

Department of Health: Neonatal Abstinence Syndrome

Denise Johnson, M.D., FACOG, FACHE
Acting Secretary of Health

Act 2 of 2022, Opioid Abuse Child Impact Taskforce
April 25, 2022

Agenda

1. Surveillance Initiatives
2. Prevention and Treatment Initiatives
3. Thriving Families Learning Opportunity

Surveillance Initiatives

NAS

▶ NAS Case Definition

To standardize reporting, a NAS surveillance case definition was developed after a thorough literature review and consultation with other state health departments:

- A newborn with a clinical diagnosis in the neonatal period (birth up to 28 days of life) who has symptoms of withdrawal because of prenatal exposure to opiate drugs, either via prescription, medical therapy (MAT), or illegal use (ICD-10 codes P96.1 and P04.49 only, if available);
- A resident of Pennsylvania (only infants born to mothers who resided in Pennsylvania before the baby's birth); and
- An infant born on or after 1/10/2018.

Pennsylvania NAS Data, 2019

Table 1 – Demographic Characteristics and Birth Parameters of Infants with NAS Born in 2019

Parameter	White Non-Hispanic	Black Non-Hispanic	Other/Multiracial/Unknown Race/Ethnicity	Hispanic	Total Cases	Statewide Births (2018) ⁴	% Difference (NAS Cases vs Statewide) ^a
Population (n)	1231	112	211	54	1608	135 677	--
Percent of all NAS cases	77%	7%	13%	3%	100%	--	--
Male infants	51%	54%	40%	63%	52%	51%	2%
Medicaid	86%	88%	83%	94%	86%	35%	146%
Low birthweight (<2500 grams)	17%	29%	21%	30%	19%	8%	138%
Preterm (<37 weeks)	16%	29%	21%	28%	18%	10%	80%
Received prenatal care	92%	85%	90%	83%	91%	98%	-7%
Received care in NICU	49%	67%	46%	67%	50%	--	--
Apgar 1 minute (≥ 7)	88%	88%	73%	93%	87%	--	--
Apgar 5 minute (≥ 7)	94%	93%	89%	98%	93%	--	--
3 or more NAS symptoms	90%	90%	92%	98%	91%	--	--

1,608 NAS cases were reported in infants born in 2019, a decrease from 2,140 in 2018.

Infants born in 2019 with NAS were more likely to:

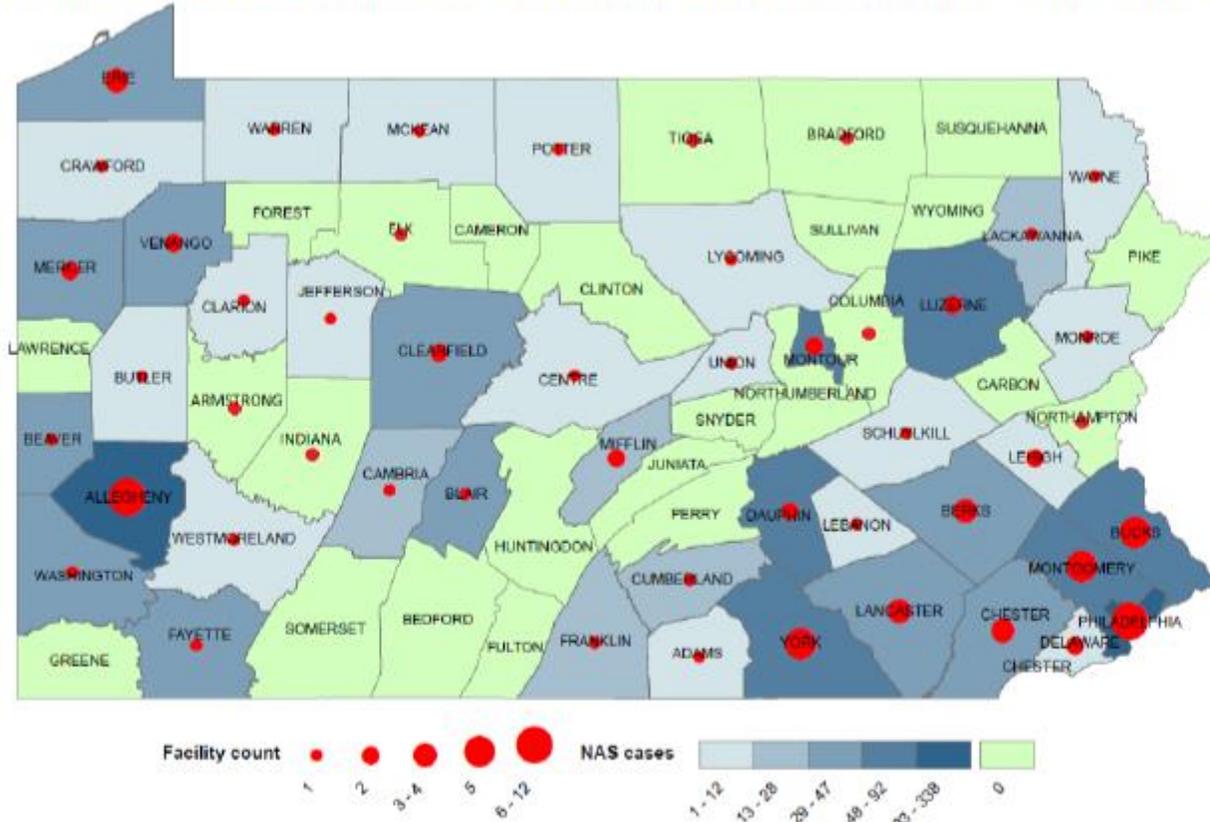
- Have their birth covered by Medicaid;
- Weigh less than 2500 grams (low birthweight);
- Be born prematurely; and
- Have a mother who did not receive prenatal care.

SOURCE: Vital Statistics (Division of Health Informatics, Pennsylvania Department of Health, 2018);⁴ NAS surveillance database (Bureau of Epidemiology, Pennsylvania Department of Health, 2019)

5 PA Department of Health, Neonatal Abstinence Syndrome: 2019 Report, <https://www.health.pa.gov/topics/Documents/Opioids/2019%20NAS%20REPORT.pdf>, 2018 Report, <https://www.health.pa.gov/topics/Documents/Diseases%20and%20Conditions/2018%20NAS%20REPORT.pdf>

▶ NAS Cases by County of Facility, 2019

Map 1 – Neonatal Abstinence Syndrome Case and Facility Counts by County of Facility

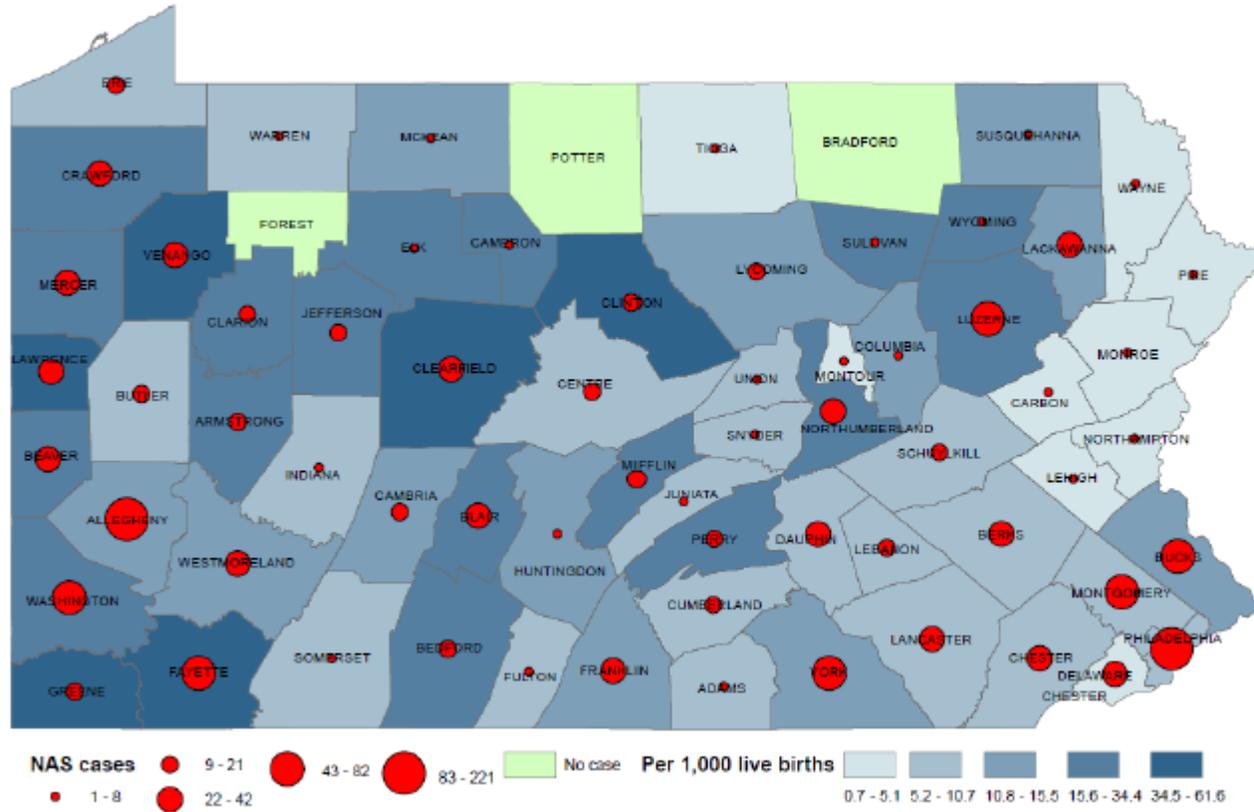


NAS surveillance database (Bureau of Epidemiology, Pennsylvania Department of Health, 2019)

- **Case counts** by county of facility was highest at **338 cases in Allegheny County**.
- A total of 25 (37%) counties had zero cases reported.
 - Eighteen of the 25 counties did not have birthing hospitals or pediatric hospitals in 2019.
- Most counties with higher reported case counts also had more reporting facilities.
- Although some, like **Fayette, Washington, and Beaver in the Southwest, had higher reported case counts with only one reporting facility** in each county.

NAS Cases by County of Maternal Residence, 2019

Map 3 – Neonatal Abstinence Syndrome Case Counts and Incidence Rates by County of Residence^d

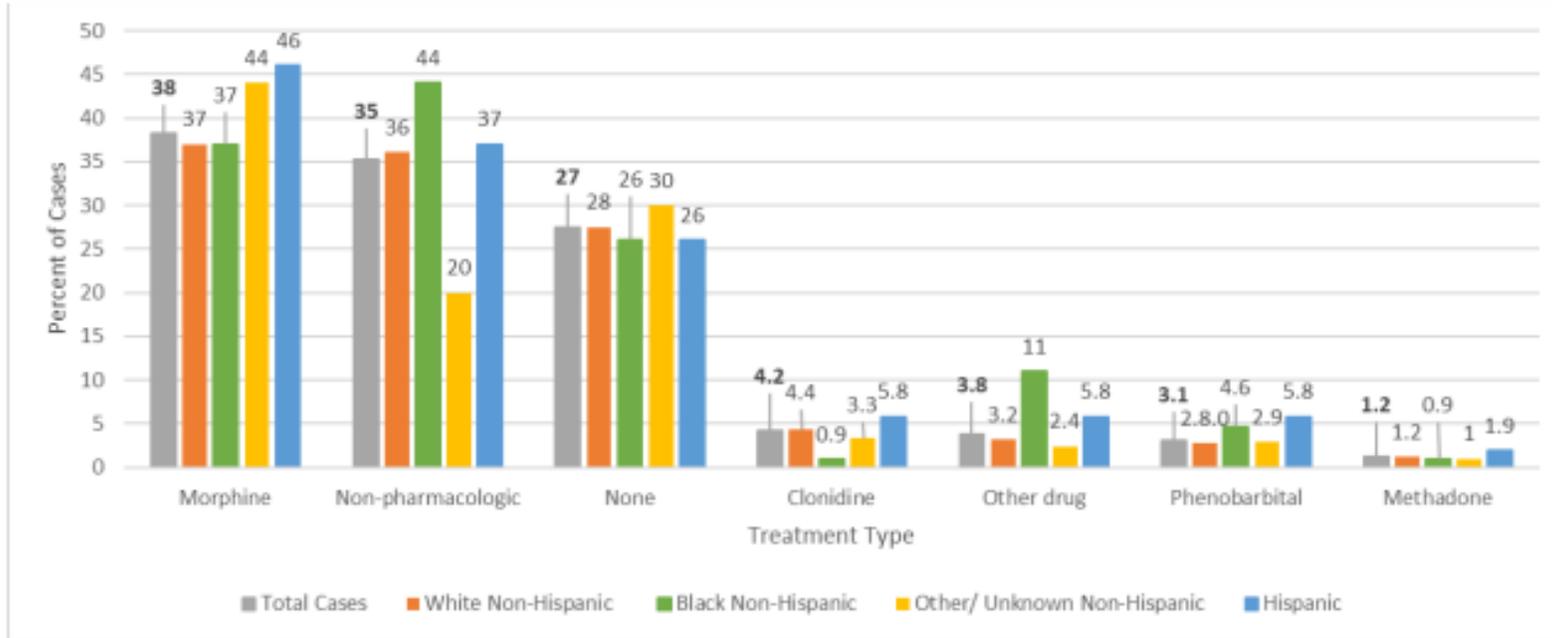


- County **case counts** ranged from zero cases in Forest, Potter, and Bradford counties to **221 in Philadelphia County**.
- **Incidence rates** ranged from zero (in counties with zero cases) to **61.6 cases per 1000 live births in Fayette County**.

SOURCE: Vital Statistics (Division of Health Informatics, Pennsylvania Department of Health, 2018);⁴ NAS surveillance database (Bureau of Epidemiology, Pennsylvania Department of Health, 2019)

Treatment Type for NAS Infants by Race, 2019

Figure 2 – Treatment Type for NAS Infants by Race



SOURCE: NAS surveillance database (Bureau of Epidemiology, Pennsylvania Department of Health, 2019)

- Infants with NAS may receive one or more types of treatment.
- Non-pharmacologic treatment was the most common treatment in infants with Black non-Hispanic mothers.
- Morphine was the most common treatment in infants born to white non-Hispanic, other/unknown race/ethnicity, and Hispanic mothers

****2020 NAS Data Report to be published soon!****

Maternal Mortality

Pregnancy Associated Deaths by Cause, 2018

The PA Maternal Mortality Review Committee (MMRC) reviews deaths of women who have died during pregnancy or within one year after the end of pregnancy. **In 2018, accidental poisonings, including overdose, was the leading cause of maternal mortality in Pennsylvania.**

Table 1: Top Causes of Death for All Maternal Deaths (Excluding Philadelphia County) in 2018 (N=85)

Cause of Death	Number of Deaths	Overall Percentage
Accidental Poisoning	43	51%
Other Direct Obstetric Deaths	9	11%
Transportation Accidents	8	9%
Assault	7	8%
Other Pregnancy Related	4	5%
Intentional Self-Harm	4	5%

Note: Philadelphia Department of Health has its own MMRC that reviews deaths of Philadelphia residents while pregnant or within a year postpartum.

MMRC Recommendation Themes

The recommendations from the MMRC are based on their review of pregnancy related deaths, and address the following issues:

1. Mental Health

2. Substance Use

3. Comprehensive Medical Care

4. Intimate Partner Violence

Recommendations from MMRC: Substance Use

Recommendations for Policymakers, inclusive of the General Assembly and State Agencies, include the following:

1. Safeguard continuous Medicaid eligibility for individuals during pregnancy and up to one year postpartum (*Effective April 1, 2022).
2. Address the privacy laws around substance use disorder (SUD) treatment to improve care coordination and communication by allowing providers to share relevant information with each other for pregnant and postpartum patients. Considerations should be made to require transparency to facilitate patient autonomy.
3. Decriminalize all substance use for pregnant people and promote mental health and substance use treatment.
4. Increase public education on SUD to decrease stigmatization of pregnant and postpartum individuals.

Recommendations from MMRC: Substance Use

Recommendations for Health Care Providers and Hospital Systems include the following:

1. Refer pregnant and postpartum patients with substance use concerns for behavioral health and substance use treatment.
2. **Promote standards of care and guidelines for treatment of substance use disorder (SUD)** by:
 - i. Providing ongoing training/education for providers on substance use among pregnant and postpartum individuals.
 - ii. Implementing universal screening in pregnant and postpartum individuals for substance use using a validated screening tool.
 - iii. Developing guidelines around frequency and timing of substance use screening for pregnant and postpartum patients.
 - iv. Developing plans for care coordination and communication for all pregnant and postpartum patients.
 - v. Increasing work force capacity of substance use treatment providers to support a potential increase in pregnant and postpartum patient referrals due to universal screening for SUD.
3. Standardize discharge plans for all hospital stays for pregnant and postpartum patients with OUD, or a prescription for an opioid, to include distribution or prescription for naloxone, instructions on how to use and where to get naloxone when needed.

Recommendations from MMRC: Substance Use

Recommendations for Community-Based Organizations include:

1. Increase community knowledge of naloxone, including information on procurement and instructions for use.

Information on Naloxone

• **Prescription/Access:**

- Anyone can access this medication from a pharmacy by obtaining a prescription from their family doctor or by using the **standing order** (a prescription written for the general public, rather than specifically for an individual) issued by Physician General Dr. Johnson. The standing order was recently updated on February 22, 2022.
- It can also be accessed through community-based organizations (CBOs) that are able to provide access to naloxone.

- **Payment:** Insurance companies vary in how they cover naloxone. Before filling a prescription, people are encouraged to check their coverage with their insurance provider.

- **Instructions for Use:** Instructions to the right, and more info at this website: www.pa.gov/guides/opioid-epidemic/#HowtoUseNaloxone



STEP 1: Peel back the package to remove the device.

Prescribing Data

▶ Prescription Drug Monitoring Program (PDMP)

The PDMP has helped to reduce opioid prescribing, risky prescribing, and doctor shopping.

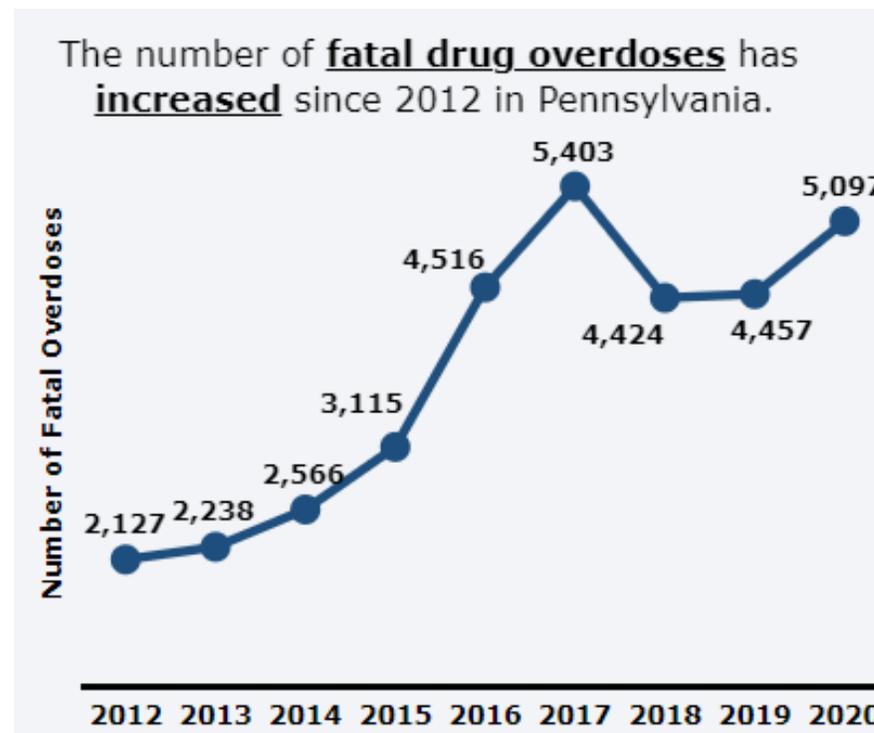
Since Q3 of 2016, PA has seen a

- 41.4% decrease in the number of dispensations of opioids (schedule II) by pharmacy location;
- 61.8% decrease in the rate of individuals with average daily MME >90; and
- 81.3% decrease in the rate of individuals seeing 3+ Prescribers and 3+ Dispensers.

In 2018 and 2019, PA saw a decrease in overdoses. But in 2020 overdose deaths climbed to nearly that of 2017.

Additional data on controlled substances, overdoses, and prescriber category (specialties) are available on PDMPDs interactive data dashboard.

 PDMP Data - Controlled Substance Dispensations	 Drug Overdose Surveillance	 PDMP Data - By Prescriber Category
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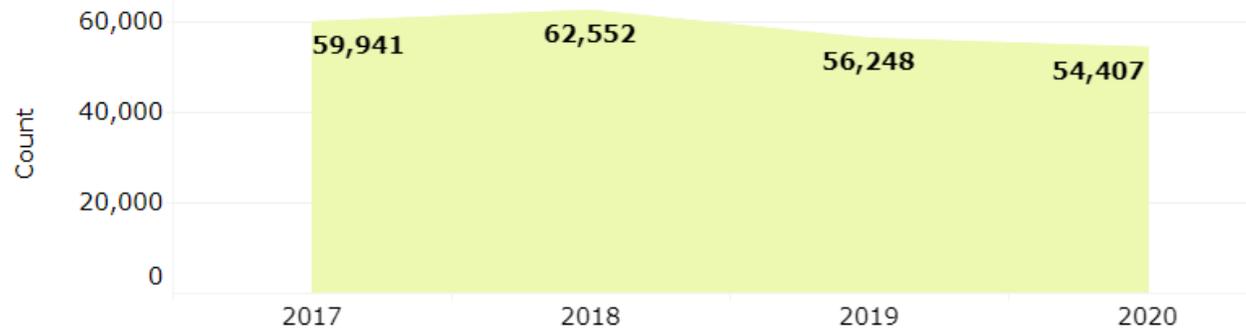


OB/GYNs/Midwives Dispensation Measures

Opioids

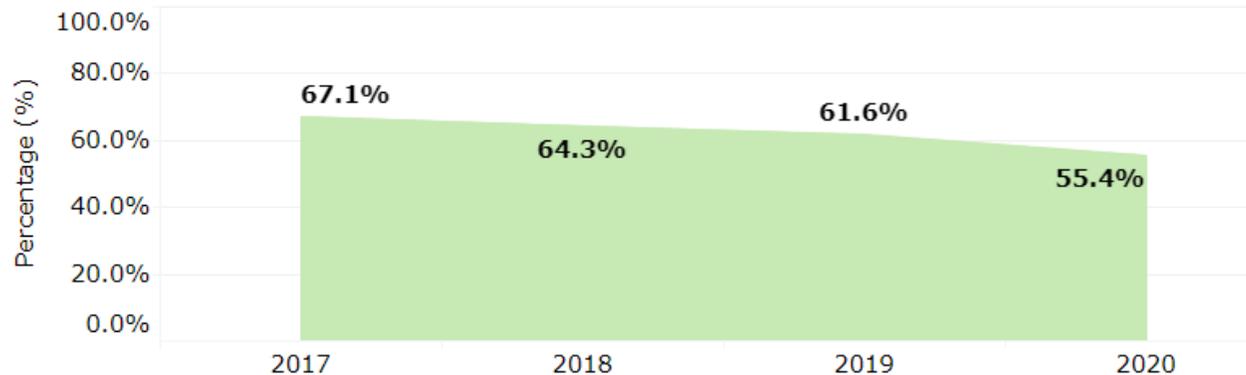
Dispensation Measures

Total Number of Opioid Dispensations by OB/GYNs/Midwives



The number of opioid dispensations by OB/GYNs/Midwives decreased from 2017 to 2020 by 9.23%

Proportion of Controlled Substance Dispensations by OB/GYNs/Midwives that were Opioids



The proportion of controlled substance dispensations by OB/GYNs/Midwives that were opioids has decreased from 2017 to 2020 by 17.36%

Prevention Initiatives

Title V Home Visiting and Centering Pregnancy

Home Visiting

- DOH provides funding to County and Municipal Health Departments (CMHDS) to provide for home visiting services to women who do not fit criteria for traditional home visiting.
- The programs implemented by CMHDs are national models of home visiting, including Partners for a Healthy Baby, Healthy Families America, Bright Futures, Parents as Teachers and Nurse Family Partnership.

Centering Pregnancy Program

- This patient-centered model of group prenatal care is used to reduce health care disparities, promote healthy behaviors, provide peer support, improve pregnancy outcomes, and reduce infant mortality.
- Studies have shown that group prenatal care can positively influence women's health outcomes after pregnancy and improve the utilization rate of preventive health services.
- Evidence suggests that group prenatal care supports successful outcomes in pregnant women with substance use disorders (SUD), as it does for other vulnerable groups.
 - As part of this program, Lancaster General Hospital offers a Centering Pregnancy group for women with substance use disorder/opioid use disorder.

▶ NAS Family Guide Toolkit



NEONATAL ABSTINENCE SYNDROME FAMILY GUIDE TOOL KIT



This guide was written to:

- Help parents learn about NAS;
- Encourage parents to share their substances or medication history with their doctor and nurse;
- Answer parents' questions about NAS so they can take good care of their baby; and
- Help parents help their baby be healthy and safe.

Developed in partnership with the
Northwestern Pennsylvania Neonatal Abstinence Syndrome Coalition
and the Ohio Perinatal Quality Collaborative.

January 2022



Crawford Co. NAS Baby Basket Initiative

- DOH Division of Newborn Screening and Genetics partnered with Crawford County Drug and Alcohol Executive Commission to distribute baby baskets and NAS Family Guide tool kits to families impacted by NAS in the Northwest region.
- Planning for this project started in the fall of 2021, the distribution of baby baskets and tool kits to counties officially began in the first week of February 2022.
- Once an NAS baby is identified, the Plan of Safe Care Coordinator will deliver the NAS Baby Basket to the mom on their first visit.
- Crawford County Drug and Alcohol has created an online assessment tool, which is being utilized to collect demographic data and feedback from families receiving the NAS baby basket and NAS Family Guide tool kit. This information will be utilized to assess the impact and effectiveness of the pilot project.



The Baby Basket contains items identified by NICU staff as fundamental in caring for an infant with NAS:

- NAS Family Guide Tool Kit
- Tips for Soothing Baby magnet
- PA Early Intervention info (rack card and info brochure)
- Summer Soothe and Vibe portable vibration and soothing sounds (includes white noises, heartbeat, and lullabies)
- Comfy Cubs (3 swaddle blankets)
- Desitin (diaper rash paste)
- Badger Sleep Balm
- 4 Dr. Brown's Baby Bottles
- 3 Dr. Brown's Pacifiers
- Room Darkening Curtains
- Toy

Syringe Service Programs (SSPs) Legislation

SSPs are public health programs that serve the community by addressing the health needs and risks of people who use drugs. SSPs...

- Save lives by lowering likelihood of overdose deaths.
- Are associated with a 50 percent decline in the risk of HIV transmission.
- Users are five times more likely to enter treatment.
- Result in benefits for law enforcement by reducing risk of needlesticks, and no increase in crime.
- Result in fewer improperly discarded syringe. SPPs are the only programs dedicated to taking back and disposing of used syringes.

There are more than 400 SSPs operating in 40 states, the District of Columbia (DC), and Puerto Rico. Local laws allow for SSPs to operate in Allegheny and Philadelphia counties.

Senate Bill 926 allows for Syringe Services Programs to operate across PA.

Fentanyl Test Strip Legislation

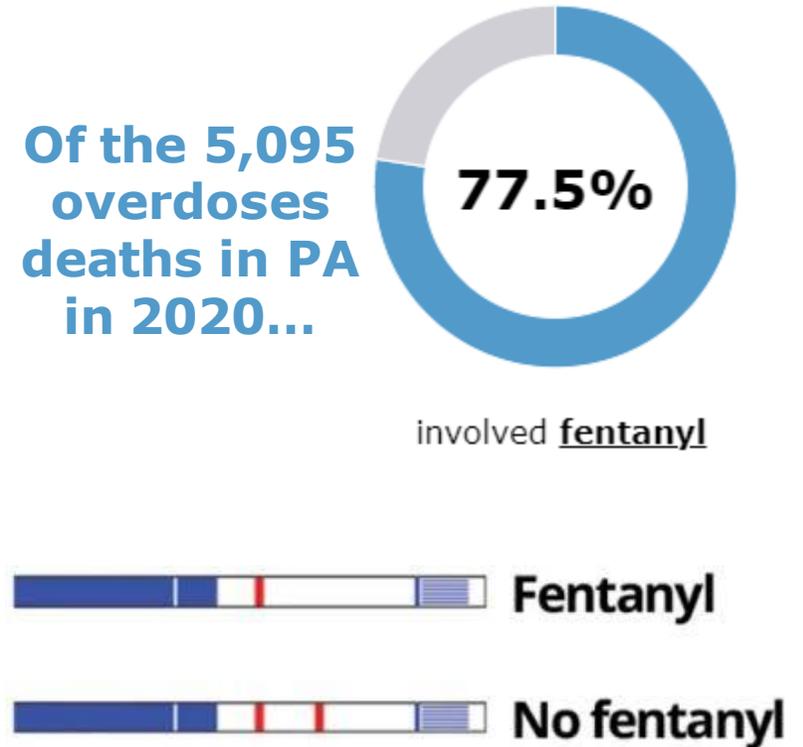
Since most drug users are unaware there is fentanyl in the substance they are using, they do not take the precautions of having naloxone available or using around other people.

Fentanyl is...

- 50 times more potent than heroin.
- Increasingly found in the drug supply, including pressed pills.
- Used by drug dealers to stretch supply and increase profits.

Fentanyl Test Strips are currently considered “drug paraphernalia” in PA.

House Bill 1393 and Senate Bill 845 would amend the Controlled Substance, Drug, Device and Cosmetic Act to allow fentanyl test strips for personal use.



Thriving Families

Learning Opportunity

▶ Transformational Leaders for Thriving Families

- Convened by Association of State and Territorial Health Officials (ASTHO) & American Public Human Service Association (APHSA)
- PA is one of 10 states chosen to participate in this learning opportunity focused on integrating child welfare and public health efforts.
- The goal is to create a prevention focused child welfare system, and create healthy resilient, and safe communities for families.
- Team Members:
 - DHS: OCYF and OMHSAS
 - DOH: Physician Generals Office (now Secretary of Health Office) and Bureau of Family Health

▶ Thriving Families cont'd

- States were directed to create a work plan and to set goals for their teams.
- **PA Work Focus: Impact of substance use disorders on children prebirth-5 years old.**
- Team enhancement led to inclusion of OMHSAS and DDAP feedback.
- Baseline Data Review: Historical matrix of working groups focused on the impact of substance use on child welfare developed.

Thank you!

Dr. Denise Johnson
Acting Secretary of Health