

## Substance Use-Implications for Child Maltreatment

A Bibliography

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Championing and Strengthening the Global Response to Child Abuse

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Scope

This bibliography lists publications covering a wide variety of issues in that are related to or

caused by childhood maltreatment and/or exposure to drugs and illegal substances. Although

most of the materials focus on opioids and other narcotics, a variety of drugs, including

alcohol, are discussed.

**Organization** 

Publications include articles, book chapters, reports, and research briefs and are listed in date

descending order. Links are provided to full text publications when possible. However, this

collection may not be complete. More information can be obtained in the Child Abuse

Library Online.

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## **Substance Use- Implications for Child Maltreatment**

## A Bibliography

Durrance, C. P., & Atkins, D. N. (2024). Estimating the incidence of substance exposed newborns with child welfare system involvement. *Child Abuse & Neglect*, 149, 106629. DOI:10.1016/j.chiabu.2023.106629

Background: Prenatal substance use can have negative health consequences for both mother and child and may also increase the likelihood of child welfare involvement. The rate of newborns with substance exposure has increased dramatically. As of 2016, federal law requires notification of all infants to child welfare agencies so that a plan of safe care can be developed and referrals to services can be offered. Objective: Child welfare agencies have not historically collected consistent, systematic data identifying substance exposed newborns. We utilized a unique strategy to identify substance exposed newborns with child welfare involvement. Participants & setting: We used data from the National Child Abuse & Detection System (NCANDS) which captures N = 3,189,034 unique child protective services investigations for children under the age of 1 between 2004 and 2017. Methods: We calculated the incidence of substance exposed newborns investigated by child welfare agencies and compared with other administrative data on prenatal substance exposure. We also analyzed this rate by infant demographic characteristics (race/ethnicity, sex, rurality). Results: Between 2004 and 2017, approximately 13 % of infants reported to child protective services were likely reported because of substance exposure at birth, and the rate of substance exposed newborns with child welfare involvement increased from 3.79 to 12.90 per 1000 births, an increase of 240 %, over this period. Conclusions: Understanding the extent of the substance use crisis for child welfare involvement is important for policymakers to support children and families.

Kenny, M. C., Ortiz Diaz, K., Goldfarb, D., & Satoba, S. (2024). Parental drug use as a form of potential child maltreatment in the United States: A review of state statutes. *Psychology, Public Policy, and Law*. Advance online publication. DOI:10.1037/law0000419

Parental substance use can be considered a form of child abuse or neglect when it interferes with parents' ability to care for their child, exposes their child to harmful substances or an unsafe environment, or leads to injury of the child. Many mandated reporters may not be aware of their obligation to report parental substance use when it meets the criteria for child maltreatment. This study reviewed all 50 U.S. states' statutes related to parental substance use as a potential form of child maltreatment and/or a criminal issue. A legal analysis utilizing both primary and secondary sources of state laws was conducted. Multiple reviewers were used to check statutes and compare findings. A coding scheme was created to determine the extent to which states utilized certain terms. Most states address parental substance use in some form as potential child maltreatment. There is great variability in how each state handles these instances, although there is some consensus that children who are exposed to an environment with manufacturing or distribution of drugs are worthy of regulation. Policy recommendations for training professionals on identification and reporting these situations as well as implications for families when reports are made are addressed.

Meinhofer, A., Chandra, N., Byanova, D., & Keyes, K. M. (2024). Foster care and health in Medicaid-enrolled children experiencing parental opioid use disorder. *JAMA Network Open*, 7(5), e2410432. DOI:10.1001/jamanetworkopen.2024.10432

IMPORTANCE: The burden of the US opioid crisis has fallen heavily on children, a vulnerable population increasingly exposed to parental opioid use disorder (POUD) in utero or during childhood. A paucity of studies have investigated foster care involvement among those experiencing parental opioid use during childhood and the associated health and health care outcomes. OBJECTIVE: To examine the health and health care outcomes of children experiencing POUD with and without foster care involvement. DESIGN, SETTING, AND PARTICIPANTS: This population-based cohort study used nationwide Medicaid claims data from January 1, 2014, to December 31, 2020. Participants included Medicaidenrolled children experiencing parental opioid use—related disorder during ages 4 to 18 years. Data

were analyzed between January 2023 and February 2024. EXPOSURE Person-years with (exposed) and without (nonexposed) foster care involvement, identified using Medicaid eligibility, procedure, and diagnostic codes. MAIN OUTCOMES AND MEASURES: The main outcomes included physical and mental health conditions, developmental disorders, substance use, and health care utilization. The Pearson γ2 test, the t test, and linear regression were used to compare outcomes in person-years with (exposed) and without (nonexposed) foster care involvement. An event study design was used to examine health care utilization patterns before and after foster care involvement. RESULTS: In a longitudinal sample of 8 939 666 person-years from 1 985 180 Medicaid-enrolled children, 49% of children were females and 51% were males. Their mean (SD) age was 10 (4.2) years. The prevalence of foster care involvement was 3% (276 456 person-years), increasing from 1.5% in 2014 to 4.7% in 2020. Compared with those without foster care involvement (8 663 210 personyears), foster care involvement was associated with a higher prevalence of developmental delays (12% vs 7%), depression (10% vs 4%), trauma and stress (35% vs 7%), and substance use-related disorders (4% vs 1%; P < .001 for all). Foster children had higher rates of health care utilization across a wide array of preventive services, including well-child visits (64% vs 44%) and immunizations (41% vs 31%; P < .001 for all). Health care utilization increased sharply in the first year entering foster care but decreased as children exited care. CONCLUSIONS AND RELEVANCE: In this cohort study of Medicaid-enrolled children experiencing parental opioid use-related disorder, foster care involvement increased significantly between 2014 and 2020. Involvement was associated with increased rates of adverse health outcomes and health care utilization. These findings underscore the importance of policies that support children and families affected by opioid use disorder, as well as the systems that serve them.

Rebbe, R., Malicki, D., Siddiqi, N., Huang, J. S., Putnam-Hornstein, E., & Laub, N. (2024). <u>Child Protection System interactions for children with positive urine screens for illicit drugs</u>. *JAMA Network Open*, 7(3), e243133. DOI:10.1001/jamanetworkopen.2024.3133

IMPORTANCE: Young children are ingesting illicit drugs at increased rates, but it is unknown what the associated child protection system (CPS) responses are when a child tests

positive. OBJECTIVE: To document the child protection system involvement and the characteristics of children who test positive for illicit substances. DESIGN, SETTING, AND PARTICIPANTS: This retrospective cross-sectional study linked medical discharge and child protection system administrative data. The setting was Rady Children's Hospital San Diego, a free-standing pediatric hospital in California. Participants included all emergency department and inpatient medical encounters involving children aged 12 years or younger with a positive urine drug test between 2016 and 2021. Statistical analysis was performed from February 2023 to January 2024. EXPOSURE: Drug type, including amphetamines, barbiturates, benzodiazepines, cannabis, cocaine, fentanyl, opiates, and phencyclidine. MAIN MEASURES AND OUTCOMES: CPS responses associated with the medical encounter including reports, substantiations, case openings, and out-of-home placements. RESULTS: A total of 511 emergency department and inpatient medical encounters involving children had a positive drug test (262 [51.3%] were female; 309 [60.5%] were age 6 years or younger; fewer than 10 [<3.0%] were American Indian or Alaska Native; 252 [49.3%] were Hispanic [any race], 20 [3.9%] were non-Hispanic Asian, 56 [11.0%] were non-Hispanic Black, 143 [28.0%] were non-Hispanic White, 36 [7.0%] had other or unknown race and ethnicity; 233 [43.6%] had a CPS report prior to the medical encounter). Following the positive screen, 244 (47.7%) were reported to child protection, and 61 (11.9%) were placed out-of-home within 30 days. Mean (SD) quarterly counts of encounters with positive drug tests doubled after the COVID-19 pandemic onset (32.9 [9.8]) compared with prior to the pandemic onset (16.5 [4.7]); for encounters positive for cannabis, mean (SD) quarterly counts were 3 times as high after the pandemic onset than prior (16.6 [4.7] vs 5.7 [2.9]). Encounters for children under age 1 were significantly more likely to have associated child protection reports (relative risk [RR], 2.91 [95%CI, 2.21-3.83]) and child protection case openings (RR, 1.71 [95%CI, 1.07-2.72]) than encounters involving older children. CONCLUSIONS AND RELEVANCE: In this cross-sectional study of emergency department and inpatient medical encounters, less than half of children with positive urine drug screens were reported to CPS; out-of-home placements were uncommon. With increased encounters for positive drug tests, it is unclear what services these children and families are receiving.

Yampolskaya, S., Sowell, C., Walker-Egea, C., Hanak-Coulter, J., & Pecora, P. J. (2024). <u>Family intensive treatment for child welfare involved caregivers with substance misuse issues: Safety, permanency and well-being outcomes</u>. *Clinical Social Work Journal*, *52*, 104-116. DOI:10.1007/s10615-023-00917-8

The Family Intensive Treatment (FIT) team model provides intensive team-based, familyfocused, comprehensive services to families in the child welfare system with parental substance misuse issues. The current evaluation study examined the effect of FIT on child safety, permanency, and parental wellbeing. A longitudinal quasi-experimental design with a two-group comparison using propensity score matching was used. Compared to a group of similar parents/caregivers receiving child welfare services (N = 2976), parents/caregivers who received FIT (N = 3025) were less likely to have new allegations of child maltreatment within 6 and 12 months after participating in the FIT program. There was no significant association between FIT receipt and recurrence of verified (i.e., substantiated) maltreatment: the rates of verified maltreatment were very similar for the parents/caregivers in the FIT group and the parents/caregivers in the comparison group. Similarly, no significant differences were found when the rates for foster care reentry were examined. In contrast, children of parents/caregivers who received FIT achieved permanency faster and at a greater rate compared to their counterparts. In addition, participation in the FIT program predicted improvement in parental/caregiver emotional protective capacity and overall protective capacity and showed a positive tendency in improvement of parental/caregiver behaviors related to their protective role. Finally, parents/caregivers who received FIT demonstrated significant improvements over time in several wellbeing domains including Daily Living Activities, Mental Health and Addiction, and Adult and Adolescent Parenting.

Bowers, P., Kable, J., Millians, M., & Coles, C. D. (2023). Behavioral impact of childhood traumatic stress in children with prenatal substance exposure. *Child Welfare*, 101(2), 35-57.

The primary aim of this study was to explore the impact of interactions between early life trauma and prenatal substance exposure on neurobehavioral functioning. A group of 308 children underwent a multidisciplinary assessment of physical, psychological, developmental, and demographic/social status looking at exposure to substances in utero and

to trauma as a function of number of adverse childhood experiences. Key findings were that polydrug exposures appear to increase vulnerability to trauma; the risks appear to be additive for exposures to alcohol, marijuana, and opioids; and that prenatal stimulant exposure has an interactive effect with trauma that more negatively impacts behavioral regulation in combination than simply adding the two effects together. Further, there appeared to be a sexual dimorphism in that female children appeared to be more susceptible to worsening behavior in response to childhood trauma than males.

Brewsaugh, K., Tucker, L. P., Loveless, A., & McDaniel, M. (2023). Children affected by parental substance use. US Department of Health & Human Services.

Children in the US who enter the child welfare system with parental substance use as a risk factor differ from children who enter the system for other reasons. Some key findings include: 1. Young children and children living in more rural areas are more likely to enter the child welfare system because of parental substance use. 2. Children removed from home because of parental substance use are more likely to experience inadequate housing and parental incarceration, compared with children removed from home without a parental substance use risk factor. 3. Children removed from home because of parental substance use have longer stays in out-of-home care compared with children removed without that risk factor.

Geary, E., Moyer, N., Day, P., & Ingoldsby, E. (2023). <u>Addressing prenatal alcohol and other drug exposure in tribal child welfare: An environmental scan</u>. *Adversity and Resilience Science*, *4*(4), 381-388. DOI:10.1007/s42844-023-00101-4

Tribal communities face critical challenges in identifying and addressing substance use by pregnant women. These challenges are often exacerbated by limited resources for services and limited research on effective interventions. To address these challenges, tribal communities are developing innovative and culturally resonant approaches to address prenatal alcohol exposure (PAE) and prenatal substance exposure (PSE). This article describes an environmental scan that was completed to understand and support the important work of these communities. It concludes with a discussion of the implications for tribal

practitioners, specifically those in child welfare as well as policymakers and funders in child welfare and allied service provision systems, and provides potential directions for future research.

Gusler, S., & Moreland, A. (2023). Cumulative risk for children's behavior problems and child abuse potential among mothers receiving substance use treatment: The unique role of parenting stress. *Social Work in Public Health*, *38*(2), 95-109. DOI:10.1080/19371918.2022.2096738

There is a high prevalence of children whose parents suffer with a substance use disorder (SUD), which is associated with negative outcomes for children such as behavior problems and parents' child abuse potential. To understand negative consequences for children, it is important to consider a cumulative risk model, examining the impact of multiple co-occurring risks, as well as examine unique singular risk factors, such as parenting stress, which may have a direct effect on outcomes as well as mediate an association between cumulative risk and outcomes. Data came from 99 mothers with SUD, engaged in a substance treatment program. Results found support for a cumulative risk model for child behavior problems and parents' child abuse potential, without the inclusion of parenting stress. However, parenting stress partially and fully mediated the relation between cumulative risk and child behavior problems and cumulative risk and parent child abuse potential, respectively. Results suggest the importance of intervention programs targeting parenting stress, to help reduce child behavior problems and parents' child abuse potential, among parents with high levels of risk and SUD.

Hall, M. T., Hardy, G. C., Golder, S., Huebner, R. A., McNeil, A. J., & Walton, M. T.
(2023). Substance use and other factors associated with child welfare case duration:
Looking beyond out of home care. *Child & Family Social Work*, 28(1), 136-146.
DOI:10.1111/cfs.12948

Little is known about factors associated with child welfare case duration. Understanding factors associated with case duration may help stakeholders make more informed decisions about funding and service allocation and improve compliance with federal law. This study

had two research questions: (1) What factors are associated with child welfare case duration? And (2) Do factors differ depending on whether children were placed exclusively with parents or with others (e.g. relatives and foster care) during the case? The study sample consisted of families (N = 874) with co-occurring child maltreatment and substance use in one midwestern state in the United States between 2007 and 2016. Linear regression models were used to identify correlates of case duration while controlling for child placement status. Overall, having a child under 1 year of age, benzodiazepine use, methamphetamine use and injection drug use were all associated with longer case duration, whereas marijuana use with no other substance use was associated with shorter case duration. Additionally, factors associated with case duration differed based on child placement status during the case. These findings suggest important heterogeneity in families involved with child welfare services and may allow for proactive mitigation of cases at greater risk.

Kim, H., Song, E. J., & Windsor, L. (2023). Longitudinal changes in the county-level relationship between opioid prescriptions and child maltreatment reports, United States, 2009–2018. *American Journal of Orthopsychiatry*, *93*(5), 375-388. DOI:10.1037/ort0000682

This article examines whether county opioid prescription rates were associated with county child maltreatment report (CMR) rates in the United States and whether this relationship changed over time. We linked multiple national data sets to assemble retail opioid prescription data, CMR data, rural—urban codes (to control for urbanicity), and census data (to control for other community characteristics, such as poverty rates) covering 2009–2018. Multilevel linear modeling analyzed the linked data. We found that the strength of the county-level relationship between opioid prescription rates and CMR rates increased almost linearly during the study period. The relationship was not significant in 2009–2011; it became significant in 2012 and grew stronger in the next 6 years. In 2012, there was one more CMR per 1,000 children in a county for every 14.3 more opioid prescriptions per 100 people. In 2018, the number of prescriptions related to this effect was 3.6. In other words, the county-level relationship between opioid prescriptions and CMRs was four times as strong in 2018 as it had been in 2012. This trend was also observed within all subgroups of child age and

sex. By type, this trend was somewhat more pronounced for neglect, but somewhat less for sexual abuse. Our findings suggest a growing need for greater efforts to prevent child maltreatment in communities with high opioid prescription rates. Further research is warranted to reveal the underlying factors for this concerning trend.

Lyons, A. J., Hirchak, K. A., Kordas, G., Herron, J. L., Jansen, K., Alcover, K. C., Bergerson, D., Avey, J. P., Shaw, J., Roll, J., Buchwald, D., McDonell, M. G., & HONOR Study Team. (2023). Factors associated with child removal among American Indian and Alaska Native people in an alcohol intervention study. *Child Maltreatment*, 28(4), 599–607. DOI:10.1177/10775595221134689

This study was a secondary data analysis of factors associated with alcohol-related child removal among American Indian/Alaska Native (AI/AN) adults enrolled in a clinical trial of an alcohol intervention. Among 326 parent participants, 40% reported ever having a child removed from their care in part because of the parent's alcohol use, defined here as alcohol-related child removal. Seventy-five percent of parents reported at least one separation during their own childhood (M = 1.3, SD = 1.0). In a multivariable analysis, alcohol-related child removal was associated with parental boarding school attendance. No relationship was found between alcohol-related child removal and alcohol intervention outcomes. Results may provide evidence of multigenerational child removal impacts of boarding schools on AI/AN adults receiving an alcohol use disorder intervention. Assessment of parental history of child removal by practitioners, strategies to prevent alcohol-related separation and to support reunification should be integrated into addiction treatment in AI/AN communities.

Morehouse, E., Ingoldsby, E., Newburg-Rinn, S., Bertrand, J., & Usher, K. (2023). Knowledge, training, and support needs for identification and appropriate care of children with prenatal alcohol and other drug exposures in the child welfare system. *Child Welfare*, 101(3), 51-76.

This study was conducted to explore what professionals working in child welfare and caregivers know about prenatal substance exposure, emphasizing prenatal alcohol exposure, and their perceived training needs. This was part of a descriptive mixed methods study conducted in 22 local child welfare agencies across five states. Findings showed that despite

widespread awareness of prenatal substance exposure, professionals have misperceptions about prenatal substance exposure effects that likely affect practice and offer important targets for improvements. Professionals and caregivers also raised targeted needs and requests for more training in many areas. Findings from this study provide initial insights into the knowledge, policies, practice, and educational needs of child welfare agencies, professionals who work in child welfare, and caregivers. Professionals and agencies can use these findings to inform approaches, practices and trainings which may help improve developmental outcomes for children and improve family functioning, thereby reducing the risk of child maltreatment and foster care placements. This study adds to the limited research published on professional's knowledge of prenatal substance exposure and to practical child welfare training applications.

Paris, R., Herriott, A. L., & Holt, M. (2023). Parenting stress and competence among mothers of young children with substance use disorders: The roles of trauma and reflective functioning. *Infant Mental Health Journal*, 44(2), 228-239. DOI:10.1002/imhj.22040

Posttraumatic stress symptoms are prominent in the lives of parents of young children with substance use disorders (SUD). Parenting experiences, particularly stress and competence, impact parenting behaviors and concomitant child growth and development. Factors that promote positive experiences of parenting, such as parental reflective functioning (PRF), and protect the mother and child from negative outcomes are crucial to understand to develop effective therapeutic interventions. The current US study analyzed baseline data from a parenting intervention evaluation to examine how length of substance misuse, PRF, and trauma symptoms were associated with parenting stress and parenting sense of competence among mothers in treatment for SUDs. Measures included the Addiction Severity Index, PTSD Symptom Scale-Self Report, Parental Reflective Functioning Questionnaire, Parenting Stress Index/Short Form, and Parenting Sense of Competence Scale. The sample included 54 predominantly White mothers with SUDs who had young children. Two multivariate regression analyses found that (1) lower parental reflective functioning and higher posttraumatic stress symptoms were associated with higher parenting stress, and (2) only higher posttraumatic stress symptoms were associated with lower levels of parenting

sense of competence. Findings underscore the importance of addressing trauma symptoms and PRF when aiming to improve parenting experiences for women with an SUD.

Picci, G., Linden-Carmichael, A. N., & Rose, E. J. (2023). Resilience profiles predict polysubstance use in adolescents with a history of childhood maltreatment. *Addiction Research & Theory*, *31*(2), 137–147. DOI:10.1080/16066359.2022.2132237

Background.: Childhood maltreatment (CM) can be an impediment to normative development and consistently predicts increased risk for substance misuse and polysubstance use (polySU). Yet, a subset of individuals who experience CM exhibit successful adaptations across the lifespan. Although there is an expansive literature on socioemotional and cognitive protective factors that mitigate impacts of CM, less is known about other, intra-individual resilience-promoting factors (e.g., positive future orientation) known to assuage high-risk SU patterns during adolescence. Method: This study examined heterogeneity in individual-level resilience characteristics in maltreated youth as it related to CM characteristics and SU patterns during adolescence. Participants included maltreated youth from the longitudinal LONGSCAN sample (N=355; 181 females). Latent Profile Analysis was used to identify subgroups of CM-exposed individuals based on 5 resilience indicator variables (i.e., commitment to goals, engaging in demanding activities, self-reliance, positive future orientation, and externalizing behaviors). Tests for differences in SU patterns and CM characteristics between the resultant profiles were performed. Results: Data models revealed 3 latent profiles based on participants' resilience traits (i.e., Low Resilience, Average Resilience, and High Resilience). There were no profile differences on the basis of CM characteristics. Those in the High Resilience profile were less likely to engage in polySU compared to the Average Resilience profile. Implications: These findings highlight the promise of individual-level resilience factors that are not necessarily dependent upon caregiver or environmental inputs as protective against polySU following CM. This work represents a promising avenue for future preventative intervention efforts targeting emergent SU behaviors in high-risk youth.

Seay, K. D., & McRell, A. S. (2023). Child welfare case managers' perceptions of parental substance use and experiences with newborn crisis assessments. *Child Welfare*, 101(3),25-50.

This study examines child welfare case managers' perceptions of parental substance use disorders (SUDs) on child safety and describes their experiences conducting newborn crisis assessments. Qualitative focus groups with case managers (n = 23) discussed perceptions of parental SUD. Transcripts were analyzed using inductive thematic analysis. Participants discussed substance type, newborn crisis assessments, parental engagement, child removal and barriers to addressing child safety. Findings support increased training for child protective services (CPS) staff and providing comprehensive behavioral health care.

Ali, M. M., Nye, E., & West, K. (2022). Substance use disorder treatment, perceived need for treatment, and barriers to treatment among parenting women with substance use disorder in US rural counties. *The Journal of Rural Health*, 38(1), 70-76. DOI:10.1111/jrh.12488

Objective: Higher rates of substance use in rural counties compared to urban counties have been well documented. Low perceived need for treatment among those with substance use disorder (SUD) has also been documented in the literature. However, not much is known about SUD treatment among parenting women in rural counties and the impact of perceived need for treatment in seeking care. Little research has also examined barriers to SUD treatment among parenting women in rural communities. Methods: Using a large nationally representative dataset, the study utilizes multivariable logistic regression models to estimate the differences in utilizing SUD treatment among parenting women with SUD in rural and urban counties in the United States. Role of perceived need for SUD treatment and barriers related to finance, access, and stigma are also examined. Results: Parenting women in rural counties with SUD who perceive a need for treatment have more than 90% lower odds of receiving treatment compared to those in urban counties. In addition, parenting women with SUD in rural counties have more than 50% higher odds of identifying access-related issues such as lack of openings in programs, unavailability of treatment facilities, and lack of transportation as barriers to care compared to parenting women in urban counties. Conclusion: Diagnosis of SUD among parenting women is steadily increasing in rural

communities. While many resources in combatting maternal SUD are being utilized, policy and programmatic responses tailored for mothers with SUD in rural communities might help increase utilization of treatment and reduce barriers to treatment.

Austin, A. E., Gest, C., Atkeson, A., Berkoff, M. C., Puls, H. T., & Shanahan, M. E. (2022). Prenatal substance exposure and child maltreatment: A systematic review. *Child Maltreatment*, 27(2), 290-315. DOI:10.1177/1077559521990116

State and federal policies regarding substance use in pregnancy, specifically whether a notification to child protective services is required, continue to evolve. To inform practice, policy, and future research, we sought to synthesize and critically evaluate the existing literature regarding the association of prenatal substance exposure with child maltreatment. We conducted a comprehensive electronic search of PubMed, Web of Science, PsycInfo, CHINAL, Social Work Abstracts, Sociological Abstracts, and Social Services Abstracts. We identified 30 studies that examined the association of exposure to any/multiple substances, cocaine, alcohol, opioids, marijuana, and amphetamine/methamphetamine with child maltreatment. Overall, results indicated that substance exposed infants have an increased likelihood of child protective services involvement, maternal self-reported risk of maltreatment behaviors, hospitalizations and clinic visits for suspected maltreatment, and adolescent retrospective self-report of maltreatment compared to unexposed infants. While study results suggest an association of prenatal substance exposure with child maltreatment, there are several methodological considerations that have implications for results and interpretation, including definitions of prenatal substance exposure and maltreatment, study populations used, and potential unmeasured confounding. As each may bias study results, careful interpretation and further research are warranted to appropriately inform programs and policy.

Freisthler, B., Michaels, N., & Wolf, J. P. (2022). <u>Families in crisis: The relationship</u> between opioid overdoses and child maltreatment in neighborhood areas. *Journal of Studies on Alcohol and Drugs*, 83(1), 145–152. DOI:10.15288/jsad.2022.83.145

Objective: The increase in the use of opioids in Ohio is believed to have contributed to a crisis within county child welfare agencies throughout the state. Prior research has found a connection between opioid use and child abuse and neglect, but no previous studies have examined the relationship between opioid overdoses and child maltreatment rates at the neighborhood level. Method: The sample is 9,231 Census block groups in Ohio for 2015. Bayesian conditionally autoregressive models were used to examine the relationship between naloxone administrations (as a proxy for overdose) and child maltreatment. We controlled for variables representing social disorganization characteristics including unemployment, racial/ethnic heterogeneity, and vacant housing rates. We specifically examined child maltreatment referrals per child population and child maltreatment substantiations per child population. Results: Higher rates of naloxone administration by emergency medical services were related to higher rates of referrals for child welfare investigations (relative risk = 1.0026) and substantiations (relative risk = 1.0027) at the block group level. Neighborhoods located in Appalachia with higher rates of overdoses were at greater risk for experiencing more referrals for child welfare investigations (relative risk = 1.0043). Conclusions: As communities continue to struggle with containing opioid misuse and reducing opioid overdose deaths, they must also contend with addressing problems that may arise from overdoses, including child abuse and neglect. Our findings suggest that the relationship between overdoses and maltreatment occurs at a much smaller spatial scale than has previously been observed. This may allow resources to be targeted more effectively within counties and communities.

Gary, J. C., Downing, N. R., & Pittman, A. (2022). The impact of parental opioid use disorder on children in rural Texas. *Substance Use & Misuse*, *57*(8), 1273-1280. DOI:10.1080/10826084.2022.2076879

The impact of opioid use disorder (OUD) on children is of increasing concern to providers and communities and is yet to be fully understood. Children and families in rural areas are particularly vulnerable due to decreased access to care, lower socioeconomic status, and

lower rates of health insurance coverage. This qualitative secondary data analysis of transcripts from interviews with community stakeholders specifically examined responses when asked how parental OUD impacted children in their rural communities. Methods and Materials: As part of a larger community assessment, 11 focus group and three individual interviews with a variety of stakeholders most likely to encounter those with or at risk for substance use disorder from a predominately rural region of Texas were held in October of 2019. During one-hour sessions a scripted interview guide was used to ask open-ended questions to identify the prevalence and impact of OUD within the community. Transcripts of recorded interviews were coded by three researchers using conventional content analysis focusing on discussion of how parental OUD impacted children in their rural communities. Codes were classified into themes based on consensus. Results: Identified themes were (1) Community Concern for Families; (2) Impaired Parents, Neglected Children, and (3) Intergenerational Normalization of Substance Misuse. Conclusions: The impact of parental OUD and SUD was a concern for participants. Findings have implications for strategies to prevent and mitigate adverse outcomes for children and families in rural areas.

Olson, A. E., Shenk, C. E., Noll, J. G., & Allen, B. (2022). <u>Child maltreatment and substance use in emerging adulthood: Internalizing and externalizing behaviors at the transition to adolescence as indirect pathways</u>. *Child Maltreatment*, *27*(3), 490-500. DOI:10.1177/10775595211010965

One well-established outcome of child maltreatment is an increased likelihood of substance use in emerging adulthood. However, research identifying the indirect pathways that explain this relation is lacking, thereby limiting substance use prevention efforts for the child maltreatment population. The present study helped address this gap by accessing data from The Longitudinal Studies on Child Abuse and Neglect (LONGSCAN; n = 1136), a prospective cohort study of child maltreatment from birth through age eighteen. Internalizing and externalizing problems at age twelve were examined as indirect effects of the relation between child maltreatment prior to age four and substance use at age eighteen. A multiple mediator model tested the total and specific indirect effects of internalizing and externalizing concerns while controlling for demographic risk factors. Results demonstrated that the total

indirect effect for internalizing and externalizing behaviors was statistically significant, Standardized Point Estimate = 0.01, 95% CI: 0.00–0.02. Examination of the specific indirect effects revealed that only externalizing behaviors constituted an indirect pathway, Standardized Point Estimate = 0.01, 95% CI: 0.00–0.03. These results suggest that externalizing behaviors at the transition to adolescence are important intervention targets for reducing the risk for substance use in emerging adulthood in the child maltreatment population.

Palumbo, R., Mechling, B. M., & Ahern, N. R. (2022). <u>Parental opioid use disorder:</u>
<u>Examining their children's experiences, needs, and road to resilience</u>. *Journal of Child and Adolescent Psychiatric Nursing*, 35(1), 24-37. DOI:10.1111/jcap.12344

Problem: Over 8 million children in the United States live with a parent with substance use disorder (SUD), inclusive of opioid use disorder (OUD). This is an adverse childhood experience (ACE), that often leads to poor outcomes such as developing SUD or mental illness. Interventions and research have focused more on the parent and not their children. Without emphasis on child's experiences, their needs, and building interventions toward developing resilience, the intergenerational cycle of SUD/OUD will persist. Methods: Nine children (ages 12-17) in custody of Social Services, who experienced a parent with OUD, participated in this pilot study. The intervention was SAMHSA's Children's Program Kit: Supportive Education for Children of Addicted Parents. Thematic analysis of verbal responses/behaviors, observations, field notes, and any retained materials (i.e., handouts) was conducted over eight sessions. Findings: Findings included three themes regarding participant's experiences: Meaning of a Parent; Others Involved; and Witnessing the Cycle. Two sub-themes also emerged: Ways to Cope and Support from Various Sources. Conclusions: Results support mental health nurses as forerunners in building, implementing, and evaluating child-focused interventions for children of parents with OUD. Interventions should focus on the needs of the children and use a strength-based approach to promote their resilience.

Shockley McCarthy, K., Price Wolf, J., & Dellor, E. (2022). Promoting permanency in families with parental substance misuse: Lessons from a process evaluation of a multi-system program. *BMC Public Health*, 22(1), 2261. DOI:10.1186/s12889-022-14528-4

Background: Families affected by substance misuse are at increased risk for child maltreatment and child welfare system involvement. The Enhancing Permanency in Children and Families (EPIC) program uses four evidence-based and informed multi-system practices to promote safety and permanency outcomes for children involved with the child welfare system due to parental substance misuse: 1) Peer Recovery Support (PRS), 2) Family Treatment Drug Court (FTDC), 3) Medications for Opioid Use Disorder (MOUD) and 4) Nurturing Parent Program (NPP) relational skill-building. The purpose of the current study was to identify barriers, facilitators, and lessons learned in the implementation of and client engagement with the main components of EPIC. Methods: Seventeen key EPIC personnel participated in the study. Individual semi-structured interviews were conducted. Qualitative analysis involved the thematic coding of the interviews, and program facilitators and barriers were revealed. Results: PRS were identified as a primary strength of the EPIC program, providing experiential connection to participating families and a valuable source of information. High turnover and matching PRS to families were barriers to PRS implementation. FTDC contributed to client success as judges developed interpersonal relationships with the clients that balanced support with accountability. Client attitudes toward court presented barriers to FTDC engagement. MOUD provided stabilization and was perceived by caseworkers as an engagement facilitator and a layer of client accountability; however, the lack of availability of MOUD service providers presented a barrier for some clients. Parental relational skill-building was not valued by clients and was perceived as conflicting with sobriety-focused activities. Conclusions: The EPIC program provides comprehensive, coordinated multi-system support and care to families affected by parental substance misuse. Continued efforts to improve recruitment and retention of PRS, reframing client perceptions of FTDC, and increasing access to MOUD may contribute to increased engagement in the program. Findings highlight the utility of tracking process outcomes in community-based interventions to promote participant engagement in programs set in complex systems.

Sumetsky, N., Burke, J. G., & Mair, C. (2022). Relationships between opioid-related hospitalizations and intimate partner violence and child maltreatment hospitalizations in Pennsylvania across space and time. *Journal of Interpersonal Violence*, *37*(5-6), NP3474-NP3491. DOI:10.1177/0886260520948525

Intimate partner violence (IPV) and child maltreatment outcomes are markedly associated with substance abuse disorders. However, few studies have explored these serious family violence outcomes in connection to the opioid epidemic or population-level geographic connections between these variables. This study assesses associations of ZIP code-level IPV and child maltreatment hospitalization outcomes with opioid- and alcohol-related diagnoses as well as economic and demographic neighborhood characteristics. We used 11 years (2004– 2014) of ZIP code-level Pennsylvania hospital discharge data and U.S. Census neighborhood characteristics data. As nearby ZIP codes are more likely to be similar than those that are distant, we incorporated spatial autocorrelation using conditionally autoregressive Bayesian hierarchical space-time models. There was a positive relationship between ZIP code-level opioid-related diagnoses and both IPV (relative risk 1.061; 95% credible interval [1.015, 1.106]) and child maltreatment (relative risk 1.055; 95% credible interval [1.035, 1.070]) hospitalizations. There was a positive relationship between alcohol-related diagnoses and IPV but not child maltreatment. Higher median household incomes were associated with lower counts of both IPV and child maltreatment hospitalizations. To illustrate geographic heterogeneity of model estimates, posterior distributions were used to compare variability of effects across ZIP codes. Our findings emphasize the secondary implications of the opioid epidemic in the form of family violence within communities.

van Draanen, J., & Aneshensel, C. S. (2022). Parental and own substance use disorder: The intersection of gender and early adversity. *Drug and Alcohol Dependence*, *234*, 109393. DOI:10.1016/j.drugalcdep.2022.109393

Background: Children who are exposed to parental substance use disorder (SUD) have a higher risk of SUD themselves. This study examines the extent to which the association between parental and own SUD is conditional upon childhood trauma, socioeconomic status, and gender. Methods: This study uses data from the Nashville Stress and Health Study with

1234 respondents ages 25–65 collected from 2011 to 2014, weighted be representative of the general population. The association between parental SUD and own SUD was estimated using Cox Proportional Hazard Models, controlling for covariates, and testing for interactions. Results: Other things being equal, the risk of own SUD is more strongly associated with parental SUD in households with childhood traumas among men, but not women. Childhood trauma is not associated with own SUD in the absence of parental SUD among men. For men with parental SUD exposure, just one traumatic event is associated with a 38% increased risk of own SUD (HR=1.382, SE=.201, p < 0.05). For men, living with grandparents is associated with added SUD risk (HR=1.476, SE=.228, p < 0.05). For women, childhood trauma is not associated with own SUD, but parental SUD (HR=1.556, SE=.238, p < 0.01), and early onset mood or anxiety disorder (HR=1.682, SE=.316, p < 0.01) are. For both genders, those who are African American have lower risk of SUD than those who are White (HR=0.774, SE=.109, p < 0.05 for women; HR=0.672, SE=.079, p < 0.01 for men). Conclusions: Parental SUD is associated with a substantial increase in risk for own SUD, and this association differs by gender and early trauma.

Cruden, G., Crawford, S., & Saldana, L. (2021). <u>Prevention adaptation of an evidence-based treatment for parents involved with child welfare who use substances</u>. *Frontiers in Psychology*, *12*, 689432. DOI:10.3389/fpsyg.2021.689432

Background: Parental substance use, especially opioid misuse and/or methamphetamine use, is a key driver for recent increases in family involvement with child welfare and foster care placements in the United States. There is an urgent need for programs that prevent parental substance use disorders, yet few prevention programs exist that target parents' unique needs and strengths. Adapting evidence-based treatment approaches for prevention might be an efficient, effective way to address this gap. The current study informed the rigorous adaptation of an evidence-based treatment that supports families involved with child welfare due to substance use, Families Actively Improving Relationships (FAIR), to a prevention-oriented intervention: "PRE-FAIR." FAIR entails four treatment domains: substance use, parenting, mental health, and ancillary services (e.g., housing, medical care, and food). FAIR significantly improved parenting and reduced parental substance use in three rigorous

treatment trials, but FAIR's effectiveness in preventing the initiation or escalation of opioid misuse and/or methamphetamine use is untested. To inform adaptation, particular attention was paid to operationalizing strategies underlying a key hypothesized mediator of successful parent outcomes—engagement. Methods: Graduated FAIR parents (n = 9) and FAIR administrators, clinical supervisors, and clinicians (n = 11) participated in semi-structured interviews. Content analysis was used to identify key variables driving FAIR engagement and parent outcomes. Causal loop diagramming, a qualitative systems science method, was employed to operationalize emergent themes, and describe how causal links between key variables interrelated dynamically over time. Results: Themes reinforced the value of FAIR's treatment domains for supporting parent's sobriety and parenting skills within a prevention orientation. Ancillary supports and strong relationships were particularly crucial for helping parents cope with stressors leading to substance use. Five engagement strategies were identified as essential to parent success: 24/7 clinician availability, in-person clinician advocacy, in-home delivery, strengths-based interactions, and urinalysis. Implications for PRE-FAIR engagement strategies and dosage were identified. Discussion: Traditional qualitative analyses and qualitative analyses based in systems science can inform rigorous adaptations of evidence-based treatment programs for prevention. Future research will explore additional required, fidelity-consistent prevention adaptations to FAIR, and the impact of PRE-FAIR on parental substance use and child welfare case outcomes.

Dolbin-MacNab, M. L., & O'Connell, L. M. (2021). <u>Grandfamilies and the opioid epidemic: A systemic perspective and future priorities</u>. *Clinical Child and Family Psychology Review*, 24, 207-223. DOI:10.1007/s10567-021-00343-7

As a result of the devastating impact of the opioid epidemic, increased numbers of children are being raised by their grandparents in what are known as grandfamilies. Despite these children and their families experiencing difficult environmental circumstances, numerous adverse life events, and challenging family dynamics, empirical examinations of the opioid epidemic, as it relates to grandfamilies, remain limited. The purpose of this review is to advance the understanding of how grandfamilies have been impacted by the opioid epidemic by using a systemic perspective to highlight themes and major conclusions within the existing

conceptual and empirical literature. The review reveals five systemically informed themes including the assumption of caregiving responsibilities, grandparent stress and well-being, caring for vulnerable grandchildren, navigating relationships with parents, and contextual stressors of societal stigma and barriers to service. To extend this work, systemically informed recommendations for clinical intervention and future priorities for research and policy are discussed.

Freisthler, B., Maguire-Jack, K., Yoon, S., Dellor, E., & Wolf, J. P. (2021). Enhancing Permanency in Children and families (EPIC): A child welfare intervention for parental substance abuse. *BMC Public Health*, 21, 1-9. DOI:10.1186/s12889-021-10668-1

Background: Across Ohio, parental substance abuse has contributed to a marked increase in the number of children in foster care. Children exposed to parental substance use have a higher likelihood of physical abuse and neglect, and consequently a variety of physical, psychological and cognitive problems. The Enhancing Permanency in Children and Families (EPIC) program is a collaborative effort between the Ohio State University College of Social Work, two county offices of the Ohio Department of Job and Family Services, two juvenile courts and local behavioral health agencies. The goal of EPIC is to use three evidence-based and evidence-informed practices to reduce abusive and neglectful parenting, reduce addiction severity in parents, and improve permanency outcomes for families involved with the child welfare system due to substance abuse. Methods: EPIC is a quasi-experimental study. Under the program, child welfare-involved adults who screen positive for substances are matched with a peer recovery supporter. Participants are also incentivized to participate in family treatment drug court, medications for opioid use disorders and home-based parenting supports. Participating adults (N = 250) are matched with comparison groups from counties participating in a separate intervention (Ohio START) and to those receiving treatment as usual, resulting in a final sample of 750 adults. Primary outcomes including addiction severity, child trauma symptoms, resilience, and attachment are assessed at baseline and at program completion. Additional outcomes include timely access to treatment services, length of placement in out-of-home care and recidivism into the child welfare system. Discussion: This intervention formalizes cross-system collaboration between child welfare, behavioral health and juvenile courts to support families affected by addiction. The use of three evidence-based or evidence-informed strategies presents the opportunity to determine specific strategies that are most effective for reducing addiction severity. Lastly, the intervention combines several sources of funding to bolster sustainability beyond the life of the Regional Partnership Grant (RPG).

Logsdon, A. R., Antle, B. F., Katz, R. S., Barbee, A. P., Kamer, C., & Spriggs, A. (2021). The impact of engagement on child welfare families involved with family treatment drug courts. *Juvenile and Family Court Journal*, 72(4), 43-56. DOI:10.1111/jfcj.12210

Family Treatment Drug Courts are multidisciplinary teams that engage child welfare families in substance use treatment and reunification court services. This quasi-experimental study evaluates the impact of engagement strategies with 36 participants. Participants experienced high levels of engagement with the court, child welfare workers, and their clinical providers. There were significant differences in engagement by race as well. Participants who successfully graduated the program had higher rates of engagement compared to those who dropped out. This study demonstrates the importance of measuring engagement with multiple providers for client success. Implications for practice and research are discussed.

Moreland, A., Newman, C., Crum, K., & Are, F. (2021). Types of child maltreatment and child welfare involvement among opioid-using mothers involved in substance use treatment. *Children and Youth Services Review*, *126*, 106021. DOI:10.1016/j.childyouth.2021.106021

Although there is a significant link between maternal substance use and child maltreatment risk, extant literature has not investigated this link specifically among the growing number of parents abusing opioids. Underreporting of opioid use within child welfare presents further challenges in elucidating relations between maternal opioid use and child maltreatment. The purpose of the current study is to examine the link between maternal opioid use in women in substance use treatment and self-reported rates of child maltreatment and child welfare involvement of their children. We examined maternal substance use, severity of substance

use, severity and type of child maltreatment of their children, and child welfare involvement across mothers who misuse opioids and misuse other substances using self-report surveys with 89 mothers. Results suggest similarities and differences among mothers who use opioids and other substances. Mothers who use opioids endorsed more significant and prolonged involvement with child welfare than mothers who use other substances. Participants did not endorse significant differences between rates of child maltreatment, and treatment engagement across groups. Given increased awareness of significant risks associated with opioid abuse, including greater risk for child maltreatment, a better understanding of its intersection with child welfare is necessary.

Orsi, R., Boissy, L., Yuma, P., Palmer, F., & Torres-Molinar, S. (2021). Child welfare in non-metro and rural communities: Experiences of child-serving professionals addressing substance use. *Child & Family Social Work*, *26*(4), 696-707. DOI:10.1111/cfs.12850

The purpose of this study is to explore the challenges and strengths that child welfare professionals experience in non-metro areas, with a secondary focus on how they encounter and respond to substance use in families and communities. We conducted three focus groups in non-metro counties (n = 35). We used thematic analysis supported by Dedoose, beginning with line by line coding, then thematic identification and mapping. Emergent themes focused on challenges and strengths experienced in non-metro communities, including (Community context)—unique community attributes; the call for treatment; (Challenges)—uphill battles; reporting; access to appropriate care; funding; interacting with state systems; and (Strength)—finding strengths and creative solutions. Child welfare professionals in non-metro communities embody and respond to both challenges and strengths. They feel frustrated by standards that do not take available resources into account, yet they effectively leverage social capital to complete their work. Giving voice to child welfare professionals can enhance policy making and create more sustainable systems for child welfare practice in non-metro settings.

Saldana, L., Chapman, J. E., Campbell, M., Alley, Z., Schaper, H., & Padgett, C. (2021).

Meeting the needs of families involved in the child welfare system for parental substance abuse: Outcomes from an effectiveness trial of the families actively improving relationships program. Frontiers in Psychology, 12, 689483.

DOI:10.3389/fpsyg.2021.689483

Limited evidence-based practices exist to address the unique treatment needs of families involved in the child welfare system with parental substance abuse. Specifically, parental opioid and methamphetamine abuse have increased over the last decade, with associated increases of families reported to the child welfare system. The Families Actively Improving Relationships (FAIR) program was developed to address the complexities of these families. Evidence-based strategies to address the interrelated needs of parents—including substance abuse and mental health treatment, parent skills training, and supportive case management to improve access to ancillary needs—are integrated in an intensive community outpatient program. This study examined the clinical effectiveness of FAIR when delivered in a Medicaid billable outpatient clinic. Parents (n = 99) were randomized either to the immediate FAIR condition or to the Waitlist (WL) condition, using a dynamic wait-listed design, with all parents provided the opportunity to eventually receive FAIR. Outcomes show statistically and clinically significant reductions in parental opioid and methamphetamine use, mental health symptoms, and parenting risk, and improvements in stability in parents receiving FAIR. Providing services to families who require travel in excess of 20 miles for sessions has challenging implications for program costs under a Medicaid structure. Study outcomes highlight the need for policies to support funding of intensive family-based programs.

Smith, J. C., Alderman, L., Attell, B. K., Avila Rodriguez, W., Covington, J., Manteuffel, B., DiGirolamo, A. M., Snyder, S. M., & Minyard, K. (2021). <u>Dynamics of parental opioid use and children's health and well-being: An integrative systems mapping approach</u>. *Frontiers in Psychology*, *12*, 687641. DOI:10.3389/fpsyg.2021.687641

The seemingly intractable opioid epidemic compels researchers, the media, and families to better understand the causes and effects of this complex and evolving public health crisis. The effects of this crisis on people using opioids, maternal prenatal opioid exposure, and neonatal abstinence syndrome are well-documented, but less is known about the impact of caregivers' opioid use on children's health and well-being. One challenge to understanding

the effects of parental opioid use disorder (OUD) on child and adolescent outcomes is the numerous interrelated pathways in which a child's health and well-being can be impacted. To better understand these dynamic relationships, we applied a systems mapping approach to visualize complex patterns and interactions between pathways and potential leverage points for interventions. Specifically, we developed a causal loop diagram system map to elucidate the complex and interconnected relationships between parental OUD, social determinants of health at the family and socio-environmental levels, family strengths, social supports, and possible adverse impacts on children's physical and mental health and risks for future substance misuse. The goals of this research are to (1) identify factors and dynamics that contribute to the relationship between parental OUD and children's health and well-being and (2) illustrate how systems mapping as a tool can aid in understanding the complex factors and dynamics of the system(s) that influence the well-being of children and their parents or primary caregivers.

Wolf, J. P., Freisthler, B., & McCarthy, K. S. (2021). <u>Parenting in poor health: Examining associations between parental health, prescription drug use, and child maltreatment</u>. *Social Science & Medicine*, 277, 113887. DOI:10.1016/j.socscimed.2021.113887

Rationale: Child maltreatment and problematic parenting are related to negative outcomes for children. Poor parental health could be a risk factor for problematic parenting through several mechanisms: 1) inadequate emotional regulation and coping; 2) impairment of parental capacity; and, 3) impairment of the parent-child relationship. Objective: This study examines relationships between self-rated parental health, prescription drug use, and a broad array of negative parenting outcomes. Methods: A sample of general population parents of children aged ten and younger was recruited from 30 mid-sized cities in California (n = 681). Weighted mixed-effects negative binomial and logistic regression models were used to examine associations between poor parental health, prescription drug use and child maltreatment (physical abuse, supervisory neglect, and physical neglect), and problematic parenting (psychological aggression and corporal punishment). Results: Parents in poor health used physical abuse, corporal punishment, and psychological aggression more frequently and had higher odds of supervisory neglect. Parents who were taking

more prescription medications had higher odds of physical neglect. Exploratory analyses suggested that prescriptions for certain medical conditions both increased and decreased the risk of problematic parenting. Conclusions: Poor health and prescription drug use are not uncommon and present largely under-recognized risk factors for a spectrum of adverse parenting outcomes. Our study provides additional evidence that parents in poor health are at heightened risk of negative parenting, and need targeted intervention supports to support family well-being.

Yoon, S., Kobulsky, J. M., Shin, S. H., & Coxe, K. (2021). The roles of child maltreatment and fathers in the development of substance use in an at-risk sample of youth: A longitudinal study. *Child Abuse & Neglect*, *118*, 105130. DOI:10.1016/j.chiabu.2021.105130

Background: Despite ample cross-sectional evidence linking child maltreatment and father involvement to adolescent substance use, little is known about the longitudinal impact of child maltreatment and father involvement in the developmental course of substance use from early adolescence to late adolescence. Objective: The primary aim of the study was to examine the long-term effects of childhood maltreatment (i.e., maltreatment type, perpetrator identity) and the quality and quantity of father involvement on developmental trajectories of substance use among high-risk youth. Participants and Setting: Data were drawn from the Longitudinal Studies of Child Abuse and Neglect. Study participants included 681 U.S. adolescents who had experienced or were at risk for child maltreatment. Methods: Latent Growth Poisson Modeling was conducted to examine developmental trajectories of substance use at ages 12, 14, 16, and 18. Results: Child emotional abuse and greater quantity of father involvement were associated with a higher initial number of substances used, while higher quality of father-child relationships was associated with a lower initial number of substances used. Emotional abuse and greater quantity of father involvement were associated with slower increases in the number of substances used over time. Conclusions: The findings suggest that engaging fathers and promoting nurturing parenting and positive parentadolescent interactions may be important for programs and policies aimed to prevent early adolescent substance use initiation. Furthermore, early identification of emotional abuse among adolescents could help to prevent initial polysubstance use onset.

Clary, E., Ribar, C., Weigensberg, E., Radel, L., & Madden, E. (2020). <u>Challenges in providing substance use disorder treatment to child welfare clients in rural communities</u>. US Department of Health and Human Services, Office of the Assistant Secretary for Planning and Evaluation.

Rural communities often lack the resources to provide services to parents struggling with substance use issues. Rural economics, transportation and technological limitations exacerbate these challenges. Child welfare agencies and substance use disorder treatment providers face particular challenges to collaboration with one another in rural communities. Stigma, lack of anonymity and misinformation compound these issues. Strategies specifically tailored to rural communities are needed to improve service access, develop workforce capacity and improve collaboration.

Rebbe, R., Bishop, A. S., Ahn, J., & Mienko, J. A. (2020). Opioid overdose events and child maltreatment indicators: Differential county-level associations. *Children and Youth Services Review*, 119, 105671. DOI:10.1016/j.childyouth.2020.105671

Background & Purpose: Concerns have been raised that the opioid epidemic has caused increases in child maltreatment and thus, increased child protective system (CPS) caseloads. Understanding the specific impact of the opioid crisis on the child welfare system is a current priority for researchers and policymakers. Yet, research is routinely limited by available measures of the opioid epidemic, maltreatment, or both. Research analyzing broader aspects of maltreatment and the opioid epidemic can improve our understanding of this link, informing decisions about how to target child welfare resources to improve child outcomes. Thus, the purpose of this study was to examine the longitudinal associations between countylevel opioid overdose event rates and four indicators child maltreatment. Methods: Publicly available data on several county-level indicators, including opioid overdose events, were linked to hospitalization and CPS records for Washington State from 2005 to 2017. Indicators of child maltreatment (intakes, substantiations, out-of-home placements, and maltreatmentrelated hospitalizations) were aggregated to the county-level based on the county's child population per year. The opioid epidemic was operationalized as opioid overdose-related events, hospitalizations and deaths, as reported by the Department of Health. Panel data analysis was used to examine the link between opioid overdose events and the four outcomes within and across time while accounting for several county-level covariates. Results: Each of the child maltreatment indicators, except substantiations, were positively correlated with opioid overdose at the county-level. Correlations ranged from 0.10 (placement) to 0.15 (intakes). Results from the panel analysis demonstrated that no significant associations were found for any of the four child maltreatment indicators and the opioid overdose event rates. However, fixed-time effects were significant, positively for intakes and hospitalizations and negatively for substantiations and placements. Conclusions: As counties experienced increased problems with the opioid epidemic, associations between opioid overdose event rates and child maltreatment indicators were not found after accounting for other county-level factors. Findings point to the saliency of broader macro-level contexts – including states' child welfare policies and economic environments – for understanding the link between the opioid epidemic and child maltreatment.

Richards, T., Bertrand, J., Newburg-Rinn, S., McCann, H., Morehouse, E., & Ingoldsby, E. (2020). Children prenatally exposed to alcohol and other drugs: what the literature tells us about child welfare information sources, policies, and practices to identify and care for children. Journal of Public Child Welfare, 1(24), 71-94. DOI:10.1080/15548732.2020.1814478

Many parents who interact with the child welfare system present with substance use issues, which means their children are at risk for prenatal exposure to alcohol and other drugs. Because child welfare agencies play an important role in identifying and providing services to mitigate negative impacts of prenatal exposures, we conducted a search for literature addressing child welfare information sources, policies, and practices related to this population. The search yielded 16 research/evaluation and 16 policy/practice papers, with most addressing exposures to both alcohol and other drugs. The literature most commonly reports that children identified as exposed are referred to child protection agencies during the newborn period. This practice may lead to underidentification, especially of children with prenatal exposure to alcohol. Research suggests that this population is at risk for poorer child welfare outcomes and that there are specific service needs for these children. This review indicates that there is an overall lack of research literature regarding identification of prenatally exposed children involved in the child welfare system that could best inform child

welfare policies and practices. Studies investigating how the child welfare system identifies and cares for children with prenatal exposures are needed.

West, A. L., Dauber, S., Gagliardi, L., Correll, L., Lilli, A. C., & Daniels, J. (2020). Systematic review of community- and home-based interventions to support parenting and reduce risk of child maltreatment among families with substance exposed newborns. *Child Maltreatment*, 25(2), 137-151. DOI:10.1177/1077559519866272

Substance-exposed newborns (SENs) are at increased risk of child maltreatment, out-of-home placement, and poor health and developmental outcomes. The purpose of this systematic review is to synthesize existing research on community- and home-based interventions designed to improve parenting and reduce risk of maltreatment for families with SENs, applying a program logic framework. The review includes studies that used preexperimental, quasi-experimental, and experimental designs. Twelve interventions were identified. Of the nine studies that used more rigorous experimental or quasi-experimental designs, five showed positive effects on at least one parenting or child maltreatment outcome, although some studies showed high risk of bias. Full coherence among the intended participants, theory of change, and program components was observed for only two interventions. The findings suggest a need for more rigorous research to develop and test interventions that are grounded in theory and prior research and that address the unique needs of families with SENs.

Crowley, D. M., Connell, C. M., Jones, D., & Donovan, M. W. (2019). <u>Considering the child welfare system burden from opioid misuse: research priorities for estimating public costs</u>. *The American Journal of Managed Care*, *25*(13 Suppl), S256–S263.

The negative impact of opioids on those who misuse them has been widely documented. Despite significant spillover effects in the form of elevated rates of child maltreatment and child welfare system (CWS) involvement for children affected by parental opioid misuse, the public costs of opioid misuse to the CWS remain largely undocumented. This work seeks to understand the value and limitations of public data in estimating the costs of the opioid

epidemic on the CWS. National data from federal sources are combined with best estimates of the association between opioid misuse and child services system utilization. The limitations of this work are explored, and future research priorities are outlined. Ultimately, this work illustrates the need to (1) improve data quality related to parental opioid misuse and CWS linkages; (2) better estimate the number of children and families coming into contact with the CWS as a result of parental opioid misuse; (3) improve predictions of CWS trajectories, including investigation, service provision, and foster care entry among this population; and (4) better estimate the CWS costs associated with patterns of system involvement resulting from parental opioid misuse. This information is crucial to ensuring the production of high-quality system involvement and cost projections related to the opioid crisis.

Feder, K. A., Letourneau, E. J., & Brook, J. (2019). <u>Children in the opioid epidemic:</u>
<u>Addressing the next generation's public health crisis</u>. *Pediatrics*, *143*(1), e20181656. DOI:10.1542/peds.2018-1656

This paper discusses the pathways by which opioid-related problems can spill over and affect child health and safety in the United States and the possible solutions and challenges. The major implications of recent changes in federal policy for the ability of states to address the pediatric impact of the opioid epidemic are also discussed.

Goldberg, A. E., & Blaauw, E. (2019). <u>Parental substance use disorder and child abuse:</u>
<u>Risk factors for child maltreatment?</u>. *Psychiatry, Psychology and Law*, 26(6), 959-969. DOI:10.1080/13218719.2019.1664277

Although the literature consistently shows an association between parental substance use disorders (SUDs) and child abuse, it is unknown what factors discern non-abusive and abusive parents with SUDs. This study aims to investigate which specific risk factors are associated with child abuse in clinically treated parents with SUDs in the Netherlands. It examines two groups of parents with SUDs in a clinical setting, with and without known instances of child abuse. These groups were compared on SUD-related factors such as the type and severity of the SUDs, and variables addressing psychological disability such as

comorbid diagnoses and quality of life. Other than a marginally significant difference in severity of addiction and a lower mean age of the parents in the child abuse group, no significant differences were found. The small sample size and the inherent difficulty of studying SUDs in a clinical sample is likely to have affected the results.

Howell, S., Bailey, L., & Coffman, J. (2019). Evaluation of drug-endangered children: The yield of toxicology and skeletal survey screening. *Child Abuse & Neglect*, *96*, 104081. DOI:10.1016/j.chiabu.2019.104081

Background: Drug endangerment is known to be associated with child maltreatment. However, even with the high association between physical abuse and drug endangerment there is no standard for screening in this population. Skeletal survey screening may facilitate the identification of children in this population who have also been physically abused. Objective: Our objective was to determine the characteristics of drug endangered children and specifically the yield of skeletal survey screening. Participants and setting: The participants in this study were children referred by Child Protective Services (CPS) due to concerns of drug exposure. They were seen in a child abuse outpatient clinic by a child abuse pediatrician or pediatric nurse practitioner. Methods: This study is a retrospective chart review of the Child Advocacy Resource and Evaluation (C.A.R.E.) Team records between January 1, 2011 and December 31, 2017. We measured the yield of toxicology, additional abuse endured, and skeletal survey findings. Results: Over the 6-year period, 1252 cases were referred to C.A.R.E. Team for drug endangerment. 1150 cases had hair toxicology performed with 595 cases (52%) testing positive for at least one illegal substance. The compound most frequently identified was methamphetamine followed by marijuana and cocaine. In addition to drug endangerment, other forms of abuse were identified in 162 cases including sexual, physical, and neglect. Using the American Academy of Pediatrics (AAP) and American College of Radiology (ACR) guidelines, 340 skeletal surveys were performed. Twelve cases (4%) had occult skeletal injuries none of which had cutaneous findings. Of those with skeletal injury, 11 cases out of 11 tested by hair toxicology were positive for at least one illegal substance. Conclusions: The application of the AAP and ACR guidelines for

skeletal survey screening to those children referred for drug endangerment is useful in identifying children with physical abuse.

Morris, M. C., Marco, M., Bailey, B., Ruiz, E., Im, W., & Goodin, B. (2019). Opioid prescription rates and risk for substantiated child abuse and neglect: A Bayesian spatiotemporal analysis. *Drug and Alcohol Dependence*, 205, 107623. DOI:10.1016/j.drugalcdep.2019.107623

Objectives: To determine the association between opioid prescribing rates and substantiated abuse and neglect across Tennessee counties during an 11-year period. Methods: We adopted a Bayesian spatiotemporal approach to determine the association between opioid prescribing and rates of substantiated child abuse and neglect over and above environmental and population-level covariates. Annual county-level data for Tennessee (2006–2016) included rates of substantiated child abuse and neglect, rates of drug and non-drug crime incidents, racial and Hispanic composition, per capita income, child poverty and teen birth rates, and vacant housing. Results: Higher opioid prescribing rates were associated with greater risk for substantiated child abuse and neglect across Tennessee counties. Risk for substantiated child abuse and neglect was positively associated with vacant housing, child poverty, teen birth rates, and rates of both drug and non-drug criminal incidents - including stimulant arrests. Risk for substantiated child abuse and neglect was negatively associated with percentages of African Americans. Conclusions: Results underscore the importance of opioid prescribing and crime rates as independent determinants of spatial and temporal variation in risk for substantiated child abuse and neglect. Policies that regulate and reduce opioid prescribing have the potential to reduce risk for child abuse and neglect.

Romanowicz, M., Vande Voort, J. L., Shekunov, J., Oesterle, T. S., Thusius, N. J., Rummans, T. A., Croarkin, P. E., Karpyak, V. M., Lynch, B. A., & Schak, K. M. (2019). The effects of parental opioid use on the parent—child relationship and children's developmental and behavioral outcomes: A systematic review of published reports. Child and Adolescent Psychiatry and Mental Health, 13(5), 1-11. DOI:10.1186/s13034-019-0266-3

Background: Between 2009 and 2014, nearly 3% of US children (age ≤ 17 years) lived in households with at least 1 parent with substance use disorder. The present systematic review aimed to evaluate effects of parental opioid use disorder on the parent-child relationship and child developmental and behavioral outcomes. Methods: Several databases were comprehensively searched for studies published from January 1980 through February 2018 that reviewed effects of parental opioid addiction on parent—child relationships and outcomes of children (age, 0–16 years). Results: Of 304 unique studies, 12 evaluated effects of parental opioid addiction on the parent-child relationship as the primary outcome and on children's outcomes, including behaviors and development. Observation of mother-child interaction showed that mothers with opioid use disorders are more irritable, ambivalent, and disinterested while showing greater difficulty interpreting children's cues compared with the control group. Children of parents with opioid use disorders showed greater disorganized attachment; they were less likely to seek contact and more avoidant than children in the control group. The children also had increased risk of emotional and behavioral issues, poor academic performance, and poor social skills. Younger children had increased risk of abuse or neglect, or both, that later in life may lead to such difficulties as unemployment, legal issues, and substance abuse. Conclusions: Current evidence shows association between parental opioid addiction and poorer mother-child attachment and suboptimal child developmental and behavioral outcomes. Further research and treatment targeting children and families with parental opioid use are needed to prevent difficulties later in life.

Halpern, S. C., Schuch, F. B., Scherer, J. N., Sordi, A. O., Pachado, M., Dalbosco, C., Fara, L., Pechansky, F., Kessler, F., and Von Diemen, L. (2018). Child maltreatment and illicit substance abuse: A systematic review and meta-analysis of longitudinal studies. *Child Abuse Review*, 27(5), 344–360. DOI:10.1002/car.2534

This study aimed to investigate the association between exposure to different types of child maltreatment (CM) and the development of substance use disorders (SUDs) later in life. A systematic review was conducted: the PubMed, EMBASE and PsycINFO databases were searched for relevant papers and ten studies were identified for further analysis. Random effects meta-analyses were performed for each type of maltreatment in order to estimate the odds ratio (OR) for SUD incidence, and meta-regressions were performed to explore potential moderators. Individuals with a history of physical abuse during childhood had a 74 per cent increased risk for drug abuse later in life (OR = 1.74, 95% confidence interval (CI) = 1.362.18). The risk for drug abuse was also 73 per cent higher in individuals with a history of sexual abuse during childhood (OR = 1.73, 95% CI = 1.242.41). A meta-regression found that gender has a moderating effect, with women at a greater risk of SUD incidence compared to men. Exposure to CM, such as physical and sexual abuse in childhood, increases the risk of further substance abuse. Understanding the interplay between the different factors associated with violence and abuse of psychoactive substances is of fundamental importance in designing prevention approaches and interventions for drug users.

Henry, C., Liner-Jigamian, N., Carnochan, S., Taylor, S., & Austin, M. J. (2018). Parental substance use: How child welfare workers make the case for court intervention. *Children and Youth Services Review*, *93*, 69-78. DOI:10.1016/j.childyouth.2018.07.003

Parental substance use (PSU) is a factor in many child welfare cases; however, little is known about how child welfare agencies and their workers make the case to juvenile or family courts that PSU-related acts and omissions are harmful to children. This qualitative data-mining study explores the ways in which child welfare workers draw on child maltreatment statutes, risk assessment tools, and practice guidelines to frame evidence and make the case that PSU is harmful or poses a substantial risk of harm to children. Narrative data were extracted from child welfare court reports located in electronic case records from two California counties.

Analysis revealed that workers cited multiple sources and types of evidence to make the case that, due to substance use, parents had failed to protect their children from harm or risk of harm and/or had failed to provide for their children's basic needs. Moreover, workers noted that these failures constituted neglect under California law. In addition, similarities and differences emerged within and across counties in how workers made the case that children were in need of protection, which suggested that state and local policy-practice guidelines influenced the structure of court reports and arguments made for state intervention. Implications for policy and practice are discussed and recommendations for future research are identified.

Horn, K. A., Pack, R. P., Trestman, R., & Lawson, G. (2018). Almost everything we need to better serve children of the opioid crisis we learned in the 80s and 90s. Frontiers in Public Health, 6, 406265. DOI:10.3389/fpubh.2018.00289

Opioid use disorder impedes dependent parents' abilities to care for their children. In turn, children may languish in unpredictability and persistent chaos. Societal responses to these children are often guided by a belief that unless the drug dependent parent receives treatment, there is little help for the child. While a preponderance of the drug dependence research is adult-centric, a significant body of research demonstrates the importance of not only addressing the immediate well being of the children of drug dependent caregivers but preventing the continuing cycle of drug dependence. The present commentary demonstrates through a brief review of the US history of drug dependence crises and research from the 1980s and 1990s, a range of "tried and true" family, school, and community interventions centered on children. We already know that these children are at high risk of maladjustment and early onset of drug dependence; early intervention is critical; multiple risk factors are likely to occur simultaneously; comprehensive strategies are optimal; and multiple riskfocused strategies are most protective. Where we need now to turn our efforts is on how to effectively implement and disseminate best practices, many of which we learned in the 1980s and 1990s. The greatest opportunity in both changing the nature of the opioid epidemic at scale and influencing rapid translation of existing research findings into policy and practice is not in asking what to do, but in asking how to do the right things well, and quickly.

Kepple, N. J. (2018). Does parental substance use always engender risk for children? Comparing incidence rate ratios of abusive and neglectful behaviors across substance use behavior patterns. *Child Abuse & Neglect*, 76, 44-55. DOI:10.1016/j.chiabu.2017.09.015

Parental substance use disorder (SUD) is associated with an added risk for child abuse and neglect, but less is understood about how a range of parental use behaviors is associated with differential maltreatment frequencies. This study used the National Survey of Child and Adolescent Well-Being (NSCAW I) to create categories for parental substance use behaviors that are conceptually associated with varying levels of substance-related impairments. The study sample was composed of 2100 parents of children ages 2–17 years from Wave 4 data collection. Weighted negative binomial regression models assessed the relationship between substance use behavior patterns and maltreatment frequencies by type. Behavior patterns defined by some form of past year substance use were associated with a higher frequency of physical or emotional abuse compared to non-users. In contrast, only past year SUD was associated with a higher frequency of neglect compared to other categories. In sum, the relationship between substance use and maltreatment frequencies differed for abuse and neglect, suggesting different pathways may be underlying these observed relationships.

Orsi, R., Yuma-Guerrero, P., Sergi, K., Pena, A. A., & Shillington, A. M. (2018). Drug overdose and child maltreatment across the United States' rural-urban continuum. *Child Abuse & Neglect*, 86, 358-367. DOI:10.1016/j.chiabu.2018.08.010

This national study of US counties (n = 2963) investigated whether county-level drug overdose mortality is associated with maltreatment report rates, and whether the relationship between overdose mortality and maltreatment reports is moderated by a county's rural, nonmetro or metro status. Data included county-level 2015 maltreatment reports from the National Child Abuse and Neglect Data System, modeled drug-overdose mortality from the Centers for Disease Control, United States Department of Agriculture Rural-Urban Continuum Codes, US Census demographic data and crime reports from the Federal Bureau of Investigation. All data were linked across counties. Zero-inflated negative binomial (ZINB) regression was used for county-level analysis. As hypothesized, results from the ZINB model showed a significant and positive relationship between drug overdose mortality

and child maltreatment report rates ( $\chi = 101.26$ , p < .0001). This relationship was moderated by position on the rural-urban continuum ( $\chi = 8.76$ , p = .01). For metro counties, there was a 1.9% increase in maltreatment report rate for each additional increment of overdose deaths (IRR=1.019, CI=[1.010, 1.028]). For non-metro counties, the rate of increase was 1.8% higher than for metro counties (IRR=1.018, CI=[1.006, 1.030]); for rural counties, the rate of increase was 1.2% higher than for metro counties (IRR=1.012, CI=[0.999, 1.026]). Additional research is needed to determine why the relationship between drug overdose mortality and maltreatment reports is stronger in non-metro and rural communities. One potential driver requiring additional inquiry is that access to mental and physical health care and substance use treatment may be more limited outside of metropolitan counties.

Quast, T. (2018). State-level variation in the relationship between child removals and opioid prescriptions. *Child Abuse & Neglect*, *86*, 306-313. DOI:10.1016/j.chiabu.2018.10.001

Background: One of the most devastating impacts of the U.S. opioid crisis is the challenge it creates for dependent parents to care for their children, potentially leading to the child being removed from their home. However, existing studies of the link between child removals and opioid prescriptions have either focused on a single state or estimated a national average. Objective: To estimate state-level associations between child removals and opioid prescriptions. Participants and setting: U.S. counties from 2010 to 2015. Methods: We performed longitudinal regression analysis in which the rates for all removals and removals associated with parental drug abuse were employed as dependent variables. In addition to the opioid prescription rate, additional explanatory variables included child removal risk factors, county fixed effects, year fixed effects, and state-specific time trends. Interaction variables were used to estimate state-specific relationships. Results: We found substantial variation in the association between child removals and opioid prescriptions. Twenty-three states had a positive association, fifteen had a negative association, and twelve did not have a statistically significant association. A one-standard deviation increase in the prescription rate was associated with a 37% (p < .001) increase in the removal rate for parental drug abuse in Illinois, while in New Hampshire it was associated with a 28% (p < .001) decrease. Conclusions: The substantial variation in state-level relationships between child removals and opioid prescriptions may reflect differences in the extent to which states have experienced the opioid crisis and indicate the need for interventions that account for those differences.

Dawe, S., Taplin, S., & Mattick, R. P. (2017). Psychometric investigation of the brief child abuse potential inventory in mothers on opioid substitution therapy. *Journal of Family Violence*, *32*, 341–348. DOI:10.1007/s10896-016-9821-3

The identification of potential child maltreatment using reliable and valid screening instruments is of particular importance in high risk populations. The current study investigates the psychometric properties of the Brief Child Abuse Potential (BCAP) Inventory in mothers enrolled in opioid substitution therapy. The BCAP Risk Abuse scale had strong internal reliability. Comparisons between valid and invalid protocols (≥ 4 on the Lie scale, > 1 Random Responding) failed to find systematic differences across most variables although those with a faking good profile had significantly lower scores on psychological well being. A six-factor solution was obtained and was conceptually strong. Subsequent analyses suggested Rigidity may be an independent subscale that needs further investigation. These results add further evidence for the potential utility of the BCAP as a measure of child abuse potential. Replication studies are needed to ascertain whether the subscales derived have convergent and predictive utility.

Freisthler, B., Wolf, J. P., Wiegmann, W., & Kepple, N. J. (2017). <u>Drug use, the drug environment, and child physical abuse and neglect</u>. *Child Maltreatment*, 22(3), 245 255. DOI:10.1177/1077559517711042

Although drug use is considered a risk factor for child maltreatment, very little work has examined how the drug environment may affect physical abuse and neglect by parents. Utilizing information from a telephone survey with 2,597 respondents from 43 cities with valid police data on narcotics incidents, we analyzed the relationship between drug use, drug availability and child maltreatment using multilevel models. City-level rates of drug abuse and dependence were related to more frequent physical abuse. Parents who use drugs in areas

with greater availability of drugs reported more physical abuse and physical neglect. Emotional support was protective of all types of maltreatment. While most child welfare interventions focus on reducing parental drug use in order to reduce child abuse, these findings suggest environmental prevention or neighborhood strengthening approaches designed to reduce the supply of illicit drugs may also reduce child abuse through multiple mechanisms.

Huebner, R. A., Young, N. K., Hall, M. T., Posze, L., & Willauer, T. (2017). Serving families with child maltreatment and substance use disorders: A decade of learning. *Journal of Family Social Work*, 20(4), 288-305. DOI:10.1080/10522158.2017.1348110

An increase in parental substance use disorders (SUD) and the number of infants and toddlers entering foster care has prompted federal and state efforts to change the treatment paradigm toward more integrated and family-centered strategies. The Regional Partnership Grant (RPG) program demonstrated that family-centered strategies can improve child and parent outcomes. The current challenge is to bring effective strategies to scale. This conceptual article highlights the lessons learned from 10 years of implementing and evaluating programs to meet the needs of families affected by parental SUD and child maltreatment. Effective family-centered strategies identified by the RPG program are illustrated with specifics from the Sobriety Treatment and Recovery Team program. These effective strategies could be implemented in any jurisdiction and include (1) collaboration toward integrated services between child welfare and SUD treatment, (2) timely access to SUDS treatment, (3) recovery management and support, (4) tailored family services, and (5) adaptation to local jurisdiction needs. When these strategies are operational, children are more likely to be safe and remain in parent custody, and parents are more likely to achieve sobriety and improve their parental capacity. Future research might examine the unique impact of each of the five strategies independently.

Kepple, N. J. (2017). The complex nature of parental substance use: Examining past year and prior use behaviors as correlates of child maltreatment frequency. *Substance Use & Misuse*, 52(6), 811-821. DOI:10.1080/10826084.2016.1253747

Background: Child maltreatment studies predominantly have operationalized parental substance use as dichotomous variables for any use, any harmful/risky use, or any substance use disorder (SUD). This limits our understanding about how a range of use behaviors may contribute to child maltreatment. Objective: Build upon prior studies by incorporating a multi-faceted approach to operationalizing parental substance use. Methods: Crosssectional, secondary data analyses were conducted using the National Survey of Child and Adolescent Well-being (NSCAW I). The study used weighted negative binomial regression to examine relationships between annual child maltreatment frequency and different ways of operationalizing substance use among 2,100 parents. Results: Several, inter-related behaviors (i.e., heavy drinking, illicit drug use, polysubstance use, SUD, and prior SUD < 4 years) appeared to be relevant for understanding differences in child maltreatment frequencies. A gradient effect was detected across five substance use behavior patterns: (1) lowest estimated counts were observed for nonusers, light-to-moderate drinkers, and parents with a prior (but not past year) SUD ( $\bar{y} < 7.0$ ), (2) slightly higher estimated count was observed for heavy drinkers and/or illicit drug users ( $\bar{y} = 9.3$ ), and (3) highest estimated count was observed for parents with past year SUD ( $\bar{y} = 17.6$ ). Conclusions/Importance: SUD is a critical screening criteria for potential child harm. Parents reporting risky substance use behaviors may benefit from prevention or brief intervention services related to both their substance use and parenting behaviors. Administrative systems also could benefit from detailed tracking of substance use behaviors for future program evaluation and development.

Lipari, R. N., & Van Horn, S. L. (2017). <u>Children living with parents who have a substance use disorder: The CBHSQ report</u>. Center for Behavioral Health Statistics and Quality, Substance Abuse and Mental Health Services Administration.

Background: Parent substance use disorders (SUDs) can have negative impacts on children, including lower socioeconomic status and more difficulties in academic and social settings and family functioning when compared with children living with parents without an SUD. Method: This report uses data from the 2009 to 2014 National Surveys on Drug Use

and Health (NSDUHs) to determine the number of children living with a parent who had an SUD (alcohol use disorder or illicit drug use disorder). The analysis is based on a sample size of 22,200 adults aged 18 or older with at least 1 related child aged 17 or younger residing in the household. Results: Based on combined 2009 to 2014 NSDUH data, about 8.7 million (12.3 percent) children aged 17 or younger lived in U.S. households with at least one parent who had an SUD. About 7.5 million (10.5 percent) children lived in households with at least one parent who had an alcohol use disorder, and about 2.1 million (2.9 percent) children lived in households with at least one parent who had a past year illicit drug use disorder. Conclusion: The annual average of 8.7 million children aged 17 or younger living in U.S. households with at least one parent who had an SUD highlights the potential breadth of substance use prevention and treatment needs for the whole family—from substance abuse treatment for the affected adults and prevention and supportive services for the children.

Steenrod, S., & Mirick, R. (2017). Substance use disorders and referral to treatment in substantiated cases of child maltreatment. *Child & Family Social Work*, 22(3), 1141-1150. DOI:10.1111/cfs.12331

Parents with substance use disorders (SUD) require treatment and support in order to provide children with appropriate care and protection. Using the 2012 National Child Abuse and Neglect Data System (NCANDS), this paper analysed 464 313 substantiated child maltreatment reports to determine (i) the proportion and characteristics of reports involving substance abuse; and (ii) the child and caregiver/perpetrator (C/P) characteristics that predicted referral to treatment as recorded in service plans. Findings indicate that 12% (N = 53 234) of maltreatment reports involved C/P SUD. Yet, of those reports, only (19%) (N = 10 088) were referred to substance abuse treatment as part of their service plan, indicating a large gap between those who need treatment and those who receive it. This finding is important given that parental SUD is consistently linked to poorer child outcomes. Amongst other variables, reports indicate that C/P with co-occurring emotional disturbance were three times more likely to be referred to treatment for SUD as part of service plans. Additional research is needed regarding the characteristics that distinguish C/P who receive referrals for SUD treatment in substantiated cases of child maltreatment.

Mirick, R. G., & Steenrod, S. A. (2016). Opioid use disorder, attachment, and parenting: Key concerns for practitioners. *Child and Adolescent Social Work Journal*, *33*, 547-557. DOI:10.1007/s10560-016-0449-1

In the United States, the current epidemic of opioid use disorders impacts many parents and their children. Historically, interventions for parents with substance use disorders have focused on two separate areas, achieving and maintaining abstinence and learning parenting skills. These interventions do not address the parent/child relationship, and the impact of parental opioid use disorder on attachment. Insecure attachment, particularly disorganized attachment, negatively affects the child's development and safety. Attachment should always be considered when doing a safety assessment or planning an intervention for parents with opioid use disorders. This conceptual paper describes the impact of parental opioid use on attachment across the developmental span of childhood, highlighting research about opioid use disorder, parenting, and attachment which is relevant for practitioners working with parents with opioid use disorders, as child protection workers, substance abuse counselors, or therapists. Identification, attachment assessment tools, and empirical research on attachment-based interventions are discussed.

Putnam-Hornstein, E., Prindle, J. J., & Leventhal, J. M. (2016). Prenatal substance exposure and reporting of child maltreatment by race and ethnicity. *Pediatrics*, 138(3), e20161273. DOI:10.1542/peds.2016-1273

BACKGROUND: Substance exposure is thought to contribute to reports of suspected maltreatment made to child protective services (CPS) at or shortly after birth. There are limited data, however, on whether clinicians are more likely to report black and Hispanic substance-exposed infants compared with white infants. METHODS: We examined racial differences in diagnosed substance exposure and subsequent maltreatment reports by using linked birth, hospital discharge, and CPS records. Diagnostic codes were used to document substance exposure; CPS records provided information on maltreatment reports. Prevalence of infant exposure was calculated by race or ethnicity, substance type, and sociodemographic covariates. We estimated racial differences in maltreatment reporting among substance-exposed infants using multivariable models. RESULTS: In a 2006 population-based California birth cohort of 474 071 black, Hispanic, and white infants, substance exposure

diagnoses were identified for 1.6% of infants (n = 7428). Exposure varied significantly across racial groups (P < .001), with the highest prevalence observed among black infants (4.1%) and the lowest among Hispanic infants (1.0%). Among white and Hispanic infants, the most frequently observed substances were amphetamine and cannabis; for black infants, cannabis was the most common, followed by cocaine. After adjusting for sociodemographic and pregnancy factors, we found that substance-exposed black and Hispanic infants were reported at significantly lower or statistically comparable rates to substance-exposed white infants. CONCLUSIONS: Although we were unable to address potential racial and ethnic disparities in screening for substances at birth, we found no evidence that racial disparities in infant CPS reports arise from variable responses to prenatal substance exposure.

Smith, V. C., Wilson, C. R., Committee on Substance Use and Prevention, Ryan, S. A., Gonzalez, P. K., Patrick, S. W., Quigley, J., Siqueira, L., & Walker, L. R. (2016). Families affected by parental substance use. *Pediatrics*, *138*(2), e20161575. DOI:10.1542/peds.2016-1575

Children whose parents or caregivers use drugs or alcohol are at increased risk of short- and long-term sequelae ranging from medical problems to psychosocial and behavioral challenges. In the course of providing health care services to children, pediatricians are likely to encounter families affected by parental substance use and are in a unique position to intervene. Therefore, pediatricians need to know how to assess a child's risk in the context of a parent's substance use. The purposes of this clinical report are to review some of the short-term effects of maternal substance use during pregnancy and long-term implications of fetal exposure; describe typical medical, psychiatric, and behavioral symptoms of children and adolescents in families affected by substance use; and suggest proficiencies for pediatricians involved in the care of children and adolescents of families affected by substance use, including screening families, mandated reporting requirements, and directing families to community, regional, and state resources that can address needs and problems.

Wolf, J. P., Ponicki, W. R., Kepple, N. J., & Gaidus, A. (2016). <u>Are community level prescription opioid overdoses associated with child harm? A spatial analysis of California zip codes, 2001-2011</u>. *Drug and Alcohol Dependence, 166*, 202–208. DOI:10.1016/j.drugalcdep.2016.07.014

Background: Non-medical prescription opioid use is increasing globally within high-income countries, particularly the United States. However, little is known about whether it is associated with negative outcomes for children. In this study, we use prescription opioid overdose as a proxy measure for non-medical prescription opioid use and ask the following: Do California communities with greater rates of non-medical prescription opioid use also have higher rates of child maltreatment and unintentional child injury? Methods: We used longitudinal population data to examine ecological associations between hospital discharges involving overdose of prescription opioids and those for child maltreatment or child injury in California zip codes between 2001–2011 (n = 18,517 zip-code year units) using Bayesian space-time misalignment models. Results: The percentage of hospital discharges involving prescription opioid overdose was positively associated with the number of hospital discharges for child maltreatment (relative rate=1.089, 95% credible interval (1.004, 1.165)) and child injury (relative rate= 1.055, 95% credible interval (1.012, 1.096)) over the ten-year period, controlling for other substance use and environmental factors. Conclusions: Increases in community level prescription opioid overdoses between 2001–2011 are associated with a 2.06% increase in child maltreatment discharges and a 1.27% increase in discharges for child injury. Communities with higher rates of non-medical prescription opioid use may experience greater levels of child harms.

Calhoun, S., Conner, E., Miller, M., & Messina, N. (2015). <u>Improving the outcomes of children affected by parental substance abuse: A review of randomized controlled trials</u>. *Substance Abuse and Rehabilitation*, 6, 15–24. DOI:10.2147/SAR.S46439

Substance abuse is a major public health concern that impacts not just the user but also the user's family. The effect that parental substance abuse has on children has been given substantial attention over the years. Findings from the literature suggest that children of substance-abusing parents have a high risk of developing physical and mental health and behavioral problems. A number of intervention programs have been developed for parents

who have a substance abuse problem. There have also been a number of interventions that have been developed for children who have at least one parent with a substance abuse problem. However, it remains unclear how we can best mitigate the negative effects that parental substance abuse has on children due to the scarcity of evaluations that utilize rigorous methodologies such as experimental designs. The purpose of this study is to review randomized controlled trials of intervention programs targeting parents with substance abuse problems and/or children with at least one parent with a substance abuse problem in order to identify programs that show some promise in improving the behavioral and mental health outcomes of children affected by parental substance abuse. Four randomized controlled trials that met our eligibility criteria were identified using major literature search engines. The findings from this review suggest that interventions that focus on improving parenting practices and family functioning may be effective in reducing problems in children affected by parental substance abuse. However, further research utilizing rigorous methodologies are needed in order to identify other successful interventions that can improve the outcomes of these children long after the intervention has ended.

Seay, K. (2015). How many families in child welfare services are affected by parental substance use disorders? A common question that remains unanswered. *Child Welfare*, 94(4), 19-51.

Associated with extensive negative outcomes for children, parental substance use disorders are a major concern within the child welfare system. Obtaining actual prevalence rate data has been difficult, however, and there are no recent published reports on this issue. Using a systematic search, this paper examines: (1) Prevalence estimates of parental substance use disorders in the child welfare population; (2) the types of child welfare involvement for reported prevalence estimates; and (3) how prevalence information is being collected. Prevalence rates were found to have a wide range, from 3.9% to 79%, with regional prevalence estimates being higher than national estimates. Prevalence rates of parental substance use disorders varied by type of child welfare involvement of the family and method of data collection. This study points out the need for improvements in prevalence estimates in the United States and national data collection procedures to ensure that child welfare and

substance abuse treatment systems are adequately responding to children and families with substance use disorders.

Lander, L., Howsare, J., & Byrne, M. (2013). <u>The impact of substance use disorders on families and children: From theory to practice</u>. *Social Work in Public Health*, 28(3-4), 194–205. DOI:10.1080/19371918.2013.759005

The effects of a substance use disorder (SUD) are felt by the whole family. The family context holds information about how SUDs develop, are maintained, and what can positively or negatively influence the treatment of the disorder. Family systems theory and attachment theory are theoretical models that provide a framework for understanding how SUDs affect the family. In addition, understanding the current developmental stage a family is in helps inform assessment of impairment and determination of appropriate interventions. SUDs negatively affect emotional and behavioral patterns from the inception of the family, resulting in poor outcomes for the children and adults with SUDs. Social workers can help address SUDs in multiple ways, which are summarized in this article.