30%)	68 (25%)

[a] Two response options were collapsed for purposes of data presentation and interpretation.

Source: CW staff survey respondents from all five states; *N* = 271; PAE = prenatal alcohol exposure

Note: Responses for each response option were missing (no response provided) for between 30 to 32 respondents (11%–12%).

Practice Highlight: Child Developmental Assessor Embedded in CW Agency Facilitates Care Planning and Service Referrals

Among the five states examined, state 5 has a unique staff role in all its CW local agencies that ensures all children entering foster care receive an immediate comprehensive assessment of child well-being. This assessment is then used to understand long-term service needs.

The assessor applies a set of validated screening tools, tailored to age, to note child needs and recommend referrals in multiple areas, including developmental delays, physical and social-emotional-behavioral health, and educational needs. Along the way, the assessor makes connections with parents, caregivers, and current and potential service providers. The assessor meets with both the caseworker and the caregiver to share the results and to facilitate the referrals for identified service needs. Summary report forms become part of the child's case file.

This screening does not specifically include systematic collection of information on maternal substance use during pregnancy or a specific screen of effects of PSE and PAE on the child; however, in interviews, directors and staff noted that this role provides an opportune "touchpoint" where, with additional training, assessors could integrate a standard tool or process to assess PSE or PAE explicitly and to inform PSE- or PAE-specific service referrals.

Types and Focus of Services From Allied Providers

Limited data suggest that CW agency service referrals to key partners can result in children and caregivers getting the care that researchers and clinicians recommend (Jirikowic et al., 2010; Olson, 2016). Limited survey data from states 3 and 5 support the idea that if CW staff recognize indicators of PSE and refer these children and families, then their allied service providers are at the ready to connect children and families to well-matched and best practice services for PAE/FASDs and other PSE conditions such as NAS. See the box on the next page for findings about what allied service providers (e.g., including medical providers, mental health professionals, and public health program staff) typically recommend as quality care for those children and families experiencing PSE who are referred to them by CW agencies.

Factors That May Affect PSE Case Planning and Referrals

The team asked CW staff and directors to think about whether and how four characteristics or factors may influence case planning and service referrals for children and families suspected of PSE: PSE status known or suspected, type of substance exposure, staff supervision processes, and judicial processes.

Service Providers' Perspectives: Common Services Recommendations

A small sample of allied service providers who were surveyed in the two in-depth states (states 3 and 5, N = 21) were asked to list up to three recommendations they commonly provide for children they serve for whom PSE is a concern.

From the 13 who provided responses on **PAE**, the most common recommendations (5 or more mentions) reflected the following:

- Work with specialists, for additional diagnostic testing and assessments at FASD clinics or developmental centers.
- Consult with medical providers such as developmental pediatricians.
- Engage in EI or mental health services.
- Engage the caregiver in parenting and family support services, including interventions to support the child's social/emotional growth, parenting classes, and caregiver peer support groups.

Of the 12 with responses regarding exposures to **substances other than alcohol**, the most common recommendations (5 or more mentions) were as follows:

- Refer to programs to address presenting needs/symptoms, such as safe sleep education, occupational therapy, or feeding therapy.
- Refer to specialists for additional developmental assessments.
- Consult with a medical provider.
- Engage the caregiver in parenting and family support services, including parenting classes to provide information about drug-affected children; provide reading materials for caregivers.

PSE status was known or suspected by CW staff

When the PSE status was known or suspected by the CW staff, about one-third of ongoing case management staff in these five states stated they would not adjust their typical case-planning or referral processes for a child.[64] Many ongoing case management staff in these five states said their agency would change how they work with or recommend services in light of this information. Some staff said that service referrals do not vary much by known PSE; rather, they are closely tied to immediate behaviors and symptoms. One ongoing case management staff member illustrated this,

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[64] Only staff with ongoing case management responsibilities were asked this question (*n* = 66).

stating: “Services depend on what the actual issue is. So, if a kid was exposed and they’re having a certain behavior, then we try to match them with a service that can help them with that behavior.”

Substances to which child was exposed

Most staff across the five states indicated that case planning and service referrals did not vary by the substance to which the child was prenatally exposed, meaning that **referral processes and types were similar whether the exposure was to alcohol, methamphetamine, an opioid, or another substance.** However, interviewees did note that CW staff awareness of services for specific substances may be affected by the types of substances they perceive to be most common in their regions. One ongoing case management staff said, “At least in this area, we have so much more exposure and knowledge to opioids versus alcohol . . . there’s probably more services that are more directly for children who have been substance exposed to something like an opioid or having withdrawals . . . versus fetal alcohol later on diagnosing children.”

Staff supervision processes

Most staff reported that PSE resources and training information were often referenced in meetings with supervisors[65] and internal teams; less than one-quarter indicated that they were not.[66] However, **only a small subset of staff spontaneously mentioned PSE (including PAE) services specifically as a topic in supervision** (17 of the 92 interviewees in this analysis), and services and referrals were discussed as part of specific case discussions (13 of the 92 interviewees). When supervisors are knowledgeable, staff note the benefits for case planning and providing quality care. One ongoing case management staff member said: “My supervisor is our ZERO TO THREE supervisor, so she brings [PSE] up a lot, I suppose, when I’m in my one-on-one supervision with her, but not generally in team meetings. She’ll be asking me, like, ‘Okay, well, what services do we need to put in place? Did they get to the [local service provider]?’ Things like that. So, about services and what we can do.”

Judicial processes

Local area directors and CW staff with ongoing case management roles in these five states perceive that judges and court processes rarely or singularly influence whether further assessment or services are provided to children suspected of experiencing PSE. Only some

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[65] *Supervision* in this context refers to the clinical and administrative oversight of the work that caseworkers do with children and families, performed by CW supervisors, managers, and other agency professionals such as coaches.

[66] This item was added after data collection concluded in state 1. Thus, this finding derives from interviewees in states 2 through 5 and excludes states whose CW directors were not asked this item (*n* = 76).

staff thought judges were well informed about PSE effects and service needs.[67] Some staff indicated judges summarily take the recommendations of the CW agency regarding the case plan and suggested services, and very rarely independently ask about possible exposures and related child needs or services. A few staff mentioned that judges are more focused on, and have greater influence on, substance use treatment services for parents rather than child needs. Illustrating these points, one local area director stated: “Typically, we take cases to the judge and say, ‘This is what we’re asking,’ and they review the information and say yes or no based on testimony and whatnot. So, it’s very rare [that judges ask about or order assessments or child services related to PSE]. In fact, I cannot think of a time where the court ordered an assessment that we weren’t already asking for.”

Barriers to Service Referrals for PSE

Regarding service referrals, recommendations, and actual provision of services, both CW staff and service providers cited specific challenges about availability and access. CW staff in all five states brought up limited services, particularly for older children, as their main challenge related to service provision for children or families affected by PSE. Staff in more rural contexts in each state talked about specialized services being in metropolitan areas far from the CW agency, but staff across all states and sites also described long waiting lists for services:

“The biggest city we are close to has some services, but we’re still 45 miles away, and that might be a big issue for some of our parents as far as transportation and money.”—Frontline/Ongoing case management staff

“We do have providers like the specialty clinic, but it’s like a 6-month waiting list. We need more.”—Frontline/ongoing case management staff

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[67] This item (“To the best of your knowledge, do judges seem aware of PSE and related child needs?”) was added after data collection concluded in state 1. Thus, this finding derives from data from 76 interviewees in states 2 through 5. Twenty-nine of the 76 interviewees endorsed the theme that judges are knowledgeable about PSE and child needs.

CW staff discussed the particular challenge of finding appropriate assessment and/or diagnostic services for children with PAE and an FASD, noting low availability across all states and sites. As one ongoing case management staff noted: “I have older children on my caseload whom people say are autistic, but I think it’s an FASD. We don’t have very many providers in the [local metropolitan area] that diagnose FASDs.” This was also observed in CW staff responses in the survey, which asked respondents to rate the availability of different types of services. General assessment services were available, such as referrals for screening and assessment, such as medical examinations, mental health, and other specialized needs like speech and occupational therapy. Less than 10 percent rated these referral sources as not available or that they did not know about availability. In contrast, about a third of CW staff survey respondents rated “referral for specific assessment of diagnosis related to PAE” as not available or they did not know if they were available. Service providers noted similar barriers (see sidebar).

Service Providers’ Perspectives: Barriers

Allied service providers (N = 21) from the two in-depth states also noted barriers to service provision for children affected by PSE in an open-ended survey item. The most common barriers (mentioned by 5 or more providers) were:

- Limited local service availability and long waiting lists
- Lack of services, specifically mental health services, evaluation and diagnostic services for FASDs and autism, school support services, and childcare services for children affected by PSE

Information Exchange Among CW Staff and Service Providers

In these five states, many CW staff indicated their state agency guides staff to share information with service providers, but the type and scope of information specific to PSE exchanged across systems varied. Almost two-thirds of the interviewees with ongoing case management responsibilities endorsed the statement that their state has a formal policy or guidance related to the sharing of information with service providers. Yet just over half of the state CW directors, local area directors, and staff with ongoing case management responsibilities interviewed indicated that information is shared with service providers regarding PSE status, and less than half perceive that ongoing service progress or results are shared between these partners. Few CW staff interviewed noted that service providers share most or all PSE-related information back with the CW agency. The relative lack of information sharing was specifically called out as a challenge by both CW staff interviewed in all five states and the limited sample of service providers in the two in-depth states (see sidebar).

CW staff mentioned barriers to information sharing that included hospitals not complying with CARA-based regulations; service providers giving information only to caregivers and not CW staff (although caregivers also expressed difficulty with obtaining information); and the slow pace at which medical and school records are shared with the CW agency. Comments reflecting some of these challenges included the following: “It takes forever to get records back from the medical record agency. . . it takes months” and “the reason I don’t use [child placement agency] that much is that we don’t get the documentation.” State 1 CW staff described a practice that helps them gather needed information (see Practice Highlight on next page).

CW staff in all five states also shared that documentation of service referrals and ongoing service information is inconsistently recorded in case records/administrative data, and case record reviews in one state supported their observations. Chapter 7 discusses documentation of service-related information.

Service Providers’ Perspectives: Information Exchange With CW

Allied service providers from the two in-depth states noted in open-ended survey responses the importance of receiving timely information from CW staff to make an accurate diagnosis and tailor recommendations and interventions, including—

- General child assessments
- Historical information regarding maternal substance use and prenatal exposure
- A thorough history of indicators and behavioral observations

However, only some of these 15 service providers indicated that they typically communicate with and share results of children’s services with the CW agency or caseworker (5 and 7 respondents, respectively).

Only 5 of the 15 respondents indicated that they share PSE-related information directly with families or caregivers.

Practice Highlight 2: Medical Clinic Specifically for Children in Foster Care Facilitates Information Gathering

Ongoing case management staff from state 1 described how they can refer directly to a medical clinic that provides specialized care for children in foster care. This service facilitates gathering critical records, including those necessary for establishing PSE and implementing related services. As one staff member noted, "*So, if the kids are with foster parents and we don't know who their doctor was or if they're on any medication or if they have any other previous diagnosis . . . they can go to the foster care clinic at [local service provider] and they can get records from pretty much anywhere, is my understanding*."

Perceived Opportunities to Enhance Practice

In interviews across all five states, CW staff mentioned areas of need and described opportunities to enhance case planning and services for children and families affected by PSE (see exhibit 26).

Exhibit 26. Suggestions to Improve Case Planning and Service Referrals

Themes and examples from CW staff

Decision-making tools to help match child and family needs to effective interventions at different developmental strategies
"What evidence-based practices would be recommended . . . that are best equipped to handle the populations who are exposed? Where do we send these kids, especially if we're dealing with [them] 3 or 4 years down the line and they're no longer infants? I think [we need] recommendations for what services are available."—Ongoing case management staff
Support from CW leadership to enhance collaboration across agencies
"There needs to be a higher-level push . . . that is not just led internally between programs. I work wonderfully with the family services group from [mental] health, the same way they do with us. But if you're . . . really going to get the treatment providers and others, there has to be the same push from the leadership across a larger group." —State CW Director

Practice Highlight: Multidisciplinary Consultation and Collaboration Available to Rural Agencies

State 2’s state CW director described how access to a multidisciplinary expert consultation team supports identification of needed services and resources for PSE: “Any county can put in an application to have an expert case consult; we have two in [this state]. That’s a multidisciplinary team, and we bring in whoever is necessary—so, child psychologists, child psychiatrists, medical professionals, legal, whoever needs to be there. What resources are available? What should we be looking for? How do we get those services in whatever county they are in? Being able to tie in some outside experts to help navigate the system a little bit. Counties that are not in the metro area, they utilize this quite often. The third most requested reason for an expert case consult . . . is current placement preservation due to child behavior [that could be attributable to PSE].”—State CW Director

The power of interagency, multidisciplinary team collaboration was also raised by the small sample of service providers who were surveyed in states 3 and 5. A Practice Highlight from state 2 offers some thoughts on a potentially promising approach along these lines (see Practice Highlight above).

Service providers also shared their perspectives on training needs and opportunities for CW agencies and staff to improve their practices and better support children and families affected by PSEs (see box on next page).

From their vantage point as frequent collaborators with CW welfare caseworkers, they noted the potential value of targeted training on specific skills; namely, how to talk with parents and caregivers more sensitively about PSE and how to foster connections to services and interventions. This is illustrated in one provider’s comments:

> *“[The needs are] CW workers . . . having sufficient training on how to identify developmental delays and disabilities possibly caused by PSE . . . having the training and skills to talk with families about these topics and support families in understanding and being willing to seek evaluations and helpful services . . . knowing where and how to refer these families for evaluations and supportive services . . . [doing] a “warm hand off,” where social workers or other department staff take time with families to*

Service Providers’ Perspectives: Practices That Best Support Children Involved With CW Systems Who Have Been Prenatally Exposed to Substances

Allied service providers in the two in-depth states shared thoughts about best practices for this population; these responses are summarized below.

- **Interagency collaboration through multidisciplinary teams**, specifically the power of “a systems of care approach” and “wraparound approach” in which all involved agencies are working together for the family’s well-being.
- **Effective referral process that engages and supports caregivers**, noting the importance of providing a supportive connection and hand-off to providers, and following up to ensure families are receiving needed services after getting a referral.
- **Enhance CW staff PSE knowledge and training—in particular, build skills to sensitively discuss PSE and refer families to needed services.** Specifically, providers suggested that CW workers should know how to recognize developmental impairments possibly caused by PSE, have more training to develop skills to talk with families about PSE, and know where and how to refer families for evaluations and supportive services.

walk them through the referral/enrollment process so families who are already experiencing high levels of stress don’t slip through the cracks.”—Nonprofit program coordinator

Finally, caregivers in the two in-depth states also shared their perspectives on services and supports they want and need to effectively care for children with PSE. In focus groups and interviews, caregivers described some of their experiences interacting with CW staff about services and identified some challenges and needs that point to important opportunities to improve CW case planning and service provision; these findings are discussed in chapter 8.

Implications

Even when indicators of PSE are present or suspected, it is not top-of-mind for CW staff to consider referring children for specific assessments and services for alcohol and other PSEs or diagnosis, particularly for older children. Support for this finding came from multiple sources and methods. The most frequent service referrals were developmental assessments and medical providers, which can be a key method of identification of PSE-associated conditions; however, staff described these referrals in relation to substance-exposed infants and young children, primarily in the context of commonly provided services to all children involved in CW. While a diagnosis of an FASD is specifically included in the CAPTA/CARA requirements to develop plans of safe care and referrals for infants, alcohol exposure effects and conditions such as FASDs are unlikely to be recognized or diagnosed until later in childhood (Chasnoff et al., 2015).

Generally not reflected in state and local CW agencies' practices is this shift in the developmental window for identification of PAE effects—and the corresponding opportunity to deliver appropriately targeted care and service plans. Knowing PSE/PAE status for older children could help anticipate the need for particular services and approaches (e.g., techniques for parenting differently; Malbin, 2017). In interviews, staff did not describe systematic processes or defined practices to integrate services and supports for older children who specifically show indicators of PAE effects and did not speak to the ways in which these supports would be important to their parents and caregivers.

As noted in chapters 4 and 5, CW staff tended to underestimate possible physical damage to the child by PSE or PAE and the specific care needs that could affect the child's future development and life outcomes. At times, staff focused on the potentially negative effects of substance use by parents (e.g., problematic parenting capacity) over the effects of exposures to the child and corresponding intervention needs. This is an important observation particularly when considering the effect of alcohol. Parents may be only moderate users of alcohol and capable parents, yet they may inadvertently cause permanent damage to the child's brain by drinking during pregnancy. The damage occurs before birth, and still must be addressed if the children are to achieve full potential in life. Parents of children with an FASD will need special training to raise their children well (Bertrand & Dang, 2012).

In an adolescent case scenario with indicators of an FASD, only some CW staff said they would refer for PAE-specific assessment. One state's practice to embed CW staff who conduct comprehensive validated developmental screens for all children in foster care, which results in immediate referrals (see Practice Highlight on page 98), may offer a strategy for other states. However, staff in this state and role noted that training is needed to ensure that these assessments give rigorous attention to PSE (and, in particular, PAE) indicators and service needs.

CW staff need targeted training, resources, and supports to ensure they can promptly and effectively apply PSE information in case planning and that they can implement strong service referrals and interventions. Allied service providers recommended that CW staff receive further training to sensitively gather substance use histories from families, better recognize indicators of PAE, and match needs to appropriate referrals. CW staff also stated that they need more instruction and better tools to guide this process. As chapter 5 makes clear, it is critical that CW staff know when and how to refer children and caregivers for further assessment and diagnosis. However, because diagnostic services for PSE-related conditions may be scarce or have long waiting lists, ongoing case managers must also be able to recognize when and how to promptly link caregivers to educational and medical interventions; provide anticipatory guidance to prepare caregivers for possible future difficulties; and help caregivers engage in developmental therapies and mental health services to begin to mitigate possible long-term effects (Hoffman et al., 2016; Jirikowic et al., 2010). With training and guidance, CW agency staff could more effectively advocate for services through court intervention, by providing judges with more complete information about both risk and family strengths, needs, and capacities (Henry et al., 2018). Staff also indicated a need for information about evidence-informed interventions for children and families, at different developmental stages.

CW agencies must develop protocols to ensure information exchange and timely feedback loops about service needs and progress among child welfare staff, allied service providers, and parents and caregivers. Data provided by CW staff and service providers suggested that information about PSE status, concerns, and progress in services is exchanged perhaps less than a third of the time. As chapter 7 discusses, case record reviews in one state showed significant lack of documented assessments and services. The absence of feedback loops can lead to service gaps as well as poor child and family engagement and follow-through. CW staff and supervisors could use tools and supports to ensure strong and systematic service coordination, follow-through, and continuity in information and services for families. CW staff and allied service providers want stronger CW leadership support to build interagency and multidisciplinary collaboration around PSE and PAE child and family needs and service provision.

7. Documentation of Prenatal Substance Exposure

This chapter examines where and how consistently information about prenatal substance exposures (PSE) is documented in the study child welfare (CW) data systems and the extent to which this information is useful for reporting and making decisions about child and family care.

Related Study Questions

- Where and how consistently is information about PSE documented in CW data systems?
- To what extent can this information be used to examine trends related to PSE including Fetal Alcohol Spectrum Disorders (FASDs)?

Summary of Findings

- In a CW case record review of 212 records in one state, information related to PSE, including receipt of services related to PSE, was found throughout intake, investigation, and ongoing documentation of reviewed files but was not consistently located in a single report or location.
- Nearly two-thirds (64 percent) of all PSE information was found in narrative report sections, making systematic monitoring and reporting difficult.

Background

Historically, national datasets deriving from CW systems data such as the National Child Abuse and Neglect Data System (NCANDS), the Adoption and Foster Care Analysis and Reporting System (AFCARS), or National Youth in Transition database have collected only limited data related to PSE. Based on legislation in the 2016 Comprehensive Addiction and Recovery Act (CARA) in 2018, NCANDS began to request that states provide data related to Plans of Safe Care (POSC) and intervention referrals for children with PSE.[68] Despite this, most states show substantial gaps in their abilities to report any data related to

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[68] Note that NCANDS began as a strictly voluntary system. States have done their best to comply, but there are increasing pressures on them to provide more information. In 2018, NCANDS began to request that states provide data elements that address PSE: number of infants with prenatal exposure to substances, number of infants with prenatal substance exposure who have a Plan of Safe Care as specified by the Comprehensive Addiction and Recovery Act (CARA), and number of infants with prenatal substance exposure who have a referral to CARA-appropriate services, including services for the affected family or caregiver. Initial data shows that 38,625 infants from 47 states were referred to Child Protective Services with PSE in 2019 (US HHS, 2021). However, some states that

PSE to the public, such as initial hospital reporting of substance-exposed births or early childhood and developmental disabilities systems documentation of developmental assessments of substance-exposed infants (Chasnoff et al., 2018). Such gaps weaken the ability of systems to work together to track children and families as they move from one agency to another (Young et al., 2009). More broadly, the lack of systematic data on PSE status for children in CW prevents estimates of the economic and resource burdens associated with care and services for these children and their families. There remains a lack of information about the magnitude of children with PSE, including prenatal alcohol exposure (PAE), in the CW system—particularly children not reported to CW as infants—and a substantial lack of understanding of how these children are, or could be, identified and cared for within the CW system.

Summary of Findings (continued)

- Aligning with reviews of case records, CW staff did not report one consistent location where information about PSE could be found but cited varied reports that were primarily narrative in nature.
- Across the case record, reports of PSE most commonly relied on drug tests—maternal drug test at birth or during pregnancy or positive toxicology report of an infant—to assess exposure. This likely results in an under-reporting of alcohol exposure, which does not appear on toxicology screens due to the typical loss of alcohol from the system after only 12 hours.

In the CW system, which usually involves multiple providers working with families and children, sharing relevant information is critical (Young et al., 2009). In a pilot study conducted in a single urban CW agency, case record reviews found inconsistent documentation of PSE (Usher et al., 2016). This is likely to hinder the CW staff's ability to find and share relevant data quickly—particularly for new caseworkers unfamiliar with a case. Furthermore, a lack of clear documentation on health concerns and factors related to PSE (including PAE) may limit CW staff's ability to fully identify PSE, provide appropriate service referrals, or reliably communicate about a child's needs (Hoffman et al., 2016). By ensuring that accurate information is included in court records, provider reports, and CW agency case records, all providers can advocate for the child and ensure that appropriate services and referrals are obtained (Paley & Auerbach, 2010). Accurate information can also help CW professionals working with families to explain the challenging behaviors of a child with PSE and help parents and caregivers

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reported data indicated less than 10 infants who were prenatally exposed to substances, reflecting the challenges of developing state data systems to accurately capture this information and the fact that states are in various stages of establishing systematic reporting processes for these data. Although this data could be used to infer the number of children with PSE in CW, it is an inadequate substitution for direct reporting and is limited to reporting only on very young children.

develop more effective parenting skills (Flannigan et al., 2021; Mirick & Steenrod, 2016), thereby reducing risk of maltreatment and improving both child and family outcomes.

Limited studies addressing CW and prenatal substance exposure indicate that hospital data may be the primary method of identifying exposed children (Richards et al., 2020). Usher et al. (2016) reported that CW staff relied on hospital medical tests conducted at birth to recognize that a child had been exposed. Yet research has shown racial and socioeconomic disparities in hospital screening of PSE and subsequent reports to CW (Ellsworth et al., 2010; Roberts & Nuru-Jeter, 2012). Relying solely on hospital reports rather than established CW policies or practices to identify children prevents broader understanding of how and when children are identified, particularly those who are not identified as newborns.

The limitations of medical testing and a lack of symptoms at birth can make gathering information on maternal substance use during pregnancy especially important to identify children with PSE, particularly for those exposed to alcohol. There are brief screening tools that can and accurately assess maternal substance use during pregnancy (Anthony et al., 2010; Chasnoff et al., 2007). Yet it is unknown the extent to which standardized tools or structured processes are used by CW agencies to gather information on maternal substances.

Key Findings

This chapter reports on findings related to where and how PSE and related factors are documented, drawing from detailed reviews of 212 CW case records in one state (state 3, see chapter 2 for detailed description of methodology; exhibit F42 in appendix F summarizes the documents reviewed).[69,70] Importantly, these findings are consistent with the results of interviews with local area directors, frontline staff, and ongoing case management staff from across five states and interviews with local area data staff from two states (state 3 and state 5).[71]

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[69] Race and ethnicity of mothers or children was not a sampling criterion for this study—the full sampling criteria are discussed in chapter 2. The racial/ethnic makeup of our sample was similar to the full child welfare population in state 3. However, the study sample inadvertently slightly oversampled White non-Hispanic children and slightly undersampled Black non-Hispanic children.

[70] States, sites, and participants were granted confidentiality to foster open discussion about practices. Descriptive information about the states and sites can be found in exhibit 4 and participants in exhibits 6–10.

[71] Case record reviews were planned and approved in state 5 but, because of effects and travel restrictions related to the COVID-19 pandemic, were unable to be completed. Data collection was modified to gather in-depth information regarding case documentation of PSE through additional data staff interviews (*n* = 9 in state 5).

The key findings presented below are divided into two sections: documentation of PSE in the case record reviews, and staff reports of PSE documentation. Supporting data can be found in appendix F (exhibits F42—F48).

Documentation of PSE in Case Record Reviews

A majority of reviewed cases from this one state included reports of PSE. To fully address study questions, cases with known PSE were reviewed to examine whether information was documented in a consistent manner across similar cases. Among reviewed cases (*N* = 212), sampled to include a greater number of cases at-risk of prenatal exposure than the general population,[72] 124 (58 percent) included reports of prenatal substance exposure for at least one child in the case record somewhere throughout case documentation. Within these cases, 15 children[73] from across 12 case files had a medical diagnosis with an FASD or medical documentation of PAE. These high percentages are most likely an artifact of the sampling method, in which 183 of the cases reflected known substance exposures, known maternal substance use, or related child medical diagnoses.

Reports of PSE were not consistently found in specific locations but were seen throughout documents related to intake or investigation. Trained case record reviewers examined six primary reports or documents related to intake and investigation and any other intake or investigative documents deemed pertinent by reviewers such as plans of safe care, substance abuse reports, or case history of past investigations. Across all reviewed intake or investigation documentation, reports of prenatal substance exposure were found in 48 percent of all reviewed cases. Within individual cases, this information was most commonly documented in hotline/intake reports, safety and risk assessments, and family assessments (all 42 percent, see exhibit 27). Just 15 reviewed cases reported PSE in a single intake or investigation documentation; 10 of these were in hotline/intake reports. However, PSE information was never consistently found in a single report or location within intake or investigation documentation. This aligned with interviews of 13 data staff who reported that information related to PSE was not consistently found in any one place but would most likely be documented in intake files, investigation assessments, or other assessments including safety and risk

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[72] Agencies selected cases that included (1) an allegation related to positive toxicology of a newborn (*n* = 58); (2) an allegation related to parental substance abuse (*n* = 60); (3) a child with a relevant medication condition (e.g., withdrawal symptoms, Attention Deficit Hyperactivity Disorder; *n* = 65); or (4) randomly selected cases (*n* = 29). This sampling approach was designed to ensure enough data to fully explore agency practice when a case included a known instance of prenatal substance exposure or an instance where prenatal substance exposure was likely.

[73] A total of 453 children were included in reviewed intake/investigation documentation and 463 children were included in reviewed ongoing documentation.

or family assessments. As discussed in chapter 5, interviewed staff most commonly reported that the intake and investigation phase of a case was the best time to gather information related to PSE.

Exhibit 27. Location of Information on PSE in Case Records

Percentage of cases reviewed with information on PSE in intake/investigation and ongoing documentation, by information source

Information Source: Intake/Investigation	% of Reviewed[a]	Information Source: Ongoing	% of Reviewed[a]
Any intake documentation	48%	Any ongoing documentation	55%
Hotline/Intake Report	42%	Contact Notes (Intake and Ongoing Case Management)	47%
Safety and Risk Assessments	42%	Child and Family Assessments	44%
Family Assessment	42%	Court Reports	40%
Allegation Report	41%	Any Medical Documents	37%
Safety Plan	30%	Family Case Plans	33%
Case Plan	22%	Safety Assessments	26%
Other intake documentation[b]	72%	Other ongoing documentation	26%
		Any Educational Documents	2%

[a] Excludes missing documents. Information could be found in multiple sources, so totals do not add up to 100%.

[b] Other documentation was reviewed only if deemed pertinent to the study, accounting for the high percentage of these documents containing reports of PSE.

Source: Case records reviewed in state 3; *N* = 212.

Information on PSE was more likely to be found in ongoing documentation than intake or investigation documentation. Case record reviewers examined seven primary documents or report sections related to ongoing cases and any other ongoing documents reviewers thought to be relevant, such as Permanency Progress Summaries, Transfer Summaries, or Adoption Reports. Within these reviewed documents, 55 percent contained reports of PSE for at least one child in the case record (exhibit 27). This is slightly higher than in intake files, suggesting that not all information pertinent to PSE identification is known or discovered during the initial intake or investigation. Furthermore, this aligns with reports of ongoing case management staff, who said they were more likely to report assessing for PSE "most of the time," as compared to intake or investigative staff (see chapter 5). Caseworker contact notes (47 percent), child and family assessments (44 percent), and court reports (40 percent) were most likely to contain information regarding PSE, which aligned with reports from interviewed data staff about where information on PSE was most likely to be found in the case record. Similar to intake/investigation documentation, no single report contained information about PSE across case files, limiting the ability of staff to quickly find PSE information consistently across case files.

Slightly more reports of PSE were found in reviewed ongoing documents, suggesting that not all information pertinent to PSE identification is known or discovered during the initial intake or investigation.

Across the case records, reports of PSE most commonly relied on drug tests to assess exposure. In examining the context of reports of PSE in intake/investigation documentation and in ongoing documentation, a variety of sources were found. However, the most common sources of PSE identification were a positive maternal drug test during pregnancy or birth (see exhibit 28) or a positive toxicology report of a newborn. This was followed by maternal reports of substance use during pregnancy or her reports of a child's PSE, which was lower in intake documentation (28 percent) than in ongoing documentation (40 percent). This aligns with reports from both interviewed and surveyed CW staff discussed in chapter 5.[74] Notably, the large percentage of cases relying on drug tests or toxicology screens to identify PSE suggests that alcohol exposures may be under-identified, as these tests are not typically designed to detect alcohol.

Exhibit 28. Context of PSE Documentation

Percentage of cases reviewed with PSE documentation in intake/ investigation and ongoing documentation by source of information

Source of Information	Any Intake	Any Ongoing
Positive maternal drug test at birth/during pregnancy	40%	45%
Positive toxicology of a newborn	34%	38%

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[74] For a detailed discussion of PSE identification, see chapter 5.

Source of Information	Any Intake	Any Ongoing
Maternal report of substance use while pregnant or PSE	28%	40%
Other collateral report of PSE	25%	30%
Hospital report of NAS[a] or withdrawal	12%	15%
Other medical report of PSE	4%	13%

[a] Neonatal Abstinence Syndrome.

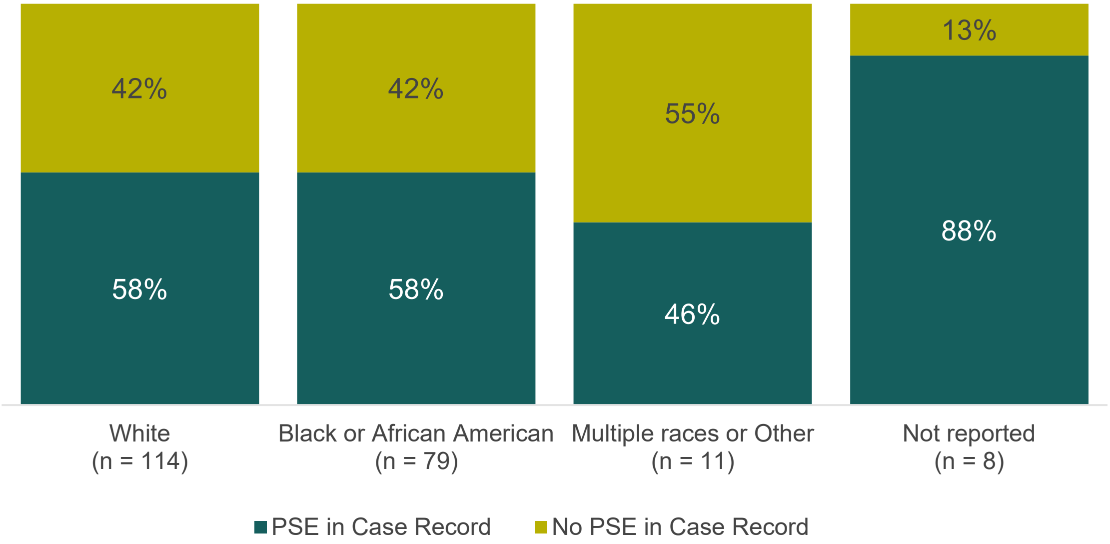
Source: Case records reviewed in state 3; *N* = 212.

Note: Categories of types of documentation were not mutually exclusive.

Across our case record sample, reports of PSE did not vary substantially by race and ethnicity. Although research has shown racial disparities in reports of PSE to CW (Roberts & Nuru-Jeter, 2012), documented reports of PSE in the case record sample were relatively consistent by race. Within the case record review, reports of PSE were captured across the whole case file while race was documented for each child in the record. In examining the race of the oldest child in each file to ensure inclusion of cases with just one child, we found that 58 percent of reviewed cases where the oldest child was White contained reports of PSE and 58 percent of reviewed cases where the oldest child was Black contained reports of PSE (see exhibit 29).

Exhibit 29. Reports of PSE in Case Record, by Race

Percentage of case records with reports of PSE by race of oldest child in the record



Source: Case records reviewed in state 3; *N* = 212.

In addition, 46 percent of cases where the oldest child was of another race or multiple races contained a report of PSE. However, this study did not further categorize "multiple races or other," and it is unclear the extent to which Black- or African American-identifying children may be included in that category. Further exploration of PSE identification and documentation by race and ethnicity is needed in future studies.

Case records in this state revealed few documented services among children with suspected or known exposures. Given oversampling for cases with PSE and related conditions (e.g., FASDs, Neonatal Abstinence Syndrome, Attention Deficit Hyperactivity Disorder), documented services were widely expected in the review of case record documents but did not emerge. Medical treatment or services of any kind (not always specific to PSE) were noted in only about one-third of the reviewed case records. Specific references to mental health, behavioral, and/or educational treatment or services were rarely documented in case records. Within those case records, many included a medical indication of PSE, some included medical treatment noting PSE, and few included PSE mentions in relation to special education.

Staff Reports of PSE Documentation

Many CW staff reported that information related to PSE would most likely be found in narrative case notes or other narrative summaries. Local area directors, frontline staff, ongoing case management staff, and staff who work in both frontline and ongoing case management roles (from all five states), and data staff (from states 3 and 5) were asked to describe where information would be documented in a data system if PSE were suspected or known. Many staff[75] reported multiple types of reports or documents that might contain this information, including case or contact notes (64 percent), medical reports (20 percent), or summaries of completed investigations (11 percent; see exhibit 30).

Exhibit 30. CW Staff Reports of Likely Location and Format of PSE Information in Case Records

Number and percentage of CW staff reporting PSE information by location/format

Location/Format	Number (Percentage)
Case notes/contact notes	106 (64%)

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[75] The following terms are used to reflect intentional approximations of frequency: *few* (about 10 to 25 percent of participants), *some* (about 26 to 50 percent of participants), *many* (about 51 to 75 percent of participants), and *most/majority* (about 76 to 90 percent of participants).

Location/Format	Number (Percentage)
Medical documentation/reports	33 (20%)
Investigation assessment summary	19 (11%)
Court reports	14 (8%)
Intake/hotline documentation	14 (8%)
Case plan	8 (5%)
Other locations (e.g., child assessment, adoption records)	19 (11%)
Format	
Narrative summary	123 (74%)
Checkbox/drop-down for PSE	21 (13%)
Hard copy only/uploaded hard copy	16 (10%)

Source: Asked of local area directors, frontline staff, ongoing case management staff, frontline/ongoing case management staff, and local area data staff from states 3 and 5; *n* = 166.

Note: Respondents could report more than one category. Data were not available from 26 respondents.

Yet across all of these reporting types, 74 percent indicated that a report of known or suspected PSE would be found in narrative summaries (see exhibit 30). Only 13 percent of staff across all five states also described using a checkbox, drop-down, or other easily analyzable feature within specific reports (e.g., assessments) to document PSE, and 10 percent described reviewing hard-copy reports such as medical files that included PSE documentation.

CW staff cited a range of documents and reports as possible locations within a case record where information about PSE might be found. In addition to case notes, respondents from all states mentioned a wide range of locations that might contain information about PSE. One local area data staff member described this range, saying: “If I suspected a child I was working with [was prenatally exposed], I would go and look at the [state 5 family assessment used in family differential response] or the investigative assessment or the court report to see what the historical information on Mom’s use was. I’d also check the [state 5 child placement assessment]; [and] they pull all the birth records usually—I would want to go look at that, too. . . . I would also look at intake history to see if we’re getting calls about that.” Reports from other staff also included investigation assessment summaries (11 percent), court reports (8 percent), and intake or hotline documentation (8 percent; see exhibit 30). These themes mirror findings of case record reviews that found references to PSE in multiple different locations across case records, with inconsistent documentation trends.

Across all five states, CW staff indicated that while there are clear locations in case record/administrative data systems for information regarding service provision for prenatal exposures, in practice, the location where service information is documented varies. The data staff (i.e., staff with responsibility for administrative data and reporting) who were interviewed in the two in-depth states provided a limited but deeper description of what this looks like in state CW systems. They described specific tabs or sections within their electronic case records (i.e., in their state's Comprehensive Child Welfare Information Systems, or CCWIS)[76] where information related to a child's education or medical history should be located (including any results related to PSE assessment, diagnosis, and services) but stressed that these fields were often not consistently completed by staff. Similarly, while information about service referrals or service receipt should be located in the "service referral" or "service authorization" section of the case record, interviewed staff said that this information was often not found in one consistent location. The case record review analysis described above echoed these findings.

Across all states, CW staff were less certain about where information related to PAE would be documented. CW staff from all states reported that, similar to information related to PSE, in general, information specifically related to prenatal alcohol exposure would also be found across case notes, medical files, or other locations. A local area data staff member reported: "[Information on prenatal alcohol exposure] would still be captured in the same places [as PSE, in general]; in all likelihood, it would be in the investigative assessment, and there would be a request for medical records from the medical professionals that would be uploaded into the file . . . [and] it would be documented in the case notes, and it would be documented in the history." However, staff were less certain about whether their agency would have this information, noting that it did not regularly appear on drug tests alongside illicit substances.

Implications

Staff may benefit from guidance on where to consistently document PSE. Across intake/investigation and ongoing case management documentation, information related to PSE was found in almost all types of documents, with contact or case notes containing the highest volumes of relevant information (64 percent of reviewed files). Compare this to the fact that only 2 percent of the respondents in the chapter 5 interview data said that these contact or case notes would be a good source for finding cases with PSE. This discrepancy may make it difficult for ongoing case

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[76] States use their CCWIS system to compile information that is reported to the federal level.

management staff to quickly identify whether children in any given case have been prenatally exposed to substances. Mirroring findings in chapter 6, staff may benefit from guidance on where to consistently document this information or from updated instruments that allow for easy documentation of known prenatal substance exposure to strengthen referrals to needed services or appropriate resources.

Inconsistent documentation and reliance on narratives limit systematic reporting. A review of case records found that information about a child's PSE was not systematically documented but, rather, located in varying places in any given record. Interviews with CW staff confirmed that there was not one set location where they would report this information. In addition, nearly three-quarters (74 percent) of all reports of PSE were seen in narrative documentation. A lack of consistency on the location of PSE and PAE information, in particular, could lead to poorer communication between staff in the agency and less ability to use this information for administrative and program planning purposes such as referrals for services. States are in varying stages of establishing systematic reporting processes that respond to Child Abuse Prevention and Treatment Act (CAPTA)/CARA reporting requirements for NCANDS data elements related to PSE and POSC and referrals (U.S. HHS, 2021). Yet the diffuse locations of this information and the lack of standardized reporting seen in narrative text may make it difficult for state agencies to determine prevalence of PSE and to assess related trends and respond to these CAPTA/CARA reporting requirements. Required data elements in electronic reporting systems such as CCWIS are a key driver of practice and procedures. A more comprehensive understanding of the number of children in CW with PSE could be facilitated by expanding the NCANDS data elements beyond those families receiving POSC and/or referrals.

CW agencies need processes to ensure that information about service referrals and the information gained from service engagement is consistently documented to monitor care and support long-term care needs. As described in chapter 6, CW staff and allied service providers suggested that information about PSE status, concerns, and progress in services is exchanged perhaps about half of the time. Case record reviews in one state showed significant lack of documented assessments and services.

Reliance on drug testing may miss cases of prenatal alcohol exposure or PSE. Case record reviews echo the literature and findings reported in chapters 3 and 5, showing that CW staff most commonly learned about prenatal exposure through a drug screen—either a maternal drug test or a positive toxicology of a newborn. However, exclusive or even substantial reliance on medical records may result in overlooking critical information about PSE in older children without early medical records. Importantly, this information could be missed for children prenatally exposed to alcohol because it is normally undetectable at birth. A further point is that the prenatal alcohol exposure information could also not be available among children who were exposed during early gestation but may have passed a toxicology screen at the time of birth (Farst et al., 2011). In addition, research has shown racial disparities in hospital screening of prenatal substance exposure and subsequent reports to CW, further limiting the benefits of relying on drug testing (Ellsworth et al., 2010; Roberts & Nuru-Jeter, 2012). Clearly communicating these limitations to CW staff alongside an increased knowledge of the long-term effects of PSE and PAE in children may raise awareness of the importance of collecting and documenting PSE information from a variety of sources during case processes.

8. Caregiver Services and Supports Regarding Prenatal Substance Exposure

This chapter presents the extent and methods with which child welfare (CW) agencies train, inform, and support caregivers about matters related to prenatal substance exposures (PSE).

Background

Although it is ideal for children to remain with their biological parents, that is not always feasible or safe. In 2018, more than 400,000 children were in foster care in the United States (Child Welfare Information Gateway, 2020b). Given these facts, supports are important for biological parents as well as foster and adoptive families (e.g., through appropriate training, targeted services, support networks). The supports for the birth parents may prevent outside placement, and, for those children placed outside the home, these supports for other caregivers may also reduce placement changes (Leve et al., 2012; Rhodes et al., 2001) and adoption disruptions or dissolutions (Child Welfare Information Gateway, 2012) as well as promote positive child and family outcomes. This is particularly true for caregivers of children with PSE. Children with prenatal exposure, especially alcohol exposure, may be difficult to parent because of a range of challenges.

Related Study Questions

- How do caregivers describe their experiences and preparedness in caring for children with PSE or prenatal alcohol exposure (PAE), in particular those with FASDs (Fetal Alcohol Spectrum Disorders)?
- How do caregivers access information and training about PSE or PAE?
- How, and how often, does the CW agency share information relevant to the child's risk or status of PSE with caregivers?
- What gaps or challenges do caregivers perceive in these areas?

Summary of Findings

- Nearly 9 in 10 caregivers (89 percent) had cared for at least one child with PSE, yet one-third reported that they were not at all prepared to care for a child with PSE, despite some training related to PSE or PAE and a resulting FASD condition.
- Eighty-four percent of caregivers reported wanting additional training on PSE and FASD.

While infants born with neonatal abstinence syndrome (NAS) initially can have serious pain and physical problems, those physical problems can largely be overcome as the child emerges from the withdrawal phase (Lynch et al., 2018). With alcohol, the challenges are related to permanent brain damage. Particularly, alcohol-exposed children can have learning and memory impairments, difficulty controlling emotions, impulsivity, problems communicating and socializing, and co-occurring mental disorders such as hyperactivity or neurocognitive issues (Mattson et al., 2011; O'Connor & Paley, 2009). Behaviors and impairments of this nature can be frustrating to parents or caregivers and can place these children at increased risk of neglect or abuse (Bertrand & Dang, 2012). Furthermore, one study of foster parents caring for children with FASDs found that parenting stress and insufficient information about the child's disability may increase the likelihood of placement changes (Brown et al., 2007; Smith et al., 2007).

Summary of Findings (continued)

- Many caregivers reported receiving limited information related to a child's PSE status from CW staff (32 percent attributed this in part to legal limitations). Many discussed sharing PSE-related information that they learned back to CW and a few discussed seeking information related to PSE directly from biological parents.
- Two-thirds of CW staff (66 percent) were unaware of PSE-related training opportunities for caregivers and only one interviewed staff was able to name any local support services specifically targeted to those caring for children with PSE. Caregivers were also largely unaware of available services for themselves and frequently cited challenges in getting needed services for children in their care.

Foster and adoptive families may lack information about PSE that may be important to preparing them to care for children with substance exposures, particularly alcohol exposure. Caregivers who do not understand that negative child behaviors are a result of an alcohol-based brain impairment may grow frustrated and angry (Bertrand & Dang, 2012). Caregivers may need education to increase their knowledge of PAE and to develop advocacy skills to learn about and access services for their children (Jirikowic et al., 2010). In addition, foster families may want more information on specific children in their care, but this information may not always be available because it may not be known to the agency (Usher et al., 2016). Understanding policies and practices that facilitate easy access and sharing of information between professionals and caregivers would be useful for CW agencies wishing to adopt the most effective practices. Yet little has been known about how CW agencies systematically and individually support these caregivers through training and provision of resources or referrals.

Key Findings

This chapter draws on structured interviews and focus groups with 44 caregivers (foster and adoptive parents[77]) in 8 county sites across 2 states (state 3 and state 5).[78] Twenty-three caregivers participated in four focus groups in state 3, and 21 caregivers participated in individual interviews in state 5.[79] Some data were collected at the individual level (*n* = 44) and some were collected at the transcript level (*n* = 25; 4 focus group transcripts and 21 interview transcripts) and are broken out by method where appropriate (see appendix E for caregiver demographics). In addition, this chapter draws from targeted questions in structured interviews with CW staff from all five states involved in the study. Thematic findings explore the ways in which the CW system trains, informs, and supports caregivers about matters related to PSE and PAE, in particular.[80]

The key findings shown below are presented in four categories: (1) caregiver experiences caring for children with PSE, (2) caregiving training on PSE, (3) information sharing between caregivers and CW, and (4) services and supports available to caregivers. Supporting data organized by respondent type are found in appendix F (exhibits F49—F54).

Caregiver Experiences Caring for Children With PSE

Most caregivers had cared for a child with prenatal exposures. Most caregivers (89 percent) reported caring for at least one child with known or suspected PSE (including children with PAE). At least one caregiver from all county sites had cared for children with known or suspected prenatal alcohol exposure or a diagnosis of an FASD (see exhibit 31 for a case example).[81] A few of these caregivers noted it was often difficult to isolate which challenges stemmed directly from substance exposure and which from other genetic or environmental factors. In addition, caregivers from three

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[77] Biological parents were not included in the sample of this study and international adoption was not specifically addressed.

[78] States, sites, and participants were granted confidentiality to foster open discussion about practices. Descriptive information about the states and sites can be found in exhibit 4 and participants in exhibits 6–10.

[79] State 5 data collection took place during the COVID-19 pandemic. Caregivers were asked brief questions about the effect of the pandemic (this data included in the Topical Appendix data) but were otherwise asked to respond to questions based on their pre-pandemic experiences to generate more comparable data.

[80] The following terms are used to reflect intentional approximations of frequency: *few* (about 10 to 25 percent of participants), *some* (about 26 to 50 percent of participants), *many* (about 51 to 75 percent of participants), and *most/majority* (about 76 to 90 percent of participants).

[81] Sampling and recruitment targeted foster, adoptive, or respite caregivers who cared for infants and children at risk for or with known PSE involved in the local sites' CW agencies (see chapter 2 for specific sampling criteria).

different sites who had cared for children with a diagnosis of an FASD described challenges with getting the right treatment or correct diagnoses.

Exhibit 31. Experience Caring for a Child With PSE

One caregiver's perspective

Rachael[a] has fostered three children and adopted each of them from the CW system. Her youngest son, Tyler,[a] has been with her since he was 3 weeks old and was adopted when he was 2. Although all she initially received was guidance to *"look at the medical history and kind of make my own conclusions as to why the child was in care,"* Rachael quickly suspected that Tyler had been prenatally exposed to alcohol or other drugs based on his lengthy hospital stay at birth, which suggested recovery from withdrawal symptoms. However, the CW staff *"would always say that, due to privacy concerns, we cannot tell you anything leading up to the birth, but they would just talk about the symptoms in the child and what those symptoms reflected without being specific."*

Rachael was connected with a birth-to-three program that was helpful, but more specialized needs often required her to do her own research. Also, the referrals from CW often yielded long wait times of many months. She reflected, *"The social workers tried, but they didn't even know other resources because they're just lacking in those kind of areas . . . and I think [there's] a little bit of a lacking in training on part of the foster parent [to ask CW staff for other resources], and maybe the social workers have other resources or how to navigate that medical world."*

While Rachael was fostering Tyler, she enrolled in two optional, ongoing training courses offered through the state CW agency on drug-affected infants and drug-affected toddlers. These courses included information about *"the behaviors that you will see because of fetal alcohol syndrome, and then the resources that you can use to help with those behaviors."* However, after consulting several doctors, *"they've all came to the consensus that he does not screen. . . . His physical features and stuff [do] not fit the criteria for fetal alcohol syndrome. . . . We're all shocked. . . . We believe his issues are due to other prenatal exposures."*

Reflecting on her time fostering Tyler, Rachael reported that she was *"somewhat"* prepared to care for him, noting that *"[CW agency has] done a pretty good job of going over everything on the surface . . . but [what would have been helpful is] more specifically what the child is doing that you're dealing with."*

[a] Names have been changed to protect confidentiality.

Source: Interview with caregiver in state 5.

Some caregivers reported being unprepared to care for children with PSEs. Among all caregivers who stated that they had cared for a child with PSE, one-third (33 percent) reported that they were not at all prepared to care for children with PSE. Some caregivers linked preparedness to training and knowledge, while others connected it to the depth of information they received from their caseworker about the specific child. Many reported that they were more prepared to care for subsequent children with PSE because they had learned from previous experiences caring for a child with PSE. One caregiver focused on the hope she had for foster children who were placed in caring homes:

> *"We have tons of conversation of the nature versus nurture conversation about what it would look like to raise a kiddo who is drug-exposed. . . . I would encourage prospective foster parents to not be overly fearful of taking a drug-exposed child. I think there's a lot of good that a loving, stable home will do for a kiddo who is drug-exposed."—Caregiver*

Caregiver Training on PSE

More caregivers reported that PSE training was covered during initial orientation than at any other time. Caregivers most frequently reported receiving formal training on PSEs (including PAE and FASDs) as part of their initial orientation from CW agencies, required for licensure, before having any children placed with them (43 percent, see exhibit 32). However, caregivers all described initial orientation as containing a lot of varied information, which may diminish retention of any information related to PSE. The CW agency also required ongoing training at various points during their caregiving, including during or after caring for a child with PSE. However, 14 percent of caregivers reported never receiving information or training related to PSE from the CW agency. Anecdotally, this seemed particularly true for the 10 relative caregivers in our sample, some of whom reported never receiving any training through their CW agency or receiving it weeks or months after a relative child with PSE came to live with them.

Exhibit 32. Caregiver Experiences With PSE Training and Information Sharing From CW Agency

Percentage of caregivers reporting receipt of training/information by type

PSE Training or Information	Percentage
Initial CW orientation	43%
Ongoing CW training	34%
Informal information on topic (e.g., brochure, website)	32%
Information related to specific child	21%
Information from other foster/adoptive parent	32%
Never received training/information	14%

Source: Closed-ended responses to questions in focus groups and interviews with caregivers in state 3 and 5, respectively; *N* = 44.

Note: Participants could choose all that apply.

Formal or in-depth training on PSE was limited. All in-depth PSE training was described as taking place during the ongoing trainings that participants could select based on interest. Unique to state 5, two caregivers described participating in PSE training through a local specialized pediatric care facility focused on PSE:

> *"Each one of those [monthly] meetings has a trainer on everything, you name it, from trauma to feeding to everything. . . . For the first . . . 2 years of being licensed, I had a monthly meeting at [specialized pediatric care facility or private organization associated with the facility] . . . and I learned a whole lot."—Caregiver*

Caregivers from one state described some training opportunities available to them related to FASDs. In contrast, in the other state, only half of interviewed caregivers had participated in training related to prenatal alcohol exposure, including FASDs; those trainings ranged from portions of broader trainings to targeted training on FASDs.

Several caregivers conducted personal research or brought to bear personal experience related to PSEs. Beyond what their CW agency had provided them, and aligned with reports of feeling unprepared to care for children with PSE, some caregivers from both states conducted their own research to find ways to learn more after a child with PAE (and a diagnosis under the FASD umbrella) or other substance exposures had been placed in their care. These individuals discussed trainings or programs offered by local universities, caregiver organizations or associations, local hospitals/medical centers, or the court system; personal reading or internet searches; and/or caregiver-initiated discussions with medical professionals. In addition, nearly half of caregivers in state 5 discussed training or experience related to caring for children with special needs or PSE that came from their current or past employment (e.g., teachers, counselors, nurses) or from caring for a biological child with similar needs.

> *"I work as a speech therapist in the NICU [Newborn Intensive Care Unit] . . . with prenatal drug-exposed babies a lot . . . [and] I had some background knowledge in terms of what our child would need in terms of therapies and medical support. . . . I was able to advocate for that and ask for that from our pediatrician."—Caregiver*

Many CW staff were unaware of PSE training opportunities for caregivers. Only one-third of staff across all five states (34 percent) reported that they were aware of whether caregiver trainings addressed

PSE, and awareness varied by state. Among staff who were aware of PSE-related training, the majority were only aware of the overall topic, with little or no information about specific topics covered. No state had more than half of staff indicate that they were aware of PSE training opportunities and, in states where higher percentages of staff reported awareness, staff contradicted each other:

> *"They go through monthly foster parent training on everything . . . and that [PSE training] is included in what they're required to do."—Ongoing case management staff*
>
> *"They don't provide specific training about substance abuse exposure. . . . They address trauma as a whole."—Ongoing case management staff*

Only six CW staff from four states (7 percent) reported that training related to PAE was available to caregivers, and none offered any details about what that training discussed.

Most caregivers wanted additional PSE-related training for themselves and CW staff. Eighty-four percent of caregivers reported that they would like more information on PSE (including FASDs). Caregivers from all eight county sites reported a desire for more or improved training around PSE (see exhibit 33). In addition, caregivers expressed the need for PSE information specific to individual children, including the substance(s) a child was exposed to and the amount and duration of exposure, if known.

Exhibit 33. Caregiver Perspectives on Training Needs

Suggestions regarding training for caregivers and CW staff

Training Areas
How to identify PSE, including— • Signs and symptoms of PSE, especially illicit substances • Information on identifying PSE-related delays versus delays because of neglect or trauma or other conditions
Knowing what to expect when parenting children with PSE/PAE (and an FASD) across development
Available interventions, services, or resources for these children or caregivers

Source: Interviews and focus groups with caregivers in states 3 and 5; *n* = 25.
Note: Not all caregivers provided a suggestion on training needs.

A few caregivers also highlighted the value of having current caregivers (peers) provide training or perspective on how to care for these children. In addition, a few caregivers reported that CW staff's lack of knowledge of PSE was a challenge in caring for these children (see exhibit F54 in appendix F);

these caregivers reported instances where CW staff were unable to refer caregivers to appropriate PSE-related services in a timely manner or where caregivers experienced frustration navigating symptoms they later found out were PSE-related and wished the CW staff had been able to better prepare them to parent those children. These caregivers subsequently recommended targeted training for CW staff in the areas listed in exhibit 33, particularly around the effects of PSE and PAE across the life course and available services or resources.

Information Sharing Between Caregivers and CW

CW staff were much more confident that information related to a child’s history regarding PSE would be shared with caregivers than the caregivers reported themselves. Caregivers in state 3 repeatedly discussed an overall lack of receiving any information, including PSE-related information, about children in their care. Caregivers from state 5 reported more examples where CW had provided them with PSE information than caregivers from state 3. However, 83 percent of CW staff across all five states described formal or informal processes for sharing child-specific PSE information with caregivers (see exhibit 33). Staff in state 5 were the most confident that this information was being consistently communicated to caregivers, which aligned with greater caregiver reports of this communication, citing that this information would be located in a child placement information form given to caregivers (see Practice Highlight).

PSE information was most prevalent for newborns. Approximately one-third of caregivers indicated that they were more likely to get specific information about PSE if the child was a newborn, but even under those circumstances, information was often limited (see exhibit 34). A quarter of staff from all states (25 percent) also reported that PSE-related information was more likely to be shared with caregivers who were caring for a newborn as compared to older children; other staff and caregivers did not report any age-

Practice Highlight: Child Placement Information Form

Both staff and caregivers in state 5 referenced a child placement information form that was given to all caregivers upon placement of a child as a tool used by staff to consistently communicate critical information about a child. This typically included key demographics such as the child’s age and gender along with medical considerations such as allergies, diagnoses, or medication. Staff and caregivers reported that this form was used to communicate a child’s known PSE status to caregivers:

“Right off the bat with our current placement, they had that information for me . . . that she was methamphetamine exposed and tested positive at the time of birth. And then with the other kiddos that we’ve been respite for that are drug-exposed, that information also came from the caseworker, which is when they send you the basics. It’s called [child placement information form] the basic information on the kiddo.”—Caregiver

specific trends related to PSE information. This may reflect a reliance on hospital toxicology reports at birth. However, it should be noted that hospital toxicology screens at birth do not and cannot test for alcohol exposure because alcohol is gone from the system within about 12 hours.

Legal limitations prevented full information sharing until adoption. Nearly a quarter of staff (23 percent) from all states noted legal limitations to how much and which types of information they could share with caregivers, particularly foster or kinship caregivers, primarily related to confidentiality policies and HIPAA[82] regulations. Caregivers also cited similar legal barriers. Some caregivers and a few staff reported that more information was shared with adoptive families than other types of caregivers (see exhibit 34). How these policies and regulations may contribute to caregivers' reports of a lack of information sharing was outside the scope of this study, but the frequency of this comment suggests that it had a negative effect on the information available to the nonadoptive caregivers.

Exhibit 34. Communication About PSE With Caregivers

Number and percentage of caregivers and CW staff reporting communication with caregivers, by coded category

Category	Caregivers (*n* = 25)	CW Staff (*n* = 103)
Child PSE-related information is shared by CW	22 (88%)	85 (83%)
PSE information related to newborns	9 (36%)	26 (25%)
Legal limitations to information sharing	8 (32%)	24 (23%)
Information sharing occurs at adoption	8 (32%)	11 (11%)
Information is shared through verbal communication	12 (48%)	32 (31%)
Information is shared through written communication	12 (48%)	17 (17%)
Lack of information sharing about child PSE by CW	17 (68%)	18 (17%)
Caregivers share back information about PSE indicators to CW	16 (64%)	16 (16%)
Direct communication between caregiver and biological family	9 (36%)	--

Source: Focus groups and interviews with caregivers in states 3 and 5, *n* = 25; interviews with ongoing case management staff, frontline/ongoing case management staff, local area directors, state CW directors, and local area data staff in all five states, *n* = 103.

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[82] The Health Insurance Portability and Accountability Act (HIPAA) of 1996 publicizes standards for the electronic exchange, privacy, and security of health information.

Some caregivers turned to biological parents for PSE information. In light of legal limitations, some caregivers in both states described learning about the children in their care, including information about possible PSE, directly from the child's biological parents during visits or jointly attended medical appointments (see exhibit 33). A few caregivers discussed directly asking biological parents about substance use history, while others inferred this information from other birth parent comments or behaviors.

Caregivers share information back to CW. Many caregivers reported that, as the case progressed, it was most often the caregiver informing CW about PSE-related behaviors or information learned from medical appointments than the other way around. Although not discussed as frequently, a few staff from all states also reported that they often rely on caregivers, particularly kinship caregivers, to inform them about the PSE-related information about the children in their care (see exhibit 33), including one local area director: "A lot of our parents are also poor reporters of the information. . . . And sometimes the way kids come in, we know so little about them that we're piecing it together as we go. And so sometimes we rely on the foster parents, the relative placements, [and] adoptive placements to really help us kind of piece together what's going on behaviorally with the kids, to try to help us sort through it."

Caregivers wanted to see improvements in information sharing. When asked to share suggestions for ways that CW agencies could better prepare caregivers to care for children with PSEs, respondents cited potential improvements to information sharing. These included timelier sharing of critical medical information, including about PSEs, more robust information gathering from biological parents by CW, and greater information transfer or transparency with caregivers.

Services and Supports Available to Caregivers

Caregivers were largely unaware of PSE-related supports for their children or themselves. Some caregivers from both in-depth states discussed receiving referrals or connections to resources (e.g., support groups, training opportunities) from CW staff based on the unique needs of children in their care, although not related to a child's PSE or FASD status. In one state, only two caregivers discussed a local university program that monitored, treated, and supported children and families with an FASD. Both of these caregivers had adopted children with an FASD through the CW system and found out about the program through their own research, not through their connections with CW. In state 5, one caregiver highlighted a local specialized pediatric care facility focused on PSE that sponsored a monthly support and training group for caregivers of these children. No caregivers discussed being aware of or informed by CW about support services available specifically for families caring for a child with PSE or an FASD.

CW staff also were unaware of PSE-related supports. Nearly half of CW staff across all five states (47 percent) reported that they were unaware of any support services (e.g., mentoring, support groups) specifically for caregivers of children with PSE, with similar trends across states. Furthermore, across all states, only one staff member, from state 5, was able to identify services or supports specifically targeted toward caregivers providing care to children with PSE, including services that might focus on parenting strategies. Many staff from across all states went on to describe various services available to all caregivers or the broader community (e.g., respite care, training support, community diaper banks), which would also be available to those caring for children with PSE.

Obtaining needed services and supports was a challenge. Caregivers frequently cited challenges in getting needed services for the children in their care (not always related to their PSE or FASD status). Challenges included the following: lack of critical information from the CW system including referrals; long wait times for services or inadequate services; and lack of follow-up from other providers, which were highlighted by one caregiver: "[Getting services] is pretty much placed onto foster parents. . . . Part of it is just [that] resources are slim. Especially in our area [there are] huge, long waiting lists. . . . So one [challenge] is just getting the services, and number two is finding providers [who] get it—[who] understand these kids." In addition, some caregivers from both states discussed wanting more resources from the CW agency to help them better care for these children. This included information such as pamphlets or brochures on PSE, particularly PAE; tip sheets on how to navigate Medicaid or educational systems (e.g., Individual Education Plan process); a list of service providers that they may need to contact to support the care of their children; and ways to connect with other foster care parents or mentors in similar circumstances.

Implications

Caregivers noted the need for and requested more in-depth training opportunities. The majority of caregivers participated in trainings that included material related to FASDs or PSE, and nearly 86 percent of caregivers reported caring for at least one child with known or suspected PSE, including diagnosed FASDs. Yet only 18 percent of caregivers reported that they were "fully prepared" to care for these children; most participants (84 percent) reported wanting additional information. There is a need for additional training and learning opportunities for caregivers. "On-the-job" learning and individual internet searches were deemed insufficient by participants. Information related to PSE, and FASDs in particular, concerning effects on child development, implications for caregiving/parenting, and appropriate and available interventions for affected children would be most helpful. Widespread polysubstance use has been documented (Davie-Gray et al., 2013; Falk et al., 2008), including among pregnant women (England et al., 2020), and education regarding this polysubstance use, especially the use of alcohol alongside other substances, is needed. Caregivers from all sites saw CW staff as also needing training in these areas, as highlighted in chapter 4, to better partner with and support caregivers on behalf of affected children.

Similar training can also support biological parents and mitigate further child maltreatment. If PSE—especially PAE—is not understood, parents may misinterpret challenging behaviors as disobedience rather than brain-based impairments. This may, in turn, contribute to frustration leading to an increased risk of child maltreatment and repeated cycles of abuse and neglect. Identification of PSE and PAE, combined with relevant training and education about exposure effects and parenting strategies, can alter the parent-child dynamic through improved understanding of the cause of child behaviors. This understanding has the potential to reduce future harm and prevent unnecessary reentry into foster care (Burry & Wright, 2006). CW agencies could consider providing biological parents with access to training developed for caregivers related to PSE and FASDs and their effects on child development and parenting.

CW agencies could improve information-sharing practices so that caregivers are better prepared to meet the needs of children exposed to substances. As was mentioned in chapter 6 regarding information sharing between CW agencies and service providers, caregivers in all eight sites highlighted the need for better and more information sharing from CW related to the histories and needs of the children in their care, particularly related to PSE status. Legal privacy or HIPAA concerns should be discussed within CW agencies to find ways to maximize the sharing of allowable information for the child's benefit. Obtaining and sharing this information as early as possible in caregiving can help equip caregivers to obtain needed services and provide appropriate parenting strategies. Such information may empower caregivers to meet the needs of such children and greatly reduce parenting frustrations, challenges, and risk situations, which can support greater placement stability and faster reunification (Leve et al., 2012; Rhodes et al., 2001). Both CW staff and caregivers may benefit from resources and guidance to move toward "partnering" to exchange information and to apply the information in joint case planning.

9. Conclusions

This multisite, mixed-methods descriptive study[83] examined gaps in understanding child welfare (CW) policies and practices related to prenatal substance exposure (PSE), with special emphasis on prenatal alcohol exposure (PAE), which can result in a fetal alcohol spectrum disorder (an FASD). Set in geographically and demographically diverse CW systems in five states, the study addressed CW policies, practices, and knowledge among staff and caregivers. By identifying potential promising practices—and gaps in policies and practice—the study findings can be applied to spur actions to improve identification of and service provision for affected children and families.[84] It is also intended as the foundation for a follow-on study that develops and then evaluates instruments useful in the field regarding the identification and care of affected children. This upcoming study also will be mindful of the positive trends in CW, in which leadership is moving in the direction of keeping more children in the home and of being careful to not over-surveil families of color.

Summary of Cross-Cutting Themes

Study findings suggest opportunities to improve practices throughout the case process:

- Help staff understand the link between PSE and PAE and the child's safety, permanency, and well-being.
- Sensitively, consistently, and equitably screen children and families about PSE, particularly PAE, early on and through ongoing interactions with families and caregivers.
- Prepare staff to recognize and understand implications of PSE and PAE, and know how to support families with the goal of protecting children and preserving families.
- Include PSE and PAE information in referrals to service providers, to promote appropriate diagnosis and services to help children stay at home and to support placement stability for children placed out-of-home.

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[83] See footnote 15 for definitions of this design.

[84] A separate component of the project explored tribal CW agency policies and practices in a collaborative case study conducted with a single tribe. The *Tribal Child Welfare Systems' Experiences With Prenatal Exposure to Alcohol and Other Drugs: A Case Study* report submitted to Children's Bureau in August 2021 summarizes key findings and considerations relevant to tribal CW and how federal agencies can best support tribal CW practice.

Significance of a Study of CW Response to PSE

Negative effects among children exposed to and affected by PSE (including opioids, methamphetamine, heroin, and alcohol) may include poor physical health, cognitive functioning, and social outcomes for children; PSE, particularly PAE, also can impair children's development of social skills and relationships (Kocherlakota, 2014; Preece & Riley, 2011). Decades of research has shown that children affected by PAE have changes in brain structure and functioning that can lead to serious, long-term medical, cognitive, mental health, and behavioral effects (Mattson et al., 2011). Alcohol exposure can also make it harder for children to modulate their behavior, recognize social cues, and recall instructions, potentially making them more challenging to care for (Jacques et al., 2020; Jirikowic et al., 2020; Turchi & Smith, 2018).

Summary of Cross-Cutting Themes (continued)

- Ensure that documentation of information on potential exposure is easily and consistently found, and use data on PSE and PAE to assess prevalence, service needs, and equitable treatment of families.
- Support caregivers to parent effectively by providing training, resources, and service referrals to sufficiently support the child and family, which may avert foster care placement, placement disruptions, and adoption disruptions.

This study focused on how practices and policies in five states guide the identification of children affected by PSE—with a focus on a potentially large population of older children whose exposure to substances, particularly alcohol, may be unrecognized at birth. The CW field has historically estimated the prevalence of prenatal exposures to drugs through hospital diagnoses of neonatal abstinence syndrome (NAS) and/or medical tests conducted at birth (França et al., 2016; Richards et al., 2020). Not only are medical tests unlikely to identify PAE (Center for Substance Abuse Treatment, 2010; Coles et al., 2000), but studies also suggest that less than 25 percent of children have the atypical facial features associated with Fetal Alcohol Syndrome (Astley, 2010; Kuehn et al., 2012). These factors make it difficult to estimate the number of children affected by PAE.

Despite these challenges to identification, there is reason to suspect that PAE affects many children involved in the child welfare system. Recent research shows that the number of infants entering foster care increased substantially from 2011—2018 (Crouse et al., 2021). Parental alcohol or drug use is associated with foster care placement for more than half of infants entering foster care, and just over one-third of children over one year of age (Young, 2021) and many of these infants and young children may have been exposed to alcohol prenatally. International studies of children in care have reported estimates of FASDs ranging from 16.9 percent (Lange et al., 2013) to 25.1 percent (Popova et al., 2019) compared with 2 to 5 percent in the general population (May et al., 2014). PAE prevalence estimates point to the important role that CW agencies should play to help identify, document, and provide appropriate PAE services referrals for children and families (Flannigan et al., 2021; Mirick & Steenrod, 2016; Petrenko, 2015; Richards et al., 2020). When children receive appropriate diagnoses, they can be referred to effective services and interventions (Chasnoff et al., 2015). These supports can benefit children and families by addressing the negative effects on the child, improving family functioning (Bertrand, 2009), which may reduce the need for out-of-home care.

Through document review and perspectives shared by staff, the study results revealed the ways that CW professionals and agencies are tasked with gathering information and making referrals for care at different phases of child and family involvement with CW. Study findings and cross-cutting themes (discussed more specifically below by theme) raised opportunities for CW to enhance practice in several ways (see sidebar for broad summary of practice enhancements).

Discussion by Cross-Cutting Themes

Study results reveal opportunities to improve CW policies and practices and to strengthen future research. For example, findings explore how state legislation and CW agency policies may help or hinder the identification of and care for children with PSE, including PAE, and their families. Data on caregiver and CW agency staff knowledge of PSE, specifically alcohol exposure, suggest ways to enhance training and resources to improve CW practices. Findings also suggest areas of inquiry not directly addressed by this study that may inform future technical assistance and research.

Previous chapters have described findings and implications by key areas visualized in the conceptual framework (see exhibit 1). These areas include federal and state CW policy regarding PSE; staff training and knowledge; agency practices to identify PSE, including PAE, among children in care; assessment and service referrals for children with PSE; documentation of PSE; and training and practices related to caregivers. The following sections offer a deeper discussion highlighting cross-cutting themes and discussing implications of findings. This report presents suggestions to improve agency policy and practice with the goal of enhancing practice in ways that will contribute to positive outcomes for children with PSE—including safety, family preservation, enhanced well-being, and permanency (see Action Steps sidebars throughout this chapter).

CW systems have a timely opportunity to preserve families and prevent maltreatment by providing tailored, equitable services to children with PSE/PAE and their families—including older children

The Child Abuse Prevention and Treatment Act and Comprehensive Addiction and Recovery Act (CAPTA/CARA, 2016)[85] may help to quickly link substance-exposed newborns and their families to services. The five states in this study all reported on activities to roll out implementation of CAPTA/CARA 2016 requirements, including developing processes to provide service referrals to families of exposed newborns. When children potentially affected by PSE are identified by hospitals when women give birth, CAPTA/CARA 2016 requires that health care providers notify child protection. The required notification of the CW agency can be an important touchpoint for CW to assess the needs of the newborn quickly and early in the child's life. These services can support the child's well-being, such as medical services to address withdrawal symptoms that may occur when infants are affected by NAS. They also may improve parental well-being. CAPTA/CARA requires addressing the needs for substance use treatment services of the affected family or caregiver.[86] While service referrals are intended to aid the family, there are valid activities to identify pregnant women and report exposed newborns to child protection that may heighten the oversurveillance of communities of color and may contribute to the overrepresentation of children of color in the CW system (Harp & Bunting, 2020; see sidebar on page 138). Agencies will want to structure their responses in a way that is equitable and does not produce unintended consequences that exacerbates disparate treatment.

> *"Do not blame the mother! Assist her in making decisions that will best serve her child's specific needs."—Service provider*

Recent federal legislation has encouraged state efforts to keep children safely at home and prevent family entry into the foster care system. These efforts in study states included collaborations between the CW agency and medical providers to meet CAPTA/CARA 2016 requirements. These efforts were sometimes described by state CW directors as a way to provide

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[85] See the glossary in appendix A for full definition of terms.

[86] The Comprehensive Addiction and Recovery Act (CARA) of 2016 amended CAPTA in sections 106(b)(2)(B)(ii) and (iii)Subsections (b)(2)(B)(ii), requires "the development of a plan of safe care for the infant born and identified as being affected by substance abuse or withdrawal symptoms or Fetal Alcohol Spectrum Disorder to ensure the safety and well-being of such infant following release from the care of healthcare providers, including through – (I) addressing the health and substance use disorder treatment needs of the infant and affected family or caregiver."

wraparound services and support that could avert the need for families to enter the foster care system to access these supportive services. Such efforts align with the Family First Prevention Services Act (FFPSA) of 2018,[87] which enables states to use funding to deliver services that are meant to prevent maltreatment and promote keeping children at home with their families whenever possible (Milner & Kelly, 2020). Services such as in-home parenting training and substance use treatment that simultaneously focuses on attachment between the parent and child may help avoid the need to place children in foster care (Waite et al., 2018). However, it is important that these services address challenges of parenting a child with PSE/PAE and not be generic. Research had shown that providing an accurate diagnosis allows parents to better understand their child's behavior, thereby reducing family stress (Olson et al., 2009a) and reframing a child's deficits and challenging behaviors as brain-based impairments can improve family functioning (Malbin, 2017). Reframing is a cost-efficient tool for case workers that can be implemented within their regular interactions with families/caregivers of children with PSE/PAE without the need for referral to outside services.

"There's a lot of interest in the medical community to talk with us . . . just really working on the discrimination toward people experiencing substance use. . . . It seems like everyone just wants to create a web of support."—State CW director

However, agencies may be limited in delivering prevention-oriented services when states define PSE as maltreatment. Four of five study states defined PSEs as a type of child maltreatment. While legislation may be intended to prevent exposures, it may have unintended consequences. Research suggests that states defining PSE as maltreatment may, in fact, increase their rates of prenatal

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[87] FFPSA of 2018 (H.R. 5456, P.L. 115-123).

exposures (Faherty et al., 2019). Pregnant women in states defining exposures as child treatment may be less likely to access substance use treatment (Atkins & Durrance, 2020). These punitive laws also may contribute to poorer health outcomes, as women who are afraid of losing their children may miss prenatal appointments and avoid disclosing substance use to health care providers (Stone, 2015).

While there are opportunities to provide prevention-oriented, family preservation services for older children, this cannot occur without CW processes and practices to recognize and care for older children affected by PSE, particularly alcohol exposure. When children come to the attention of CW through allegations unrelated to PSE, CW staff in study states did not universally assess whether unrecognized exposures could be contributing to poor family functioning. For example, there are specific and unique challenges to parenting children affected by prenatal alcohol exposures. The effects of alcohol may cause impaired executive functioning and disruptive behavior that in turn leads to high levels of stress for all types of families—including adoptive and birth parents (Paley et al., 2006). If referred to CW, these families may be better

Unequal Response to Families of Color

- Although the study did not collect specific data on hospital reports of newborns, a few interview respondents noted disparities in reports made to CW. Their statements are in line with some research suggesting that Black women may be more likely to be reported for PSE by medical providers (Chasnoff et al., 1990; Kerker et al., 2004). Other studies did not find that race was a factor (Rebbe et al., 2019). It could be that these conflicting findings reflect heterogenous practices driving rates of investigation, substantiation, foster care, and termination of parental rights for children of different races that vary significantly by county (Edwards et al., 2021).
- Disparate agency responses to hospital reports may start a chain of events that disproportionally affect children and families of color. For example, state policies may direct that alternative response, voluntary services be offered when reports of newborns with mothers receiving medication-assisted treatment are made to the agency. Yet studies show that families of color may be offered these voluntary services less than White families (Connell, 2020). This may result in an investigative response, substantiation of allegations, placement in foster care, and termination of parental rights—all of which may occur more often for children of color (Edwards et al., 2021).

served by in-home services that can recognize effects such as an FASD and give families the support as well as explicit skills they need to reduce conflict in the home and address their child's needs.

"(State) policies that criminalized substance use during pregnancy, considered it grounds for civil commitment, or considered it child abuse or neglect were associated with significantly greater rates of NAS in the first full year after enactment and more than 1 full year after enactment." (Faherty et al., 2019)

Service referrals may not be tailored to the unique challenges of families parenting children affected by alcohol exposure. While interviewed staff referenced substance use treatment services for parents and medical and developmental services for young children with PSE, they were not aware of services for older children with an FASD or supportive services for families. Well-matched family services are more likely to prevent maltreatment (Fuller & Zhang, 2017) than those with little alignment. Significant service needs may go unaddressed if a child's exposure to alcohol is not recognized or if agency staff are not aware of its potential implications. Research suggests that this may occur regularly, with mismatched referrals to services that may not address the needs of children with FASDs who are involved with the CW system (Chasnoff et al., 2015). For example, group parent trainings may teach the use of rewards and consequences, which assumes that children can learn from their own experiences. Yet children with FASDs frequently have cognitive disabilities and struggle with memory and attention (National Center on Birth Defects and Developmental Disabilities, 2021; Streissguth et al., 2007), which limit the benefits of such parent trainings for this population. Such incongruities may mirror caregivers' experience in society. For example, birth parents and foster caregivers of children with FASDs reported criticism of their parenting skills due to children's behaviors (Breen & Burns, 2012), when such behavioral effects are the result of deficits in neurocognitive functioning (Bertrand & Dang, 2009).

Action Steps: Tailored, Fair Service Delivery

States can use federal funding opportunities to deliver family preservation and prevention services. As FFPSA implementation continues, agencies have an opportunity to provide evidence-based services that address the needs of children and families affected by PSE and PAE. For example, agencies could work with service providers to increase access to substance use treatment that emphasizes the child-parent bond—rather than individualized, parent-oriented treatment—to improve the likelihood of family reunification (Maltais et al., 2019). Evidence-based interventions applicable to families of children with FASDs could be promoted by agencies and used to strengthen family functioning (Marcellus & Badry, 2021; Petrenko et al., 2019).

States can reconsider and revise laws that define PSE as a type of child maltreatment. Research suggests that attempts to reduce rates of PSE through punitive approaches such as defining PSE as maltreatment are ineffective (Faherty et al., 2019), and may have unintended effects such as reduced participation in substance use services and prenatal medical care (Atkins & Durrance, 2020; Stone, 2105). Removing PSE as a type of maltreatment in state laws could allow CW agency policies and staff practices to focus on prevention-oriented and family preservation service delivery that supports positive parent-child relationships and parental sobriety.

Child welfare agencies can help birth families develop specific parenting skills to effectively care for children with FASD conditions. Agencies may routinely refer birth families to parenting programs with teaching techniques that are ineffective for children with FASDs; such experience can leave parents of children affected by exposure to alcohol frustrated and unfairly doubtful of their own abilities (Olson et al., 2009). Agencies should instead offer interventions and strategies proven effective in reducing externalizing behaviors of children with FASDs and improving parent efficacy (Bertrand & Dang, 2012).

Child welfare agencies can evaluate their service delivery to families of color. Agencies should examine whether their services are delivered equitably and achieve similar outcomes for families of varied race/ethnicity (Huebner et al., 2021). Engaging communities can help agencies shape services that reflect families' diverse needs and cultural values (Ayon & Aisenberg, 2010). For example, working with communities of color could prevent potential inequities by pairing universal screening of PSE by the CW agency (or community providers working with the CW agency) with ensuring women receive effective substance use treatment and services to meet coexisting needs such as housing, childcare, and mental health services.

CW staff need guidance and training to identify children with PSE, particularly those exposed to and affected by alcohol

CW's emphasis on medical tests and hospital reports suggests a passive role for the CW agency, which reacts to—but does not proactively identify—children in their care with PSE or PAE. Both states and CW agencies have developed policies and procedures around PSE that assume hospitals will identify children exposed to substances and the types of substances to which they were exposed. Reliance on medical testing can underestimate alcohol exposure, which is not typically identified through medical tests of the newborn and mother at birth (Drescher-Burke, 2007). This may explain why CW staff estimated that fewer children in their care were prenatally exposed to alcohol than other types of substances.

> *"The knowledge that children with behavior issues and disabilities are frequently children who were prenatally exposed to alcohol and drugs needs to be up front with all social workers working with children at risk. Early identification and early intervention does help children and families to be as successful as possible."—Allied service provider*

Currently used information collection and documentation practices are unlikely to help identify children. Across the five states studied, staff received little guidance to help them understand what information they could collect, where they should document it, and how they could use this information. With the exception of newborns identified at birth, children's PSE status was often documented in narrative forms that cannot be easily found or quantified. To meet CAPTA/CARA requirements, the five states made efforts to collect data on the number of exposed newborns, service referrals, and plans of safe care.[88] However, limitations of data systems largely led to collecting information on newborns using single variables such as "substance exposed," rather than modifying data systems to allow specific exposures—such as opioids or alcohol—and other details such as information source to be recorded.

There is limited guidance directing staff to collect retrospective information on maternal substance use during pregnancy. Although staff in these five states were expected to collect

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[88] CARA of 2016 amended CAPTA in sections 106(b)(2)(B)(ii) and (iii)Subsections (b)(2)(B)(ii) requires "the development and implementation by the State of monitoring systems regarding the implementation of such plans to determine whether and in what manner local entities are providing, in accordance with State requirements, referrals to and delivery of appropriate services for the infant and affected family or caregiver."

information on parental substance use during investigative processes, they lacked processes to systematically gather information on substances the mother may have used during pregnancy. Similarly, CW agencies are expected to share information about children's birth and family medical backgrounds, including substance use, with adoptive families at the time of finalization of the adoption, but it is unclear how and when staff are able to collect these details. Experts have recommended that CW systems use standardized substance use screening tools to assess parental substance use, such as AUDIT, TWEAK, CAGE, and the 4-Ps[89] (which have been validated in other populations) to identify caregivers potentially affected by substance use and whose children may be at risk for PSE, including PAE (Anthony et al., 2010; Young et al., 2006). It needs to be on CW staff's radar to systematically gather information about possible exposures retrospectively for children coming to the attention of CW for reasons other than parental substance use and at older ages. By collecting information on maternal alcohol use during pregnancy, CW agencies may begin to address information gaps that can hamper diagnosis of FASDs for children in foster care (Bakhireva et al., 2018).

Lack of trust may inhibit information sharing between staff and birth parents. Some staff reported they obtained inaccurate information on substance use from birth mothers, despite agency practices that featured family engagement, trust building, and partnership. Interestingly, Donahue et al. (2019) found that self-reports of drug use by mothers were three times higher and more consistent with urinalysis than estimates of use by the mother's family and friends. This suggests that mothers may accurately self-report, though it may require developing a trusting relationship between birth parents and CW staff. CW staff in particular must learn how to sensitively explore issues of PSE with mothers, who may be resistant to disclose potential exposures due to fears of separation or prosecution. This relationship could be critical to share information that will lead to tailored services for the family. Honest, open dialogue and information about PSE could avoid a mismatch between referrals and family needs, which can decrease child safety and the likelihood of family reunification (Fuller & Zhang, 2017).

Donahue et al. (2019) found that mothers' self-reports of drug use were three times higher and more consistent with urinalysis than estimates of use by the mothers' family and friends, suggesting that mothers may accurately self-report if there is a trusting relationship with CW staff.

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[89] See footnote 38 for more information about these tools.

Action Steps: Guidance and Training for CW Agency Staff

CW agencies can provide guidance and training to help staff understand why identifying children with PSE, especially PAE, is an essential part of their roles and responsibilities. Administrators and supervisors can demonstrate how identifying PSE could lead to services that improve child outcomes and reduce risk. For example, CW staff who understand effective practices with children with PSE and their families may help avoid placement disruptions and failed reunifications. Services that enhance well-being, such as educational supports, can help a child academically progress and reduce negative school interactions. Simple reframing of child behaviors can reduce parental stress and risk of maltreatment.

CW agencies can increase CW staff awareness of effective services that can help address PSE and PAE. Interventions that improve academic and cognitive performance and improve behavioral self-regulation and social skills can help children grow and develop (Bertrand, 2009; Marcellus & Badry, 2021). Parenting training can help caregivers address difficult child behaviors (Reid et al., 2015). Caseworkers can also benefit by learning strategies that will help support children and families, such as reframing behaviors and adopting strength-based approaches (Clark et al., 2014).

CW agencies can develop policies and procedures to help staff systematically screen all children in care—to identify those with PSE who may need further medical assessment, diagnosis, and services. Information on a mother's use of substances during pregnancy, such as alcohol, is a key piece of information that can help identify affected children. Numerous screening tools can be used to identify those with potential substance use issues (Anthony et al., 2010; Chasnoff et al., 2007). Tools selected for use should be tested and found reliable with populations that vary by race/ethnicity.

CW agencies can train and support staff to recognize moments to ask sensitive questions about mothers' substance use during pregnancy. Even when using proven screening instruments, staff must develop skills to effectively engage families and build ongoing rapport within a recovery-friendly framework. Trainings could include known techniques, such as motivational interviewing, to elicit sensitive information. They should also incorporate specific information and skills related to engaging communities of color, who may be less likely to engage with CW due to historical and current inequity in the CW response (Mirick, 2014).

Action Steps: Guidance and Training for CW Agency Staff (continued)

Federal regulations could guide practices that stress the importance of identification of PSE and PAE among older children, not just newborns. State responses to CAPTA/CARA 2016 have brought attention to and provided data on the number of infants and very young children affected by PSE and the need for services. These data can be used to plan for service needs and to build collaborations with other systems to ensure strong prevention responses and comprehensive care. Similar regulatory efforts could be used to guide practice changes specific to older children.

Researchers can conduct studies of screening practices and associated changes in child services and outcomes. Such studies should explore CW staff approaches to screening and supporting families (especially families of color) and compare subgroups by race/ethnicity to address potential disparities in services and outcomes. In addition, such research could investigate practical implementation strategies such as the most effective staff for obtaining PSE/PAE history, agency/community factors that may influence effectiveness across local agencies, and racial or cultural factors that should be incorporated into protocols.

Focus on drug exposures may de-emphasize the prevalence and needs of children prenatally exposed to alcohol

Despite its harmful effects, PAE is largely absent in agency policies around identification and services. Systematic documentation of information to consider whether children were, or could be, affected by PAE was lacking. For example, PAE is rarely referenced on forms used to gather, document, and share information on children. Without specific policies to assess PAE in older children, staff may revert to existing intake and investigation policies. They may also emphasize use of illegal drugs by parents or prenatal exposures to illegal substances described in their state's laws. Policies and staff practice may also overlook polysubstance use issues. Individuals who use other drugs are also quite likely to use alcohol (Falk et al., 2008), and alcohol exposure is more likely to lead to greater long-term impacts on the child (Institute of Medicine,1996).

Staff have less awareness, knowledge, and training on PAE compared to other substance exposures. Staff illustrated inaccurate knowledge of the neurobehavioral and physical effects of PAE, which could lead to the under-identification of children with FASDs. This is consistent with findings by Lloyd et al., (2018), who reported that CW staff, social workers, and early intervention professionals had less knowledge about PAE than illegal drug exposures. Studies also suggest that caseworkers may be less likely to identify alcohol use in parents than drug use (Seay, 2015). The failure to have alcohol "on their radar" conflicts with (1) CAPTA/CARA, which requires CW agencies to report children with a diagnosis under the umbrella of FASDs as well as children with drug exposures; (2) frequent co-occurrence of alcohol use and drug use (Davie-Gray et al., 2013); and (3) the serious long-term effects that can result from exposure to alcohol. The limitations of medical testing and a lack of symptoms at birth can render information on maternal substance use during pregnancy—and thus, potential PSE, PAE, or FASDs—especially important to accurately diagnose under the umbrella of FASDs. Yet this information is more often unavailable for foster and adoptive children compared to children living with biological family members (Bakhireva et al., 2018). Without any documented indication of the child's PAE, a formal diagnosis of an FASD most often cannot be made. This jeopardizes the availability of needed services paid for by Medicaid or other insurance. See the Diagnostic and Statistical Manual of Mental Disorders, 5th Edition for an explanation of the criteria for a diagnosis of damage due to a prenatal exposure to alcohol (American Psychiatric Association, 2015).

Action Steps: Elevating Knowledge and Importance of Prenatal Alcohol Exposure

Federal guidance and partnerships could work to increase awareness of the importance and benefits of identifying PAE. Experts and stakeholders could be engaged to provide guidance about best practices in identifying and caring for children with PAE. CW agencies and staff need additional PAE training, resources, and skills to understand the importance of identifying children with PAE not recognized at birth and to build identification and care into everyday practice.

By training staff on the long-term effects of specific types of substance exposure, CW agencies can begin addressing inequitable responses to families of color. Providing information on different types of prenatal exposures—particularly, the damaging long-term effect of alcohol, a legal drug—can help reduce the perception of over-importance associated with other substances (Bagley & Badry, 2019). Research has shown that children exposed to substances associated with Black and low-income populations, such as crack cocaine, have higher rates of placement in out-of-home care than other substances (Rebbe et al., 2019b; Prindle et al., 2018). These patterns occur despite evidence that even small amounts of alcohol—an exposure initially studied in a large sample of children of mostly White, middle-class women – can cause significant damage to the child’s brain. Training should address the fact that there is “no known safe amount, time or type of alcohol use during pregnancy” (Office of the Surgeon General, 2005). FASDs can occur even when mothers do not have alcohol substance use disorders; any amount of alcohol can negatively affect the child (Bagley & Badry, 2019), even if consumed before mothers know they are pregnant. Better education on PAE’s long-term effects can help staff consider services matched to ongoing child and family needs.

Researchers can develop studies to understand CW agency policies and practices in response to prenatal exposures and how race, socioeconomic status, and other variables may contribute to inequitable responses for communities of color. Studies have reported varied results in whether reports of PSE by hospitals vary by race (e.g., Chasnoff et al., 1990; Rebbe et al., 2019b). Studies also have mixed results about child outcomes in child welfare that may vary by race but may be significantly different from county to county (e.g., placement in foster care, termination of parental rights; Edwards et al., 2021). Research is unclear about whether and how this may be happening, particularly regarding CW subsequent decision making, which may be affected by attitudes regarding substance use and parenting (Drabble, 2007). Future studies are necessary to identify and address inequity in practices and outcomes for children with PSE and their families.

Improving CW agency identification could reduce challenges for caregivers parenting children, including those whose alcohol exposures have not been recognized

Some caregivers are likely parenting children who are affected by alcohol exposure but who have not been identified. The reliance on hospital identification at birth and lack of standardized processes to identify older children, particularly retrospective information on PAE, makes it highly likely that families are caring for children with undiagnosed conditions that fall under FASDs. This may negatively affect the child, as unaddressed deficits that impair the child's functioning in areas such as academic progress, social relationships, and learning everyday skills can compound over time. Undiagnosed conditions under the FASD umbrella may affect caregivers as well. Children with PSE are highly likely to have associated mental health and behavioral conditions (Chasnoff et al., 2015). The functional impairments that frequently occur in affected children can lead to poorer executive and adaptive functioning and externalizing and internalizing behavior problems, which may be misinterpreted and are associated with increased parenting stress (Paley et al., 2006). Caregivers may grow frustrated when they do not understand that child behaviors are a result of a brain impairment rather than willful disobedience (Bertrand & Dang, 2012).

Children with an FASD may be at risk for placement instability due to challenging behaviors. Studies have reported that child behavior problems are associated with placement instability (Brown et al., 2007; Fisher et al., 2011; Leathers et al., 2019; Zinn et al., 2006). These behaviors make for difficult parenting that predict placement disruption (Leathers et al., 2019). Unfortunately, placement changes may further increase problematic behaviors of the child (Rubin et al., 2007). The cycle of placement changes and resultant reductions in child functioning may further disrupt a child's social relationships, which may already be challenging for children with FASDs to form and maintain due to difficulties in communication and reading social cues.

Without agency identification and service referral processes, caregivers may be left seeking information on a child's alcohol exposure and finding appropriate services on their own—at the same time they are parenting children who may have significant needs. Some caregivers interviewed reported receiving little to no information on specific children in their care. In these cases, they sometimes sought information about alcohol exposure from others, including birth parents, or sought information on the internet, which can include unreliable sources or misinformation. Caregivers also reported that they sought services that agency staff were not aware of, including diagnostic services and services to address the child's needs. A diagnosis may be difficult news, but it may help caregivers to reframe the child's behavior for themselves, and explain their child's needs to others, such as teachers and medical providers. When a child is diagnosed, caregivers may feel relief that there is an explanation for their child’s behaviors and their parenting challenges (Olson et al., 2009b). CW staff also can be a resource about evidence-based interventions that are available. Understanding a child’s PAE-related behaviors and needs may be empowering for parents to challenge the perceived view of their child as naughty or deliberately disobedient (Breen & Burns, 2012).

Gaps in training and assistance may leave caregivers unprepared and unsupported. Several interviewees said they had cared for children exposed to alcohol without receiving specific guidance or supports. Without adequate information about potential effects, caregivers may be hampered in advocating for and seeking services for the child. The lack of a support system may contribute to caregiver frustration with the child’s PSE-related symptoms (Breen & Burns, 2012). Research shows that parents and caregivers of children with FASDs have high levels of stress, more so than parents and caregivers of children with other types of developmental disabilities (Paley et al., 2006). Such stress without agency support may lead some caregivers to leave the CW system.

A lack of resources and training may be barriers for relative caregivers. Relative caregivers interviewed by the study reported a lack of training on PSE, which was in line with the experience of nonrelative caregivers. Yet it may be especially important to provide training and supports to relative caregivers because they may experience stress at higher levels than nonrelative providers (Harnett et al., 2012). Financial stress, concerns about children’s behavior, navigating service systems, and challenging relationships with birth parents all contributed to grandparent caregiver stress (Lee et al., 2016). Communities of color may have a higher proportion of relative caregivers because Black children (Montoro-Rodriguez & Ramsey, 2019) and Native American children (Mutchler et al., 2007) may be more likely to be cared for by relatives—who may be doing so with fewer resources. A higher percentage of Latino, Native American, and Black grandparents caring for children were found to have insufficient economic resources compared to White grandparents (Mutchler et al., 2007). This disparity contributes to the stress that Black grandparents who are caring for children may experience (Kelley et al., 2013). In addition, children cared for by relatives may have significant needs—including an undiagnosed condition among the FASDs. A study of 74 Black children cared for by their grandparents found that after developmental evaluations, 13 received a diagnosis included in FASDs, 12 were diagnosed with unspecified developmental delays, and 15 had delayed development in cognitive, communication, gross motor, and/or fine motor skills (Whitley & Kelley, 2008).

"Hopefully, there is [some training]. But I wasn't offered that. He came to me as a relative . . . you know, he came in as relative care. And that's maybe why I wasn't given any training or maybe the training wasn't offered to me."—Caregiver

Action Steps: Training and Support for Caregivers

CW agencies can provide in-depth training to caregivers on the long-term effects of PAE. Trainings should list the potential indicators of PAE, emphasize the structural brain changes and neurocognitive effects behind child behaviors, and provide information on related service referrals. Training and agency support should help caregivers apply effective parenting strategies, which can reduce negative child behaviors and support family functioning.

CW agencies can provide referrals and supports for relative and foster caregivers. Respite care and subsidies can provide life-changing supports but often require time and attention to secure. Concrete resources, such as clothing and school supplies, may also reduce caregiver stress. Caregivers may also benefit from connecting with their peers, including state or national groups focused on children with FASDs.

Researchers can study supports provided to caregivers of children with FASDs and whether these supports improve placement stability. They can also develop research to help CW agencies better understand the costs and benefits of caregiver training and resources.

Stronger documentation and information sharing is needed to identify and care for children affected by PSE

During investigations, information collected and documented centered on the specific allegation and parent characteristics, with little inclusion of possible substance exposures for the child. Information was considered to determine whether an allegation of child maltreatment was true and to assess the child's current safety and future risk of maltreatment. For example, staff completing structured assessments of child safety and risk of future maltreatment were directed to consider PSE as evidence of severity of parental substance use, rather than as an indicator of potential child needs. While gathering information on parent substance use treatment can be critical to assess child safety, these investigative processes may not be effective in assessing child needs and developing case plans (Van der Put et al., 2017). The studied states' investigative policies and practices suggest that potential effects of substance exposures on children are not top-of-mind when staff consider the most relevant needs and service referrals. This may divert attention from information that could lead to better assessments of child needs (including diagnosis and tailored services) earlier in the case.

Policies and procedures suggest that thorough assessments of child needs did not occur until the child was placed out of home. In all study states, systematic processes to identify a child's basic medical and developmental needs did exist once the child was placed out of home. Some agencies used screening instruments to assess for developmental delays for example, as did service providers receiving potential referrals (e.g., pediatricians and partner organizations providing developmental assessments and early intervention). Without information on a child's known or potential PSE status, assessments are incomplete and service providers may lack important context to identify the child's needs. No states had policies guiding structured processes for CW staff to review medical, developmental, mental health, and behavioral indicators to consider PSE or possible effects specifically in the case presentation. More guidance could help CW staff determine whether to refer children for a more thorough diagnostic assessment and treatment (Burd et al., 2011).

Seeking and sharing information with service providers could promote better identification of children affected by PSE, particularly those with alcohol exposure. CW agencies routinely refer children and families to statewide or local service providers, including those overseen by other state agencies or contracted by the state (e.g., developmental assessment for early intervention services and medical providers). Increased collaboration and integration of services is necessary to serve children with PSE and their families. Yet forms used to share information may not be consistently used or explicitly convey information relevant to a child's potential or known PSE status. It is also unclear how CW agencies document information shared by caregivers who may notice PSE indicators or by other professionals such as educators. In the one state where case records were reviewed, there was scant information of this type, and the location of documentation was inconsistent.

Current data and documentation practices impede understanding of the prevalence and needs of children with PSE—particularly those exposed to alcohol. In a single state where case records were studied, information was often documented in narrative, text-based forms. There was little indication from CW staff across the five states that agencies are applying case information related to PSE to conduct specific planning. This is perhaps because indicators of PSE are not well-operationalized for CW staff or systematically recorded, or easily accessed. Without easy access to information on the child, identification becomes more difficult, as do estimates of how many children with PSE the agency is serving. This makes it difficult for agencies to assess needs of children and families and plan for adequate resources to address them.

There is a lack of data on a national level on children with PSE, particularly PAE, in child welfare. CAPTA/CARA 2016 legislation has directed states to report data on children with PSE, including PAE, and the services they receive.[90] These data will provide estimates for provision of services to newborns with PSE identified at birth and their families. Yet these data are not specific in terms of the type of exposures, and requirements do not address identification of older children who are recognized as affected as they grow and develop. The lack of refinement in data reporting requirements is similar to descriptions of Young et al. (2009) and Seay (2015), who noted the limitations and lack of uniform data on parental substance use in the CW population.

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[90] CAPTA/CARA 2016 requires states to “report in the National Child Abuse and Neglect Data System (NCANDS), to the maximum extent practicable: the number of infants identified as being affected by substance abuse or withdrawal symptoms resulting from prenatal drug exposure, or a Fetal Alcohol Spectrum Disorder; the number of infants with safe care plans; and the number of infants for whom service referrals were made, including services for the affected parent or caregiver.”

Action Steps: Gathering, recording, and using information

Federal data reporting requirements have led to understanding more about the prevalence and needs of newborns with PSE on a national level. Similar efforts could be made to support understanding of all children with exposures, regardless of age, that may not be evident until the child is older, such as exposures to alcohol.

CW agencies would benefit from changes to their data systems that would allow for aggregated data of indicators of and activities related to children with PSE and their families. This would help agencies assess local needs and services as well as equity of service delivery and outcomes.

CW agencies can review their case processes to identify activities that can promote identification of PSEs and service referrals. Systematic opportunities to collect information exist throughout the case processes—including risk assessments, family needs, ongoing and case interactions—for both in-home and out-of-home CW cases.

CW agencies can leverage existing collaborations to create consistent documentation and structured information sharing to facilitate child identification and care. Activities could include jointly developing referral forms that more clearly document information about the child pertinent to PSE. Service providers can use the known or even unknown information to conduct screenings or assessments that may lead to appropriate service referrals.

Researchers can study agency efforts to incorporate structured processes to consider whether children are affected by unrecognized PSE. Other agencies can use these findings to develop their practices, especially any found to improve child identification and care.

Universal documentation and reporting could assist monitoring and understanding of racial, cultural, and economic inequities and disparities. Understanding points in the CW case process, and family demographics, could help agencies identify potential bias in CW response, plan activities to address bias, and evaluate whether these actions make improvements.

Activities and Resources to Help the CW System Identify and Care for Children

CW may benefit from a more comprehensive array of activities and resources to help staff recognize children affected by PSE and to provide services promoting their safety, permanency, and well-being. To advance these ends, the study team is currently applying lessons learned from this study to develop resources, tools, and practice guides to help agencies and staff assess their PSE-related practices. This effort, led by Children's Bureau in an interagency agreement with Centers for Disease Control and Prevention titled *Identification and Care of Children Prenatally Exposed to Alcohol and Other Drugs: Prevention Strategies,*[91] includes developing resources that take disproportionality and inequities into account. The resulting practice guidance may help facilitate CW staff to obtain prenatal exposure histories for all children in care, which may reduce disparities in identified PSE resulting from an overreliance on hospital reporting or CW staff biases in information gathering. Implementation and outcomes of the practice guidance and resources will be evaluated in collaboration with CW agency sites to ensure feasibility and efficacy before wider dissemination. In addition to this next phase of the team's work, potential actions at the federal, state/agency, and individual CW professional levels are outlined in this section.

Federal Level

Develop and maintain current resources to help state agencies improve services for children in their care as well as staff training. These resources can include materials to help agencies assess their needs related to PSE, screening practices, and examples of model policies and procedures to improve and standardize the identification of and service provision to children affected by PSE. Other resources could include training and informational materials for use by CW agencies to train their staff and share with children and families affected by PSE.

Focus on preserving families of children with PSE, particularly children exposed to alcohol, as an extension of federal prevention efforts. Ideas include developing informational materials for birth parents to help them understand the long-term effects of PSE and effective parenting strategies. Other actions include development of community services to help address children's medical, developmental/educational, mental health, and behavioral needs and public awareness campaigns to enhance community-wide knowledge.

Consider requirements to promote data reporting by states on older children with PSE. The government could seek expert consultation to consider additional data elements, particularly for

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[91] Contract Number HHSP233201500133I with Children's Bureau, Administration for Children and Families in an interagency agreement with the Centers for Disease Control and Prevention, U.S. Department of Health and Human Services (IAA# 19FED1916928DDB).

tracking PAE, that could be included in reports to the National Child Abuse and Neglect Data System (NCANDS).[92]

Develop resources to help state agencies effectively use their administrative data to examine touchpoints during the case process related to services and outcomes for children with PSE. Technical assistance also should help states evaluate practices and whether unequal response and service delivery contribute to the overrepresentation of children of color with PSE entering the CW system and the outcomes of children with PSE. Policy suggestions and development tools could assist practice change at the state and local level.

Facilitate interagency work at the federal level to strengthen prevention and reunification for children with PSE, including PAE. Services to children and families are referred by and often provided by the CW system, which includes service providers that may be funded and directed by various federal agencies. Comprehensive services and supports for children and families affected by PSE require coordination of multiple types of providers (e.g., developmental assessors, medical providers, diagnostic services, parenting and child intervention providers, early education and education services). Collaboration at the federal level from agencies that direct and fund these services can help reduce barriers to family service access. Interagency collaboration can facilitate increased coordination among service providers and improved data collection and sharing, to support consistent and systematic identification and early services for children with PSE.

Fund and facilitate studies of training and supports implemented by CW agencies. Studies should seek to understand the outcomes of activities and resources on CW agency staff practices and care of children with prenatal exposures. This research should include varied populations, such as children of different ages and families of differing race/ethnicity, and diverse CW staff, structures, and processes.

State/Agency Level

Develop policies and procedures to systematically screen children in care and document known or potential risks of PSE—particularly alcohol. Screening should be done for all children, including those who are identified at birth, with a focus on alcohol, which is difficult to detect at birth. Screening can be built into existing case processes to ensure feasibility and promote consistent implementation.

Revise training requirements for CW staff and caregivers to embed and ensure knowledge and skill development related to PSE. Potential content areas include helping children who are exposed to substances remain in their home, recognizing indicators in children and referring them to appropriate assessments, and understanding and addressing the needs of children and their caregivers.

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[92] See https://www.acf.hhs.gov/cb/research-data-technology/reporting-systems/ncands for a description of national reporting and current data elements.

Allocate resources for supervisor and coaching support to reinforce new knowledge and practices with birth parents and caregivers. Individual or group supervision sessions can help CW staff apply knowledge gained in training to their work with families.

Use contractual agreements with private providers for specific services that help to identify PSE, particularly PAE, for children already in care. When the agency has the authority to select and compensate providers, performance-based contracting can be used to require activities such as data collection and information sharing, training of contracted employees, and use of practices that specifically consider a child's possible or known PSE status.

Build partnerships and collaborate with other state agencies and family service providers to support strengthened identification of and services for children at risk of PSE. Collaborations can focus on determining needs, tailoring services, and reducing barriers to access them for families affected by PSE and improving information documentation and sharing to better identify and provide services for children in care. State examples of effective partnerships to address substance-exposed newborns could be helpful.[93]

Work toward incorporating easily found information elements about PSE risk and indicators (especially alcohol) into agency data systems. Agencies and caseworkers can use this information to better plan for and monitor children and families' service needs.

Seek and develop culturally competent services for children and families affected by PSE. Examples include conducting outreach to community service providers, soliciting input from community members, and building relationships with communities to ensure that services reflect cultural values.

Individual CW Professional Level

Access training and information to learn about the long-term effects of PSE, particularly alcohol. Increased understanding of potential neurocognitive deficits can help providers identify children who may be affected, consider appropriate referrals, and provide families with targeted support that can help improve family functioning. Appreciate how identification of children with PSE/PAE can benefit child and family outcomes as well as CW practice.

Reflect on potential personal biases and how they may influence practice. Internalized beliefs—including those about the morality of substance use or about people of different race/ethnicities and socioeconomic statuses—may lead to subtle behaviors during family interactions, including avoidance or discomfort. Building self-awareness of these biases and their potential effects can help practitioners refrain from actions and decisions that may contribute to disparate practice.

Seek out local resources that can provide appropriate services to children and families experiencing prenatal exposures and their effects. Suggestions include diagnostic services and educational supports for children and caregiver support organizations for affected families.

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[93] See https://ncsacw.samhsa.gov/collaborative/building-capacity.aspx.

Agencies can facilitate keeping staff up-to-date on knowledge of services and evidence-based interventions for children with PSE/PAE and their families.

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Appendix A. Glossary

AFCARS: The Adoption and Foster Care Analysis and Reporting System collects case-level information from state and tribal title IV-E agencies on all children in foster care and those who have been adopted with title IV-E agency involvement (U.S. Department of Health and Human Services, 2021).

CAPTA: Child Abuse Prevention and Treatment Act is the key Federal legislation addressing child abuse and neglect. CAPTA was originally enacted in P.L. 93-247 and was most recently amended on January 7, 2019, by the Victims of Child Abuse Act Reauthorization Act of 2018 (P.L. 115-424). CAPTA provides Federal funding to States in support of prevention, assessment, investigation, prosecution, and treatment activities. It also provides grants to public agencies and nonprofit organizations, including Indian Tribes and Tribal organizations, for demonstration programs and projects (Child Welfare Information Gateway, 2019b).

CARA: Comprehensive Addiction and Recovery Act (P.L. 114-198) of 2016 aims to address various aspects of substance use disorders, particularly opioid use disorder, with (1) provisions that affect multiple agencies and systems, including the addition of various requirements regarding the Child Abuse Prevention and Treatment Act (CAPTA) and (2) provisions to help States address the effects of substance use disorders on infants, children, and families. The act requires states to ensure the safety and well-being of infants following their release from the care of health-care providers by (1) addressing the health and substance use disorder treatment needs of the infant and affected family member or caregiver and (2) monitoring these plans to determine whether and how local entities are making referrals and delivering appropriate services to the infant and affected family member or caregiver. CARA requires states to report, in the National Child Abuse and Neglect Data System, the number of infants identified as being affected by (1) substance use or withdrawal symptoms resulting from prenatal drug exposure or (2) a fetal alcohol spectrum disorder (Child Welfare Information Gateway, n.d.; Child Welfare Information Gateway, 2020c).

Caregiver: Caregivers discussed in this report include foster parents, kinship caregivers, foster-to-adopt parents, and adoptive parents of children involved with the child welfare system and in out of home care.

Children in care: Children who are involved with the CW system who have been removed from the care of their original families because of a situation where authorities have deemed their family unable or unfit to look after them properly. In some cases, children are voluntarily placed into care by their parents or guardians. Children can come into care for a variety of reasons including abuse and neglect, illness, death of a parent, addiction issues or conflict in their family, disability, or emotional problems.

Children involved with child welfare (CW): Children from families with an open CW case that may be receiving services in the home of their original families or may be placed out of home and under the custody of the CW system.

Differential response (DR): Sometimes referred to as alternative response, DR is a CW systems reform that enables child protective services to differentiate its response to reports of child abuse and neglect based on several factors. Typically, the differentiation is to provide preventative services when appropriate (Child Welfare Information Gateway, 2020a).

FASDs: Fetal alcohol spectrum disorders is an umbrella term that encompasses several diagnostic categories (not a clinical diagnosis itself) related to the adverse effects resulting from in utero exposure to alcohol, including fetal alcohol syndrome (FAS), partial fetal alcohol syndrome (pFAS), alcohol-related neurodevelopmental disorder (ARND), alcohol-related birth defects (ARBD), and finally, Neurobehaviroal Disorder Associated with Prenatal Alcohol Exposure (ND-PAE), a mental health diagnosis added to the American Psychicatric Association Diagnostic and Statistical Manual (5th edition) in 2013 (American Association of Pediatrics, n.d.).

FFPSA: The Family First Prevention Services Act was signed into law as part of Public Law (P.L.) 115–123 and has several provisions to enhance support services for families to help children remain at home, reduce the unnecessary use of congregate care, and build the capacity of communities to support children and families (Child Welfare Capacity Building Collaborative, n.d.).

Foster child: A child raised by someone who is not its biological or adoptive parent.

In-home child welfare services: The target population for CW in home services is families who have come to the attention of the public CW agency because of alleged child maltreatment. In general, families receiving in-home services have an open case with the agency, whether the alleged maltreatment has been substantiated through an investigative process. The goals of in-home services are to stabilize the family and ensure the safety and well-being of the children in the home to prevent placement or re-entry into foster care (D'Aunno et al., 2014).

NCANDS: The National Child Abuse and Neglect Data System is a voluntary data collection system that gathers information from all 50 states, the District of Columbia, and Puerto Rico about reports of child abuse and neglect. NCANDS was established in response to the Child Abuse Prevention and Treatment Act of 1988. The data are used to examine trends in child abuse and neglect across the country, and key findings are published in the Children's Bureau's Child Welfare Outcomes Reports to Congress and annual Child Maltreatment reports (U.S. Department of Health and Human Services, 2021).

NAS: Neonatal abstinence syndrome is a result of the sudden discontinuation of fetal exposure to substances that were used or abused by the mother during pregnancy (Kocherlakota, 2014).

Opioids: Opioids are a class of drugs used to reduce pain. Common types of prescription opioids are oxycodone (OxyContin), hydrocodone (Vicodin), morphine, and methadone. Heroin is an illegal opioid (Centers for Disease Control and Prevention, 2021).

Plans of safe care: To receive Child Abuse Prevention and Treatment Act (CAPTA) funds, states are required to ensure that they operate programs relating to child abuse and neglect that include the development of a plan of safe care (POSC) for infants born and identified as being affected by substance abuse or withdrawal symptoms or FASD to ensure the safety and well-being of such infant following his or her release from the care of health-care providers, including through addressing the health and substance use disorder treatment needs of the infants and affected family or caregivers. States have flexibility in implementation of POSCs. For example, the plan can be initiated in advance of the infant's birth by a designated community organization, including a substance use disorder treatment provider, the health-care provider at the birth hospital, or as part of the discharge process to ensure services are provided to the infant and the affected family or caregiver (Child Welfare Information Gateway, 2020c).

PAE: Prenatal alcohol exposure occurs when a woman drinks any amount of alcohol while pregnant.

PSE: Prenatal substance exposure occurs when a woman uses drugs or drinks alcohol during pregnancy. Drugs may be prescription medications or illegal substances, and include nicotine, alcohol, marijuana, opioids, cocaine, and methamphetamine, among others. Although PSE could include the commonly used nicotine as well as other less common toxic substances, nicotine is not addressed in this report.

Resource families: Families with children who are cared for by foster parents, foster-to-adopt families, and kinship caregivers (Child Welfare Information Gateway, n.d.).

Appendix B. Expert Consultants and Contributing Stakeholders

Exhibits B1, B2, and B3 present the many esteemed technical experts, stakeholders, and federal agency partners who contributed to the study design and execution.

Exhibit B1. Expert Technical Workgroup (ETWG) Members and Their Areas of Expertise

Name, Title, and Organization	Area(s) of Expertise
Carl Ayers, M.S.W., formerly the Director of the Division of Family Services, Virginia Department of Social Services	Child welfare (CW) practice and policy
Ira Chasnoff, M.D., President of NTI Upstream and Professor of Clinical Pediatrics at University of Illinois College of Medicine	Effects of prenatal substance exposure (PSE) on infants and children; interventions for children with an FASD
Diane DePanfilis, Ph.D., M.S.W., Professor of Social Work, Hunter College, City University of New York	CW practice; intervention research; implementation science
Anita Fineday, J.D., M.P.A., Managing Director of the Indian Child Welfare Program for Casey Family Programs	Tribal CW practice and related legal practice
Todd Franke, Ph.D., Professor, Luskin School of Public Affairs, University of California, Los Angeles	CW research; applied statistics and psychometrics; early intervention services
Michael Hurlburt, Ph.D., Associate Professor, School of Social Work, University of Southern California	Research on mental health interventions; implementing and evaluating practice innovations in CW settings
Tracy Jirikowic, Ph.D., Associate Professor, Department of Rehabilitation Medicine, University of Washington	Neurodevelopmental effects of PSE on children; interventions for children with an FASD
Molly Millians, Ph.D., Clinical Education Specialist, Department of Psychiatry and Behavioral Sciences, Emory University School of Medicine	Neurodevelopmental effects of PSE on children; interventions for children with an FASD

Name, Title, and Organization	Area(s) of Expertise
Doug Waite, M.D., FAAP, Division Chief, Developmental-Behavioral Pediatrics, BronxCare Health Systems	Diagnosis and interventions for children with an FASD; providing medical services to children in foster care
Nancy Young, Ph.D., Executive Director, Children and Family Futures; Director, National Center for Substance Abuse in Child Welfare	State and local policy, practice, and research on substance abuse in CW; Working with children and families affected by substance use involved in the CW system

Exhibit B2. Stakeholders Consulted on Study Design and Objectives

Name, Title, and Organization	Area(s) of Expertise
Brady Birdsong, Chief Information Officer, District of Columbia Department of Behavioral Health	CW information systems; child CW and technology
Kim Bishop-Stevens, M.S.W., Substance Abuse Manager, MA Department of Children and Families	CW practice and policy
Julie Collins, M.S.W., Director, Standards for Practice Excellence, Child Welfare League of America	CW practice, policy, and research; Children and families affected by substance use involved in the child welfare system
Kara Finck, J.D., Director, Interdisciplinary Child Advocacy Clinic, University of Pennsylvania Law	Legal needs of children and families; Systemic reform projects in the areas of CW and Family Court
Kathy Mitchell, M.H.S., Vice President and International Spokesperson, National Organization on Fetal alcohol Syndrome (NOFAS)	Prevention, intervention, and training in Fetal Alcohol Spectrum Disorders; Supporting families touched by FASD and other prenatal exposures

Exhibit B3. Federal Agency Leadership and Staff Consulted on Study Design and Objectives

Name and Title	Division or Office and Federal Agency
Federal Contract Leadership	
Sharon Newburg-Rinn, Ph.D., Social Science Research Analyst **Contracting Officers Representative, Lead Federal Project Officer*	Children's Bureau, Administration for Children and Families, U.S. Department of Health and Human Services
Jacquelyn Bertrand, Ph.D., Child Psychologist **Federal Partner Agency*	National Center on Birth Defects and Developmental Disabilities, Centers for Disease Control and Prevention (CDC), U.S. Department of Health and Human Services
Federal Staff Consultants	
Melinda Baldwin, Ph.D., LCSW, Chief	Child, Adolescent, and Family Branch, Substance Abuse and Mental Health Services Administration, U.S. Department of Health and Human Services
Jeanne Blankenship, M.S.W., Child Welfare Program Specialist	Office of Child Abuse and Neglect, Administration for Children and Families, U.S. Department of Health and Human Services
Gail Collins, M.P.A., Division Director, Program Implementation	Children's Bureau, Administration for Children and Families, U.S. Department of Health and Human Services
Christine Fortunato, Ph.D., Senior Social Science Research Analyst	Division of Child and Family Development, Office of Planning, Research, and Evaluation, Administration for Children and Families, U.S. Department of Health and Human Services
Laura Hoard, Ph.D., Senior Social Science Research Analyst	Division of Child and Family Development, Office of Planning, Research, and Evaluation, Administration for Children and Families, U.S. Department of Health and Human Services
Heather McCann, M.P.H., CPH, ORISE Fellow	National Center on Birth Defects and Developmental Disabilities, Centers for Disease Control and Prevention (CDC), U.S. Department of Health and Human Services

Name and Title	Division or Office and Federal Agency
Dori Sneddon, Ph.D., Child Welfare Program Specialist	Office of Child Abuse and Neglect, Administration for Children and Families, U.S. Department of Health and Human Services
Elaine Stedt, M.S.W., Director, Office on Child Abuse and Neglect	Office of Child Abuse and Neglect, Administration for Children and Families, U.S. Department of Health and Human Services

Appendix C. Research Questions and Sub-questions by Construct and Data Source

The overarching research questions for the study were refined in consultation with the Expert Technical Work Group and federal project leadership. The questions are:

1. What are the current knowledge, policies, and practices in place in CW agencies and related organizations for the identification of children with prenatal substance exposure and/or diagnosed with a resulting condition (such as a Fetal Alcohol Spectrum Disorder [FASD])?
2. What type of training and dissemination activities are used currently, and what consensus is there, if any, among CW professionals in the studied settings, regarding practice changes that are likely to improve identification and documentation of children with PSE and resulting conditions in the CW system?

Exhibit C.1 shows the research sub-questions by construct and data sources applied to answer the sub-questions. These sub-questions directly informed the development of items included in each data source. The questions were slightly modified from the original matrix[94] following data collection in the first state. Study questions posed in chapters in this report align with, but do not reflect exactly the research sub-questions listed here (study questions have been summarized for ease of interpretation for the final report).

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[94] The original research sub-questions were included in the *Study Design Options Report* and are listed in the *Technical Appendix*.

Exhibit C.1. Study Sub-questions by Construct and Data Source

Primary Study Constructs	Study Sub-Questions	State-Level Data Sources		Site-Level Data Sources					Ancillary Data Sources	
		State informants – interviews	**Document review**	**Local Area Director - interviews**	**CW staff - interviews**	**CW staff - survey**	**Case records**	**Local area data staff – interviews**	**Service providers - survey**	**Caregivers – focus group and interviews**
1.State policy	1.1. How have state plans/processes related to CAPTA/CARA influenced local CW policies, procedures, documentation, and/or data collection for children with PSE?	X	X	X				X		
2. Courts	2.1. To what extent do judicial orders influence the child's case plan in regard to identification of PSE? Services for children with PSE? Services for caregivers of children with PSE?	X		X	X					
3. CW agency/Site policies and practice	3.1. What agency guidance direct staff to share information on a child's PSE status with pre-adoptive families? What type of information is shared?	X	X	X	X					
	3.2. How does agency guidance direct staff to screen and refer foster children for medical, developmental, mental health, and behavioral services? To what extent and how do these screening practices support identification of children with PSE?	X	X	X	X					

Primary Study Constructs	Study Sub-Questions	State-Level Data Sources		Site-Level Data Sources					Ancillary Data Sources	
		State informants – interviews	Document review	Local Area Director - interviews	CW staff - interviews	CW staff - survey	Case records	Local area data staff – interviews	Service providers - survey	Caregivers – focus group and interviews
	3.3. How does agency guidance direct staff to document and update child's medical information? To what extent and how does current medical information on case records support referrals of children with PSE?			X	X					
	3.4. What policies/instruments are used by CW agencies to guide collecting, interpreting, documenting, and/or sharing information related to maternal substance use during pregnancy? PSE?	X	X	X	X			X		
	3.5. What policies/instruments are used by CW agencies related to the identification of and service referrals for children with or at risk of PSE? FASD?	X	X	X	X					
	3.6. What policies are present in CW agencies that may support more consistent/reliable collection and documentation of information related to maternal substance use during pregnancy? Identification of PSE?	X	X	X	X			X		

Primary Study Constructs	Study Sub-Questions	State-Level Data Sources		Site-Level Data Sources					Ancillary Data Sources	
		State informants – interviews	**Document review**	**Local Area Director - interviews**	**CW staff - interviews**	**CW staff - survey**	**Case records**	**Local area data staff – interviews**	**Service providers - survey**	**Caregivers – focus group and interviews**
	3.7. What training is available to CW site staff related to PSE? What are training requirements? What content is covered? How is training delivered?	X		X	X					
	3.8. What training is available to resource families/preadoptive families related to PSE? What are training requirements? What content is covered? How is training delivered?			X	X					X
4. Site Staff knowledge/practice	4.1. What do CW staff know related to the effect of PSE? FASD? The prevention of FASD?				X	X				
	4.2. How do CW staff obtain information about PSE? What training and information dissemination methods increase their knowledge of PSE?				X	X				
	4.3. What training, information, and/or other supports enable CW staff to apply their knowledge of PSE to their work with children and families?				X					

Primary Study Constructs	Study Sub-Questions	State-Level Data Sources		Site-Level Data Sources					Ancillary Data Sources	
		State informants – interviews	**Document review**	**Local Area Director - interviews**	**CW staff - interviews**	**CW staff - survey**	**Case records**	**Local area data staff – interviews**	**Service providers - survey**	**Caregivers – focus group and interviews**
	4.4. To what extent and how do CW staff identify children in their caseload with PSE?			X	X	X	X			
	4.5. How do CW staff respond in identifying child needs and making service referrals to children in their caseload with PSE?				X	X	X			
	4.6. What factors are associated with CW staff identification of a child with PSE? With their response to a child's service needs once identified with PSE? (e.g., training, years of experience, knowledge, access to services, child age)				X	X	X			
5. Data and Documentation	5.1. Where in the data system is information entered regarding maternal substance use during pregnancy? PSE? How consistently is this information entered?				X		X	X		
	5.2. To what extent is information in the CW data system able to be used to determine trends related to PSE? FASD? Related service referrals?						X	X		

Primary Study Constructs	Study Sub-Questions	State-Level Data Sources		Site-Level Data Sources					Ancillary Data Sources	
		State informants – interviews	**Document review**	**Local Area Director - interviews**	**CW staff - interviews**	**CW staff - survey**	**Case records**	**Local area data staff – interviews**	**Service providers - survey**	**Caregivers – focus group and interviews**
	5.3. To what extent and how do CW site staff use information related to an individual child’s PSE status in regard to supervision/internal team meetings? Identification of service needs? Monitoring case plan progress? Quality assurance processes? Others?				X					
6. Child and family services & supports	6.1. What assessment/diagnostic services are available for children with PSE? Are those services accessible and timely?			X	X				X	
	6.2. What trends in children’s referrals for assessment and service referral are observed in regard to identification of PSE? Child characteristics? Site policies? Service array?				X		X			
	6.3. Are service providers knowledgeable about PSE?				X		X		X	
	6.4. Are services tailored to children with PSE?				X				X	

Primary Study Constructs	Study Sub-Questions	State-Level Data Sources		Site-Level Data Sources					Ancillary Data Sources	
		State informants – interviews	**Document review**	**Local Area Director - interviews**	**CW staff - interviews**	**CW staff - survey**	**Case records**	**Local area data staff – interviews**	**Service providers - survey**	**Caregivers – focus group and interviews**
	6.5. What CW agency/ provider collaborative service structures exist that serve children with PSE? How do these collaborative efforts affect service delivery?				X				X	
	6.6. How does the CW agency support caregivers of children with PSE, in regard to general information on PSE? Child-specific information on PSE status? Support services? Parenting strategies for children with PSE?				X					X

Appendix D. Additional Methodological Details

Study Approvals

The study team obtained approvals from the federal Office of Management and Budget (OMB), the ICF Institutional Review Board (IRB), and three of the five participating states' IRBs (two states did not require state-level IRB approvals). Data sharing agreements also were developed with the two states participating in the in-depth data collection. All data management and storage was regulated under a privacy impact assessment and data monitoring and security plan approved by the ACF Office of the Chief Information Officer.

Instrument Development and Cognitive Pre-testing

Instruments and data collection tools (i.e., surveys, interview and focus group protocols) were developed for all methods listed in exhibit 5. Following development of initial instruments, Expert Technical Work Group (ETWG) consultants provided detailed feedback and the revised versions underwent cognitive testing (Litwin, 2003; Willis & Artino, 2013). Testing was conducted with 28 Subject Matter Experts, including those with CW direct service provision experience, foster and adoptive parents, and allied service providers. Instruments were revised and further tested in a second round of cognitive pre-testing interviews.

Training

For the key informant interviews, study team members served as interviewers for data collection. All interviewers completed a 2-day instrument and procedures training and a 2-hour training tailored to each state. Trainings were conducted approximately 1-2 weeks before data collection in each state. For case record review (state 3 only) 13 abstractors were recruited from local university graduate programs (e.g., social work, public health, psychology) or from an online job posting requesting prior research experience in these program areas. All abstractors participated in a half-day virtual training and a 1.5 day in-person training that included extensive review of the Access database tool[95], review of the detailed operationalized coding manual, several paired and individual practice reviews of mock cases, and debriefing sessions to discuss coding challenges, questions, and treatment of ambiguities in the case records.

Site Visits

Teams of two study staff conducted site visits to 18 sites in four of the five states. Because of pandemic travel restrictions at the time of data collection, all interviews conducted in state 5 were completed via teleconferences and were scheduled to occur within a two-week period for each site. Each visit included individual interviews with a local area director and CW staff in all in-person data collection states. In state 3, focus groups of caregivers also were conducted during the site visit. Interviews and focus groups occurred in private offices or conference rooms at the local CW agency.[96] Participants signed consent forms and interviews were audio-recorded on digitally encrypted recorders. Just prior to or during site visits, CW staff and service provider surveys were sent to participants via email links to Qualtrics web-based electronic survey software. Surveys were available for a three-week period. Participants received weekly reminders and agencies were provided ongoing reports of response rates to boost participation and reach targeted numbers. At the conclusion of each site visit, interviewers developed a brief site visit summary that captured key observations and notes about contextual factors and entered quantifiable data items from interviews into the Interviewers Notetaker Spreadsheet.

Onsite Case Record Reviews

Staff at the participating in-depth state (state 3) and local CW agencies identified 55 case records for review at each of four sites from that state, following sampling criteria listed in exhibit 9.[97]

Printed case records (ranging from 50 to more than 500 pages per record) were provided to abstractors. Data elements were abstracted (i.e., specific narrative text or other data elements were identified), coded, and entered in the Access database. The state CW agency provided abstractors

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[95] The database for this component of the study was created using Microsoft Access (Microsoft Access, version 2012).

[96] In the few instances when interviewees were not available on the day of the site visit, telephone interviews were conducted.

[97] Two states (state 3 and state 5) agreed to in-depth data collection including case record reviews, but because of the timing of COVID-19 pandemic restrictions, this component was not able to be completed in state 5.

with a private, locked location at the central CW office to conduct the reviews on individual encrypted laptops, disconnected from the internet, that were preloaded with the Access database. One of four data collection supervisors were on-site throughout the review period to ensure all security and confidentiality procedures were followed, to answer any coding questions, and to hold debriefing meetings during which abstractors were encouraged to discuss reactions and emotions related to distressing information they encountered in case files. Paired reviews were conducted on the first day for reliability and validity checks (these were in addition to reliability and validity checks conducted during the 1.5-day training). During training, abstractors had a target goal of 75 percent reliability for each reviewed document. During the first day of full reviews, paired abstractors had to have reliability of 90 percent for each document reviewed before reviewing documents on their own. Reliability of less than that on any one document resulted in conducting a subsequent paired review of that document. Case reviewers' databases were also periodically spot-checked to ensure data quality and consistency. Staff needed to maintain 90 percent reliability with their supervisor during all spot checks, which were all met. Upon conclusion, Access files were transferred to the study team via encrypted flash drives.

Analysis

Qualitative Analysis

Document review. Policy documents were analyzed to explore the policies that may contribute to CW agency practice in identifying, assessing, and referring children potentially affected by PSE. A-priori codes aligned with study key constructs and sub-research questions (see appendix C) were operationalized in an Excel spreadsheet, organized by whether information was state-specific or local agency-specific. Content analysis was applied to code information to quantify information and facilitate contextual subgroup analysis and cross-state understanding of phenomena of interest.

Interview and focus group data. Grounded theory[98] techniques were adapted to systematically explore and analyze qualitative data from interviews and focus groups. Interviews and focus groups were transcribed verbatim and subsequently uploaded and coded using Dedoose, a software designed to assist with qualitative coding and analysis.[99]

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[98] Grounded theory is a methodology that uses comparative analysis techniques to systematically discover or construct theory from qualitative and quantitative data (Tie et al., 2019).

[99] Dedoose Version 8.3.47 (2021). Los Angeles, CA: SocioCultural Research Consultants, LLC. www.dedoose.com

Codebook development and pilot coding. A codebook operationalized codes using definitions with relevant inclusion and exclusion criteria (i.e., descriptions of when to apply a code and when not to apply a code). An initial codebook was developed before collecting qualitative data and included "a priori codes" based on the study's research questions and main study constructs (e.g., PSE training, PSE identification, PSE documentation, PSE information sharing). Pilot coding was conducted with state 1 qualitative data, and the codebook was further refined after the pilot. Additional "emergent codes" were identified that surfaced after a review of data across states (e.g., reported methods for identifying or suspecting PSE).

Coding procedures. A team-based, iterative, and collaborative approach facilitated the coding and analysis as this has been shown to increase fidelity and dependability when analyzing large volumes of data (Cascio et al., 2019). A team of analysts were trained on a common set of coding procedures to help ensure coding validity, transparency, and consistency. Coders met regularly to make refinements to the codebook and to help ensure a common interpretation and application of codes across states. A multilevel (three-level) coding process was used to organize qualitative data from interview and focus group transcripts. Data were organized by applying a level 1 codes to each study construct (e.g., CW staff knowledge) and level 2 codes to each study subdomain (e.g., knowledge related to PSE). A third level of coding (i.e., thematic coding) was conducted to highlight themes that emerged across states and to examine patterns by different study criteria (e.g., variation by respondent type, phase of case management, type of substance, child age). Across five states, the average coding team that conducted level 1 and level 2 coding was comprised of six coders (range: 4-7). The number of coders was dependent on staff availability and the number of interviews conducted in the state. Two additional staff were assigned to conduct backup coding on 25 percent of transcripts across five states. Level 3 coders included six analysts that were assigned qualitative datasets that aligned with specific areas of inquiry or final report chapters.

Inter-coder consensus and reliability. An iterative-inductive, and systematic process helped establish inter-coder consensus and reliability (Cascio et al., 2019). Paired coding was conducted with 25 percent of transcripts throughout the coding process. This procedure involved having one analyst review the code applications of another analyst. Memos in Dedoose flagged instances where paired coders had different interpretations of codes. Coder meetings were used as "reliability checks" to discuss and resolve any paired coding discrepancies.

Theme identification. Coders met regularly to compare findings within and across states and to discuss themes emerging from their review and analysis of data. Coder meetings helped to identify patterns in data by discussing confirming or disconfirming findings across states. These discussions were also applied to examine evidence and have confidence that saturation had been reached (e.g., that the ability to obtain new information from additional interviews has been attained and further development of coding is not needed; Fusch & Ness, 2015; Hennick et al., 2016). Memos were created in Dedoose to track coders' interpretations of qualitative data so as to identify reporting insights (e.g., common barriers to PSE training or PSE identification) and potentially promising practices (e.g., reported successes related to screening for PSE). Analytic tools in Dedoose were applied to explore data (e.g., how often were codes applied across states? by different types of respondents? by different phases of case management?) and to summarize data into tables. These analytic functions included examining the frequency of code applications (i.e., the total number of times a particular code was applied across all transcripts—since codes could be applied more than once in a transcript); code presence (i.e., the total number of unique transcripts that received a particular code at least once); and code co-occurrence (i.e., how often two codes were applied to the same excerpt). A summary of qualitative findings organized by final report chapter and sub-research question was produced for use in reporting.

Survey qualitative responses. Open-ended responses on the CW staff and service provider surveys were reviewed to identify pertinent quotes to illustrate key themes. A small number of qualitative survey responses were coded descriptively in an Excel spreadsheet to address select study questions and responses were summarized by state. For example, responses to an open ended question about the most harmful type of prenatal substance exposure were categorized by substance type and counted.

Quantitative Analysis

Survey data. All data from the CW staff and service provider surveys were downloaded from Qualtrics, deidentified, and stored on the project's secure server. Survey data were cleaned and formatted to facilitate the import into SAS software, Version 9.4[100] for analysis. Data were analyzed using descriptive statistics, measures of central tendency, and frequencies. Response frequencies and percentages were calculated where appropriate (e.g., length of time working at local agency). Means or medians (and corresponding measures of variability) were calculated for survey questions answered on ordinal level Likert scales and for count/other numeric variables (e.g., staff perception of prevalence of PAE in their agency's caseload). Descriptive statistics were produced at the aggregate level (all individuals from all states combined), for each of the 5 states (all individuals within each state combined), and by respondent role for CW staff (all individuals from all states combined, categorized into 7 roles). For a true/false quiz on facts regarding alcohol exposure and effects (see chapter 4), the percent correct for each item was determined, and items were ranked

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[100] SAS Institute, Cary, NC.

from “most often” to “least often” correct. Additional subgroup analyses were conducted to report or compare groups of states based on certain contextual factors (e.g., states that define PSE/PAE as child abuse and neglect).

Response rates. For states 1 – 4, survey response rates were calculated by dividing the number of responses received by the number of individuals who were sent the survey. In state 5, the response rates are estimates calculated by dividing the number of responses received by the number of individuals each agency was asked to send the survey to (staff survey n = 12, service provider survey, n = 3 at each site).[101]

Data cleaning and examination of missingness. Respondents answered most questions on the surveys. The survey items were not forced choice; respondents could choose to not respond to any items. A relatively small amount of missing data occurred across close-ended variables in the survey. The rate of missing data for typical close-ended items in aggregate analyses hovered around 12-16 percent.

Our analysis of the survey data was descriptive (not predictive) and was guided by the study objective to provide overarching descriptions of policy and practice across different CW agencies. The research questions are not comparative, and no hypotheses were posited to be tested in predictive analyses. The analytic team provided all available data for each analysis to preserve and report as much data as possible given relatively small samples. Missing data rates are presented in exhibits where missingness was observed to be somewhat variable (e.g., different rates by state); otherwise, it was reported in each exhibit as a note. The approach to examining and reporting missing data given this design aligns with recommended practices (Lee et al., 2021).

In data files and analysis output, missing data were categorized into three types: invalid, valid, and variable exclusion. Invalid missing data are described as variables where a record was incomplete because a respondent did not answer the question for an unknown reason (e.g., mistakenly skipped, refused, or considered it to be not applicable). Valid missing is described as variables where a record was incomplete because the question was not displayed or the question should not be answered because of survey logic (i.e., question was only displayed to some respondents based on criteria). The third type of valid missing classification was because of exclusion of the variable from one or more of the three slightly different survey forms. The pattern of types of missing were considered at multiple points of analysis, including when site reports were prepared within each state

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[101] Because of IRB and data sharing requirements in state 5, survey links were emailed by the local study liaisons as survey respondent names and email addresses were not to be shared with the study team. Therefore, the study team does not definitively know the number of individuals who were sent the survey.

(immediately after data collection in the state) and again in final aggregated analysis, reporting and interpretation. Most missing data were invalid missing and were not observed to vary in meaningful ways by role. While some states had higher rates of missingness across the CW staff survey, patterns did not appear to be related to staff role or the content/topic of the item. Rather, missingness was observed to be relatively randomly distributed within state (e.g., random across sites within states, or across roles within sites and states).

For constructed variables, when one or more items used to determine a score were missing for a record, a score was not calculated for that record and the incomplete data were not included in the analysis. For example, for a T/F quiz on facts about alcohol effects, the average quiz score was only calculated for records when respondents completed the T/F quiz (i.e., respondents has a response for each of the items in the quiz).

Quantitative interview data. Close-ended items from interviews were transferred from the Interviewer Notetakers Spreadsheet (Excel) into IBM SPSS Statistics 22, and descriptive statistics (e.g., frequencies) were calculated.

Case record review data. The Access database included both close-ended quantitative data (e.g., gender, and prepopulated code categories such as yes/no for presence of PSE or PAE specific information) and open-ended textual data (e.g., substances mentioned, medical diagnoses). Data from each case file recorded within one record in the Intake and Ongoing databases. All client names, agency-specific client identification numbers, addresses, Medicaid information, and Social Security numbers were excluded from entry into the database according to the data sharing agreement. Birthdates were included to determine child age and to link client information from the Intake and the Ongoing databases but were deleted from data files after merging was completed.

Data were converted into Excel files and then transferred into SPSS for final cleaning and analysis. Variables designating site (local agency site) and case selection criteria were added. Additional child-level variables related to PSE-related diagnosis (e.g., FASD, withdrawal, neonatal abstinence syndrome [NAS], etc.), and service receipt (e.g., medical services, mental health services, etc.) were tabulated separately deriving from existing string (narrative text) variables.

Case record quantitative data were first examined by calculating frequencies (counts) of key variables of interest within the sample. Next, basic descriptive statistics were produced (means and standard deviations, percentages) and examined by relevant subgroups, such as child’s age at entry, documented parental substance use, selection criteria, and location (e.g., intake, ongoing file documents).

Appendix E. Participating Site and Sample Characteristics

The exhibits in this appendix present details about the sample, overall, and by method and data source.

State and Site Sample

The final study sample included data collected at 22 sites across 5 states. See exhibit 4 in chapter 2 for summary information on the five states in the study.

Sample by Method and Data Source

Exhibit 10 in chapter 2 presents the number of participants for each study component by state, and the case record sample in one state.

Survey Participants by Select Characteristics

CW Staff Survey Participants by Role

Exhibit E1 presents the number of survey participants by role across the five states. It also presents the percentages of the survey participants roles within each state and in total. The titles and roles of the participating child welfare (CW) staff varied across sites because of the unique administrative and staffing structure of each CW agency. Respondent roles were determined and categorized on a state-by-state basis by first reviewing all roles selected from the 15 options listed on the survey. The project director, data manager, and policy document review team lead then grouped the roles in accord with knowledge gained about CW staff roles in that state from the state's policy document review. Respondents who selected "other" and then described their role were reassigned if there was an appropriate category to which to reassign them. Survey participants were instructed to choose all roles that apply; thus, the total exceeds 100 percent.

Exhibit E1. CW Staff Survey Participants

Number and percentage of survey participants by responsibilities and state

Study Participant Role/ Responsibilities	State 1	State 2	State 3	State 4	State 5	Total
Frontline Staff	42 (55%)	14 (20%)	13 (36%)	21 (40%)	17 (46%)	106 (39%)
Supervisor/Manager	9 (12%)	20 (29%)	12 (33%)	10 (19%)	9 (24%)	57 (21%)
Hotline/Intake Staff	9 (12%)	9 (13%)	-	5 (10%)	2 (5%)	25 (9%)
Child Protective Services (CPS) Investigative Staff	26 (34%)	26 (37%)	18 (50%)	20 (38%)	13 (35%)	103 (38%)
Family Needs Assessors	8 (10%)	9 (13%)	3 (8%)	9 (17%)	6 (16%)	35 (13%)
Ongoing Case Management Staff	19 (25%)	13 (19%)	4 (11%)	14 (27%)	9 (24%)	59 (22%)
Permanency Staff	9 (12%)	16 (23%)	4 (11%)	12 (23%)	6 (16%)	47 (17%)
Total Staff Surveyed	76	70	36	52	37	271
Surveys Sent	84	80	62	63	48[a]	337[a]
Response Rate	90%	88%	58%[b]	83%	-	-

[a] The survey response rate in state 5 is unknown. Because of the state's IRB and data sharing agreement requirements prohibiting sharing identifying information of staff for research purposes, the team was unable to track the number of individuals to whom the site study liaison sent the surveys. Each site study liaison in state 5 was asked to send out 12 surveys to CW staff for a potential total of 48. [b] A lower-than-expected response rate was obtained in state 3, despite efforts to improve it. The window for completion of the survey was extended and multiple reminders were sent to respondents, including information about site level response rates to motivate completion. The study team identified three possible contributions: the additional burden placed on state 3 sites and staff (staff at each site had to prepare 50+ case files for record review) may have resulted in study fatigue; the data collection period was in October-November over multiple holidays, and the state CW director indicated that the state was preparing for a large CW initiative in the coming months.

Source: CW staff survey in all five states; *N* = 271.

Note: Constructed staff role/responsibility categories were not mutually exclusive. Respondents were asked to check all that apply.

Exhibits E2 and E3 present the number of years CW staff survey respondents worked in CW and in their current local CW agency, respectively.

Exhibit E2. Number of Years Survey Respondents Worked in CW Field

Number and percentage of respondents within each range of years, by state

State	Less than 1 year	1 to 5 years	6 to 10 years	11 to 20 years	20+ years
State 1	0	4 (5%)	16 (21%)	30 (39%)	26 (34%)
State 2	8 (11%)	29 (41%)	12 (17%)	15 (21%)	6 (9%)
State 3	2 (6%)	15 (42%)	8 (22%)	7 (19%)	2 (6%)
State 4	8 (15%)	19 (36%)	7 (13%)	12 (23%)	6 (11%)
State 5	0	14 (38%)	11 (30%)	9 (24%)	2 (5%)

Source: CW staff survey in all five states; *N* = 271; missing *n* = 3.

Exhibit E3. Number of Years Survey Respondents Worked at Local Agency

Number and percentage of respondents within each range of years, by state

State	Less than 1 year	1 to 5 years	6 to 10 years	11 to 20 years	20+ years
State 1	0	20 (26%)	14 (18%)	31 (41%)	11 (14%)
State 2	10 (14%)	34 (49%)	9 (13%)	11 (16%)	6 (9%)
State 3	3 (8%)	18 (50%)	7 (19%)	4 (11%)	2 (6%)
State 4	16 (31%)	18 (35%)	8 (15%)	5 (10%)	5 (10%)
State 5	0	19 (51%)	7 (19%)	10 (27%)	1 (3%)

Source: CW staff survey in all five states; *N* = 271; missing *n* = 2.

Service Providers Survey Participants by Role

Exhibit E4 shows the number and percentage of respondents to the service provider survey by state and role. Service provider surveys only were administered in the two in-depth data collection states (states 3 and 5).

Service providers were asked to indicate the role that best describes their professional role, from a list of five choices. For respondents who selected “Other,” the project director and data manager reviewed and re-assigned the roles if they fit into one of the other categories and also grouped two of the categories together with “Other” because of extremely small number of respondents in those categories.

Exhibit E4. Roles of Service Provider Survey Respondents

Number and percentage of survey respondents by state and type of service provider

Type of Service Provider	State 3	State 5	Total
Total Providers Surveyed	11	10	21
By Role			
Medical providers (e.g., primary care physician, pediatrician, nurse practitioner)	1 (9%)	3 (30%)	4 (19%)
Mental health provider (e.g., psychiatrist, psychologist, behavioral specialist, counselor, LPC, LSCW)	6 (55%)	5 (50%)	11 (52%)
Other[a]	3 (27%)	2 (20%)	5 (24%)

[a] Other includes three categories combined because of the small number of respondents: Developmental therapist of intervention services (e.g., such as speech pathologist, physical therapist, occupational therapist); Education specialist (e.g., early intervention specialist); Other, please describe.

Source: Service provider survey from states 3 and 5; *N* = 21.

Caregiver Participants

Exhibit E5 shows characteristics of caregivers participating in focus groups and interviews by state. Each caregiver provided some limited demographic data. Caregiver interviews and focus groups were administered only in the two in-depth data collection states (states 3 and 5).

Exhibit E5. Descriptive Characteristics of Caregivers

Number and percentage of caregivers by type of caregiver, age range of children cared for, number of children cared for, length of caregiving and percentage with biological children, by state

	State 3[a]	State 5[b]	Total
Type of Caregiver[c]			
Kinship	5 (22%)	5 (24%)	10 (23%)
Foster[d]	21 (91%)	20 (95%)	41 (93%)
Age Range of Children Cared for			
Newborn	18 (78%)	20 (95%)	38 (86%)
1 to 5	14 (61%)	11 (52%)	35 (80%)
6 to 10	16 (70%)	11 (52%)	27 (61%)

	State 3[a]	State 5[b]	Total
11 to 15	11 (48%)	7 (33%)	18 (41%)
16+	6 (26%)	2 (10%)	8 (18%)
Number of Children Cared for			
1 to 5 children	8 (35%)	10 (48%)	18 (41%)
6 to 10 children	3 (13%)	3 (14%)	6 (14%)
11 to 20 children	3 (13%)	2 (10%)	5 (11%)
21 to 50 children	4 (17%)	3 (14%)	7 (16%)
More than 50 children	5 (22%)	3 (14%)	8 (18%)
Length of Caregiving			
1 to 5 years	12 (52%)	11 (52%)	23 (52%)
6 to 10 years	3 (13%)	6 (29%)	9 (21%)
11 to 20 years	6 (26%)	3 (14%)	9 (21%)
21 or more years	2 (9%)	1 (5%)	3 (7%)
Percentage with Biological Children	18 (78%)	16 (80%)	34 (78%)

[a] Focus group participants (n = 23) [b] Interview participants (n = 21) [c] Participants could choose all that apply [d] "Foster" includes short-term, long-term, therapeutic, respite, and adopted-from-foster care caregivers.

Source: Close-ended response to questions in focus groups and interviews with caregivers in states 3 and 5; N = 44.

Case Records Sample

Case records were reviewed from a subsample of four CW agencies in one state (state 3). The original intention was to conduct case record reviews from four additional sites in state 5, but because of travel and other restrictions during the COVID-19 pandemic, these additional case reviews did not occur.

The target sample was 220 cases. The final sample of case records derived from agencies located in urban, suburban, and rural sites in state 3. Index cases (meaning one child from the family-level case) had to meet the following criteria:

- All cases involved at least one child who had come into care of the CW agency
- All cases had been opened for at least 90 days
- A subset of cases selected from each agency met one of the following criteria:

- **Known prenatal substance exposure**: cases with an allegation related to positive toxicology of a newborn
- **Maternal substance abuse**: cases with an allegation related to parental substance abuse
- **Related medical diagnosis**: cases where the child has a relevant medical condition (e.g., Attention-Deficit/Hyperactivity Disorder (ADHD), withdrawal symptoms)
- **Randomly selected**: cases were randomly selected from the entire pool of case files, to include those children without key indicators of potential prenatal substance exposure.

The final sample included 212 records. During data collection, it was discovered that some duplicate records had been pulled and some records were incomplete, resulting in a slightly smaller sample than anticipated.

Exhibit E6 shows the final number of cases included in the review by selection criteria. Additional details regarding selection criteria definitions are shared in Chapter 7 and in appendix F.

Exhibit E6. Final Case Record Review Sample

Number and percentage of case records by sample selection criteria

Selection Criteria Subgroup	Criteria Description	Number of Cases
Known prenatal substance exposure	Cases with an allegation related to positive toxicology of a newborn	58 (27%)
Maternal substance use	Cases with an allegation related to parental substance abuse	60 (28%)
Related medical diagnoses	Cases where the child has a relevant medical condition (e.g., ADHD, withdrawal symptoms)	65 (31%)
Randomly selected	Random selection, anticipated to largely include children without key indicators of potential prenatal substance exposure	29 (14%)

Source: Case record reviews in state 3; *N* = 212.

Appendix F. Supporting Data

This appendix features data supporting key findings presented in the main report. Exhibits are organized by chapter, then by category.

Laws and Policies Guiding CW Response to PSE

The following data and their takeaways support key findings related to laws and policies guiding CW response to PSE (exhibits F1-F3).

Exhibit F1. Overview of CW Agency Activities in Response to CAPTA/CARA

Activities and planning described by State CW Directors in response to CAPTA/CARA[102]

	State 1	State 2	State 3	State 4	State 5
Notification of Newborns with PSE[103]					
CW policy changes to use alternative response when notified of newborn with PSE	Yes	No	Yes	Yes	Yes

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[102] The Child Abuse Prevention and Treatment Act (CAPTA), originally enacted on January 31, 1974 (P.L. 93-247), is federal legislation that provides funding and guidance to state public CW systems. This act has been amended several times and was last reauthorized on December 20, 2010, by the CAPTA Reauthorization Act of 2010 (P.L. 111-320). It was amended in 2015, 2016, and 2018, and most recently, certain provisions of the act were amended on January 7, 2019, by the Victims of Child Abuse Act Reauthorization Act of 2018 (P.L. 115-424). The Comprehensive Addiction and Recovery Act (CARA) of 2016 amended CAPTA in sections 106(b)(2)(B)(ii) and (iii)Subsections (b)(2)(B)(ii), requiring states to have “policies and procedures (including appropriate referrals to child protection service systems and for other appropriate services) to address the needs of infants born with and identified as being affected by substance abuse or withdrawal symptoms resulting from prenatal drug exposure, or a Fetal Alcohol Spectrum Disorder, including a requirement that health care providers involved in the delivery or care of such infants notify the child protective services system of the occurrence of such condition of such infants…such notification shall not be construed to I.- establish a definition under Federal law of what constitutes child abuse or neglect; or II. - require prosecution for any illegal action”.

[103] States may create CW systems that use “alternative responses” when allegations of child maltreatment are determined to involve low to moderate risk, and “investigative responses” for reports of more severe child maltreatment that may lead to the CW agency asking the court for legal custody of the child.

	State 1	State 2	State 3	State 4	State 5
Child Welfare Policy Revisions					
Use of alternative response when agency is notified of newborn with PSE	Yes	No	Yes	Yes	Yes
Plan of Safe Care[104]					
Plan of Safe Care Development Processes	Implemented	Planning	Implemented	Implemented	Planning
State entity responsible for developing initial Plan of Safe Care	CW Agency	n/a	CW Agency & Other Providers	Hospitals	CW Agency
Data Collection Process[105]					
Information collected on number of: newborns identified with PSE, plans of safe care, service referrals for families	Implemented	Implemented	Implemented	Implemented	Planning
Use of alternative response when agency is notified of newborn with PSE	Yes	No	Yes	Yes	Yes

Source: State CW Director interviews in all five states; *N* = 5 interviews.

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[104] The Comprehensive Addiction and Recovery Act (CARA) of 2016 amended CAPTA in sections 106(b)(2)(B)(iii) requires the development of a plan of safe care for the infant born and identified as being affected by substance abuse or withdrawal symptoms or Fetal Alcohol Spectrum Disorder to ensure the safety and well-being of such infant following release from the care of healthcare providers, including addressing the health and substance use disorder treatment needs of the infant and affected family or caregiver.

[105] The Comprehensive Addiction and Recovery Act (CARA) of 2016 amended CAPTA in sections 106(b)(2)(B)(ii) and (iii) by adding these requirements to Section 106(d) Annual State Data Reports: (18) The number of infants—
(A) identified under subsection (b)(2)(B)(ii); (B) for whom a plan of safe care was developed under subsection (b)(2)(B)(iii); and (C) for whom a referral was made for appropriate services, including services for the affected family or caregiver, under subsection (b)(2)(B)(iii).

Takeaway: State CW directors described policy changes at several levels, including changes set forth in state legislation, revisions to CW agency policies, and creating new processes in response to CARA 2016.

Exhibit F2. State Legislation Addressing Parental Substance Use and Child Maltreatment

Substances included in the definition of child maltreatment by state

Definition of Child Maltreatment:	State 1	State 2	State 3	State 4	State 5
Parent manufactures/sells substances which may cause harm through environmental exposure/ingestion	meth-amphetamine, amphetamine, heroin, cocaine, opioids	meth-amphetamine	meth-amphetamine	meth-amphetamine, cocaine, heroin, marijuana	meth-amphetamine
Parent uses/ possesses substances which may contribute to child maltreatment	meth-amphetamine, amphetamine, heroin, cocaine, opioids	--	--	--	controlled substances, alcohol
Parent drives under the influence with child in vehicle	--	--	alcohol, marijuana, or any drug	--	--
Prenatal substance exposure	cocaine, heroin, amphetamine, meth-amphetamine, or other illegal drugs	opiates, hallucinogens, stimulants, depressants	controlled substances, alcohol	controlled substances, alcohol	--

Source: State legislation in all five states

Takeaway: Document review revealed that all five states have laws that refer to situations related to parental substance use in definitions of child maltreatment. Study states varied in which substances were considered in these determinations.

Exhibit F3. Direct Contact Staff Referring to CW Agency Policies Guiding Identification and Care of Children with PSE

Number of CW staff by theme and state

CW Staff Interviews	State 1	State 2	State 3	State 4	State 5	Total
Referred to any CW agency policy	23	29	19	31	17	118
Referred to PSE policy on newborns	19	5	16	16	5	60
Referenced policies applied when parents use substances	10	5	3	8	5	31
Referenced policies applied when parents use substances during pregnancy	0	1	0	1	0	2
Referenced policies used to guide safety/risk assessments	5	8	0	2	6	21
Referred to state definition of CAN	8	2	0	1	4	15
Referenced policies guiding family needs assessment	0	0	0	1	0	1
Referenced policies applied when children placed out of home	4	2	0	2	1	9

Source: CW staff interviews with frontline, ongoing case management staff, and frontline/ongoing case management staff; *n* = 118.

Takeaway: While high numbers of CW staff referred to the existence of relevant policies, relatively few CW staff referred to specific state and local agency policies regarding key aspects of parental substance use and PSE. About half of the staff mentioned policies regarding newborn exposures.

Staff Training and Knowledge Regarding PSEs

The following data and their takeaways support key findings related to staff training and knowledge (exhibits F4–F8), understanding of PSE (exhibits F9–F20), and perceived training needs (exhibit F21).

Exhibit F4. PSE and PAE Training Received by CW Staff Interview Participants

Number and percentage of CW staff reporting receipt of training by type of training and state

	State					Overall (n=126)
	1 (n=26)	2 (n=29)	3 (n=19)	4 (n=33)	5 (n=19)	
Yes, any training received	16 (61%)	27 (93%)	13 (68%)	27 (82%)	16 (84%)	99 (79%)
Yes, training included PAE	13 (50%)	25 (86%)	11 (58%)	16 (48%)	13 (68%)	78 (62%)
No PSE or PAE training received	10 (38%)	2 (7%)	6 (32%)	6 (18%)	3 (16%)	27 (21%)

Source: Close-ended responses to questions in CW staff interviews with frontline, ongoing case management, and frontline/ongoing case management staff in all five states; *n* = 126.

Takeaway: In interviews, the majority (about two-thirds to three-quarters) of CW staff reported having participated in training on PSE topics. Relative to other states, fewer staff in state 3 reported having been trained on PSE topics.

Exhibit F5. PSE and PAE Training Received by CW Staff Survey Respondents

Number and percentage of CW staff reporting receipt of training by topic and state

	State					Overall (n=271)
	1 (n=76)	2 (n=70)	3 (n=36)	4 (n=52)	5 (n=37)	
Training taken on any PSE topic						
Yes, PSE Training Taken	66 (87%)	59 (84%)	21 (58%)	44 (85%)	32 (86%)	222 (82%)
Missing	*5 (7%)*	*8 (11%)*	*14 (39%)*	*7 (13%)*	*3 (8%)*	*37 (14%)*
Training taken on any PAE topic						
Yes, PAE Training Taken	69 (91%)	59 (84%)	20 (56%)	44 (85%)	32 (86%)	224 (83%)

Missing	*4 (5%)*	*8 (11%)*	*14 (39%)*	*6 (11%)*	*3 (8%)*	*35 (13%)*
Training taken on any PSE or PAE topic						
Yes, PSE/PAE Training Taken	69 (91%)	59 (84%)	21 (58%)	46 (88%)	32 (86%)	227 (84%)
Missing	*4 (5%)*	*8 (11%)*	*14 (39%)*	*6 (11%)*	*3 (8%)*	*35 (13%)*

Source: CW staff survey in all five states; *N* = 271.
Note: Constructed variable, aggregating responses to training in multiple listed topics.

Takeaway: The majority (over three-quarters) of surveyed CW staff reported having participated in training on PSE topics and PAE topics, with slight variation by state.

Exhibit F6. PSE and PAE Training Received by CW Staff Interview Participants Across Roles

Number and percentage of CW staff interview participants by type of training received and respondent role

	Respondent Role		
	Frontline (n=60)	Ongoing Case Management (n=49)	Frontline/Ongoing Case management (n=17)
Yes, any training received (n=99)	48 (80%)	36 (73%)	15 (88%)
Yes, training included PAE (n=78)	38 (63%)	27 (55%)	13 (76%)

Source: Close-ended responses to questions in interviews with frontline, ongoing case management, and frontline/ongoing case management staff in all five states; *n* = 126.

Takeaway: In interviews, four-fifths of CW staff reported receiving training in PSE, with slightly less reporting training in PAE, particularly among ongoing case managers.

Exhibit F7. PSE and PAE Training Received by CW Staff Survey Respondents Across Roles

Number and percentage of CW staff survey respondents by type of training received and respondent role

	Respondent Role[a]						
	Investigative Worker (n=103)	Family Needs Assessor (n=35)	Frontline (n=107)	Hotline/ Intake (n=25)	Ongoing Case Management (n=59)	Permanency (n=47)	Supervisor (n=60)
Training taken on any PSE topic							
Yes, PSE Training Taken	82 (80%)	27 (77%)	85 (79%)	20 (80%)	45 (76%)	39 (83%)	51 (85%)
Missing	*16 (15%)*	*4 (11%)*	*17 (16%)*	*3 (12%)*	*10 (17%)*	*6 (13%)*	*6 (10%)*
Training taken on any PAE topic							
Yes, PAE Training Taken	84 (82%)	30 (86%)	89 (83%)	19 (76%)	46 (78%)	40 (85%)	50 (83%)
Missing	*15 (15%)*	*3 (9%)*	*16 (15%)*	*3 (12%)*	*10 (17%)*	*6 (13%)*	*5 (8%)*

[a] Respondents were able to select more than one role.

Source: CW staff survey in all five states; *N* = 271.

Takeaway: The majority (76-85 percent) of surveyed CW staff reported receiving training in PSE and PAE, with no discernible variation across roles and responsibilities.

Exhibit F8. Sources of Staff Training on PSE and PAE for CW Staff Survey Respondents

Number and percentage of survey respondents receiving training by source of training

Source[a]	Number (Percentage)
Courses or sections of courses in undergraduate and/or graduate school	110 (41%)
Training through State CW Agency	163 (60%)
In-House Local CW Agency Training	92 (34%)
Continuing Education Units	57 (21%)

Other Source (e.g., training/TA provider)	54 (20%)
Training not offered/Did not receive any training on topic	67 (25%)

[a] These are not mutually exclusive categories. Respondents may have indicated having more than one training source depending on the training topic.

Source: CW staff survey in all five states; *N* = 271; missing *n* = 35.

Note: Constructed variable, aggregated across PSE and PAE.

Takeaway: Most surveyed staff (60 percent) received PSE training through the state CW agency, with another third (34 percent) reporting in-house local CW agency training. Undergraduate and graduate education was also a frequent source of training (41 percent).

Exhibit F9. Sources of CW Staff Training on PSE and PAE for CW Staff Interview Respondents

Number and percentage of interview participants receiving training by source of training

Source	Number (Percentage)
PSE Internal Training (state or local agency)	105 (83%)
PSE External Training (source other than state or local agency)	66 (52%)

Source: CW staff interviews with frontline, ongoing case management, and frontline/ongoing case management staff in all five states; *n* = 126

Takeaway: Most surveyed staff (60 percent) received PSE training through the state CW agency, with another third (34 percent) reporting in-house local CW agency training. Undergraduate and graduate education was also a frequent source of training (41 percent).

Exhibit F10. Local Area Directors' Report of PSE and PAE Training Available to CW Staff

Number and percentage of local area directors indicating availability of training by state

	State					Overall (n=26)
	1 (n=5)	2 (n=4)	3 (n=6)	4 (n=6)	5 (n=5)	
Internal (state or local agency) PSE Training is available to staff	5 (100%)	2 (50%)	3 (50%)	3 (50%)	5 (100%)	18 (69%)

Source: Local area director interviews in all five states; *n* = 26.

Takeaway: Although many local area directors knew of internal PSE training available to their staff, many did not.

Exhibit F11. Self-reported Level of PSE and PAE Knowledge

Number and percent of CW staff indicating PSE and PAE knowledge by knowledge level and data collection method

	Interview (n=152)	Survey (n=271)
Level of PSE knowledge		
No Knowledge	0	3 (1%)
Beginner	36 (24%)	72 (27%)
Intermediate	97 (64%)	141 (52%)
Advanced	19 (12%)	20 (7%)
Missing	*0*	*35 (13%)*
Level of PAE knowledge		
No knowledge	8 (5%)	3 (1%)
Beginner	57 (37%)	71 (26%)
Intermediate	70 (46%)	146 (54%)
Advanced	17 (11%)	16 (6%)
Missing	*0*	*35 (13%)*

Sources: Close-ended responses to questions in local area director interviews and CW staff interviews with frontline, ongoing case management, and frontline/ongoing case management staff in all five states; *n* = 152. CW staff survey data in all five states; *N* = 271; missing *n* = 35.

Takeaway: Most staff report a high level of awareness of prenatal substance use effects, across both data sources/methods. Yet, about one-quarter reported ‘beginner’ knowledge for PSE and about one-quarter to one-third reported this level for PAE.

Exhibit F12. PSE and PAE Self-Reported Knowledge by Years of Experience in the CW Field

Number and percentage of CW survey respondents indicating PSE and PAE knowledge by knowledge level and years of experience

Knowledge	Less than 1 year (n=18)	1 to 5 years (n=81)	6 to 10 years (n=54)	11 to 20 years (n=73)	20+ years (n=42)
PSE					

No Knowledge	1 (6%)	0	1 (2%)	1 (1%)	0
Beginner	5 (28%)	27 (33%)	10 (18%)	18 (25%)	12 (29%)
Intermediate	6 (33%)	38 (47%)	33 (61%)	42 (57%)	21 (50%)
Advanced	1 (6%)	5 (6%)	4 (7%)	4 (5%)	6 (14%)
Missing	*5 (28%)*	*11 (14%)*	*6 (11%)*	*8 (11%)*	*3 (7%)*
PAE					
No Knowledge	1 (6%)	0	0	2 (3%)	0
Beginner	5 (28%)	29 (36%)	10 (18%)	20 (27%)	7 (17%)
Intermediate	7 (39%)	36 (44%)	35 (65%)	41 (56%)	26 (62%)
Advanced	0	5 (6%)	3 (6%)	2 (3%)	6 (14%)
Missing	*5 (28%)*	*11 (14%)*	*6 (11%)*	*8 (11%)*	*3 (7%)*

Source: CW staff survey in all five states; *N* = 271; missing *n* = 35.

Takeaway: Level of self-reported knowledge increased as staff gained experience in the CW field and at the agency.

Exhibit F13. PSE and PAE Self-Reported Knowledge by Years of Experience in the CW Agency

Number and percentage of CW survey respondents indicating PSE and PAE knowledge by knowledge level and years of experience

Knowledge	Less than 1 year (n=29)	1 to 5 years (n=109)	6 to 10 years (n=45)	11 to 20 years (n=61)	20+ years (n=25)
PSE					
No Knowledge	1 (3%)	1 (1%)	0	1 (2%)	0
Beginner	8 (28%)	33 (30%)	11 (24%)	15 (25%)	5 (20%)
Intermediate	11 (38%)	50 (46%)	31 (69%)	35 (57%)	14 (56%)
Advanced	1 (3%)	9 (8%)	1 (2%)	5 (8%)	4 (16%)
Missing	*5 (28%)*	*11 (14%)*	*6 (11%)*	*8 (11%)*	*3 (7%)*
PAE					
No Knowledge	1 (3%)	0	1 (2%)	1 (2%)	0

Beginner	8 (28%)	35 (32%)	9 (20%)	16 (26%)	3 (12%)
Intermediate	12 (41%)	50 (46%)	32 (71%)	36 (59%)	16 (64%)
Advanced	0	8 (7%)	1 (2%)	3 (5%)	4 (16%)
Missing	*5 (28%)*	*11 (14%)*	*6 (11%)*	*8 (11%)*	*3 (7%)*

Source: CW staff survey in all five states; *N* = 271; missing *n* = 35.

Across roles, close to half of staff in non-supervisory roles reported having 1-5 years of experience at the CW agency, and those in supervisory roles had more years of experience.

Takeaway: Level of self-reported knowledge increased as staff gained experience in the CW field and at the agency.

Exhibit F14. Years of Experience in the CW Agency by Role

Number and percentage of CW survey respondents CW role by years of experience

Role[a]	Less than 1 year	1 to 5 years	6 to 10 years	11 to 20 years	20+ years
Investigative Worker (n=103)	15 (15%)	54 (52%)	9 (9%)	20 (19%)	5 (5%)
Family Needs Assessor (n=35)	5 (14%)	15 (43%)	4 (11%)	9 (26%)	2 (6%)
Frontline (n=107)	12 (11%)	52 (49%)	12 (11%)	20 (19%)	11 (10%)
Hotline/ Intake (n=25)	0	12 (48%)	3 (12%)	9 (36%)	1 (4%)
Ongoing Case Management (n=59)	9 (15%)	29 (49%)	9 (15%)	10 (17%)	2 (3%)
Permanency (n=47)	5 (11%)	26 (55%)	3 (6%)	9 (19%)	4 (9%)
Supervisor (n=60)	1 (2%)	7 (12%)	20 (33%)	23 (38%)	9 (15%)

[a] Staff could select more than one role.

Source: CW staff survey in all 5 states; *N* = 271.

Takeaway: Regardless of role, the majority of survey respondents had less than 5 years of experience.

Exhibit F15. Results of Staff PAE Knowledge Quiz by Years of Experience

Mean and range of the number of correct answers by years of experience at the CW agency and CW field

	Mean	Range
Years worked at local agency		
<1 year (n = 29)	7.52	4-9
1-5 years (n = 109)	7.51	4-9
>20 years (n = 25)	7.79	6-9
Years worked in CW field		
<1 year (n = 18)	7.46	4-9
1-5 years (n = 81)	7.46	5-9
>20 years (n = 42)	7.85	6-9

Source: CW staff survey in all five states; *n* = 237.

Takeaway: Staff with less experience in CW (0-5 years) had the lowest mean number of correct answers, and those with the most CW or agency experience (>20 years) had the highest mean number of correct answers.

Exhibit F16. Top Three Items Chosen by CW Staff When Asked to Identify PAE Effects on Children

Number and percentage of CW staff choosing possible effect of PAE on children

Possible Effect	Selected Yes
Abnormal facial characteristics	230 (85%)
Learning disabilities	231 (85%)
Intellectual disability	229 (84%)
Missing	34 (12%)

Source: CW staff survey in all five states; *N* = 271.

Takeaway: When asked to identify the effects of PAE on a child, high proportions of staff identified abnormal facial features, learning disabilities, and intellectual disabilities, at comparable rates.

Exhibit F17. Results of CW Staff Survey PAE Knowledge Quiz, by State

Mean and median number of correct answers within each state

State	Mean	Median
1 (n = 76)	7.61	8.00
2 (n = 70)	7.81	8.00
3 (n = 36)	7.23	7.00
4 (n = 52)	7.64	8.00
5 (n = 37)	7.38	7.50

Source: CW staff survey in all five states; *N* =271.

Takeaway: Collectively, surveyed staff from the state 3 had the lowest mean number of correct answers to the "true/false" quiz.

Exhibit F18. Years Worked at Local Agency by State

Number and percentage of survey respondents with range of years of experience by state

State	Less than 1 year	1 to 5 years	6 to 10 years	11 to 20 years	20+ years
State 1	0	20 (26%)	14 (18%)	31 (41%)	11 (14%)
State 2	10 (14%)	34 (49%)	9 (13%)	11 (16%)	6 (9%)
State 3	3 (8%)	18 (50%)	7 (19%)	4 (11%)	2 (6%)
State 4	16 (31%)	18 (35%)	8 (15%)	5 (10%)	5 (10%)
State 5	0	19 (51%)	7 (19%)	10 (27%)	1 (3%)

Source: CW staff survey in all five states; *N* =271; missing *n* = 2.

Takeaway: In the CW field overall, turnover/new staff may be one reason for the knowledge gaps.

Exhibit F19. Years Worked in CW Field by State

Number and percentage of survey respondents with range of years of experience by state

State	Less than 1 year	1 to 5 years	6 to 10 years	11 to 20 years	20+ years
State 1	0	4 (5%)	16 (21%)	30 (39%)	26 (34%)
State 2	8 (11%)	29 (41%)	12 (17%)	15 (21%)	6 (9%)
State 3	2 (6%)	15 (42%)	8 (22%)	7 (19%)	2 (6%)
State 4	8 (15%)	19 (36%)	7 (13%)	12 (23%)	6 (11%)
State 5	0	14 (38%)	11 (30%)	9 (24%)	2 (5%)

Source: CW staff survey in all five states; *N* =271; missing *n* = 2.

Takeaway: There was a wide range of years of experience among CW staff, from less than one year to more than 20 years of experience working in the CW field.

Exhibit F20. Staff Responses to Question: What is the Most Harmful Prenatal Exposure?

Number and percentage of respondents indicating various substances are the most harmful prenatal exposure by state and overall

Substance category	Aggregate	State				
		1 (*n* = 76)	2 (*n* = 70)	3 (*n* = 36)	4 (*n* = 52)	5 (*n* = 37)
Many/All	105 (39%)	31 (41%)	24 (34%)	14 (39%)	25 (48%)	11 (30%)
Alcohol	65 (24%)	13 (17%)	27 (39%)	4 (11%)	8 (15%)	13 (35%)
Opioids	18 (7%)	6 (8%)	5 (7%)	2 (6%)	2 (4%)	3 (8%)
Methamphetamine	12 (4%)	10 (13%)	2 (3%)	0	0	0
Benzodiazepine	2 (1%)	0	0	0	2 (4%)	0
Cocaine	2 (1%)	0	0	0	2 (4%)	0
Missing/no response	*60 (22%)*	*12 (16%)*	*12 (17%)*	*16 (44%)*	*13 (25%)*	*7 (19%)*

Source: CW staff survey in all five states; *N* =271.

Takeaway: The largest proportion of staff identified multiple or all substances as the most harmful, followed alcohol, then by opioids and methamphetamine.

Exhibit F21. PSE and PAE Training Gaps Reported by CW Staff
Number and percentage of CW staff reporting various training gaps by state and overall

Identified Gap:	State					Overall
	1 (n=32)	2 (n=34)	3 (n=31)	4 (n=40)	5 (n=34)	(n=171)
Indicators of PSE	14 (43%)	14 (41%)	22 (71%)	21 (52%)	12 (35%)	83 (48%)
Long term effects of PSE	7 (22%)	9 (26%)	14 (45%)	15 (37%)	12 (35%)	57 (33%)
General Information on Substances	12 (37%)	10 (29%)	6 (19%)	10 (25%)	8 (23%)	46 (27%)
Identification of PSE	9 (28%)	10 (29%)	6 (19%)	4 (10%)	10 (29%)	39 (23%)
Information on Resources, Services, and Treatment	9 (28%)	9 (26%)	5 (16%)	11 (27%)	6 (18%)	40 (23%)
Suggested Enhancements	12 (37%)	4 (12%)	9 (29%)	7 (17%)	14 (41%)	46 (27%)

Source: CW interviews with state CW directors, local area directors, frontline, ongoing case management, and frontline/ongoing case management staff in all five states; local area data staff in two states; *n* = 171.

Takeaway: CW staff raised targeted needs and requests for more training in several areas.

Identification of Children with PSEs

The following data and their takeaways support key findings related to estimated prevalence of children prenatally exposed to substances (exhibits F22–F23); reported PSE assessment practices and ideal timing to assess for PSE (exhibits F24–F25); CW staff reported methods for gathering information on PSE (exhibits F26–F28); and variation in PSE information gathering methods (exhibits F29–F31).

Exhibit F22. Average Perceived Prevalence of Children With PAE by State

CW staff estimated percentage of children with an open case at their agency that were prenatally exposed to alcohol by state

State ID	N	*Missing*	Mean	Median	Minimum	Maximum
1	70	6	38%	40%	1%	85%
2	57	13	36%	30%	0	90%
3	22	14	27%	17%	1%	85%
4	40	12	26%	25%	0	85%
5	30	7	38%	33%	5%	99%

Source: CW staff survey in all five states; *N* = 271.

Takeaway: Staff from states 1, 2, and 5 provided comparatively higher average PAE estimates than staff from states 3 and 4.

Exhibit F23. Average Perceived Prevalence of Children With PSEs Other Than Alcohol by State

CW staff estimated percentage of children with an open case at their agency that were prenatally exposed to drugs other than alcohol by state

State ID	N	*Missing*	Mean	Median	Minimum	Maximum
1	72	*4*	52%	50.00	5%	95%
2	58	*12*	52%	50%	7%	99%
3	22	*14*	50%	50%	15%	85%
4	41	*11*	51%	50%	10%	90%
5	31	*6*	55%	50%	15%	99%

Source: CW staff survey in all five states; *N* = 271.

Takeaway: Similar average estimates were provided from each state for children who were prenatally exposed to drugs other than alcohol that ranged from 50.54 percent to 54.61 percent.

Exhibit F24. Frequency of CW Staff Assessment of PSE

Number and percentage of CW staff indicating PSE is assessed with most, some, or relatively few children in contact with CW agency, by respondent type

	Respondent Type			
	Frontline (*n* = 61)	Ongoing Case Management (*n* = 49)	Frontline/Ongoing Case Management (*n* = 16)	TOTAL (*n* = 126)
Most	24 (39%)	30 (61%)	4 (20%)	58 (46%)
Some	27 (44%)	14 (29%)	11 (67%)	52 (40%)
Relatively Few	8 (13%)	5 (10%)	2 (13%)	15 (12%)
Missing	*2 (3%)*	*0*	*0*	*2 (2%)*
Total	100%	100%	100%	100%

Source: CW staff interviews in all five states; *n* = 126.

Takeaway: Ongoing case management staff were more likely than frontline staff and staff that perform both frontline and ongoing case management duties to report that they assess PSE with “most” children that come into contact with their agency.

Exhibit F25. CW Staff Perceptions of Ideal Point to Assess Child History of PSE

Percentage of survey respondents indicating various time points are ideal to assess child history of PSE by state

	State ID					
	1 (*n* = 76)	2 (*n* = 70)	3 (*n* = 36)	4 (*n* = 52)	5 (*n* = 37)	Total (*N* = 271)
Intake/screening of allegations of child abuse or neglect	21%	41%	31%	25%	35%	30%
Child protection investigations of screened-in reports to determine occurrence/assess for risk of abuse and neglect	53%	37%	28%	48%	49%	44%
Family/child needs assessment for mandatory services	9%	4%	1%	12%	5%	7%
Service planning during ongoing case management	12%	4%	0	2%	5%	6%

	State ID					
	1 (*n* = 76)	2 (*n* = 70)	3 (*n* = 36)	4 (*n* = 52)	5 (*n* = 37)	Total (*N* = 271)
Other (please specify)	0	1%	0	4%	3%	1%
Missing	*5%*	*11%*	*39%*	*10%*	*3%*	*12%*
Total	100%	100%	100%	100%	100%	100%

Source: CW staff survey in all five states; *N* = 271.

Takeaway: A majority of CW staff across all five states indicated that the ideal point to assess for a child's history of prenatal substance exposure would be early in case management.

Exhibit F26. PSE Identification/Information Gathering Methods by State

Number and percentage of CW staff reporting various methods of identifying PSE by method and state [a,b]

	State 1 (*n* = 31)	State 2 (*n* = 33)	State 3 (*n* = 25)	State 4 (*n* = 39)	State 5 (*n* = 24)	TOTAL (*N* = 152)
Identified at birth by a hospital	**30 (97%)**	**30 (91%)**	**24 (96%)**	**35 (90%)**	**23 96%)**	**142 (93%)**
Behavioral indicator(s)	**25 (81%)**	**28 (85%)**	14 (56%)	28 (72%)	**22 (92%)**	**117 (77%)**
Case record documentation	**22 (71%)**	21 (64%)	**20 (80%)**	**33 (85%)**	**21 (88%)**	**117 (77%)**
Developmental milestone(s)	18 (58%)	**28 (85%)**	**17 (68%)**	**30 (77%)**	18 (75%)	111 (73%)
CW screening or assessments	**22 (71%)**	24 (73%)	**17 (68%)**	20 (51%)	12 (50%)	95 (63%)
Mother provides information	**22 (71%)**	18 (55%)	11 (44%)	18 (46%)	12 (50%)	81 (53%)
Cognitive indicator(s)	13 (42%)	18 (55%)	13 (52%)	10 (26%)	16 (67%)	70 (46%)
Collateral source	12 (39%)	14 (42%)	10 (40%)	15 (38%)	16 (67%)	67 (44%)
Physical characteristics	7 (23%)	11 (33%)	7 (28%)	11 (28%)	9 (38%)	45 (30%)

[a] The most commonly reported PSE information gathering methods have been bolded for each state. Columns do not total 100% since more than one information gathering method could have been reported by each interview respondent.

[b] Interview code definitions used with PSE information gathering methods are listed in appendix G.

Source: CW staff interviews: Asked of frontline, ongoing case management, and frontline/ongoing case management staff, and local area directors in all five states; *N* = 152.

Takeaway: Across all five states, identification by hospitals at the time of birth was the top reported method for either identifying or suspecting PSE.

Exhibit F27. Most Commonly Reviewed Information Used to Identify PSE

Number and percentage of CW staff reporting various sources of information are among the three most common

	Observation of child's home		Birth records		Develop-mental assessments		Other medical records		Information shared by schools		Conver-sations with the mother		Collateral reports		Observat-ions of the child		Judicial review or court reports		Other	
Rank	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
First	11	4%	134	49%	8	3%	26	10%	5	2%	31	11%	12	4%	8	3%	3	1%	0	0
Second	8	3%	29	11%	26	10%	60	22%	4	1%	59	22%	20	7%	29	11%	1	<1%	2	1%
Third	16	6%	30	11%	22	8%	39	14%	12	4%	43	16%	39	14%	34	13%	0	0	2	1%
Not selected	203	75%	45	17%	182	67%	113	41%	217	80%	105	39%	167	62%	167	62%	234	86%	234	86%

Source: CW staff survey in all five states; *N* = 271.
Note: Missing *n* =33 (12%).

Takeaway: The most commonly reviewed sources of information to identify PSE included birth records, conversations with mothers, and other medical records.

Exhibit F28. Sources of Information Considered to Be Accurate to Determine PSE

Number and percentage of CW staff reporting various sources of information are among the three most common accurate sources

	Observations of child's home		Birth records		Develop-mental assessments		Other medical records		Information shared by schools		Conver-sations with the mother		Collateral reports		Observa-tions of the child		Judicial review or court reports		Other	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Ranked first	6	2%	140	52%	19	7%	46	17%	3	1%	10	4%	6	2%	6	2%	3	1%	1	<1%
Ranked second	5	2%	32	12%	37	14%	98	36%	4	1%	20	7%	14	5%	27	10%	2	1%	2	1%
Ranked third	7	3%	50	18%	58	21%	29	11%	7	3%	27	10%	23	9%	33	12%	3	1%	0	0
Not selected by any respond-ent	222	82%	18	7%	126	46%	67	25%	226	83%	183	68%	197	73%	174	64%	232	86%	237	87%

Source: CW staff surveys in all five states; *N* = 271.
Note: Missing *n* = 31 (11%).

Takeaway: The most accurate sources of information to identify PSE included birth records, other medical records, and developmental assessments.

Exhibit F29. PSE Identification/Information Gathering by Phase of Case Management

Number and percentage of CW staff reporting identification method or documentation at intake or during ongoing case management of case

	Intake (*N* = 152)[a]	Ongoing Case Management (*N* = 152)[a]
Identified at birth by a hospital	**128 (84%)**	47 (31%)
Behavioral indicator(s)	56 (37%)	**74 (49%)**
Case record	62 (41%)	**73 (48%)**
Developmental milestone(s)	51 (34%)	**63 (41%)**
CW screening or assessments	68 (45%)	48 (32%)
Mother provides information	56 (37%)	31 (20%)
Cognitive indicator(s)	29 (19%)	32 (21%)
Collateral source	49 (32%)	16 (11%)
Physical characteristics	15 (10%)	22 (14%)

[a] One or both phases of case management could be applied within the same interview transcript. Columns do not total 100% since more than one information gathering method could have been reported by each interview respondent. Interview code definitions used with PSE information gathering methods are listed in appendix G.

Source: CW staff interviews; asked of frontline, ongoing case management, and frontline/ongoing case management staff, and local area directors in all five states; *N* = 152.

Takeaway: The most common method used to gather relevant PSE information for intake phase of case management mainly included reports made by hospitals at the time of a child's birth, while common methods used to gather relevant PSE information during ongoing phase of case management were more evenly distributed.

Exhibit F30. PSE Identification/Information Gathering by Type of Respondent

Number and percentage of CW staff reporting identification method or documentation by CW role[a]

	Frontline (*n* = 60)	Ongoing Case Management (*n* = 49)	Frontline & Ongoing Case Management (*n* = 17)	Local Area Director (*n* = 26)
Identified at birth by a hospital	**58 (97%)**	**46 (94%)**	**17 (100%)**	**21 (81%)**
Behavioral indicator(s)	**43 (72%)**	41 (84%)	13 (76%)	**20 (77%)**
Case record	35 (58%)	**44 (90%)**	13 (76%)	**25 (96%)**
Developmental milestone(s)	**41 (68%)**	**43 (88%)**	**17 (100%)**	10 (38%)
CW screenings or assessments	38 (63%)	27 (55%)	**14 (82%)**	16 (62%)
Mother provides information	30 (50%	26 (53%)	11 (65%)	14 (54%)
Cognitive indicator(s)	27 (45%)	23 (47%)	6 (35%)	14 (54%)
Collateral source	27 (45%)	22 (45%)	7 (41%)	11 (42%)
Physical characteristics	14 (23%)	17 (35%)	6 (35%)	8 (31%)

[a] The most commonly reported PSE information gathering methods have been bolded for each state. Columns do not total 100% since more than one information gathering method could have been reported by each interview respondent. Interview code definitions used with PSE information gathering methods are listed in appendix G.

Source: CW staff interviews; asked of frontline, ongoing case management, and frontline/ongoing case management staff, and local area directors in all five states; *N* = 152.

Takeaway: Frontline staff, ongoing case management staff, 'combined' frontline/ongoing case management staff all indicated that identification at the time of birth by hospitals was the most common way PSE was identified.

Exhibit F31. PSE Identification/Information Gathering Patterns by Child Age

Number and percentage of CW staff reporting identification method or documentation[a] for younger and older children

	Younger children[b] (*N* = 152)	Older children[b] (*N* = 152)
Identified at birth by a hospital	**108 (71%)**	39 (26%)

Behavioral indicator(s)	53 (35%)	**66 (43%)**
Case record	37 (24%)	36 (24%)
Developmental milestone(s)	44 (29%)	33 (22%)
CW screening or assessments	18 (12%)	17 (11%)
Mother provides information	33 (22%)	24 (16%)
Cognitive indicator(s)	26 (17%)	47 (31%)
Collateral source	28 (18%)	10 (7%)
Physical characteristics	15 (10%)	12 (8%)

[a] Interview code definitions used with PSE information gathering methods are listed in appendix G.

[b] Both age categories could be applied within the same transcript and to the same excerpted text. The most commonly reported PSE information gathering methods have been bolded for each state. Columns do not total 100% since more than one information gathering method could have been reported by each interview respondent.

Source: CW staff interviews; asked of frontline, ongoing case management, and frontline/ongoing case management staff, and local area directors in all five states; *N* = 152.

Takeaway: Identifying PSE by hospital reports at birth was most commonly referenced for younger children. The most reported methods used to gather relevant PSE information referenced for older children were distributed across different information gathering methods.

Service Referrals For Children Prenatally Exposed to Substances

The following data and their takeaways support key findings related to service referrals and factors that may affect service referrals (exhibits F32–F37), information exchange among CW staff and service providers (exhibits F38–F39), and perceived opportunities to enhance practice (exhibits F40–F41).

Exhibit F32. Themes Related to Service Referrals for Children with Prenatal Substance Exposures

Number and percentage of CW staff and directors reporting service theme by state and overall

Service Theme	State 1 (*n* = 17)	State 2 (*n* = 22)	State 3 (*n* = 16)	State 4 (*n* = 26)	State 5 (*n* = 16)	Overall (*N* = 97)
No services/don't know of services for children with prenatal substance exposures	9 (53%)	5 (23%)	3 (19%)	4 (15%)	2 (12%)	23 (24%)
Services are accessed through children's school/educational plan	6 (35%)	7 (32%)	4 (25%)	6 (23%)	6 (37%)	29 (30%)

Source: CW staff interviews; qualitative analysis of interviews with state CW directors, local agency directors, ongoing case management staff, and frontline/ongoing case management staff who were interviewed about service referrals in all five states; *n* = 97.

Takeaway: Just under a third of staff across the five states described that there were no services, or they were unaware of services specifically for children with PSE.

Exhibit F33. Perceived Availability of Services Indicated by CW Staff when PSE Indicators are Present in a Case Scenario of a School-Aged Child

Number and percentage of surveyed staff endorsing availability of service across all five states

In response to case scenario, how available are the services listed:	Available/ Somewhat Available[a]	Not Available	Don't Know
Medical examinations/physical health check/medical treatment exam	225 (83%)	0	3 (1%)
Initial screening to identify potential developmental or learning issues	223 (82%)	3 (1%)	2 (1%)
Initial screening to identify potential mental health or behavioral issues	227 (84%)	0	1 (<1%)
Initial screening to identify potential speech, physical therapy, and/or occupational needs	219 (81%)	6 (2%)	1 (<1%)
In-depth assessment/diagnosis of mental health or behavioral issues	220 (81%)	6 (2%)	1 (<1%)

In response to case scenario, how available are the services listed:	Available/ Somewhat Available[a]	Not Available	Don't Know
In-depth assessment/diagnosis of intellectual, learning, developmental and/or cognitive issues	216 (80%)	8 (3%)	4 (1%)
In-depth assessment/ diagnosis related to speech, physical therapy, and/or occupational needs?	209 (77%)	9 (3%)	8 (3%)
Referral for specific assessment of diagnosis related to prenatal alcohol exposure	138 (51%)	36 (13%)	54 (20%)

[a] Two response options were collapsed for purposes of data presentation and interpretation.

Source: CW staff survey in all five states; *N* = 271.

Note: Responses for each response option were missing (no response provided) for between 43 to 45 respondents (16-17%).

Takeaway: Staff perceived that most screening and in-depth assessment services for developmental, mental health and physical needs are available. Specific assessment/diagnostic services for PAE were rated as much less available.

Exhibit F34. Would Knowing a Child Had PSE Change the Way Staff at This Agency Work With or Recommend Services for a Child?

Number of and percentage of CW staff endorsing response by state and overall

Response	State 1 (*n* = 11)	State 2 (*n* = 17)	State 3 (*n* = 9)	State 4 (*n* = 19)	State 5 (*n* =10)	Overall (*N* = 66)
Yes	6 (54%)	9 (53%)	7 (78%)	12 (63%)	7 (70%)	41 (62%)
No	4 (36%)	7 (41%)	3 (22%)	7 (37%)	2 (20%)	22 (33%)
Don't Know	1 (9%)	0	0	0	1 (10%)	2 (3%)
Missing	0	1 (6%)	0	0	0	1 (1%)

Source: CW staff interviews; close-ended responses to questions in interviews with ongoing case management and frontline/ongoing case management staff who were interviewed about PSE practice changes in all five states; *n* = 66.

Takeaway: About two-thirds of staff indicated that their approach to working with or recommending services for a child would change as a result of knowing that a child was prenatally exposed to substances. Only a few staff reported that service recommendations would change as a factor of substance type child was exposed to or if child had a known PSE diagnosis.

Exhibit F35. Would Knowing a Child Had PSE Change the Way Staff at This Agency Work With or Recommend Services for a Child?

Number of and percentage of CW staff endorsing response across five states

Referral/Service Changes As a Result of Known PSE	Number of staff endorsing response (Percent of staff asked this question across all five states) (*N* = 97)
Referral/Service does NOT vary by substance type	20 (21%)
Referral/Service does NOT vary by PSE diagnosis	19 (20%)
Referral/Service varies by symptom	30 (31%)

Source: CW staff interviews in all five states; qualitative analysis of interviews with state CW directors, local agency directors, ongoing case management staff, and frontline/ongoing case management staff who were interviewed about service referrals; *n* = 97.

Takeaway: About one-fifth of staff noted that service referrals and services do not vary by type of substance children are exposed to, nor by whether the child has a PSE-related diagnosis or not.

Exhibit F36. Is Information Related to PSE Discussed in Supervision or Internal Case Planning?

Number of and percentage of CW staff endorsing response across four states[a]

Response	Number of interviewed staff endorsing response in states 2 – 5 (Percentage)
Yes	47 (85%)
No	7 (13%)
Don’t Know	1 (2%)

[a] This item was added after data collection in state 1, thus it was not asked of staff in state 1.

Source: CW staff interviews; close-ended responses to questions in interviews with ongoing case management and frontline/ongoing case management staff who were interviewed about supervision practices in four states; *n* = 55.

Note: This item was not asked of CW state or agency directors.

Takeaway: Most staff noted that PSE is discussed in supervision or internal team meetings.

Exhibit F37. Themes Related to Judicial PSE Knowledge and Influence on PSE Related Services

Number and percentage of CW staff reporting themes across five states

Response	Number of interviewed staff endorsing response (Percentage of staff asked this question)
Judges are knowledgeable about PSE (n = 76)[a]	29 (38%)
Judge influences child services	13 (14%)
Judge influences parent services	8 (9%)
Child service needs are specified by CW staff and summarily endorsed in court processes	32 (35%)

[a] This item was added after data collection in state 1, thus it was not asked of staff in state 1.

Source: CW staff interviews with local area directors, ongoing case management staff, and frontline/ongoing case management staff who were interviewed about judicial practices in five states; *n* = 92.

Note: This item was not asked of state CW directors.

Takeaway: Just over one-third of staff perceive judges to be knowledgeable about PSE, and only a few staff note that judges appear to influence child or parent service provision for PSE (e.g., mandate additional services or assessments).

Exhibit F38. Types and the Extent of Information Exchanged Between CW Agency and Allied Service Providers Related to PSE and Care Plans

Number and percentage of CW staff reporting type of information exchanged across five states

Type of Information Exchanged	Number of interviewed staff endorsing response (Percentage of staff asked this question) (*N* = 97)
PSE exposure status	54 (56%)
Progress/recommendations/results	40 (41%)
Concerns	22 (23%)
Records	21 (22%)
CPS Referral Report	9 (9%)
Extent of Information Exchanged	

Type of Information Exchanged	Number of interviewed staff endorsing response (Percentage of staff asked this question) (*N* = 97)
Most or all PSE related information from CW agency is shared with service provider	29 (30%)
Most or all PSE related information from service providers is shared with CW agency	18 (19%)
Not a lot of information is shared between CW agency and service provider	6 (6%)

Source: CW staff interviews; qualitative analysis of interviews with state CW directors, local area directors, ongoing case management staff, and frontline/ongoing case management staff who were interviewed about information exchange in all five states; *n* = 97.

Takeaway: Over half of CW staff perceive that their agency shares information about PSE status with their allied service providers, such as medical providers, behavioral health and other therapists. Yet less than one third reports that most information is shared by their agency, and one-fifth said that most PSE service information flows back to the CW agency from providers.

Exhibit F39. Service Providers' Perceptions of Information Exchange with CW Staff and Caregivers

Number and percentage of service providers endorsing response across two states

Providers' Perceptions of Information Exchange with CQ Staff and Caregivers	Number of surveyed service providers endorsing item (Percentage of service providers surveyed) (*N* = 21)
Give information at the time of appointment to CW staff who brings the child	5 (24%)
Follow-up communication to CW staff to give results of child's appointment	7 (33%)
Give information at the time of appointment to caregiver who brings the child	5 (24%)
Follow-up communication to caregiver to give results of child's appointment	5 (24%)
No response/Missing	6 (29%)

Source: Service provider survey administered to service providers in states 3 and 5; *N* = 21.
Note: Responses for each response option were missing (no response provided) for 6 service providers (29%).

Takeaway: One-third or fewer service providers noted that they promptly share information back to the CW agency or caseworker, and about one-quarter stated that they provide information directly to caregivers.

Exhibit F40. Common Service Recommendations Made By Allied Service Providers for Children Involved in the CW System with Suspected PAE

Number of mentions of type of service recommendation made by service providers across two states

Type of service recommendation	Number of mentions (*n* = 13)
Refer to specialists, for additional diagnostic testing/FASD diagnosis, FASD clinic, or developmental center/assessments	8
Medical provider or medical recommendations	7
Early intervention programs	5
Referrals to psychological or mental health services	5
Caregiver services, including teaching parents' interventions that promote the child's developmental and social/emotional development, parenting classes, and connecting with other caregivers with children affected by PAE	4
Referrals specific to presenting needs/symptoms	3
Case management services (e.g., home visiting)	2

Source: Service provider survey administered in states 3 and 5; *N* = 21.
Note: Survey item requested up to three recommendations, open-text coding; missing *n* = 8 (38%).

Takeaway: Among a small sample of service providers from the two in-depth data collection states, the most frequent service recommendations that they provide for children/families involve in CW who are suspected of being affected by PAE were to work with specialists for appropriate assessment and diagnosis, consult with medical providers such as developmental pediatricians, and to engage in early intervention and/or mental health services.

Exhibit F41. Common Service Recommendations Made By Allied Service Providers for Children Involved in the CW System with Suspected Exposure to Substances Other Than Alcohol

Number of mentions of type of service recommendation made by service providers across two states

Type of service recommendation	Number of mentions (*n* = 12)
Referrals to PSE programs to further identify or address presenting needs/symptoms	11
Refer to specialists, for additional developmental assessment or therapies (safe sleep, occupational, feeding)	5
Medical provider or medical recommendations	5
Caregiver services, including parenting classes for information about drug-affected children, reading materials for caregivers, and generally connecting parents and caregivers to resources	5
Early intervention programs	4

Source: Service provider survey administered in states 3 and 5; *N* = 21.
Note: Survey item requested up to three recommendations; open-text coding; missing *n* = 9 (43%).

Takeaway: Among a small sample of service providers from the two in-depth data collection states, the most frequent service recommendations that they provide for children/families involve in CW who are suspected of being affected by exposure to substances other than alcohol were to programs and services to identify and address presenting needs and specific behaviors known to be concerns with opioids and methamphetamines such as safe sleep education, occupational therapy, or feeding therapy.

Documentation of PSE

The following data and their takeaways support key findings related to documentation of prenatal substance exposure (exhibits F42–F48).

Exhibit F42. Primary Documents Included in Case Record Review

Reviewed Documentation Related to Intake/Investigation	Reviewed Documentation Related to Ongoing Cases
Hotline/Intake Report and Allegation Report	Foster Care or Family Case Plan
Safety Plan	Safety Assessments
Family Functioning Assessment	Contact Notes*
Safely and Risk Assessments	Court Reports*
CPS Family Plan	Child and Family Assessments
Other Documents	Medical Documentation
	Educational Documentation
	Other Documents

Note: Documents contained information from both intake/investigation and ongoing cases but were coded as part of the ongoing case database.

Exhibit F43. PSE Documentation in Intake, Ongoing, and Full Case Files

Number and percentage of case records with PSE documentation overall and by site within State 3

	N	PSE in Intake	PSE in Ongoing	PSE in Full Case File
Overall	212	48%	55%	58%
Site 32	52	42%	50%	52%
Site 33	52	46%	50%	54%
Site 34	63	48%	57%	60%
Site 35	45	56%	62%	69%

Source: Review of CW case records in State 3; *N* = 212.

Takeaway: Across all sites, reports of PSE were more present in ongoing case documentation, suggesting that not all information about PSE is known during the initial intake or investigation phase.

Exhibit F44. Information on PSE in Intake File

Number and percentage of case files with types of information on PSE in intake file in State 3

Information Source	N	A. Yes	B. No Relevant Information	C. Section Not Available	% of reviewed[a]
Hotline/Intake Report	212	90	121	1	42%
Safety and Risk Assessments	212	65	88	59	42%
Family Assessment	212	56	78	78	42%
Allegation Report	212	35	50	127	41%
Safety Plan	212	18	43	151	30%
Case Plan	212	13	47	152	22%
Other[b]	212	32	44	136	72%
Overall intake file	212	101	111	0	48%

[a] Excludes case records where the listed document was missing or not part of the reviewed file.

[b] Other documentation was only reviewed if deemed pertinent to the study, accounting for the high percentage of reviewed documents containing reports of PSE.

Source: Review of CW case records in State 3; *N* = 212.

Takeaway: Within intake/investigation documentation, the most information related to PSE was found in the hotline/intake report, the safety and risk assessments, and/or the family assessments. However, no single documentation reliably contained information about PSE across all intake/investigation files.

Exhibit F45. Information on PSE in Ongoing Case Management File

Number and percentage of case files with types of information on PSE in ongoing case management file in State 3

Information Source	N	A. Yes	B. No relevant information	C. Section Not Available	% of reviewed[a]
Contact Notes (Full file)	212	95	109	8	47%

Information Source	N	A. Yes	B. No relevant information	C. Section Not Available	% of reviewed[a]
Child and Family Assessments	212	46	57	109	44%
Court Reports	212	77	117	18	40%
Any Medical Documents	212	51	87	74	37%
Family Case Plans	212	50	101	61	33%
Safety Assessments	212	19	53	140	26%
Other Documentation in Ongoing File	212	23	64	125	26%
Any Educational Documents	212	1	64	147	2%
Overall ongoing documentation	212	116	94	2	55%

[a] Excluding missing documentation not present in reviewed files. Missing documentation may indicate that assessments were not completed or sources not requested or could reflect a gap where information should be present.

Source: Review of CW case records in State 3; *N* = 212

Takeaway: Within ongoing case management documentation, the most information on PSE was found in the contact notes (which included information from the intake/investigation phase), the child and family assessments, and the court reports. However, no single documentation reliably contained information about PSE across all ongoing case management files.

Exhibit F46. Source of PSE Identification in Intake and Ongoing Case Management Record Files, by Location in Case Record

Percentage of case records in State 3 that included source of PSE identification in intake or ongoing case management documentation

Source Type[a]	Positive toxicology	Hospital report of NAS or Withdrawal	Mom positive drug test at birth/during pregnancy	Other medical or doctor's report	Parental report of maternal substance use during pregnancy or PSE	Other collateral report of PSE
Intake Documentation						
Hotline/Intake Report (n=211)	29%	11%	35%	3%	19%	20%
Allegation Report (n=85)	34%	17%	31%	5%	27%	20%
Safety Plan (n=61)	20%	8%	23%	3%	10%	12%
Family Assessment (n=134)	31%	10%	38%	4%	24%	19%
Safety and Risk Assessments (n=151)	27%	9%	30%	3%	18%	14%
Case Plan (n=60)	13%	8%	15%	0%	7%	3%
Other (n=76)	22%	1%	32%	1%	17%	4%
Overall intake documentation (n=212)	34%	12%	40%	4%	28%	25%
Ongoing Case Management Documentation						
Family Case Plans (n=151)	27%	8%	23%	4%	11%	15%

Source Type[a]	Positive toxicology	Hospital report of NAS or Withdrawal	Mom positive drug test at birth/during pregnancy	Other medical or doctor's report	Parental report of maternal substance use during pregnancy or PSE	Other collateral report of PSE
Safety Assessments (n=73)	22%	7%	24%	2%	7%	15%
Contact Notes (Full file) (n=204)	34%	12%	39%	6%	30%	23%
Court Reports (n=194)	26%	11%	31%	4%	16%	18%
Child and Family Assessments (n=103)	30%	12%	33%	3%	24%	18%
Any Medical Documents (n=138)	25%	12%	23%	10%	9%	9%
Any Educational Documents (n=65)	0%	0%	2%	0%	2%	0%
Other ongoing documentation (n=87)	10%	3%	15%	1%	10%	5%
Overall ongoing documentation (n=212)	38%	15%	45%	13%	40%	30%

[a] Excludes missing documentation not present in reviewed files. Missing documentation may indicate that assessments were not completed or sources not requested or could reflect a gap where information should be present.

Source: Review of CW case records in State 3; *N* = 212.

Takeaway: Within the intake/investigation documentation, CW most commonly reported PSE through a positive maternal drug test or a positive toxicology screen. It is notable that neither of these tests reliably screens for alcohol consumption/exposure. Within the ongoing case management documentation, CW most commonly reported PSE also through a positive maternal drug test or positive toxicology screen, and a parental report of maternal substance use during pregnancy.

Exhibit F47. Frequency of Documentation that Treatment/Service Was Mentioned in the CW Agency Case Record

Percentage of case records reviewed in State 3 with types of treatment/services found in documentation

Type of Treatment/Services Found in Documentation	Frequency
Medical	30%
Behavioral	6%
Mental Health	2%
Educational	2%

Source: Review of CW case records in State 3; *N* = 212.

Exhibit F48. Frequency of Documentation that Provides Evidence of PSE-Related Assessment and Service Referrals

Percentage of cases with presence of documents providing evidence of PSE-related assessment and service referrals found in case records in State 3

Type of Documentation	Percentage
Across all children mentioned in the 212 case records (*n* = 431)[a]	
Formal medical diagnosis	40%
Medical history indicating PSE	28%
Enrolled in special education	9%
Across all case records (*n* = 212)	
Formal medical diagnosis	58%
Medical history indicating PSE	42%
Enrolled in special education	13%

[a] All children who were part of the case record (reflecting siblings, attached to the family-level case number) were included in child-level data reporting (*n* = 431).

Source: Review of CW case records in State 3; *N* = 212.

Takeaway: Medical treatment or services of any kind (not always specific to PSE) were noted in about one-third of the reviewed case records. Specific references to mental health, behavioral, and/or educational treatment or services were rarely documented. Many included a medical diagnosis of PSE, some included medical treatment noting PSE, and few included PSE mentions in relation to special education.

Caregiver Services and Supports Regarding PSE

The following data and their takeaways support key findings related to caregiver services and supports related to prenatal substance exposure (exhibits F49-F54).

Exhibit F49. Caregiver Demographics

Number and percentage of caregivers by number of children cared for, age range of children cared for, length of caregiving, type of caregiver, and percentage with biological children

Number of children cared for		Age range of children cared for	
1 to 5 children	18 (41%)	Newborn	38 (86%)
6 to 10 children	6 (14%)	1-5	35 (80%)
11 to 20 children	5 (11%)	6-10	27 (61%)
21 to 50 children	7 (16%)	11-15	18 (41%)
More than 50 children	8 (18%)	16+	8 (18%)
Length of Caregiving		**Type of Caregiver[a]**	
1 to 5 years	23 (52%)	Foster	41 (93%)
6 to 10 years	9 (21%)	Kinship	10 (23%)
11 to 20 years	9 (21%)	**Percentage with Biological Children**	78.0%
21 or more years	3 (7%)		

[a] Participants could choose all that apply. “Foster” includes short-term, long-term, therapeutic, respite, and adopted-from-foster care caregivers.

Source: Caregiver focus groups and interviews in states 3 and 5, respectively; close-ended responses; *N* = 44.

Exhibit F50. Caregiver Experience and Preparedness

Number and percentage of caregivers with types of experience and preparedness for caring for children with prenatal substance exposure across States 3 and 5

Types of Experience	Number (%)
Have cared for child with special needs (n=44)	42 (96%)
Have cared for child with known or suspected PSE (including FASD) (n=44)	39 (89%)
Preparedness to care for child with PSEs (including FASD), among those who have (n=39)	
Not at all prepared	13 (33%)
Somewhat prepared	19 (49%)
Fully prepared	7 (18%)
Would like more training or information on PSE (including FASD) (n=44)	37 (84%)

Source: Caregiver focus groups and interviews in states 3 and 5, respectively; close-ended responses; *N* = 44.

Takeaway: Most caregivers had cared for at least one child with known or suspected PSEs. Most who had cared for a child with PSE reported being only somewhat prepared or not at all prepared to care for that child.

Exhibit F51. Caregiver Reports of Training Related to PSE

Number of caregivers reporting types of training related to PSE in States 3 and 5, by state

	State 3 (*n* = 4 focus groups)	State 5 (*n* = 21 interviews)
PSE Training	4	21
Training on FASD/PAE	4	11
Training on PSE	3	20
Conducted own research, outside of CW training	3	8
Relevant job or personal experience	0	10
Training on caring for children with special needs	4	21
Training on navigating systems	4	21

Source: Caregiver focus groups and interviews in states 3 and 5, respectively; *N* = 44.

Takeaway: Most caregivers had received some training on PSE-related topics both through the CW agency and through their own initiative or experience.

Exhibit F52. CW Staff Awareness of PSE Training or Resources Available to Caregivers

Number and percentage of CW staff reporting awareness of training or resources by state and overall

	State ID					Total (*n* = 92)
	1 (*n* = 16)	2 (*n* = 21)	3 (*n* = 15)	4 (*n* = 25)	5 (*n* = 15)	
Unaware of CW training on PSE	10 (63%)	11 (52%)	11 (73%)	12 (48%)	7 (47%)	51 (55%)
Aware of CW training on PSE	2 (13%)	7 (33%)	3 (20%)	12 (48%)	7 (47%)	31 (34%)
Aware of non-CW training or resources on PSE	1 (6%)	3 (14%)	2 (13%)	7 (28%)	0 (0%)	13 (14%)

Source: CW staff interviews with local area directors, ongoing case management staff, and frontline/ongoing case management staff in five states; *n* = 92.

Note: State 3 and state 5 were the sites of caregiver data collection

Takeaway: CW staff were largely unaware of CW training opportunities for caregivers related to PSEs.

Exhibit F53. Thematic Analysis of Challenges and Suggestions Reported by Caregivers

Number of caregivers reporting challenges or suggestions in States 3 and 5, by state

	State 3 (*N* = 4 focus groups)	State 5 (*N* = 21 interviews)
Challenges with CW staff or systems		
Information-sharing challenges	4	9
Challenges with caseworker (turnover, overworked, inter-personal)	3	10
Caseworkers lack knowledge of PSE (lack of training)	2	2
Not enough input into case decisions (e.g., TPR)	2	0

Challenges caring for specific children		
Challenges getting services for child	2	9
Not enough training for caregivers	1	7
Caregiver Suggestions		
Provide more or better training to caregivers	4	11
Improvements to CW practice	4	6
Provide specific resources to caregivers	3	8
More training for service providers	2	2

Source: Caregiver focus groups and interviews in states 3 and 5, respectively; *N* = 44.

Takeaway: Caregivers described a variety of challenges in caring for children with PSE and offered some suggestions on how to better support other caregivers in their caregiving of these children.

Exhibit F54. Thematic Analysis of CW Staff Reports of Services Available to Caregivers

Number and percentage of CW staff reporting types of services available to caregivers

	***N* = 66**	**%**
General services for caregivers known by CW staff	34	52%
General community supports (e.g., daycare, TANF, clothing bank)	10	15%
Kinship caregiver services	7	11%
General training resources	8	12%
Respite care (by CW agency or others)	6	9%
Support services for children that may support caregivers (e.g., pediatricians, developmental assessment organizations)	7	11%
Services provided by non-profits or religious organizations	7	11%
Staff unaware of PSE-specific support services for caregivers	31	47%

Source: CW staff interviews with ongoing case management staff and frontline/ongoing case management staff in five states; *N* = 66.

Takeaway: CW staff had limited awareness of PSE-related supports available to caregivers, focusing more on general services.

Appendix G. Interview Code Definitions Used with Prenatal Substance Exposure Information Gathering Methods

The following definitions were developed by the study team when coding PSE information gathering methods in interview transcripts. These definitions were not drawn from academic sources but were written to help ensure consistent interpretation of codes.

Behavioral indicator. Attention deficit disorders or Attention-Deficit/Hyperactivity Disorder diagnosis, emotional regulation challenges, and information and referrals from mental health providers from screenings and assessments. This code was also used if the respondent discussed observing behavioral issues at school with school aged children.

Case record documentation pertaining to child or mother. PSE identified or suspected upon caseworker review of a child's or family case record (e.g., child's medical records, birth records, prior reports of child abuse and neglect etc.).

Developmental milestone. Developmental assessments completed for younger children (non-school aged). Developmental milestones include skills such as taking a first step, smiling for the first time, etc. School aged children were more often identified by a behavioral or cognitive delay.

Screening and assessment. Standardized and non-standardized screening, assessments, or forms used by CW agencies that might lead staff to suspect or identify PSE (e.g., safety or risk assessments, family assessments, parental substance use assessments). These screenings and assessments are not specifically designed to screen for or assess for PSE.

Ask about substance use. The caseworker directly asks the mother about her substance during a current or past pregnancy, the mother admitted to PSE or brought it up on her own.

Cognitive indicator. Child suspected/identified with PSE because of an IEP, learning disability, cognitive impairment. This code was commonly double coded with behavioral indicators if the interview respondent was describing a child that had an IEP for a learning disability and the respondent described behavioral issues observed/reported at school.

Collateral source. The caseworker describes obtaining information about the mother's substance use while pregnant from collateral sources. Collateral contacts can include the referral source, other family members, professionals who have contact with the family, or people in the community whose contact with one of the members may have given them knowledge that would relate to the family assessment.

Physical characteristics. Physical characteristics used to suspect/identify FASD such as: growth restriction, small head size or microcephaly, facial characteristics (e.g., small eye openings, absence of groove between the nose and upper lip, thin upper lip).