ADDRESSING OPIOID USE IN PREGNANT AND POSTPARTUM PEOPLE

A DATA REVIEW FROM THE 2020 PENNSYLVANIA FAMILY SUPPORT NEEDS ASSESSMENT

PENNSYLVANIA FAMILY SUPPORT NEEDS ASSESSMENT

From 2019-2020, the Pennsylvania Office of Child Development and Early Learning (OCDEL) partnered with Children's Hospital of Philadelphia's (CHOP) PolicyLab to conduct a county-level needs assessment of health resources and economic and social conditions for Pennsylvania families. The final product, the ***PA Family Support Needs Assessment*** (FSNA), provides critical insight into both social determinants of health—like rent burden and food access—and traditional measures of health outcomes across Pennsylvania.* In the assessment, counties are ranked as having elevated, moderate or low need across 67 indicators.** The PA FSNA provides a systematic method for identifying community need to inform resource allocation statewide.

THE IMPACTS OF OPIOID USE IN PREGNANT AND POSTPARTUM PEOPLE

Pennsylvania had the **third-highest number of deaths from opioid overdose in the nation** in 2019. The COVID-19 pandemic has only exacerbated this problem—there was a 16% increase in the state's overdose deaths in 2020, disproportionately experienced by Black people.

New statewide data from the Pennsylvania Maternal Mortality Review Committee tell a similar story for people who give birth inPennsylvania: from 2013-2018, accidental **poisonings—including drug overdoses—were the leading cause of pregnancy-associated death in the state**, and these rates have more than doubled since 2013. There were also glaring racial disparities in maternal mortality from all causes: Black women made up 23% of deaths but only 14% of births.

The Pennsylvania Family Support Needs Assessment identified substance use as a key area for study and improvement in the state, offering several insights to address both substance use and, more specifically, opioid use. In light of recent data on rising opioid overdose rates driving pregnancy-associated deaths in Pennsylvania, this brief aims to highlight specific needs relevant to this issue in both urban and rural areas of the state to better support pregnant and parenting people in treatment and recovery during the opioid epidemic.

**Information from this brief is compiled from the full PA Family Support Needs Assessment developed by PolicyLab at Children's Hospital of Philadelphia and the Pennsylvania Office of Child Development and Early Learning. The full report and appendices are available at bitly.com/PA-FSNA-2020.*

***Refer to the "Summary of Methods" chapter, starting on page 8, in the full PA Family Support Needs Assessment*

These data describe a startling crisis for Pennsylvania's pregnant and postpartum people. Beyond pregnancy-associated death, using opioids during pregnancy is linked to a significantly higher likelihood of preterm birth and neonatal abstinence syndrome (NAS), which can lead to a cascade of challenges for individuals in the postpartum period, including a higher likelihood of psychiatric conditions such as depression and anxiety, as well as postpartum overdose.

Opioid use in pregnancy and the postpartum period also has broader implications for families. Parental substance use is a key driver of child welfare involvement, cited as a core factor for removal from the home for more than 35% of children in foster care in 2016 across the nation—an increase of nearly 17% since 2000. Therapeutic and prevention models are important not only for addressing racial inequities in maternal and infant morbidity and mortality but also remediating racial disproportionality in the child welfare system, such as children of color being less likely to be reunified with their families after being removed from the home due to parental substance use.

There are well-described links between opioid use, socioeconomic status and housing instability. Disadvantaged socioeconomic status is associated with higher infant mortality and higher prevalence of opioid prescriptions. Concerns about loss of custody loom large for parents using opioids, which is inextricably tied to stable-enough housing to maintain or regain custody of their children, especially if the family finds a housing or shelter environment that exacerbates the parent's substance use.

SPOTLIGHT ON TERMINOLOGY

Substance Use and Opioid Use: Opioid use—distinct from the broader category of substance use—is rising in Pennsylvania and nationally, exacting a unique toll on people who give birth. While we aim to use "opioid use" as specific terminology wherever possible in this brief, some available data and intervention programs are targeted only to the broader category of substance use.

Pregnant and Postpartum People: We recognize that pregnancy and the postpartum period includes people of multiple gender identities, including cisgender women, transgender women and nonbinary people. We aim to use gender-inclusive language throughout this brief, though some data may specifically refer to people who identify as women.

Medication for Addiction Treatment: To reflect current usage from the National Academy of Medicine, we aim to use this preferred term to refer to medication used in treatment for opioid use disorder, but specific data cited in this brief may refer to the term medication-assisted treatment (MAT) where it is used in the PA FSNA and parts of the scientific literature.

KEY INDICATORS OF OPIOID USE IN PREGNANT AND POSTPARTUM PEOPLE IN PENNSYLVANIA

PolicyLab compiled county-level data assessed in the PA FSNA from eight related indicators* of substance use, the impacts of opioid use in pregnancy, and risks for people in the postpartum period to offer broad insight into opportunities for intervention to support vulnerable parents and their families.

INDICATOR	PA MEDIAN	U.S. RATE
Postpartum high-risk opioid use	9.21% of Medicaid-enrolled mothers	N/A**
Substance treatment facilities	3.31 facilities per 100,000 residents	4.5 facilities per 100,000 residents
Mental health treatment facilities	3.74 facilities per 100,000 residents	3.6 facilities per 100,000 residents
Buprenorphine physicians	5.39 providers per 100,000 residents	26.6 providers per 100,000 residents
Overdose deaths	29 deaths per 100,000 residents (15-64)	11.3 providers per 100,000 residents (15-64)
Opioid overdose hospitalizations	52.4 hospitalizations per 100,000 residents	28 hospitalizations per 100,000 residents
Neonatal abstinence syndrome	15.7 diagnoses per 1,000 neonatal stays	7 diagnoses per 1,000 neonatal stays
Pregnancy and postpartum substance use disorder	5.35% of Medicaid-enrolled mothers	2.3% of Medicaid-enrolled mothers

**Definitions and data sources for each indicator are listed in the Appendix in Table 1.*

***The indicator of postpartum high-risk opioid use does not have an equivalent national benchmark.*

WHAT WE FOUND

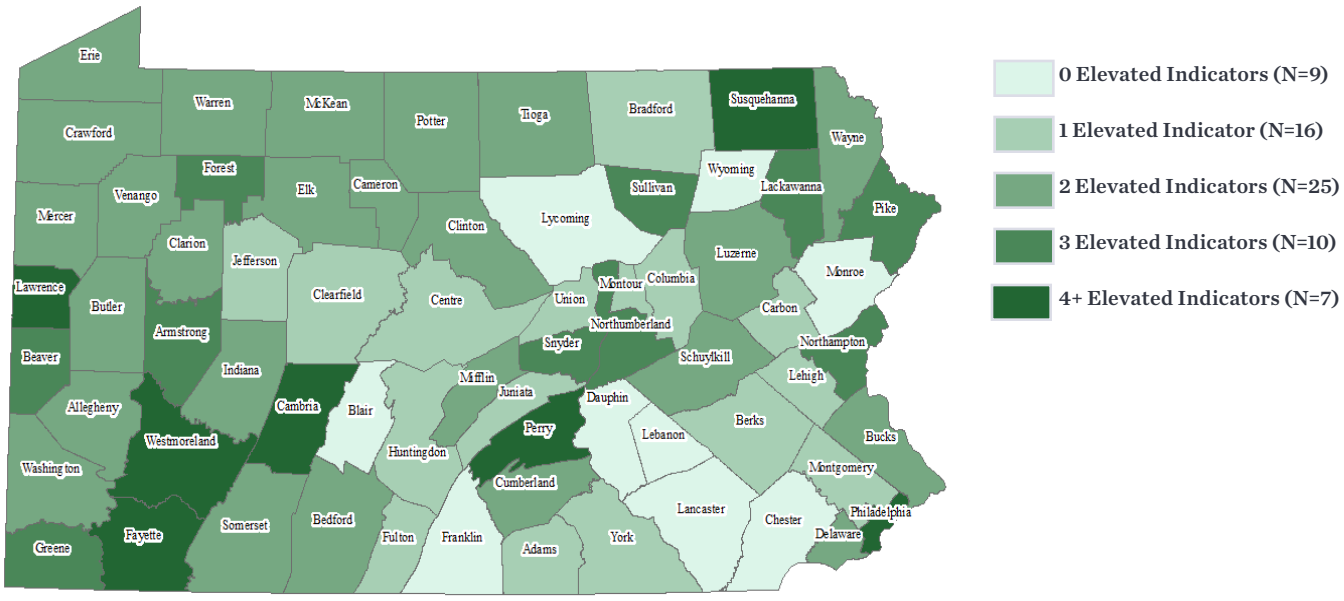
Compared to median rates across the U.S., Pennsylvania has:

- Nearly ***2x higher*** rates of opioid overdose hospitalization and death
- Almost ***5x fewer*** physicians who can prescribe buprenorphine to treat people with opioid use disorder

For pregnant and postpartum people in Pennsylvania compared to median rates in the rest of the nation, they have:

- ***2x higher*** rates of diagnosed substance use disorder
- More than ***2x higher*** rates of neonatal abstinence syndrome (NAS) in newborns

Indicators of Elevated Opioid Use and Need for Treatment in Pennsylvania



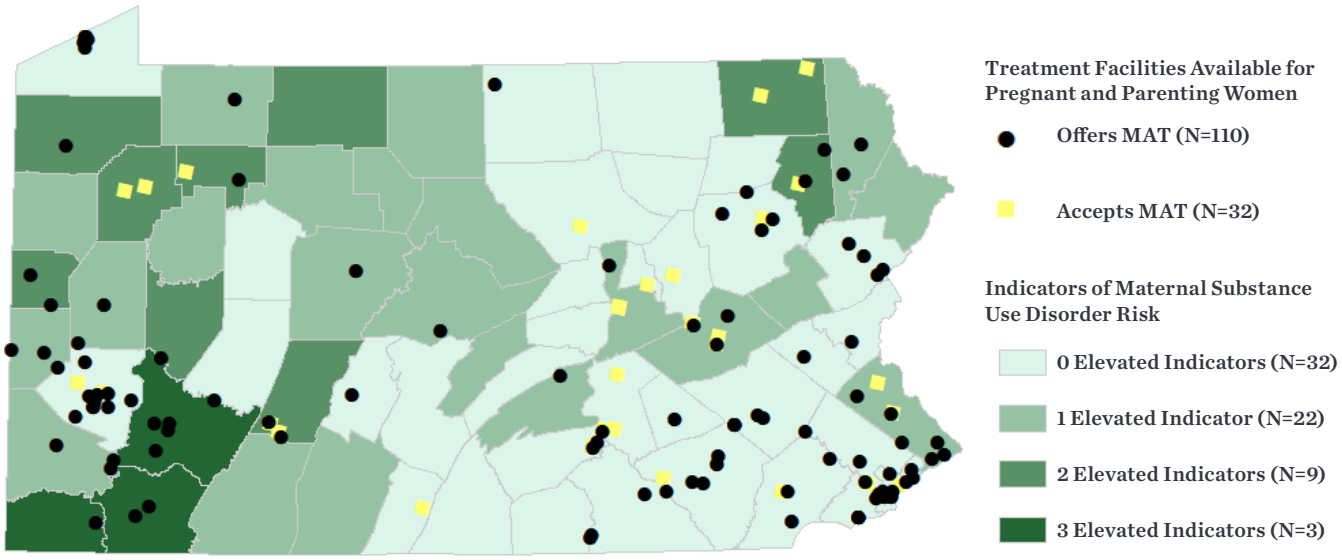
This map highlights indicators of elevated need across the 8 indicators listed in the table on Page 2. Full definitions for each indicator are available in the Appendix.

These indicators suggest substantial need in counties across Pennsylvania, with a particularly **elevated concentration of need in the southwestern region of the state**. County-level maps of smaller indicator groups are available in the Appendix.

It is also important to note that Philadelphia and Allegheny counties represent counties with the highest absolute need in terms of population size, and a closer look reveals **three Philadelphia ZIP codes with elevated substance use risk** relative to the rest of the state and **34 Allegheny ZIP codes with elevated substance use and/or opioid use risk**. ZIP code maps for these counties are also available in the Appendix in Figures 6 and 7.

Spotlight on Pregnant and Postpartum People:

Access to Medication for Addiction Treatment Shown with Prevalence of Opioid-Related Diagnoses Specifically among Pregnant and Postpartum People



The three indicators of maternal substance use disorder risk include 1) postpartum high-risk opioid use, 2) neonatal abstinence syndrome diagnosis, and 3) pregnancy and postpartum substance use disorder.

This map highlights critical gaps between the needs of pregnant and postpartum people using opioids and substance use treatment facilities that are available to support those unique needs. If you look specifically at facilities that offer medication for addiction treatment to pregnant and postpartum people, the universe of available treatment options is even smaller. In fact, of the **564 substance use treatment facilities in Pennsylvania listed by the Substance Abuse and Mental Health Services Administration (SAMHSA), only 110 have specialized programs for pregnant and postpartum people and offer medication to their clients**.

Access to these types of specialized services could be important for people initiating and maintaining treatment in pregnancy and the postpartum period. There is evidence that pregnant patients seeking treatment for opioid use encounter barriers to treatment based on their pregnancy status, such as limited access to recommended medications, increased stigma and long call wait times.

In evaluating the geographic distribution of need and clear gaps in access to treatment, it is also critical to note the relationship between opioid use and socioeconomic status. Nationwide, lower socioeconomic status—particularly median income, lower education and unemployment—is associated with higher indicators of the opioid epidemic. A county-level evaluation of socioeconomic need across Pennsylvania is available in the PA FSNA, and a map of these geographic trends is included in the Appendix of this brief.

RECOMMENDATIONS

These recommendations focus on opportunities for action in Pennsylvania to address opioid use and access to treatment for substance use disorder in pregnancy and the highly vulnerable postpartum period. In Pennsylvania, overdose deaths accounted for 40% of the pregnancy-associated deaths in 2018, a rise from 19% in 2013. It is important to note that overdose risk extends beyond the immediate postpartum window, with research indicated that 7-12 months postpartum still presents an elevated overdose risk period.

Improve Access to Treatment for Substance Use Disorders.

→ ***Extend and enhance perinatal Medicaid coverage.***

Medicaid is essential for providing access to health services for individuals with low income and covers 32% of births in Pennsylvania. Well-documented disparities in health outcomes among people with low income extend to pregnancy-associated deaths in Pennsylvania, which disproportionately occur among Medicaid-eligible individuals (53%) and reflect the influence of structural and social determinants of health. The federal American Rescue Plan passed in early 2021 includes an opportunity for states to extend their Medicaid coverage in the postpartum period from the current 60 days (for those qualifying through pregnancy eligibility levels) to a duration of 12 months. Among other advantages, this provides coverage for all Medicaid benefits—not simply those related to pregnancy and delivery—which can ensure continuation of coverage for new parents who seek treatment for opioid use. Pennsylvania's stated intent to take up this flexibility has the potential to facilitate improved access to treatment in the coming years, but additional federal efforts will be needed to make this change permanent.

As the Pennsylvania Department of Human Services seeks to incentivize quality prenatal, labor and delivery, and postpartum care through Medicaid, including through alternative payment models, the use of quality metrics that incentivize access to and continued engagement in substance use disorder treatment can serve as a valuable tool for improving care. The adoption of appropriate metrics that will incentivize substantive improvements and innovations in delivery of care and ultimately, patient outcomes, is critical. Metrics that reflect the use of professionals adept at service connectivity and navigation of the treatment and recovery process—including social work, care navigators, community health workers, peer support recovery specialists—are needed. Moreover, given the known geographic disparities in access to medication across the Commonwealth, state Medicaid has a role to play in considering payment levers that support greater and more equitable access to evidence-based treatment inclusive of medication for pregnant and postpartum people.

→ ***Focus on access to medication for addiction treatment.***

Pennsylvanians in more than half of the counties in the state have low levels of access to buprenorphine, substance use treatment or mental health treatment. These gaps in access are exacerbated for pregnant and postpartum people, with several counties lacking any specialized programs offering medication for addiction treatment to this population, which is critical to initiation and retention of treatment for many people. Providers are required to have an X-waiver to prescribe buprenorphine, and despite recent relaxation of

The American College of Obstetricians and Gynecologists highlights medication support as the preferred treatment for people using opioids during pregnancy, but research has shown that people who are pregnant inconsistently receive medication as part of their substance use treatment, and much less frequently than recommended.

There are also significant racial disparities in access to medication for opioid use disorder, with Black patients less likely to have treatment follow up after hospitalization with an overdose, and White patients and those with employer-based insurance plans more likely to access buprenorphine treatment. With these racial disparities mirroring racial disparities in maternal mortality across the state, it is imperative that equity is urgently prioritized in policy solutions that support greater access to medication.

this regulation, there are still too few providers with the required training and certification to offer these medications, including only 2% of OB/GYNs. Increasing access to medication for addiction treatment in the state will require a layered approach that includes targeted investments to address geographic disparities in medication providers highlighted in the state map above, supporting more OB/GYNs and other providers working with pregnant and postpartum individuals to get X-waivered, and increasing funding for comprehensive medication services across the state. A specific focus on the southwestern and northwestern regions of the state is warranted.

Support Family-based Treatment Interventions.

→ *Continue support for family focused interventions.*

Family-focused interventions for pregnant and postpartum people are an important component of comprehensive support for opioid use disorder. Many programs that support families dealing with opioid use are ancillary in nature, such as evidence-based home visiting (EBHV) supported by the state. These programs are often not designed specifically to address opioid use, but nationwide, nearly one-third of mothers in EBHV reported using illegal drugs or alcohol prior to pregnancy. These support programs focus on parenting, service connectivity and family stability, and represent a unique voluntary, stable, and trauma-informed space for parents using a strengths-based approach. Pennsylvania has led the way in providing support for innovative, family-oriented services to caregivers impacted by substance use. Continuing to expand access and improve quality of these interventions is critical to the provision of effective care for caregivers in treatment and recovery. Current state funding levels for EBHV support coverage for approximately 1 in 20 eligible families.

Successful community-based initiatives, like the Healthy Maternal Opiate Medical Support (MOMS) program in Lackawanna and Susquehanna counties—which offers comprehensive services from addiction treatment to housing support to help navigating the child welfare system—should be considered for replication and scaling. The MOMS program offers critical education on treatment for opioid use disorder and serves the community with a client-centered approach, a successful model that could be replicated to reach underserved areas and complement individual treatment with family-oriented support. This is an opportunity to help lessen the broader impacts of opioid use on families in the state.

Interim pilot report studying EBHV for OUD is available in the PA FSNA beginning on page 217.

→ *Address housing instability for pregnant and parenting persons in treatment and recovery.*

Housing instability is associated with adverse maternal and infant health outcomes, including links to higher likelihood of relapse with injection drugs for people who previously stopped using them. There is evidence that identifying housing needs and providing targeted supports among mothers with substance use disorder is linked to a higher likelihood of reaching family reunification. In Pennsylvania, mothers transitioning from residential mommy-baby treatment programs should be prioritized for housing-related financial supports.

Pregnant and parenting people with small children face significant barriers to initiating and continuing treatment for opioid use, especially for treatment regimens that require daily attendance. For example, of the 530 substance use disorder treatment facilities that accept women in Pennsylvania, only 32 locations offer child care.

Improvements in services for this population should incentivize partnership between treatment programs and therapeutic models that address parenting or mother-infant pairs through psychotherapy. This can help to increase focus on supporting mothers and babies together as a family unit to support opioid use recovery and family preservation. Furthermore, state Medicaid and private payers should consider alignment of licensing guidelines with reimbursement structures that incentivize support for the unique needs of mothers in treatment, including child care.

Models of rapid rehousing similar to the federal Homelessness Prevention and Rapid Re-Housing Program (HPRP) can also support these families, as both federal and state programs have observed that the large majority of recipients of rapid re-housing support transitioned to more permanent housing after receiving services. Philadelphia recently implemented an innovative rapid re-rehousing initiative known as Rapid Rehousing for Reunification, targeted specifically to families nearing reunification but for whom housing stability is still a barrier. This unique application of rapid re-housing piloted by Philadelphia's Department of Human Services should be considered for scale-up.

Interim pilot report studying EBHV for OUD is available in the PA FSNA beginning on page 217.

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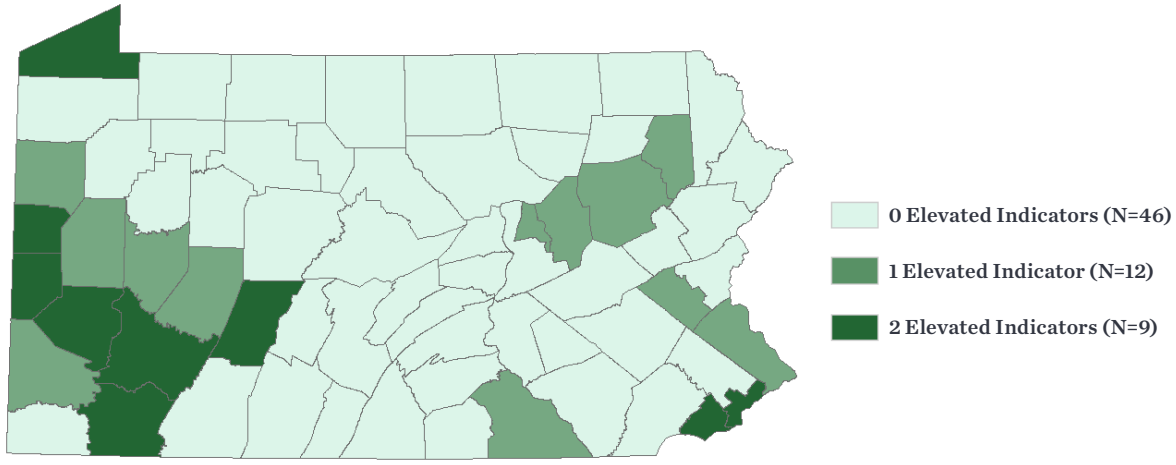
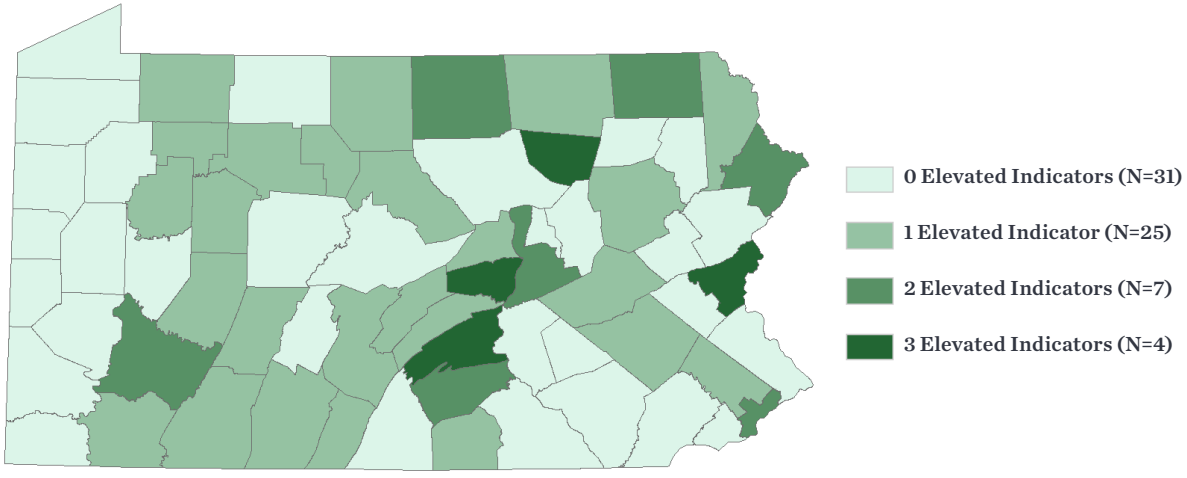
FIGURE 1: OPIOID EPIDEMIC: INDICATORS OF ELEVATED NEED



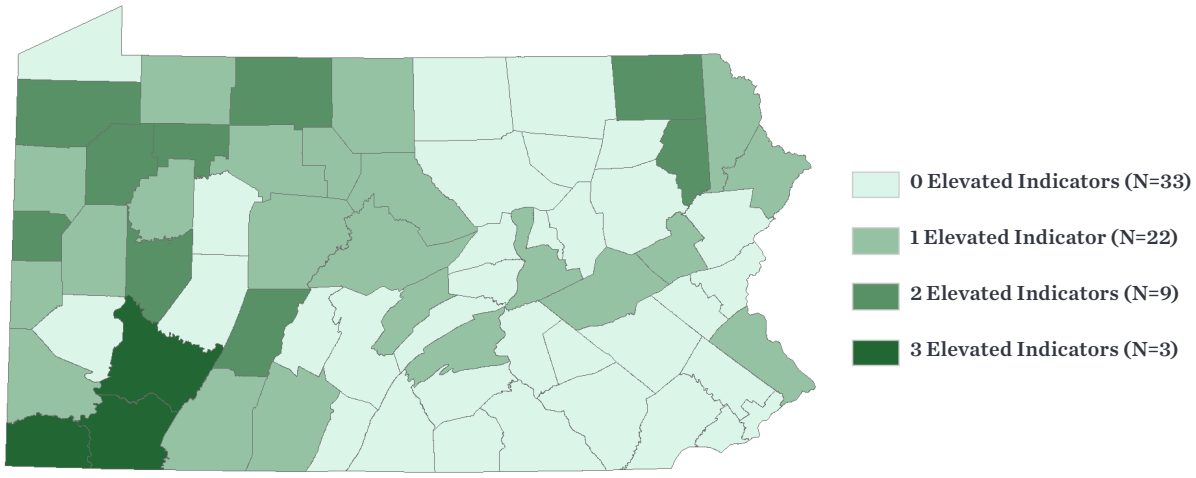
Indicators of opioid epidemic: Overdose deaths and opioid overdose hospitalizations

FIGURE 2: ACCESS TO TREATMENT: INDICATORS OF ELEVATED NEED



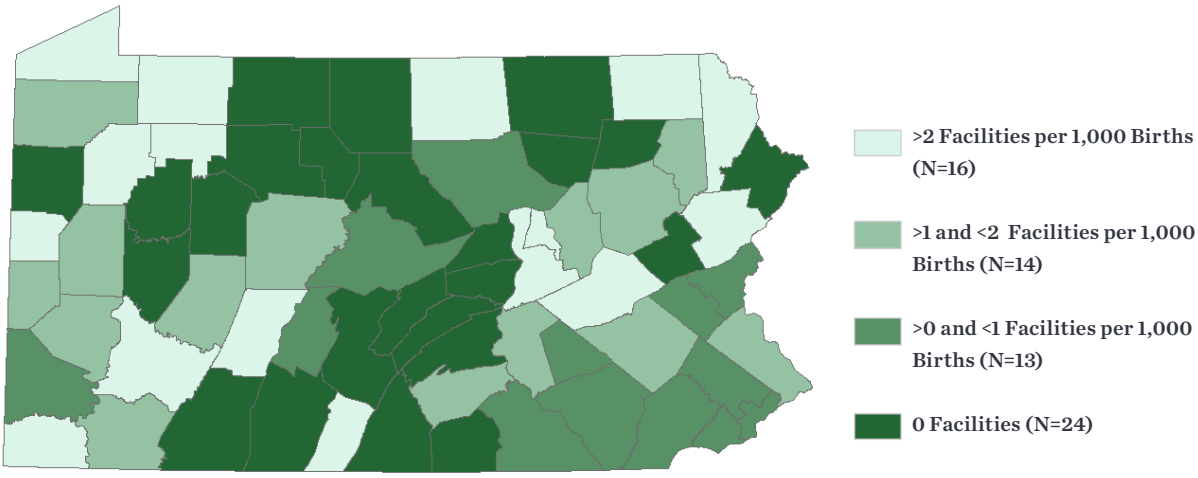
Indicators of treatment access: substance use treatment facilities, mental health treatment facilities, and buprenorphine physicians

FIGURE 3: PREGNANCY AND POSTPARTUM OPIOID USE: INDICATORS OF NEED



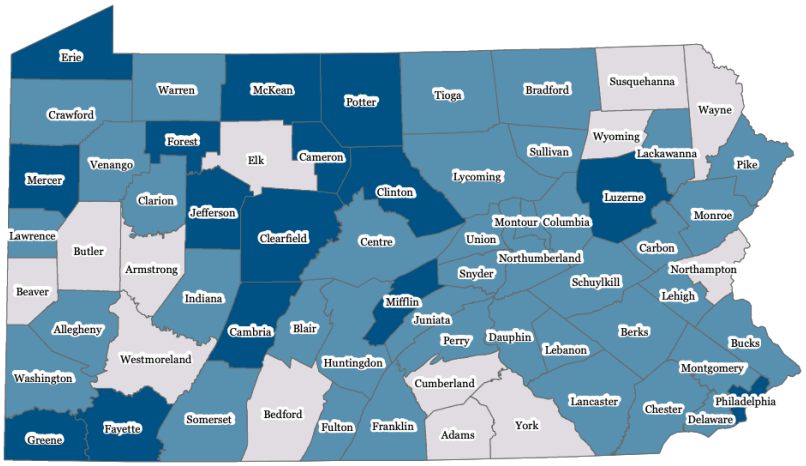
Indicators of pregnancy and postpartum opioid use: postpartum high-risk opioid use, neonatal abstinence syndrome, and pregnancy and postpartum substance use disorder

FIGURE 4: TREATMENT FACILITIES PER 1,000 BIRTHS



Number of substance use treatment facilities in each county that have specialized programs for pregnant and postpartum people per 1,000 county births

FIGURE 5: SOCIOECONOMIC NEED MAP (FIGURE 3 FROM FSNA)



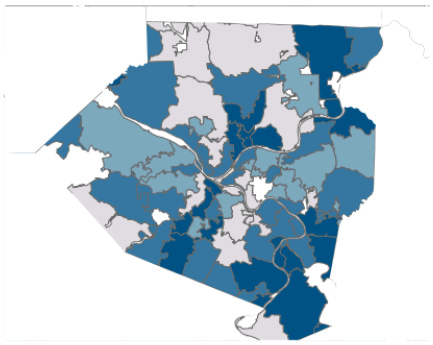
Fifteen counties across the state experience an elevated need in socioeconomic conditions, while 13 counties fared well.

- Low Need
- Average Need
- Elevated Need

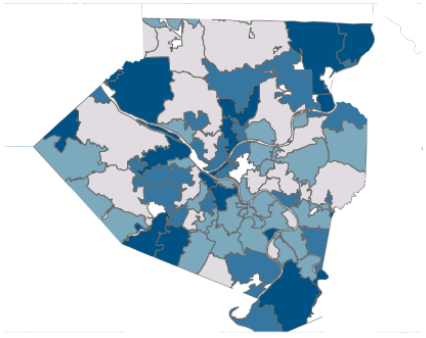
Data and methodology available in the PA Family Support Needs Assessment in the Summary of Methods chapter, beginning on page 8, and the Socioeconomic Status Map from page 27, Figure 3

FIGURE 6: ZIP CODE MAPS OF ALLEGHENY COUNTY

OPIOID USE DISORDER



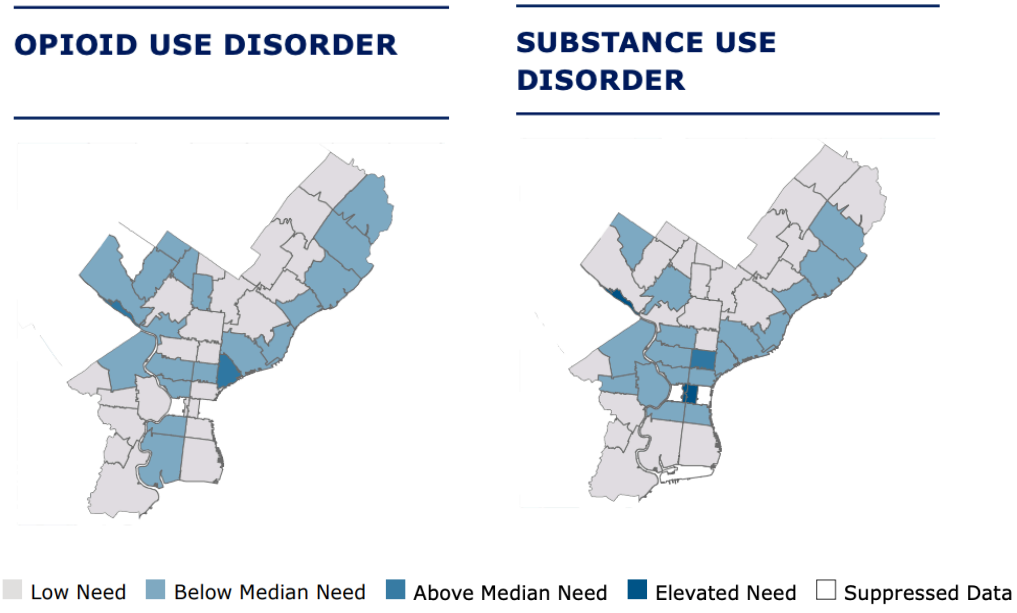
SUBSTANCE USE DISORDER



Low Need | Below Median Need | Above Median Need | Elevated Need | Suppressed Data

Data and methodology for Sub-County Analyses available in the PA Family Support Needs Assessment, beginning on page 56. Allegheny County ZIP code maps from page 57.

FIGURE 7: ZIP CODES FOR PHILADELPHIA COUNTY



Data and methodology for Sub-County Analyses available in the PA Family Support Needs Assessment, beginning on page 56. Philadelphia County ZIP code maps from page 81.

TABLE 1

INDICATOR	DEFINITION & SOURCE	PA MEDIAN	U.S. RATE
Postpartum high-risk opioid use	Rate of mothers filling >=2 opioid prescriptions in the 2017 calendar year among Medicaid-enrolled mothers who delivered live births during 2015-2016, 2017, Medicaid Claims	9.21	N/A**
Substance treatment facilities	Number of drug and alcohol treatment facilities per 100,000 residents, 2018, Substance Abuse and Mental Health Services Administration	3.31	4.5
Mental health treatment facilities	Number of mental health treatment facilities per 100,000 residents, 2018, Substance Abuse and Mental Health Services Administration	3.74	3.6
Buprenorphine physicians	Number of buprenorphine treatment practitioners per 100,000 residents, 2018, Substance Abuse and Mental Health Services Administration	5.39	26.6
Overdose deaths	Rate of overdose deaths per 100,000 people aged 15-64 years, 2017, OverdoseFreePA	29	11.3
Opioid overdose hospitalizations	Rate of hospitalizations for opioid overdose per 100,000 residents, 2016-2017, Pennsylvania Health Care Cost Containment Council	52.4	28
Neonatal abstinence syndrome	Rates of neonatal abstinence syndrome per 1,000 newborn stays, 2016-2017, Pennsylvania Health Care Cost Containment Council	15.7	7
Pregnancy and postpartum substance use disorder	Rate of diagnosed substance use disorder in the 2016 calendar year among Medicaid-enrolled mothers who were pregnant or delivered live births during 2014-2016, 2016, Medicaid Claims	5.35	2.3