Substance Exposed Newborns and Part C: New Challenges and New Opportunities

IDIO Conference

August 2018

Neonatal Abstinence Syndrome (NAS)

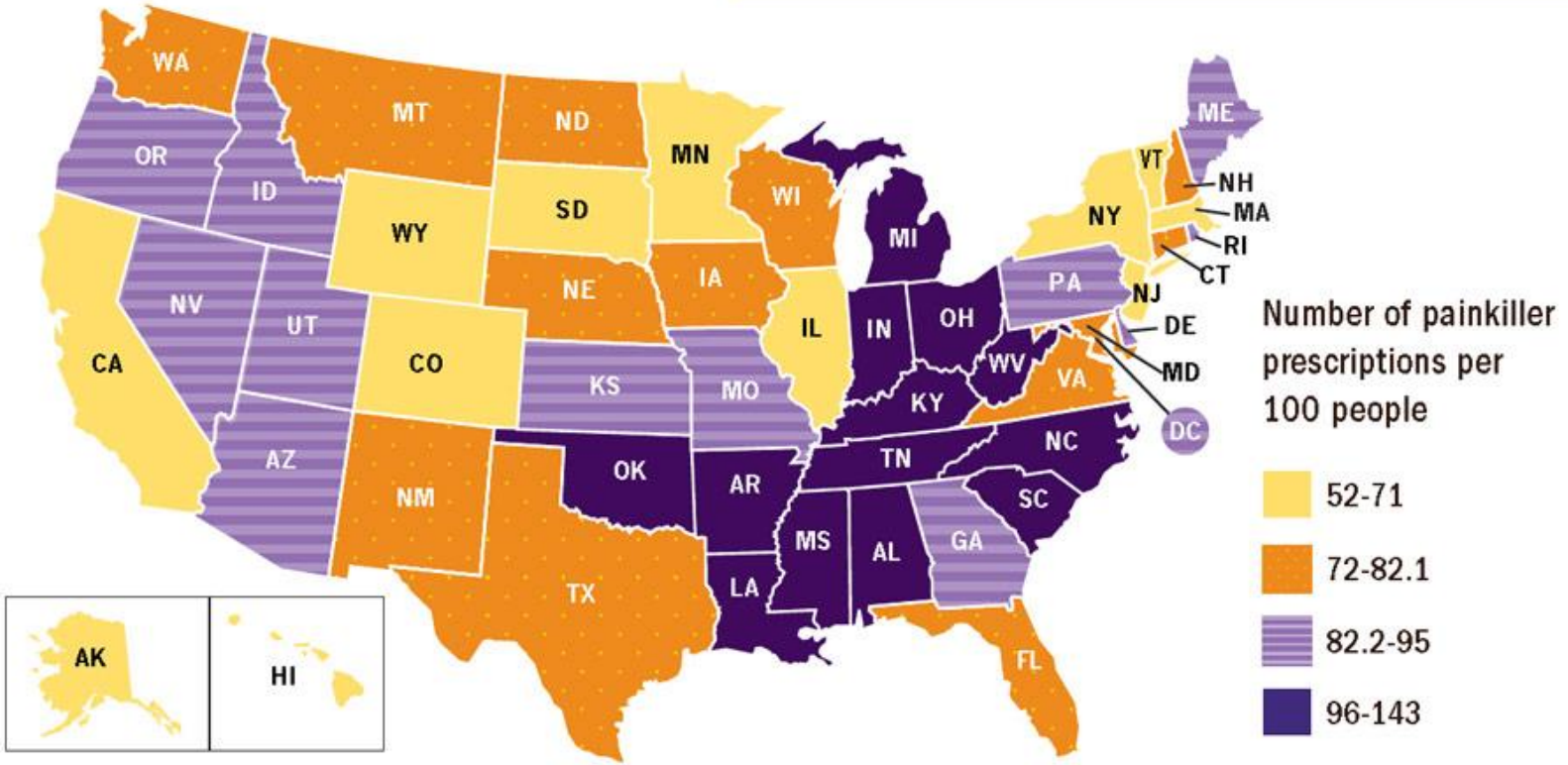
A drug withdrawal syndrome that presents in newborns after birth when transfer of harmful substances from the mother to the fetus abruptly stops at the time of delivery Most frequently due to opioid use in the mother, but may also be seen in infants exposed to benzodiazepines, and alcohol.

NAS Origin

Fetal exposure usually occurs for one of three reasons:

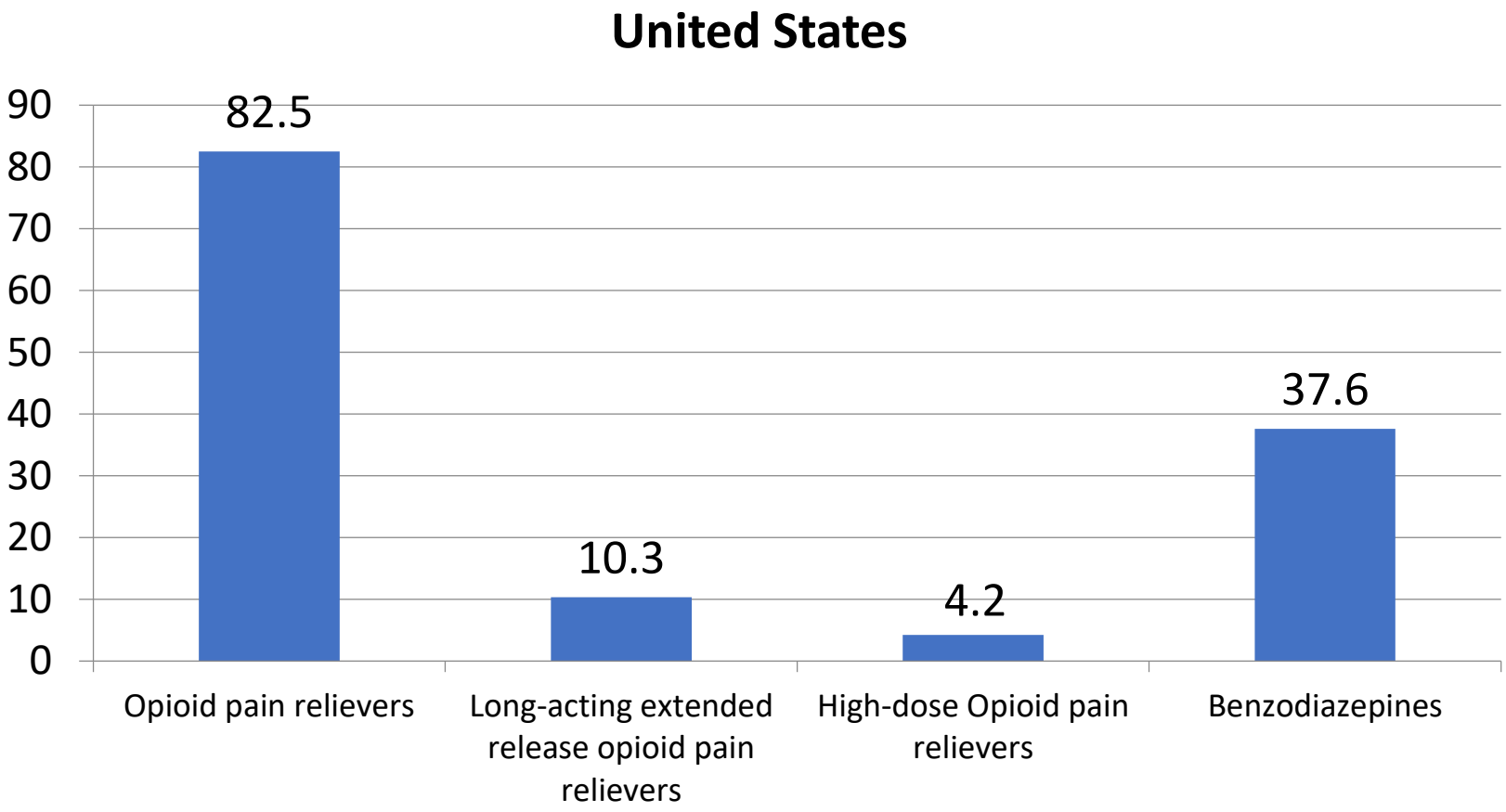
- Mothers are dependent/addicted to opioids, either prescribed or illicit.
- Mothers require prescription opioids for another disease process
- Mothers receive Medicaid Assisted Therapy (MAT) to facilitate safe withdrawal from addiction to prescription or illicit opioids.

Some states have more painkiller prescriptions per person than others.

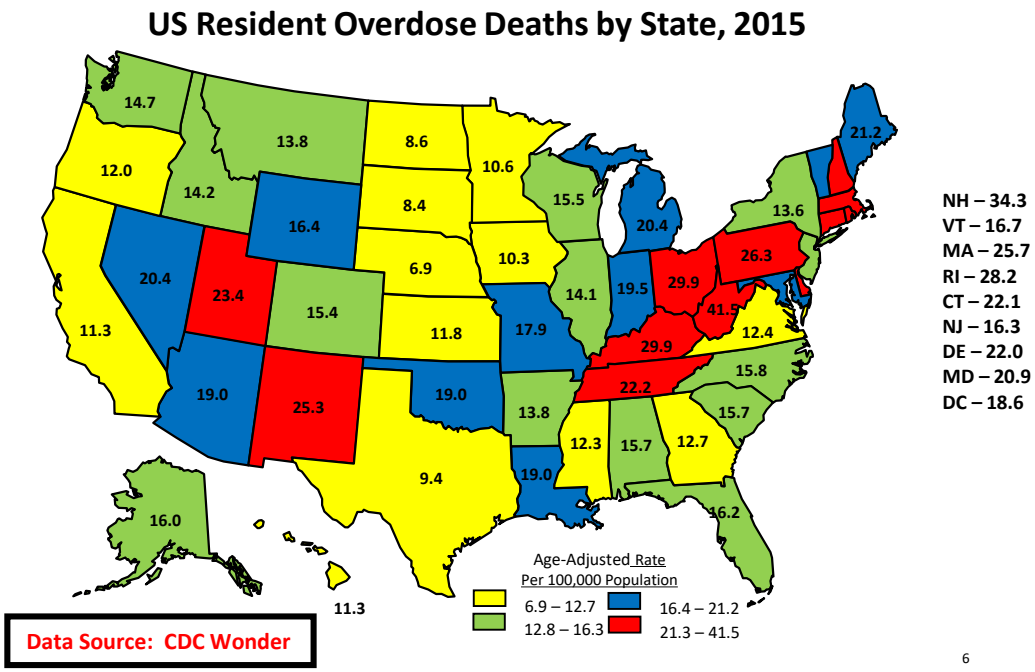


SOURCE: IMS, National Prescription Audit (NPA™), 2012.

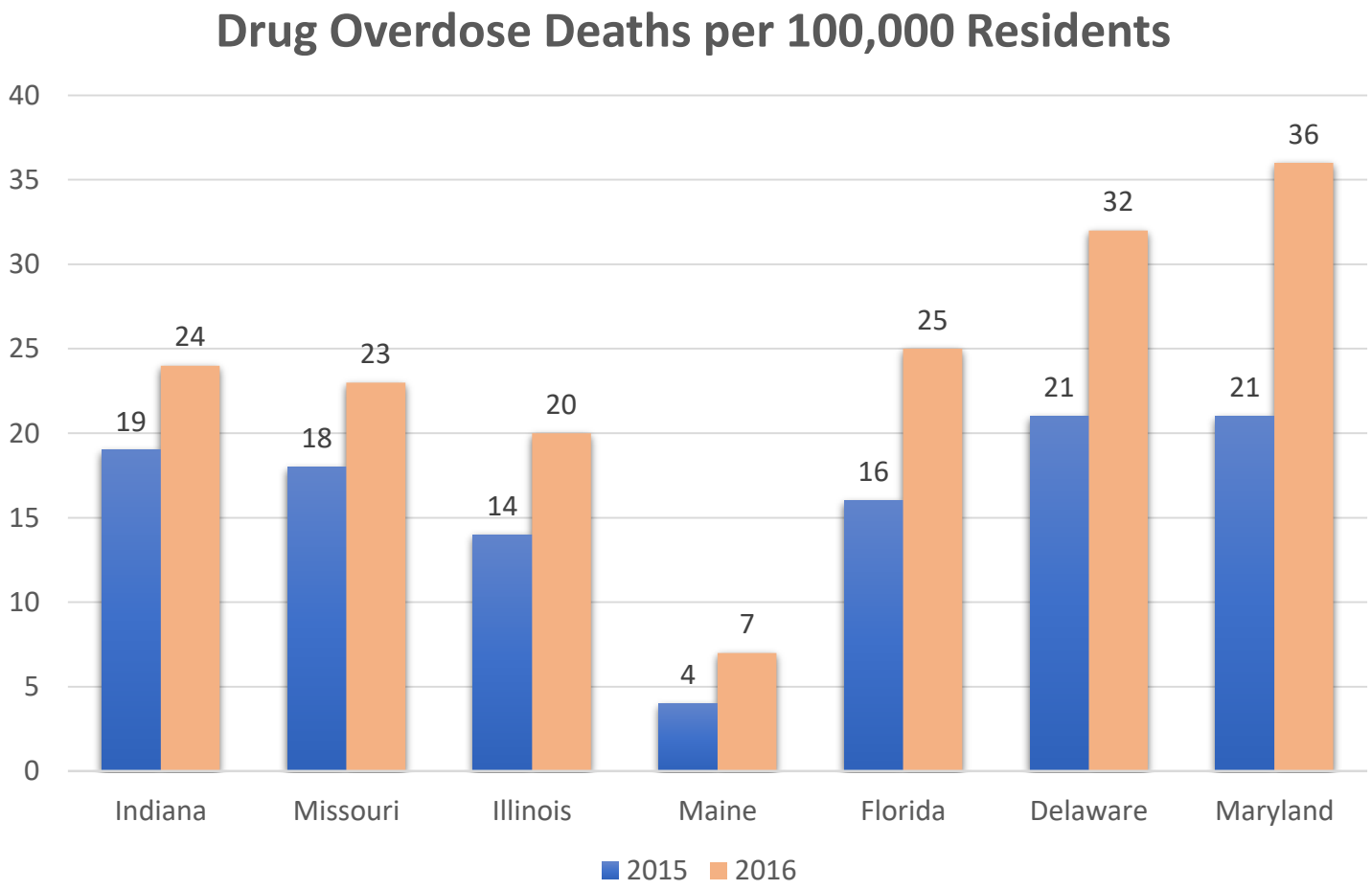
Prescribing Rates per 100 Persons



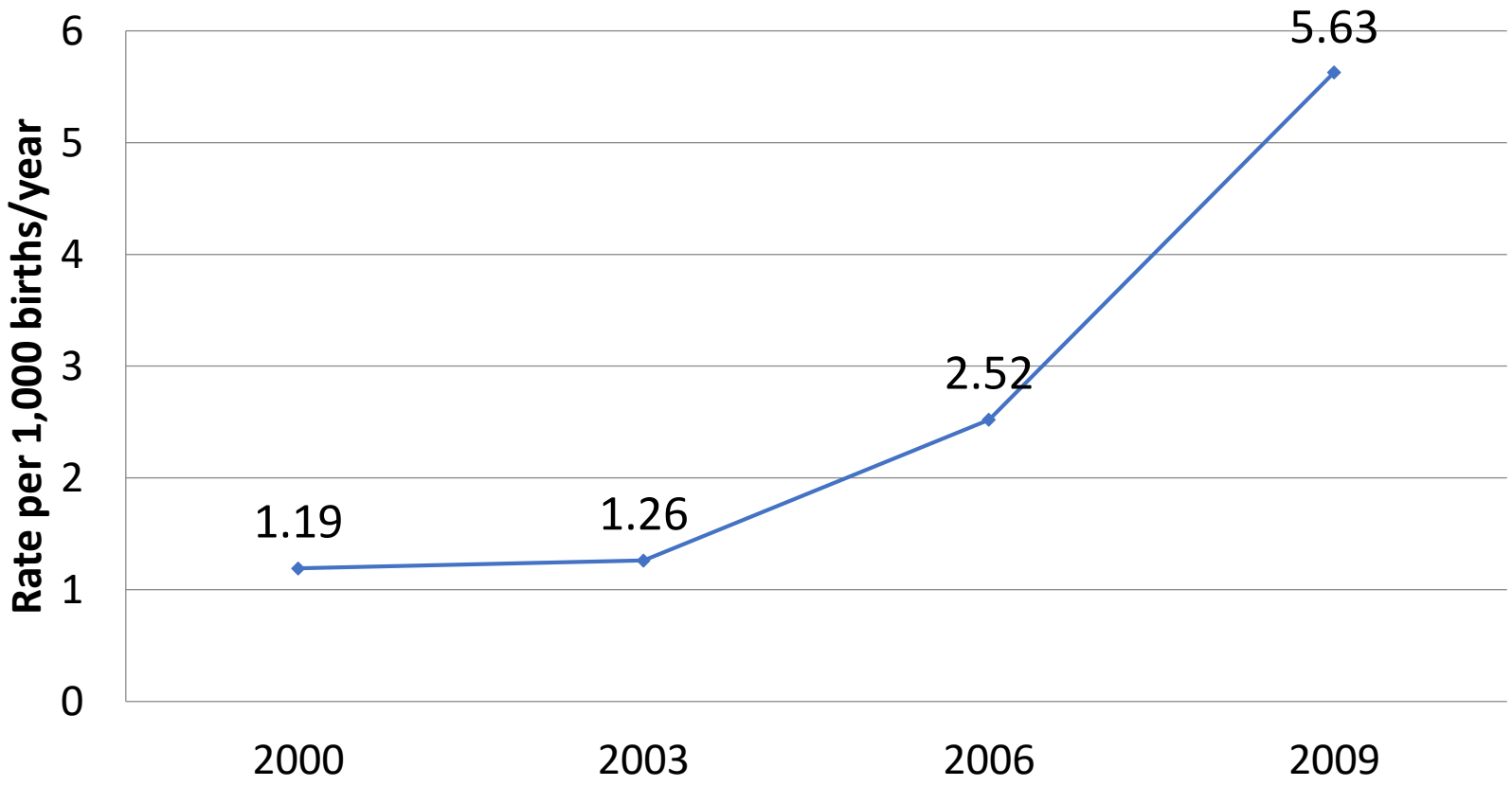
Drug Overdose Rates by State



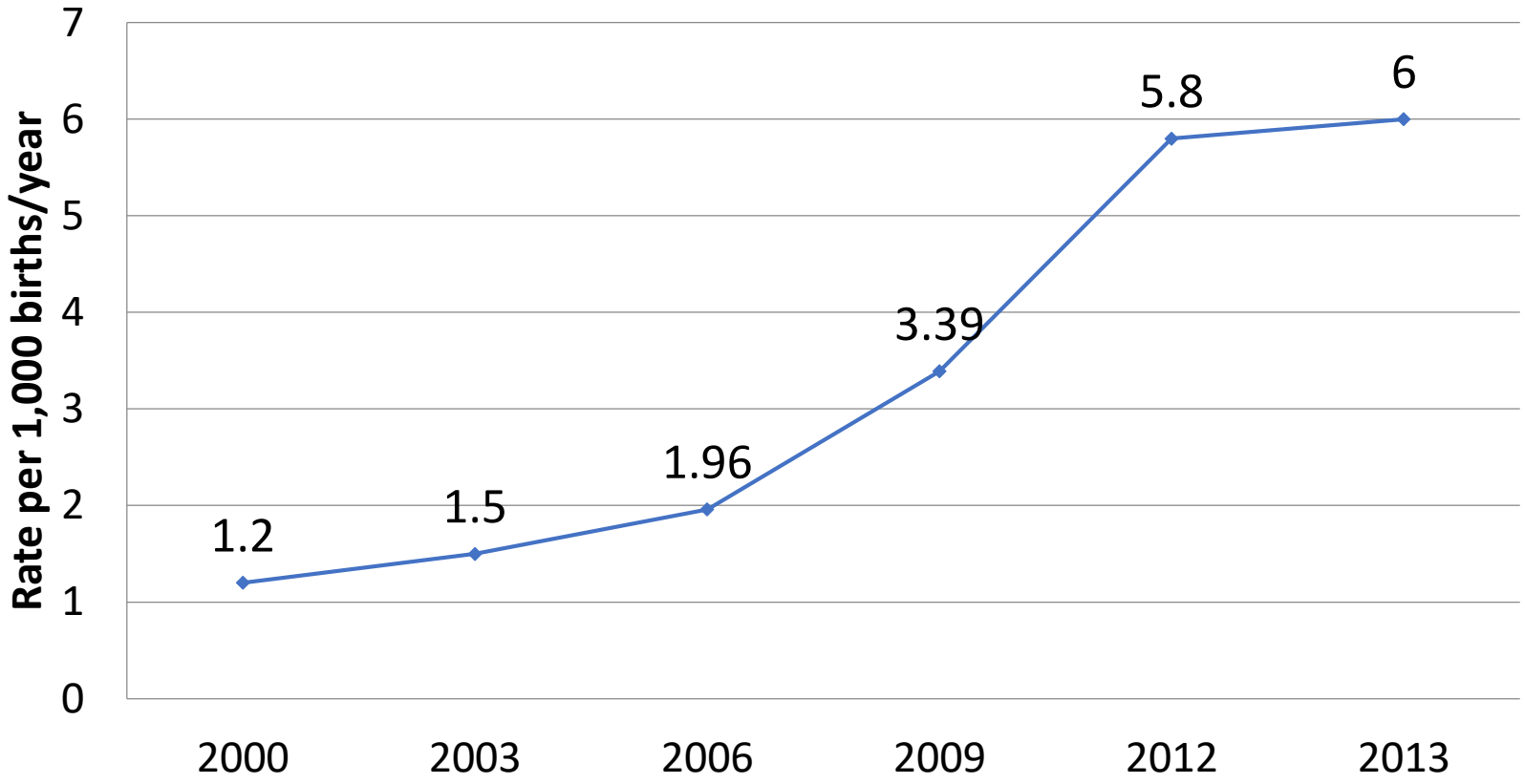
Changes from 2015-2016



Source: National Center for Health Statistics, CDC

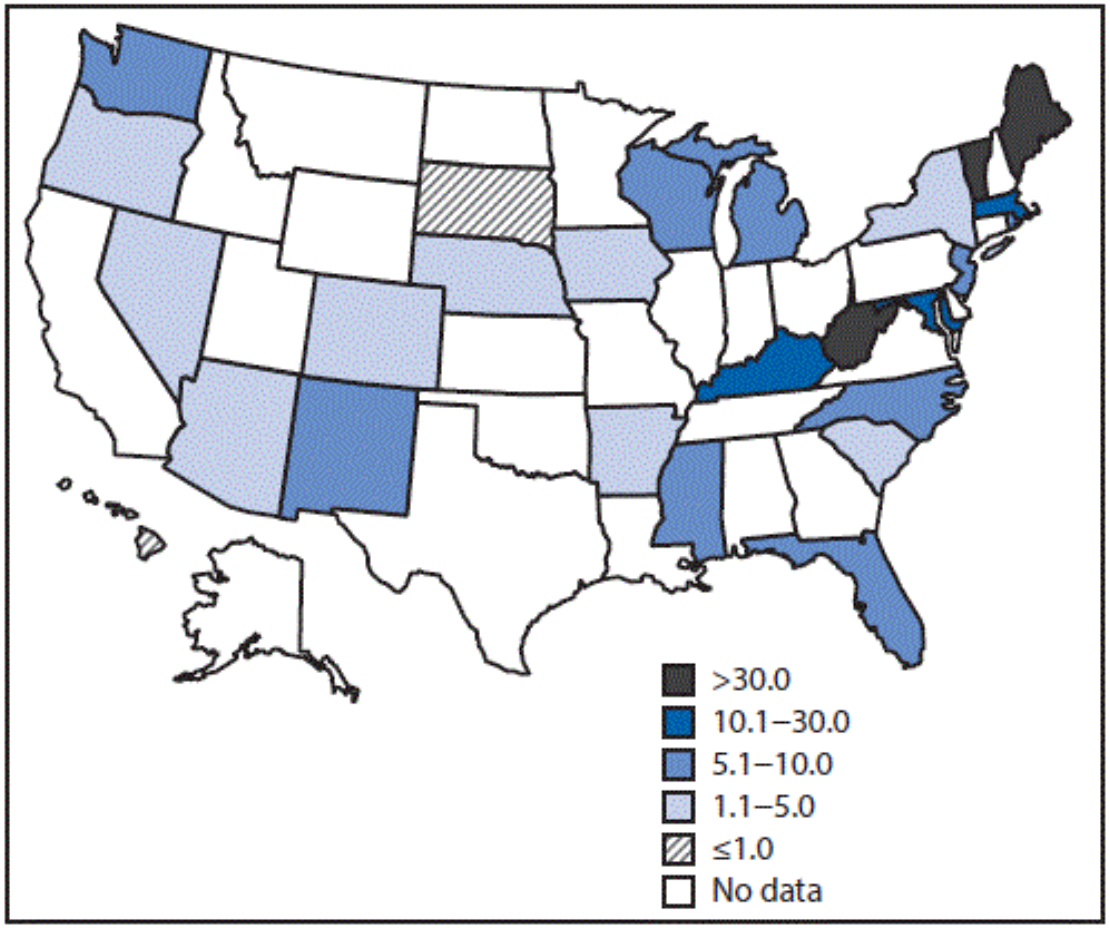


Prevalence of Maternal Opioid Use



Prevalence of NAS

NAS Incidence Rates 2012-2013

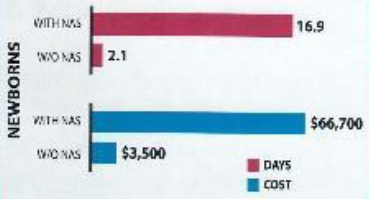


DRAMATIC INCREASES IN MATERNAL OPIOID USE AND NEONATAL ABSTINENCE SYNDROME

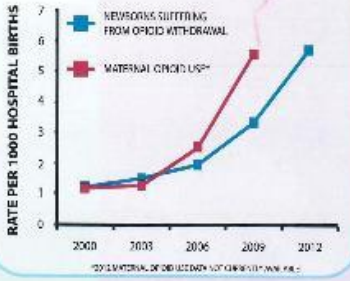
THE USE OF OPIOIDS DURING PREGNANCY CAN RESULT IN A DRUG WITHDRAWAL SYNDROME IN NEWBORNS CALLED **NEONATAL ABSTINENCE SYNDROME** (NAS), WHICH CAUSES **LENGTHY** AND **COSTLY** HOSPITAL STAYS. ACCORDING TO A NEW STUDY, AN ESTIMATED **21,732 BABIES** WERE BORN WITH THIS SYNDROME IN THE UNITED STATES IN 2012, A **5-FOLD INCREASE** SINCE 2000.

EVERY 25 MINUTES, A BABY IS BORN SUFFERING FROM OPIOID WITHDRAWAL.

AVERAGE LENGTH OR COST OF HOSPITAL STAY



NAS AND MATERNAL OPIOID USE ON THE RISE

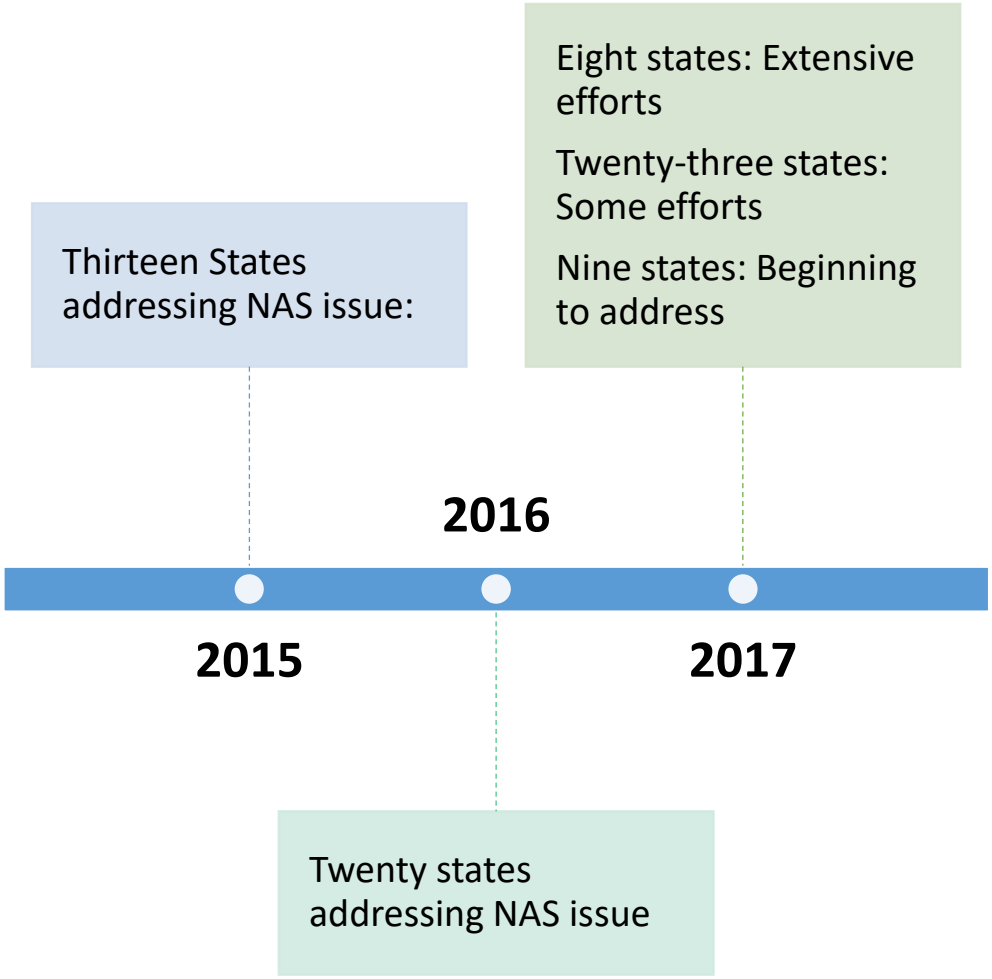


NIH National Institute on Drug Abuse

Source: Patrick et. Al. JAMA 2012 , Patrick et. Al. Journal of Perinatology 2015

		Nicotine	Alcohol	Marijuana	Opiates	Cocaine	Meth
Short Term - Birth	Fetal Growth	Effect	Strong Effect	**No Effect**	Effect	Effect	Effect
	Anomalies	No Consensus	Strong Effect	**No Effect**	No Effect	**No Effect**	No Effect
	Withdrawal	No Effect	No Effect	**No Effect**	Strong Effect	**No Effect**	No Data
	Neurobehavior	Effect	Effect	Effect	Effect	Effect	Effect
Long Term Effects	Growth	No Consensus	**Strong Effect**	No Effect	No Effect	No Consensus	**No Data**
	Behavior	**Effect**	**Strong Effect**	Effect	Effect	**Effect**	**No Data**
	Cognition	**Effect**	**Strong Effect**	Effect	No Consensus	**Effect**	**No Data**
	Language	**Effect**	Effect	No Effect	No Data	**Effect**	**No Data**
	Achievement	**Effect**	Strong Effect	Effect	No Data	No Consensus	**No Data**

ITCA Tipping Points Questions 2015-2017



New Population

Types of Services

Provider Training

System Capacity

So what does this mean for Part C?

Implications for Service Delivery

Increasing referral numbers

Understanding the impact of drug exposure or NAS on infant development (Assessment and Intervention)

Understanding the needs of mothers experiencing addiction

Collaborating with other community partners to support family needs

Potential need for specialized service coordination

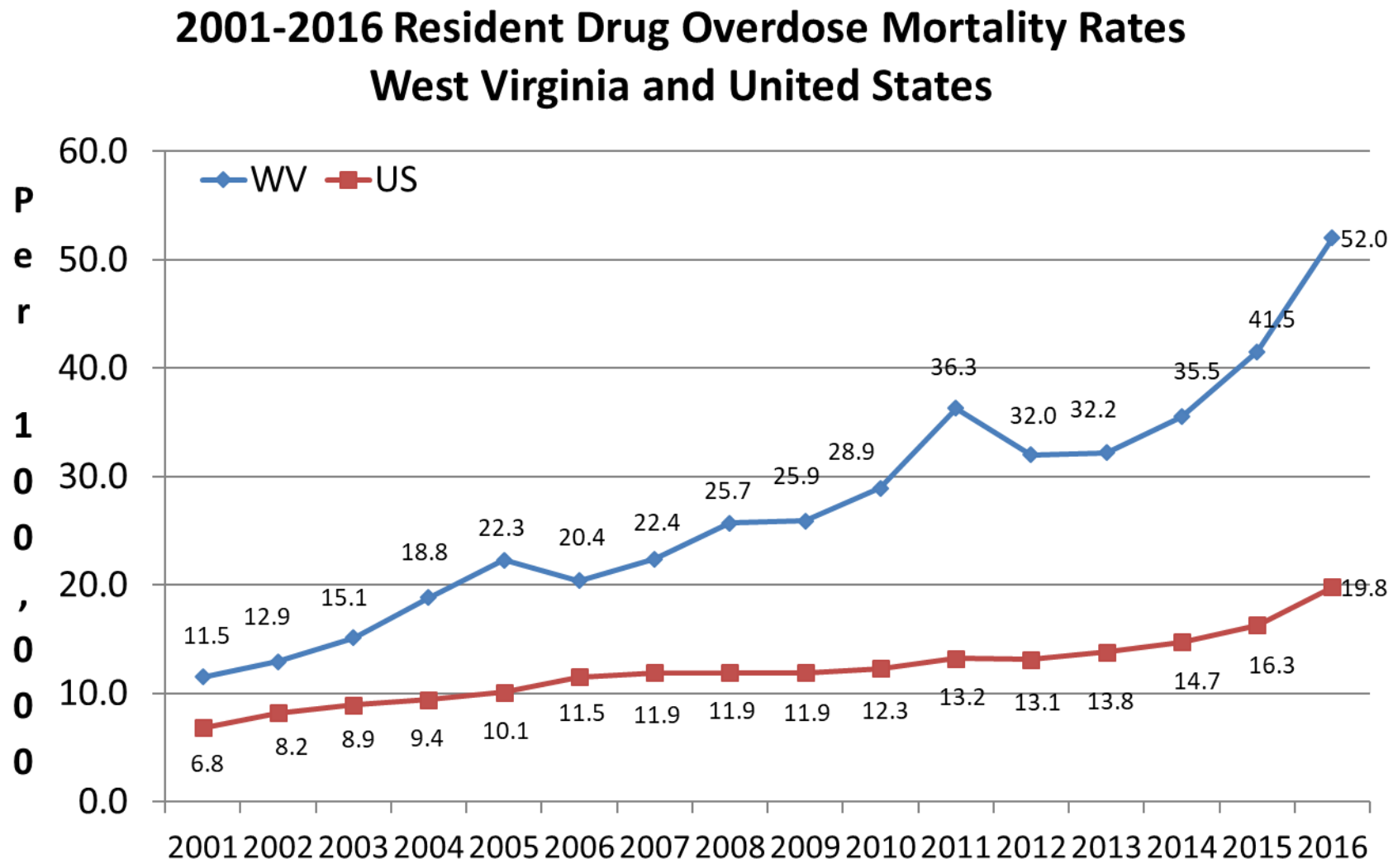
West Virginia

Pam Roush

Part C Coordinator

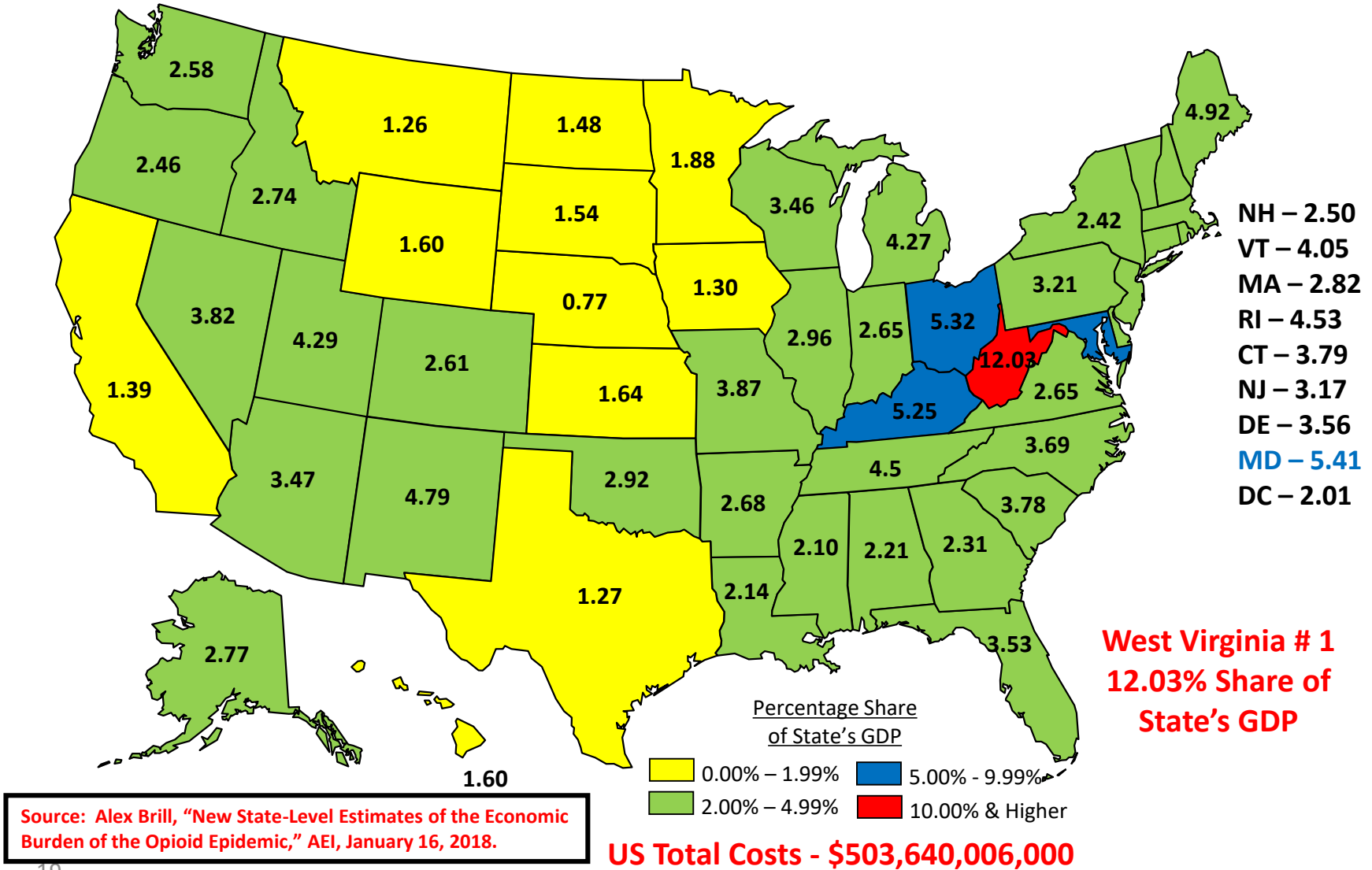
Substance Exposed Newborns and Part C: New Challenges and New Opportunities

West Virginia Versus United States



Data Source: WV Department of Health and Human Resources, Health Statistics Center, Vital Surveillance System and CDC Wonder
Rates are age-adjusted to the 2000 US Standard Million

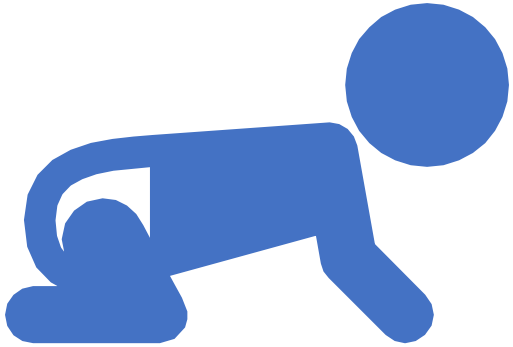
Economic Impact



West Virginia # 1
12.03% Share of State's GDP

Source: Alex Brill, "New State-Level Estimates of the Economic Burden of the Opioid Epidemic," AEI, January 16, 2018.

US Total Costs - $503,640,006,000



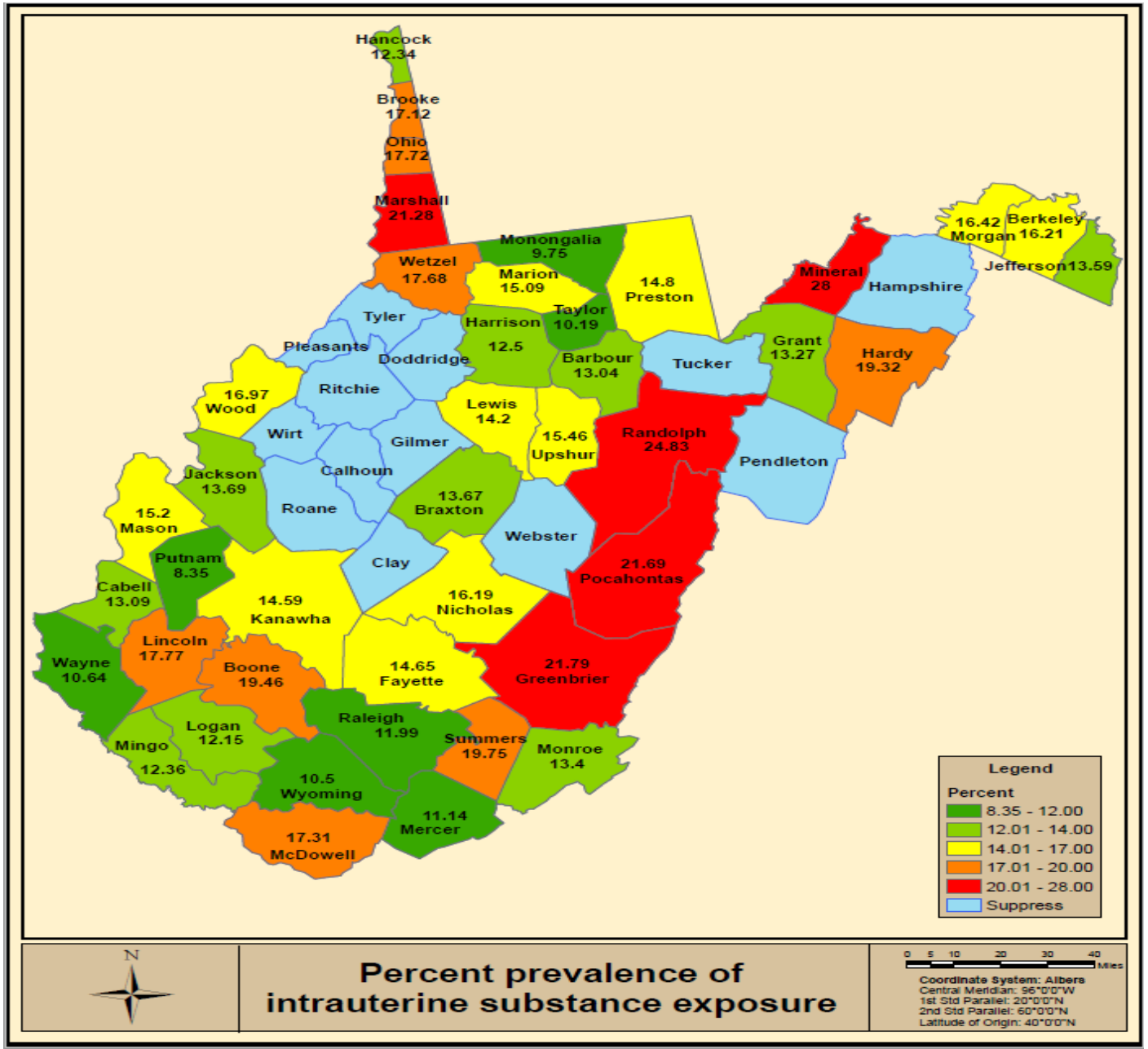
- In October, 2016 WV started documenting births impacted by substances
- WV now gathers each baby's exposure to substances and diagnosis of NAS at birth

Tracking Data Through Birth Score

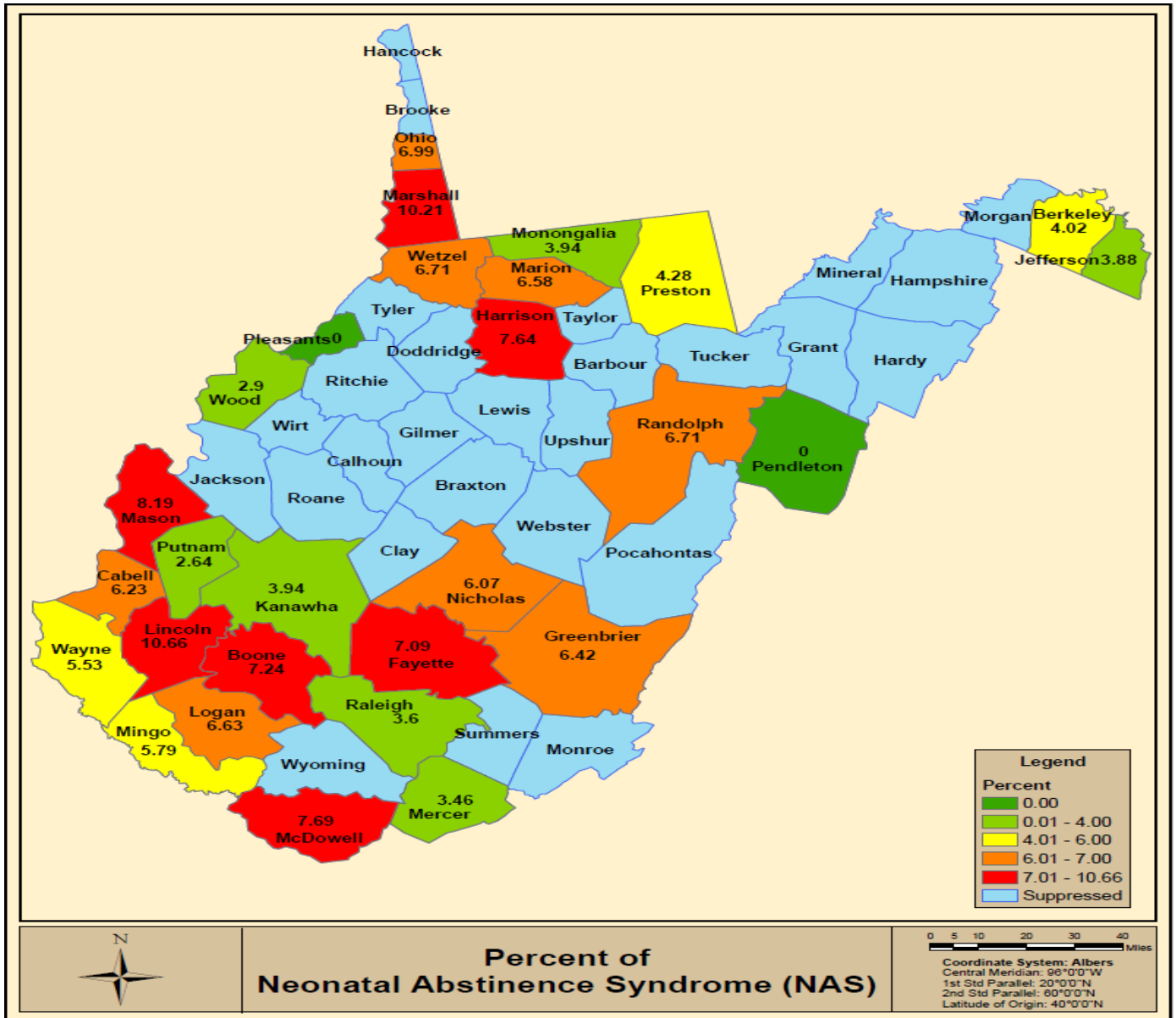
- West Virginia's Birth Score Program started collecting Intrauterine Substance Exposure and NAS data October 1, 2016.

- What exactly is collected?
  - **Intrauterine Substance Exposure**
    - Includes any medication prescribed and not prescribed by a physician that has a psychoactive affect
  - **How Intrauterine Substance Exposure is documented**
    - Self-reported, documented in prenatal record, positive maternal drug test, unknown, other
  - **Infant has clinical signs consistent with NAS diagnosis**

Percent Infant Drug Exposure at Birth



Percent Babies Diagnosed with NAS at Birth

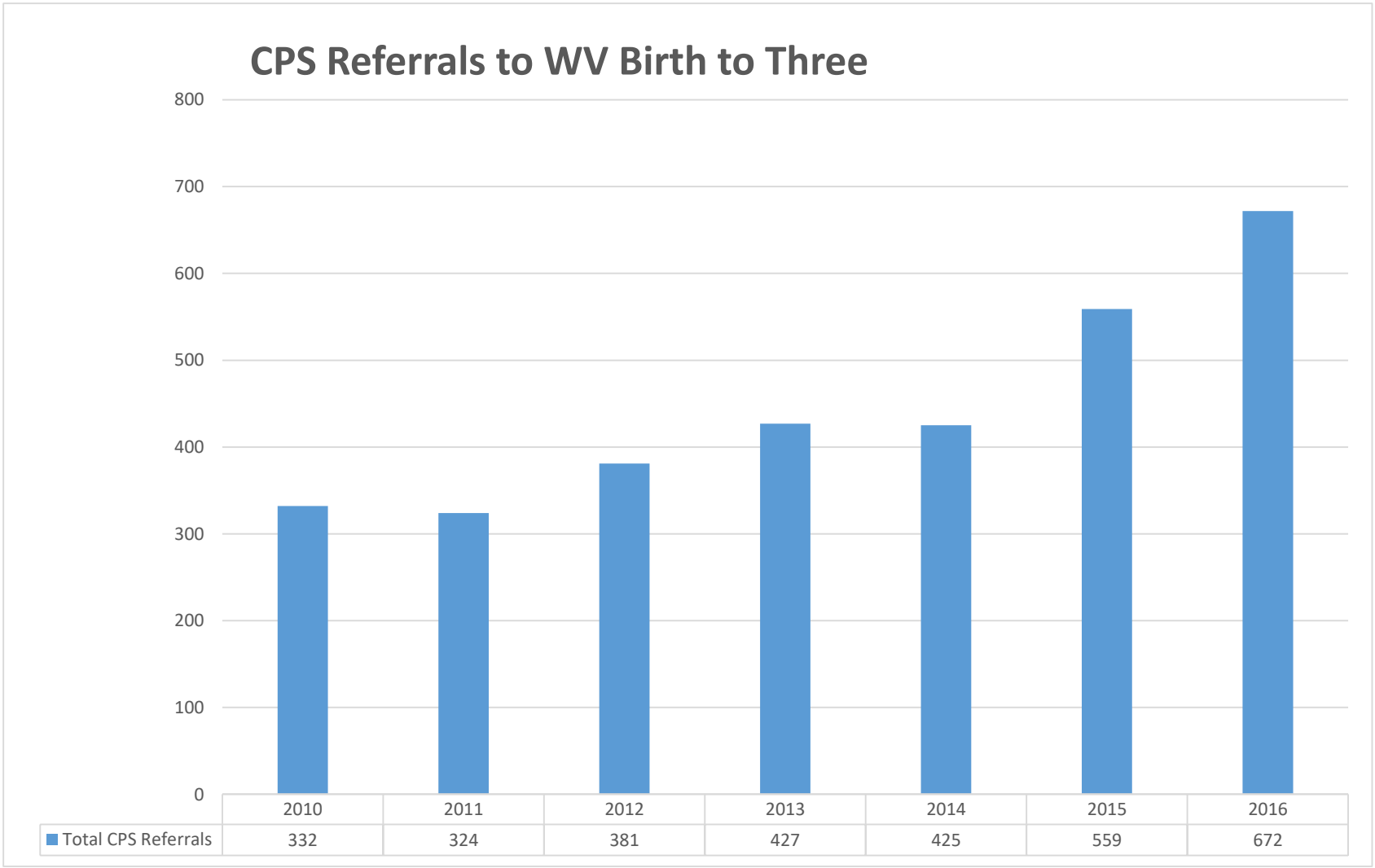


Collaboration with initial health care providers

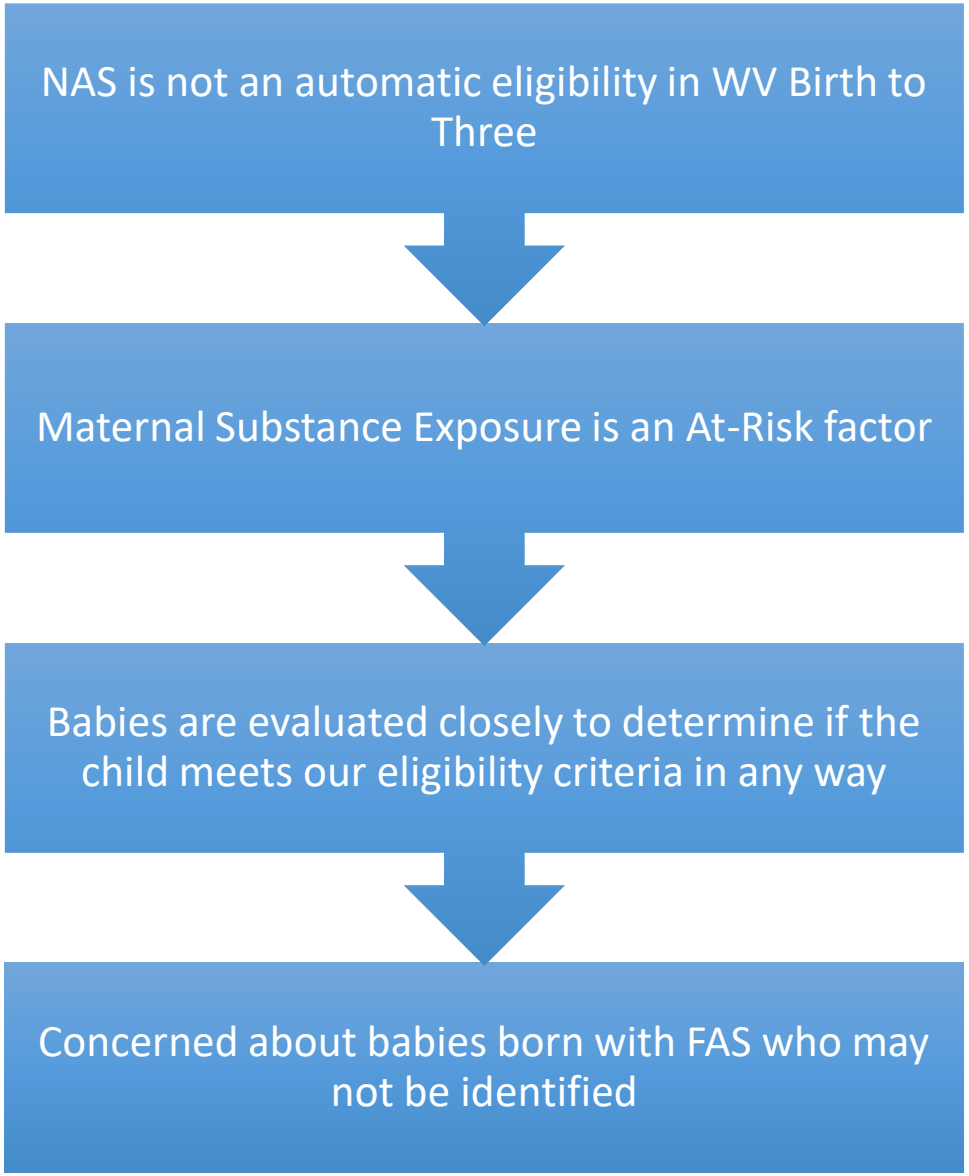
WV has newborn centers which are specializing in treatment of infants with NAS

Referrals of these babies to Part C may come directly from the hospital, or through CPS

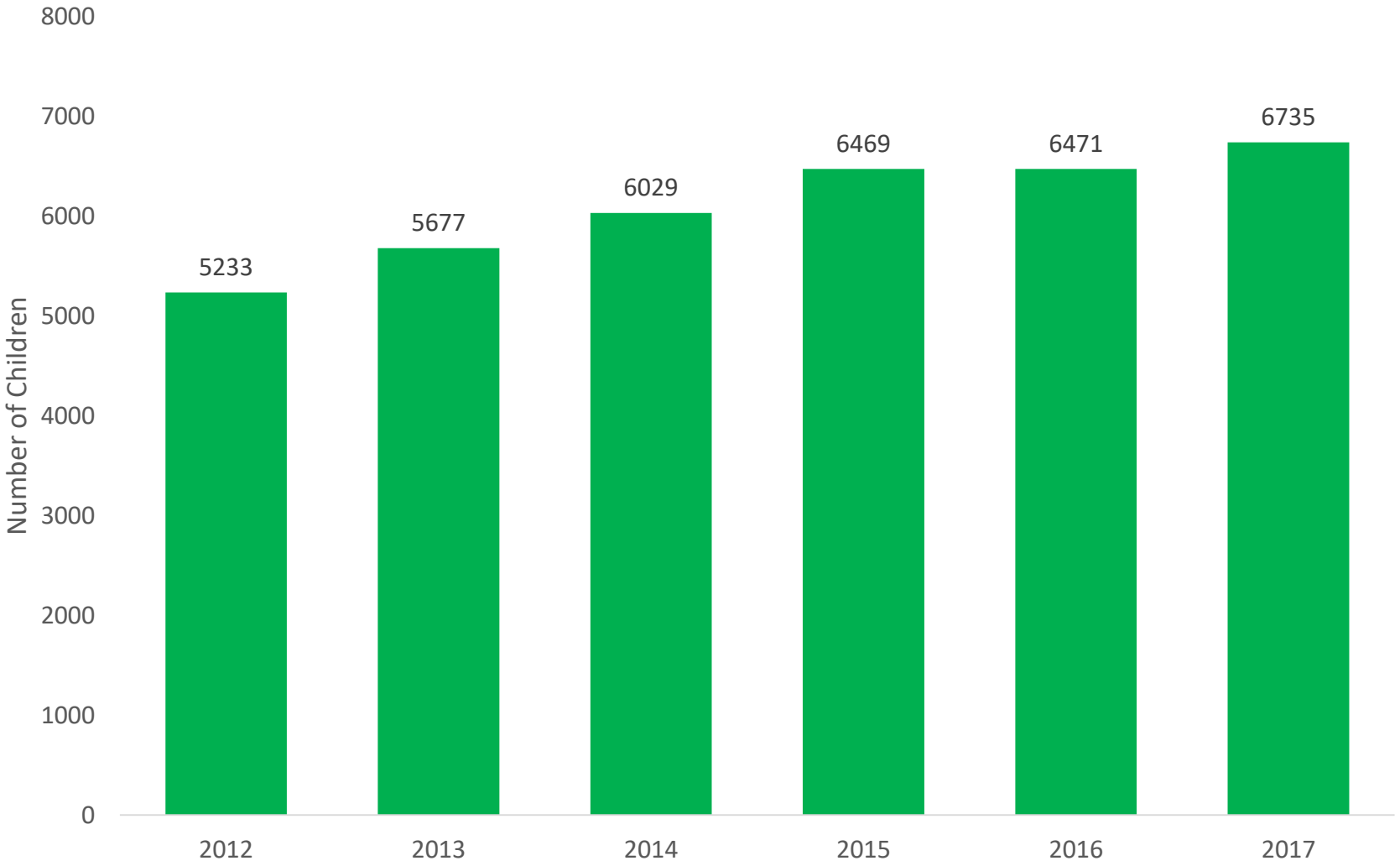
Increase in CPS Referrals to WVBTT



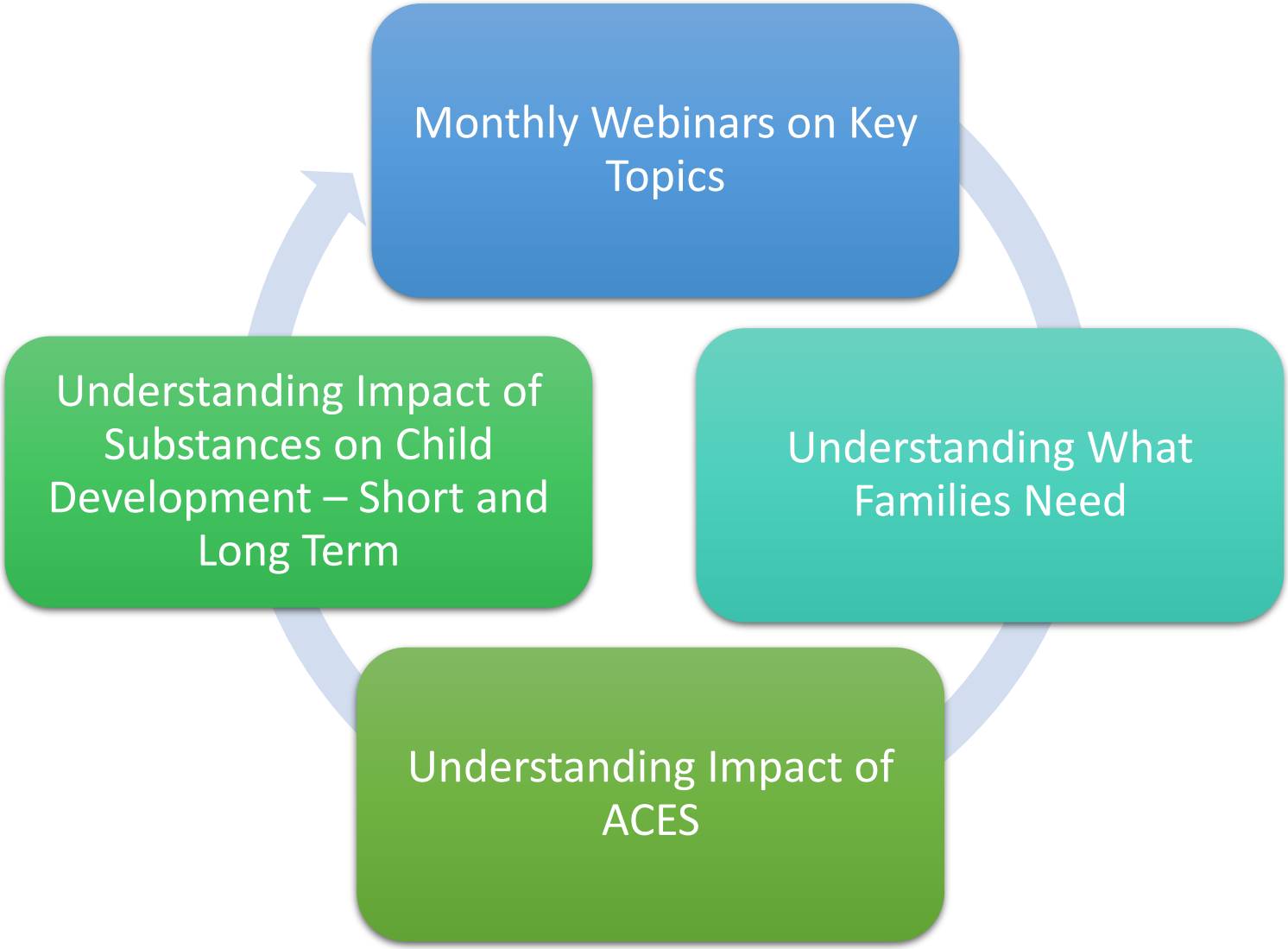
Eligibility for WV Birth to Three



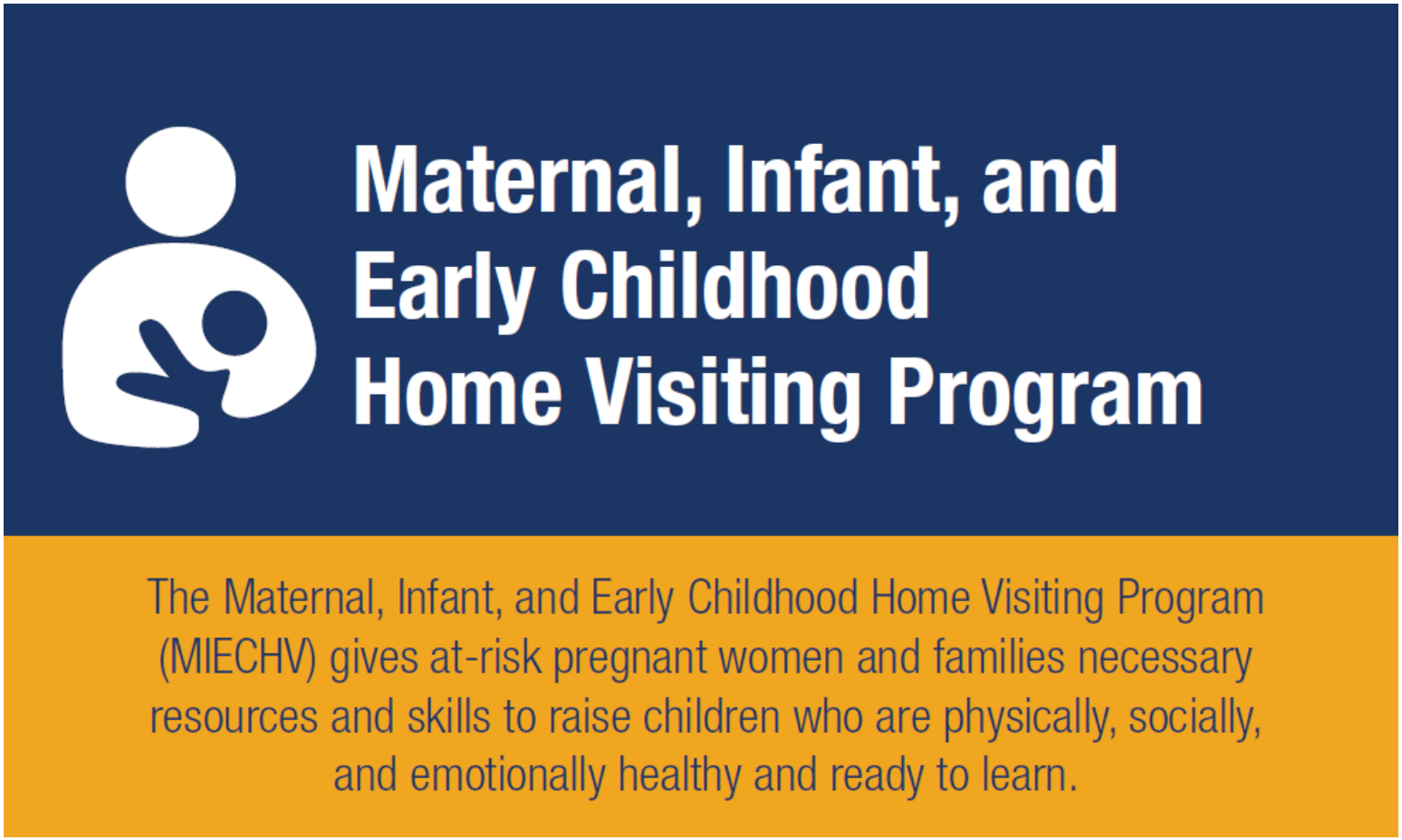
WV Birth to Three Enrollment



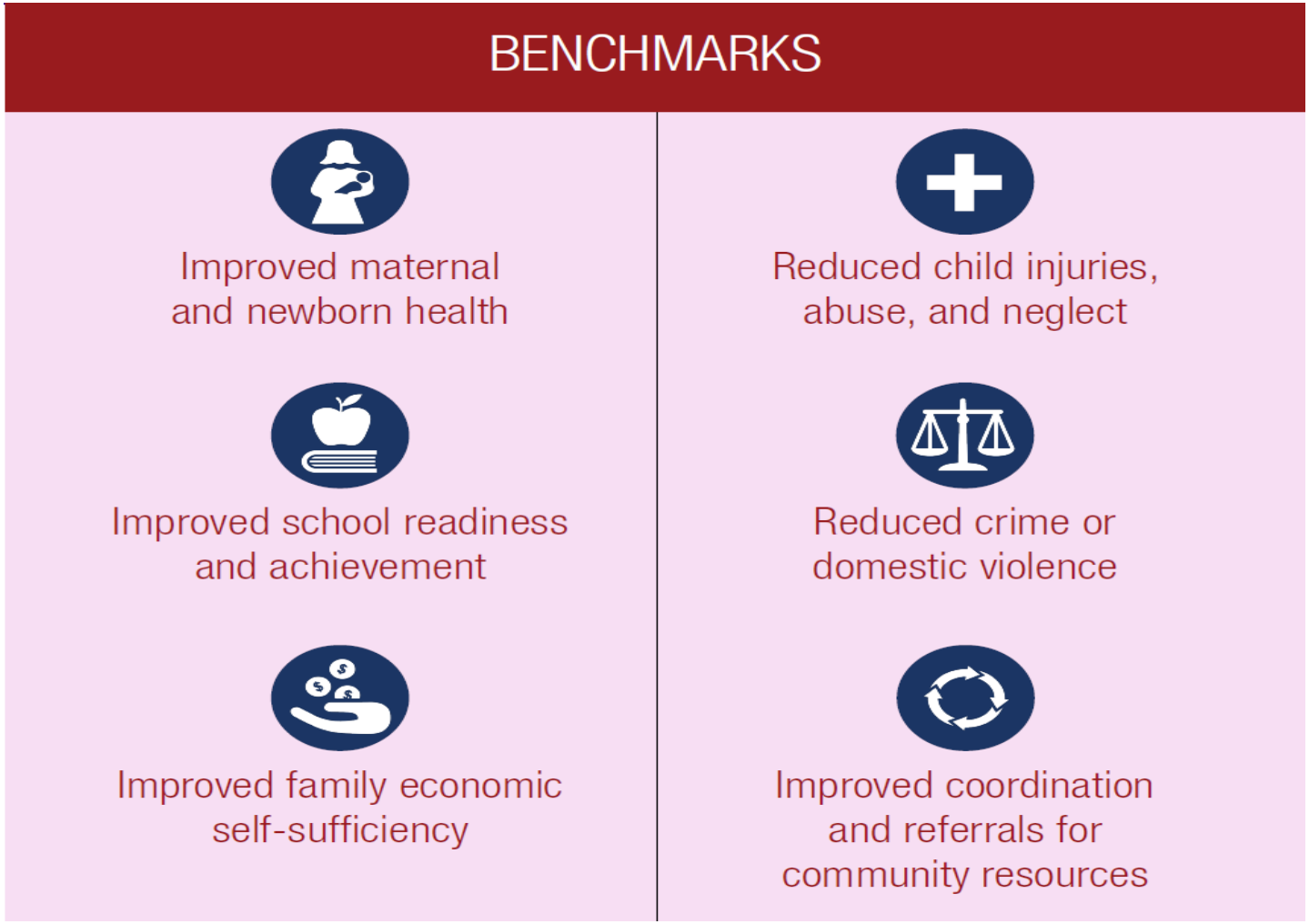
SSIP Professional Dev. Activities



Home Visiting



Home Visiting Benchmarks



Final Thoughts

Indiana

Christina Commons

Part C Coordinator

Indiana Perinatal Quality Improvement Collaborative

Vision:

- All perinatal care providers and all hospitals have an important role to play in assuring all babies born in Indiana have the best start in life.
- All babies born in Indiana will be born when the time is right for both the mother and the baby
- Through a collaborative effort, all women of childbearing age will receive risk appropriate health care before, during and after pregnancy

Perinatal Substance Use Taskforce

- 5 workgroups developed as a result of 2017-2018 taskforce deliverables
  - Pharmacologic Treatment
  - Non-Pharmacologic Treatment
  - Medical Home—Women
  - **Medical Home—Infant**
  - Transfer Protocol

Medical Home—Infant Workgroup

- Charge—Develop a universal protocol for substance exposed infants to include:
  - Guidelines for follow-up for infant primary care providers
  - Guidelines for communication between infants and maternal primary care providers
- Strengthen the medical home for infants and mothers

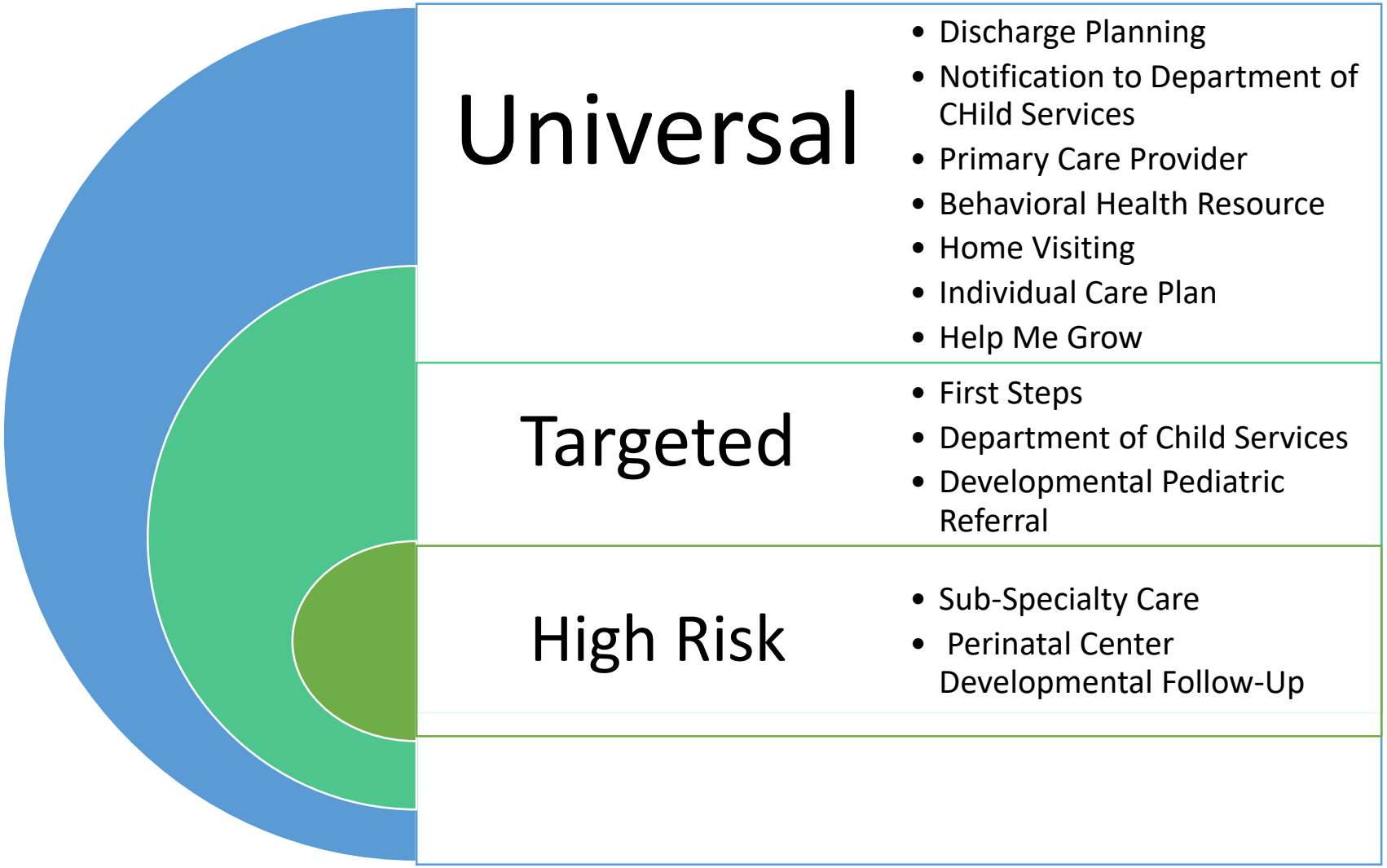
Considerations

- Appropriate discharge planning must occur prior to the release of the infant and parent
- All children and families are different and will require different levels of support
- Professionals are most comfortable with screening protocol when they know next steps and are supported
- Consistency in discharge and communication with identified primary care physicians is critical for the success of the infant and mother or other caregivers

Tools Developed

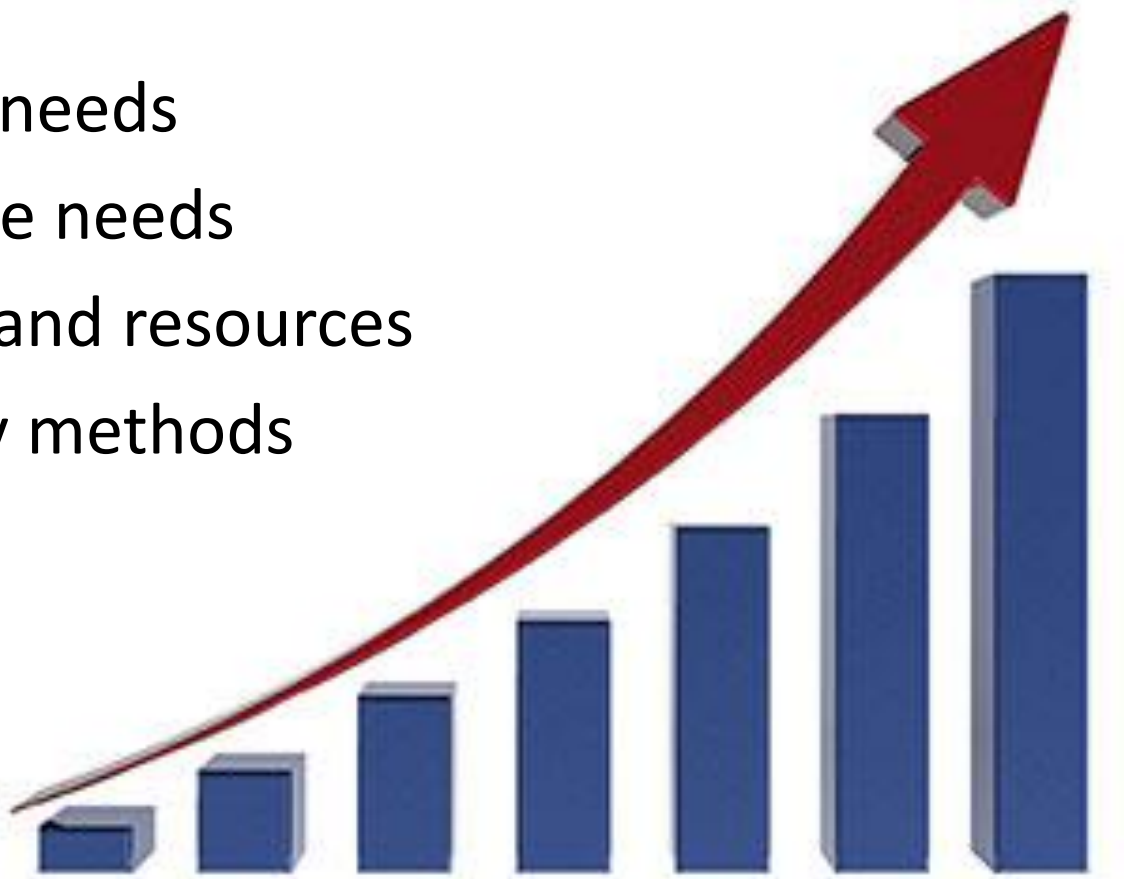
- Discharge planning for infants with prenatal substance exposure
- Discharge checklist
- Primary care provider letter
- Screening recommendations for children who were prenatally substance exposed

Discharge Planning & Follow-Up for Substance-Exposed Infants



Impact on Part C

- Referrals
- Fiscal resource needs
- Human resource needs
- Training needs and resources
- Service delivery methods



Massachusetts

Patti Fougere

Part C Coordinator

Substance Exposed Newborns and Part C: New Challenges and New Opportunities

MA EI System Overview

40,110 children served in FY'17

$200 Million Annual Budget

- Allocation from State Legislature
- Federal Office of Special ED
- Health Insurance companies

Services are provided by 60 Certified EI Programs throughout the state

CHILDREN WITH A CONFIRMED DIAGNOSIS OF NAS

A child with a diagnosis of NAS is automatically eligible for EI Services for up to one year.

Subsequent eligibility must be based on factors other than the diagnosis, i.e. risk or established delay.

The evaluation identifying this condition does NOT have to be the initial evaluation.

Children diagnosed with Neonatal Abstinence Syndrome (NAS)

The number of children referred to EI having an NAS diagnosis steadily increased between fiscal years 2010 and 2017. Significant increases occurred between 2011 and 2014. The number of new referrals has slowed down since then.

Exhibit 1: NAS Child Counts & Client Status (table)

Date of Referral Fiscal Year	Total		Evaluated & Eligible but no IFSP	IFSP Signed but no further services	IFSP Signed, received services	
	#	% Change from Prev FY			#	Avg Length of Stay (in mos)
2010	255	*NA*	26	6	223	7.4
2011	338	32.5%	35	11	292	10.6
2012	422	24.9%	28	10	384	10.8
2013	556	31.8%	74	9	473	11.2
2014	692	24.5%	59	20	613	11.0
2015	766	10.7%	60	17	689	12.0
2016	803	4.8%	61	21	698	13.1
2017	869	8.2%	63	20	772	12.9
	4,701		406	114	4,144	

* The majority of NAS diagnosed children have received IFSP services

Engaging Families Impacted by NAS: Promising Practices from MA Part C Pilots

Trend data shows significant increase in the number of EI enrolled infants having an NAS diagnosis

Convened a small work group to focus on the system implications of the recent increase in NAS referrals – April 2015

Goal of the Workgroup

Raise awareness statewide of the impact on infants and young children

Ensure EI participation in statewide initiatives

EI is an entry point for all families throughout the state/established certified EI program in each community

Develop a position paper that highlights the role of EI; addresses the concern of the system and the long term impact on the child and family.

Continue to share community and regional resources and opportunities that address best practices in serving the NAS population.

NAS Pilot

- MDPH received small amount of funding to support a part-time Early Intervention professional to work in coordination with a level III neonatal intensive care or community birthing hospital staff to outreach to parents of children born with a diagnosis of NAS prior to discharge.
- The goal of the program is to make an early connection with parents without paperwork to help familiarize them with EI services and provide a “warm referral.”
- The EI program will establish and/or strengthen relationships with hospital staff to educate them on early invention, meet parents sometime after birth, and become part of the discharge planning team to support and engage the family in receiving early intervention services.
- Align with MA EI home visiting approach - PIWI

Outcome of the Pilot

- Improved relationships and increase in referrals from the hospitals in general
- Enthusiasm of many hospital staff
- Most successful with 1-2 regular EI staff
- Warm referral – no paperwork at initial meeting
- Permission to follow-up
- Inclusion of EI at other initiatives

Outcome of NAS Workgroup

Development of a "Model of Support" flyer for providers, referral sources and other community partners (see attached)

Family Education

Strategies

Training

- Emphasis of content on:
  - Relationship Based Services
  - Supporting the parent-child dyad
  - Building competence and confidence of parents in supporting their child's development

Other State Initiatives

- Title V Substance Use priority -State Performance Measure:
  - Percent of infants diagnosed with neonatal abstinence syndrome (NAS) in MA hospitals who are receiving Early Intervention service
- 2017 Policy Academy: Improving Outcomes for Pregnant and Postpartum Women with Opioid Use Disorders and their Infants, Families and Caregivers – Recommendations:
  - Automatic 3 year eligibility NAS diagnosis
  - Automatic 1 year eligibility SEN diagnosist
- Neonatal Quality Improvement Collaborative of Massachusetts (NeoQIC) NAS summit.

Discussion

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