DOH Updates

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Secretary of Health

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1. PA MMRC

2. STI Screening and Response

3. NAS Reporting

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MMRC Update

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CDC Pregnancy Checkbox Data

Maternal Mortality in the United States, Data Release, 2018 National Vital Statistics Report

- Released January 20, 2020
- https://www.cdc.gov/nchs/maternal-mortality/data.htm

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CDC Pregnancy Checkbox Data

- Source: Pregnancy checkbox data
- Pregnancy checkbox implementation in state death records began in 2003, and culminated in 2017
- Data presented on 2018 deaths

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CDC Pregnancy Checkbox Data

Maternal deaths include deaths of women while **pregnant or within 42** days of termination of pregnancy, irrespective of the duration and the site of the pregnancy, **from any cause related to or aggravated by the pregnancy or its management**, but not from accidental or incidental causes.

Late maternal deaths include deaths of women from direct or indirect obstetric causes **more than 42 days but less than 1 year** after termination of pregnancy.

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CDC Data: Maternal Deaths

Area	# Deaths	Rate
Illinois	14	**9.7**
N. Carolina	13	**10.9**
California	53	**11.7**
Pennsylvania	19	**14.0**
Maryland	10	**14.1**
Ohio	19	**14.1**
Washington	13	**15.1**
Florida	35	**15.8**
Virginia	16	**16.0**
Michigan	18	**16.4**
Missouri	12	**16.4**
Massachusetts	12	**17.4**

Area	# Deaths	Rate
USA	658	**17.4**
Texas	70	**18.5**
New York	47	**20.8**
Arizona	18	**22.3**
Indiana	20	**24.5**
South Carolina	14	**24.7**
Louisiana	15	**25.2**
Tennessee	21	**26.0**
New Jersey	27	**26.7**
Georgia	35	**27.7**
Oklahoma	15	**30.1**
Kentucky	22	**40.8**
Arkansas	17	**45.9**

- Rates per 100,000
- 26 states had <10 deaths and are suppressed

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CDC Data: Late Maternal Death

- Numbers for PA, 41 other states and D.C were too low to report (less than 10)

Area	# Deaths	Rate
Georgia	26	**20.6**
Alabama	10	**17.3**
Missouri	12	**16.4**
North Caroline	11	**9.2**
New York	18	**8.0**
United States	277	**7.3**
Florida	19	**8.6**
Texas	22	**5.8**
California	26	**5.7**

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Definitions

Pregnancy Associated Deaths

Pregnancy-Related Death
The death of a woman during pregnancy or **within one year of pregnancy** due to a pregnancy complication, a chain of events initiated by pregnancy, or the aggravation of an unrelated condition by the physiologic effects of pregnancy

Pregnancy-Associated but NOT Related Death
The death of a woman during pregnancy or **within one year of pregnancy** from a cause that is not related to pregnancy

Unable to Determine

Source: St. Pierre A; ZaharatosJ; Goodman D; Callaghan WM. Jan 2018. Challenges and opportunities in identifying, reviewing, and preventing maternal deaths.Obstetrics and Gynecology. 131; 138-142.

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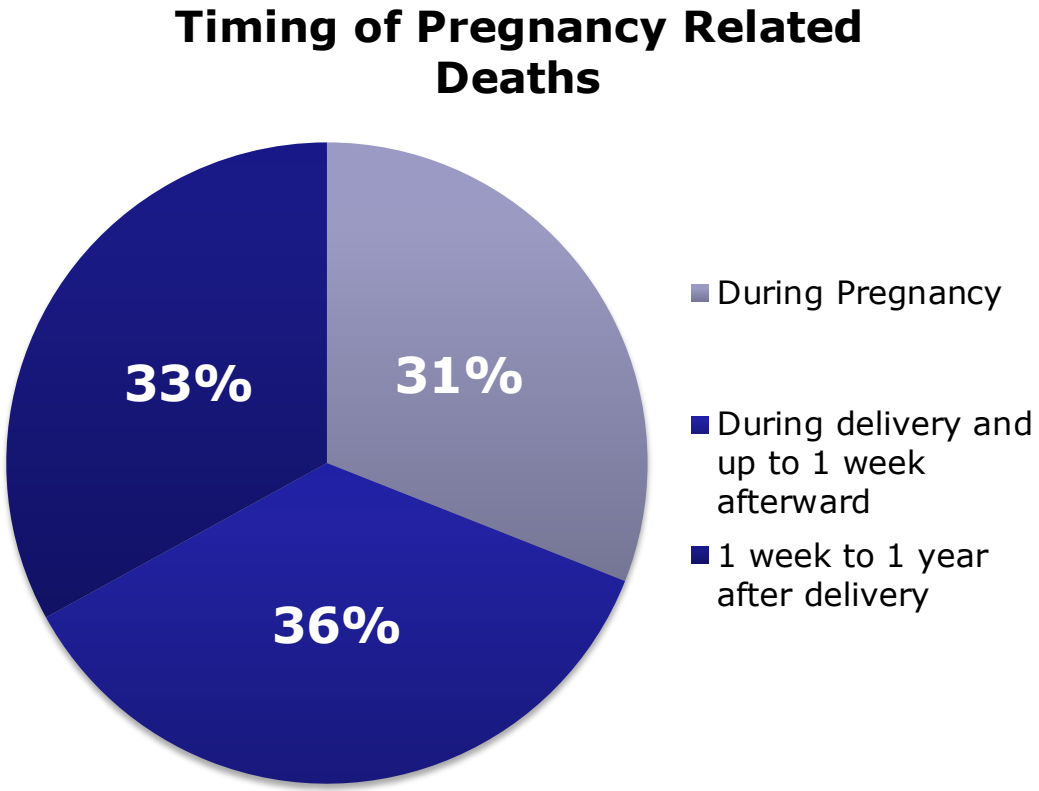
National Data – Pregnancy Related Deaths

700 women die from pregnancy-related complications each year in the United States.

3 in 5

pregnancy related deaths could be prevented.



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Source: Pregnancy Related Deaths, CDC Vital Signs, May 7, 2019

National Data – Pregnancy Related Deaths

Leading Causes of Pregnancy Related Deaths by Time of Death

- **Overall:** Heart disease and stroke caused more than 1 in 3 deaths.
- **At Delivery:** Obstetric emergencies, like severe bleeding and amniotic fluid embolism (when amniotic fluid enters a mother's bloodstream) were most common.
- **Week after delivery:** severe bleeding, high blood pressure, and infection were most common.
- **1 week to 1 year after delivery:** Cardiomyopathy (weakened heart muscle) was the leading cause of deaths

Source: Pregnancy Related Deaths, CDC Vital Signs, May 7, 2019

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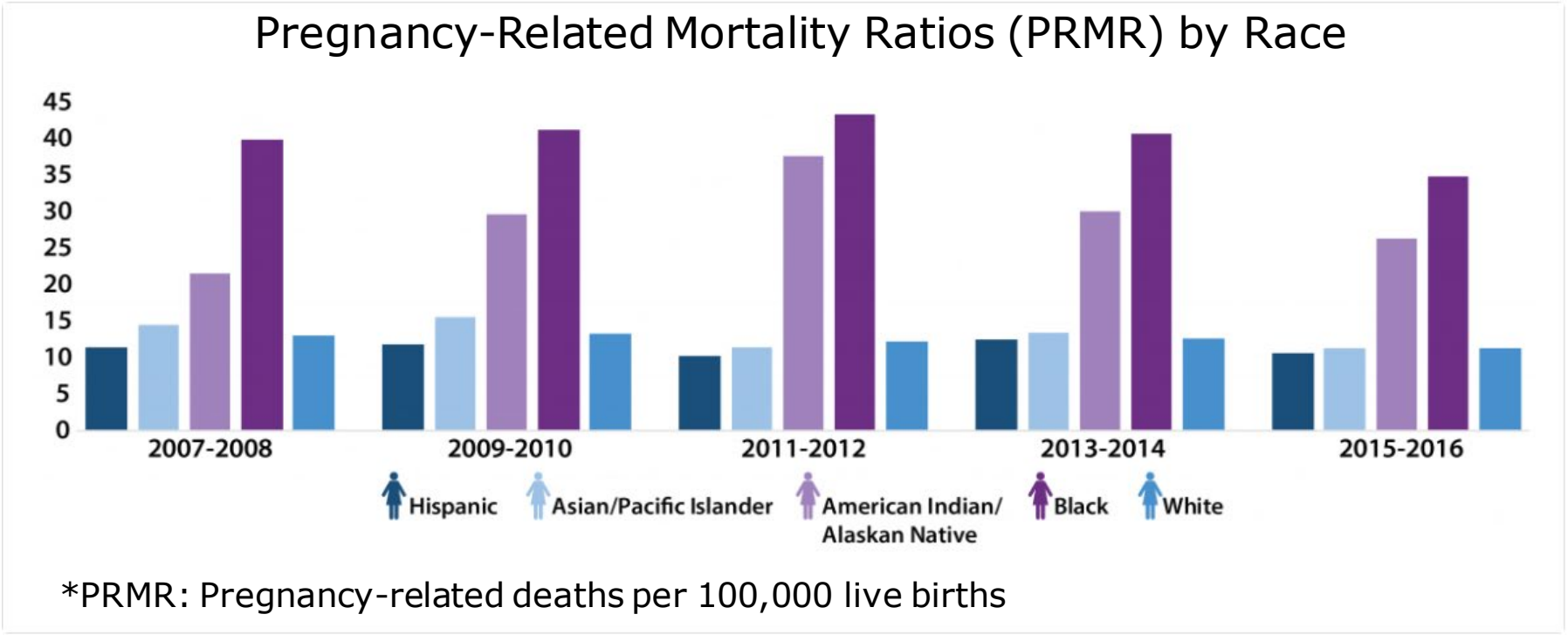
National Data - Racial Disparities

Nationally, American Indian/Alaska Native and Black women are **2 to 3 times** as likely to die from a pregnancy-related cause than white women. These inequities persist over time.



*PRMR: Pregnancy-related deaths per 100,000 live births

Source: Infographic: Racial/Ethnic Disparities in Pregnancy-Related Deaths — United States, 2007–2016, CDC, Division of Reproductive Health, National Center for Chronic Disease Prevention and Health Promotion

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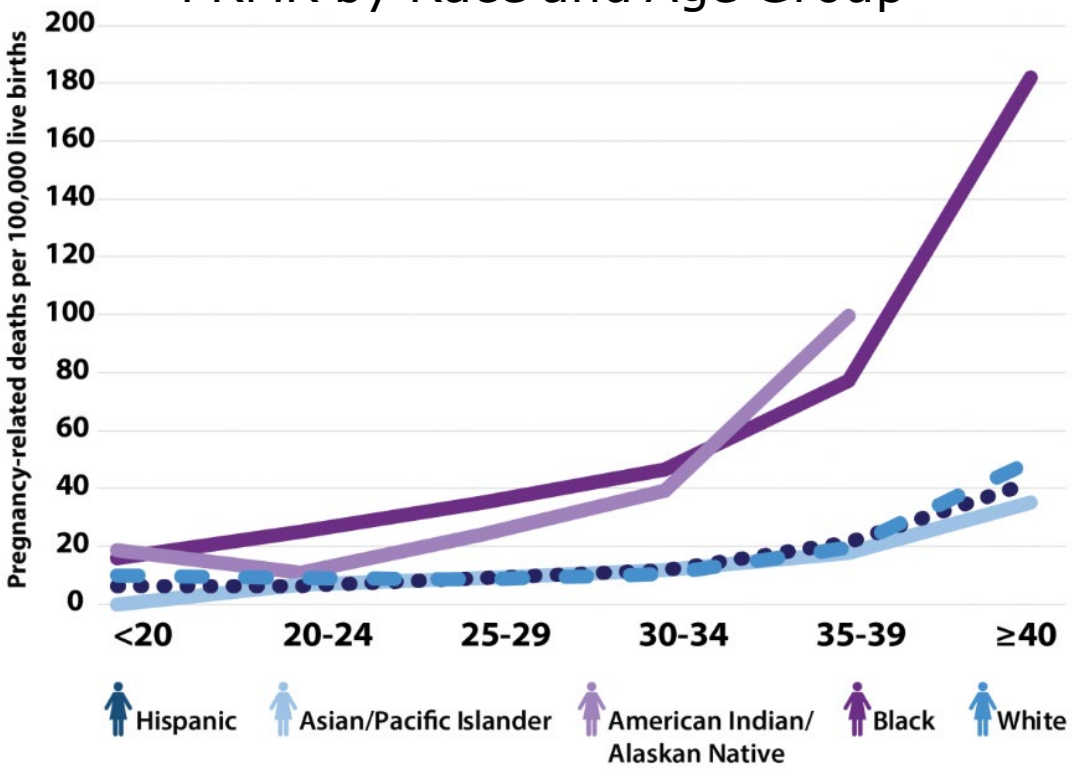
National Data - Racial Disparities

Inequities Increase with Age

PRMR by Race and Age Group



The disparity ratio between black women and white women by age rage from 1.5 for <20 age group to **4.3 for 30-34 age group.**

*PRMR: Pregnancy-related deaths per 100,000 live births

Source: Infographic: Racial/Ethnic Disparities in Pregnancy-Related Deaths — United States, 2007–2016, CDC, Division of Reproductive Health, National Center for Chronic Disease Prevention and Health Promotion

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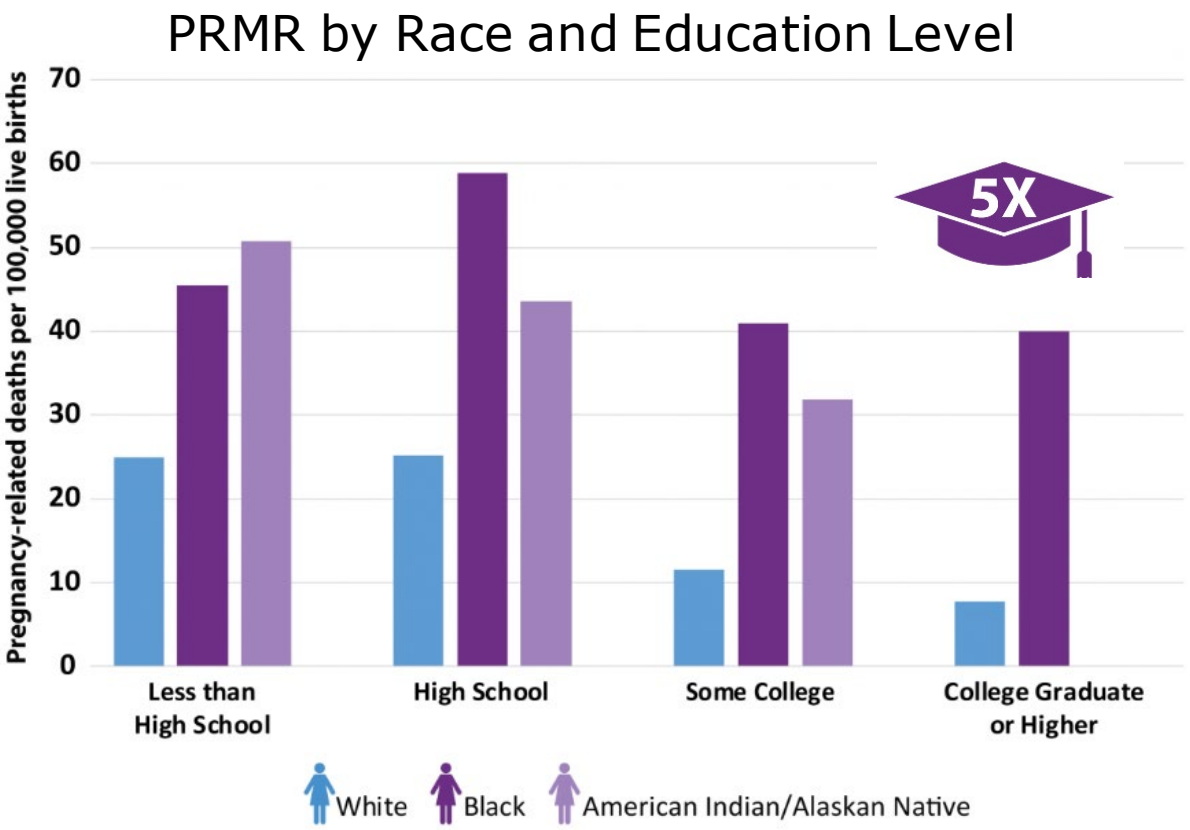
National Data - Racial Disparities

Inequities by Education Level



The PRMR for black women with **at least a college degree was 5 times higher** than white women with a similar education.

*PRMR: Pregnancy-related deaths per 100,000 live births

Source: Infographic: Racial/Ethnic Disparities in Pregnancy-Related Deaths — United States, 2007–2016, CDC, Division of Reproductive Health, National Center for Chronic Disease Prevention and Health Promotion

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*2018 data coming this Fall

PA MMRC

The **mission** of the Pennsylvania Maternal Mortality Review Committee is to:

- Systematically review all maternal deaths;
- Identify root causes of these deaths; and
- Develop strategies to reduce preventable morbidity, mortality and racial disparities related to pregnancy in Pennsylvania.

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MMRIA Decision Form

6 Key Questions Answered in Case Review

1. Was the death pregnancy-related?
2. What was the underlying cause of death?
3. Was the death preventable?
4. What factors contributed to the death?
5. What are recommendations that address the contributing factors?
6. What are the expected impacts if those recommendations where acted on?

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Mock Case Review

www.reviewtoaction.org

WELCOME

Have you ever wondered what happens during a maternal mortality review committee meeting? Maybe you are in the early phases of assembling a committee in your local jurisdiction, and you aren't quite sure who should be involved or how to describe the process to potential committee members. Or maybe you have been invited to serve on a review committee, but you don't know what to expect when you arrive.

This interactive website was designed to offer people a peek inside a review committee

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PA MMRC Timeline

- **May 2018**: Legislation (HB 1869/ Act 24 of 2018) establishing the PA MMRC signed into law.
- **October 2018**: Committee membership established.
- **February 2019:** MMRC establishes mission, vision, and scope of review.
- **April 2019:** PA Perinatal Quality Collaborative, the action arm of the MMRC, is launched.
- **July 2019:** PA MMRC first case review meeting.
- **September 2019:** Secured $2.25 million in funding over 5 years for PA MMRC through CDC's Enhancing Reviews and Surveillance to Eliminate Maternal Mortality (ERASE MM) program.
- **February 2019:** Access to CDC's Maternal Mortality Review Information Application (MMRIA).

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ERASE MM

ERASE MM Program Funding:

- Personnel: medical record abstractor, program administrator and epidemiologist.
- Philadelphia MMRC: costs associated with coordinating efforts, sharing data, and aligning procedures with PA MMRC to follow CDC guidance.
- Implicit Bias Training
- Review to Action: Stakeholder Engagement

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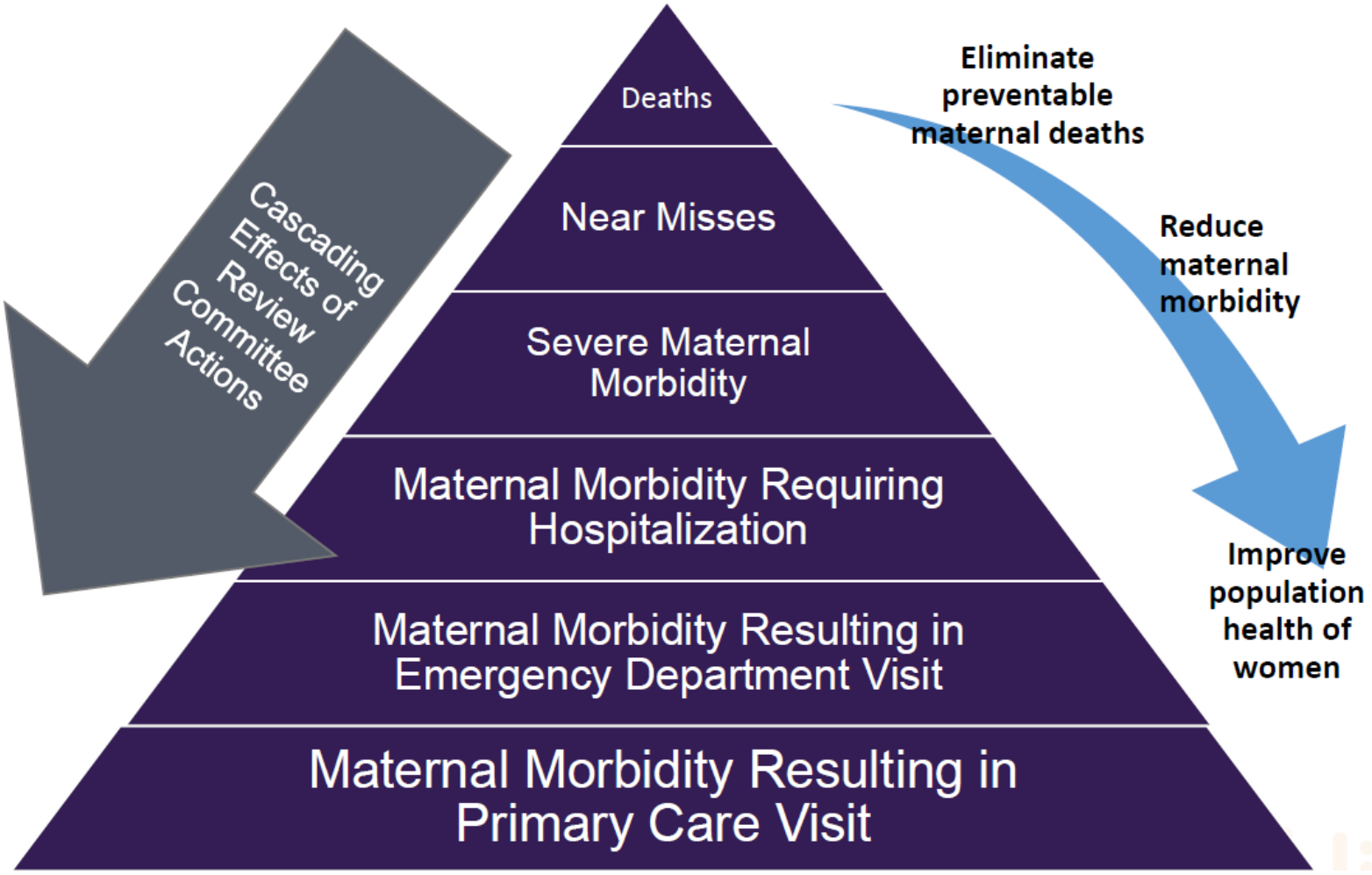
Cascading Effects of MMRC



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Source: Power of MMRCs, www.reviewtoaction.org

PA MMRC

- Common Themes Discussed in Case Review Meetings:
  - Obstetric Emergencies;
  - Risk Appropriate Care; and
  - Access to Care.

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Obstetric and Postpartum Emergencies

- EMS is vital in responding to emergencies, especially in rural areas.
- Initial education for certification for EMS providers in PA meets or exceeds the National EMS Educational Standards for obstetrics.
- Total EMS agencies: 1,339
- Total EMS providers: 40,490
  - EMR– 3,025
  - EMT– 29,243
  - AEMT– 318
  - Paramedic– 6,676
  - PHRN– 1,228

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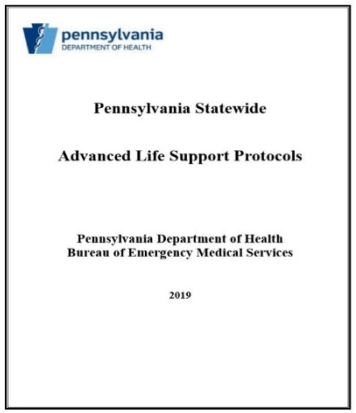
Anatomy of a 911 Response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Pennsylvania Statewide

Advanced Life Support Protocols

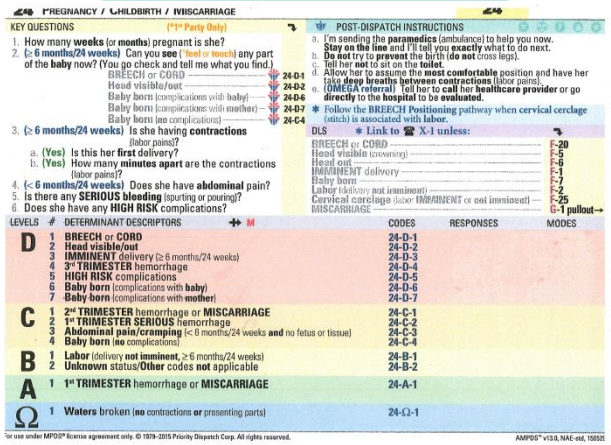
Pennsylvania Department of Health
Bureau of Emergency Medical Services

2019

911 Call

Tiered EMS Response

Delivery to Definitive Care


PREGNANCY / CHILDBIRTH / MISCARRIAGE

KEY QUESTIONS (*1st Party Only)

1. How many **weeks** (or **months**) pregnant is she?
2. (≥ **6 months/24 weeks**) Can you **see** (feel or touch) any part of the **baby** now? (You go check and tell me what you find.)
   - BREECH or CORD — 24-D-1
   - Head visible/out — 24-D-2
   - Baby born (complications with baby) — 24-D-6
   - Baby born (complications with mother) — 24-D-7
   - Baby born (no complications) — 24-C-4
3. (≥ **6 months/24 weeks**) Is she having **contractions** (labor pains)?
   a. (**Yes**) Is this her **first** delivery?
   b. (**Yes**) How many **minutes apart** are the contractions (labor pains)?
4. (< **6 months/24 weeks**) Does she have **abdominal** pain?
5. Is there any **SERIOUS bleeding** (spurting or pouring)?
6. Does she have any **HIGH RISK** complications?

POST-DISPATCH INSTRUCTIONS

a. I'm sending the **paramedics** (ambulance) to help you now. **Stay on the line** and I'll tell you **exactly** what to do next.
b. **Do not** try to **prevent** the birth (**do not** cross legs).
c. Tell her **not** to sit on the **toilet**.
d. Allow her to assume the **most comfortable** position and have her take **deep breaths between contractions** (labor pains).
e. (**OMEGA referral**) Tell her to **call** her **healthcare provider** or go **directly** to the **hospital** to be **evaluated**.

* Follow the **BREECH Positioning** pathway when **cervical cerclage** (stitch) is associated with **labor**.

DLS * Link to ☎ X-1 unless:

- BREECH or CORD — F-20
- Head visible (crowning) — F-5
- Head out — F-6
- IMMINENT delivery — F-1
- Baby born — F-7
- Labor (delivery not imminent) — F-2
- Cervical cerclage (labor IMMINENT or not imminent) — F-25
- MISCARRIAGE — G-1 pullout→

LEVELS	#	DETERMINANT DESCRIPTORS ↠ M	CODES	RESPONSES	MODES
D	1	**BREECH** or **CORD**	24-D-1		
	2	**Head visible/out**	24-D-2		
	3	**IMMINENT** delivery (≥ 6 months/24 weeks)	24-D-3		
	4	3rd **TRIMESTER** hemorrhage	24-D-4		
	5	**HIGH RISK** complications	24-D-5		
	6	**Baby born** (complications with **baby**)	24-D-6		
	7	**Baby born** (complications with **mother**)	24-D-7		
C	1	2nd **TRIMESTER** hemorrhage or **MISCARRIAGE**	24-C-1		
	2	1st **TRIMESTER SERIOUS** hemorrhage	24-C-2		
	3	**Abdominal pain/cramping** (< 6 months/24 weeks **and** no fetus or tissue)	24-C-3		
	4	**Baby born** (**no** complications)	24-C-4		
B	1	**Labor** (delivery **not imminent**, ≥ 6 months/24 weeks)	24-B-1		
	2	**Unknown** status/**Other** codes **not** applicable	24-B-2		
A	1	1st **TRIMESTER** hemorrhage or **MISCARRIAGE**	24-A-1		
Ω	1	**Waters** broken (**no** contractions **or** presenting parts)	24-Ω-1		

AMPDS™ v13.0, NAE-std, 150525

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EMS – Maternal Health Population

- In 2019, commonwealth EMS providers responded to **419,462** 911 responses of a **female of childbearing age** (12-51)
  - Represents 25% of EMS 911 responses.

- Total of **58,094** EMS records with a primary impression that indicated **potentially some type of maternal health issue**.
  - Represents **14% of interactions with females 12-51** and is **3% of 911 interactions overall**.
  - This is a rare occurrence for EMS providers. Something they may see 3-4 times in their career.

- Caveat 28% (118,285) of primary impressions for the 12-51 range of females were left blank.

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EMS Case Counts, Females ages 12-51, PA, 2019

Primary Impression	Case Count
Acute or general abdominal complaint	47,925
Labor and delivery with complications	1,365
Postpartum hemorrhage	45
Abnormal uterine or vaginal bleeding	3,575
Pregnancy with contractions	3,476
Incidents involving preterm labor and/or delivery	373

Note: Case counts are single patient counts. Even if multiple conditions were present providers could only select 1 category.

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EMS Continuing Education

Certification Level	Number of CPC Hours	Total Number of Hours	Years to Complete
EMR	12	16	3
EMT	18	24	3
AEMT and Above	27	36	2

- PA DOH Bureau of EMS added **Obstetrics and Childbirth** and **Pregnancy Medical Emergencies** to the free web based trainings for EMS providers offered by the department in 2020.

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Risk Appropriate Care

- It is important to provide risk-appropriate care that is specific to the health needs of the patient.
- Knowing the level of maternal care a hospital or birth center can provide is vital to improving patient outcomes.
- Establishing levels of maternal care can **reduce maternal morbidity and mortality**, including existing disparities, by encouraging the creation of a system that provides risk-appropriate care specific to maternal health needs.
- Central to systems is the **development of collaborative relationships between hospitals of differing levels of maternal care** in proximate regions.

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Risk Appropriate Care

ACOG levels of maternal care:

- Level I: basic care;
- Level II: specialty care;
- Level III: subspecialty care; and
- Level IV: regional perinatal health care centers.

Additional information and specific on these levels: https://www.acog.org/Clinical-Guidance-and-Publications/Obstetric-Care-Consensus-Series/Levels-of-Maternal-Care

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Access to Care – Payment for Services

Maternity Care Coverage through:

- Medicaid;
- Employer or large group employer coverage;
- Employer self-insured coverage;
- Women's Veteran Health Care program; and
- Affordable Care Act.

Additional information and links to coverage information on https://www.health.pa.gov/topics/healthy/Pages/Pregnancy.aspx

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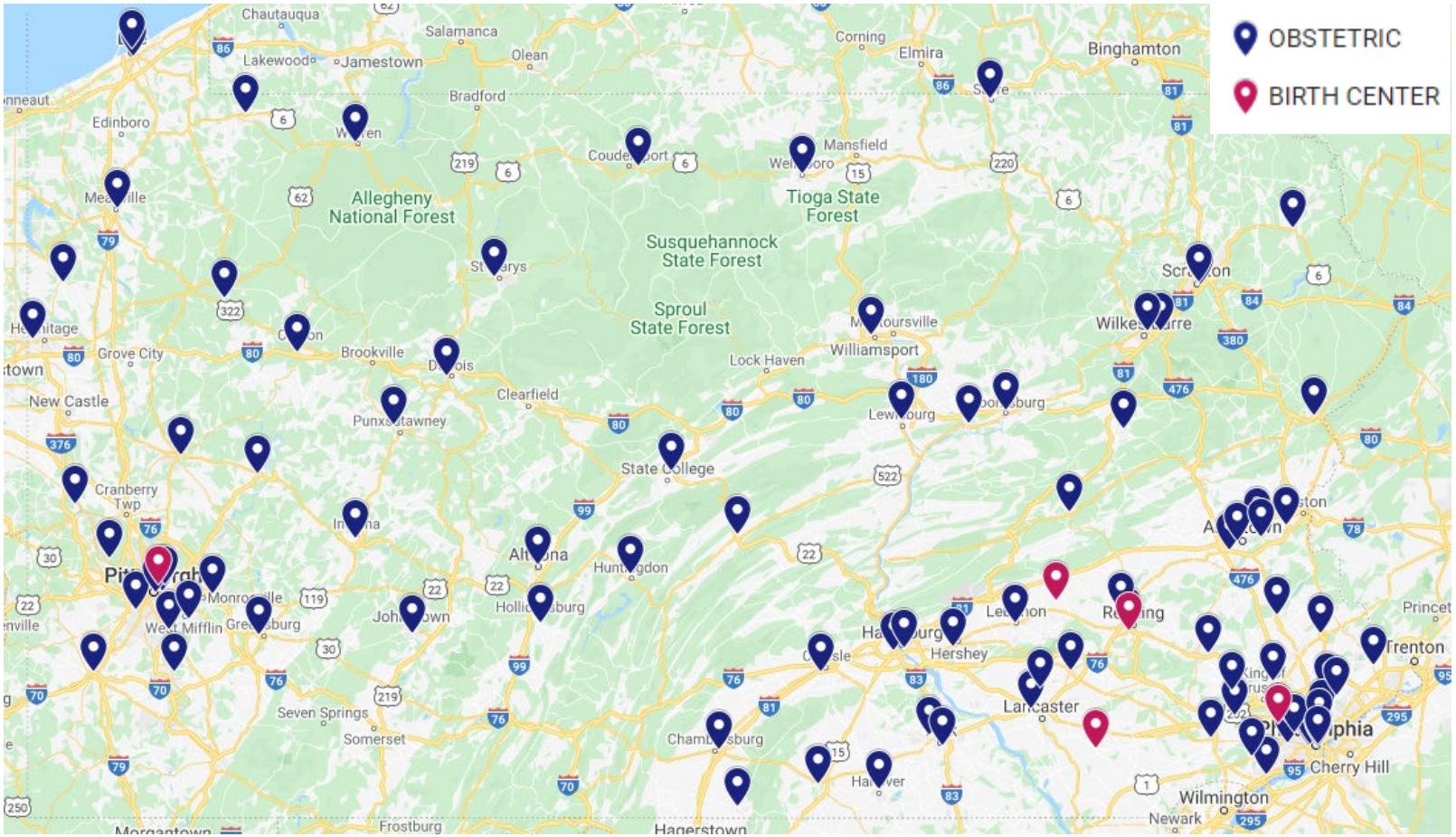
Access to Care – Location of Services

Hospitals with an Obstetric Unit and Birth Centers in Pennsylvania



https://www.health.pa.gov/topics/healthy/Pages/Pregnancy.aspx

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Alignment with PQC

- The Maternal Mortality Key Driver Diagram lists **"Establish Levels of Maternity Care"** as a driver and the following interventions for the PQC:
    1. Establish levels of risk and levels of maternity care to properly triage patients and connect to the right provider;
    2. Educate families and providers to make informed decisions about the appropriate place of birth;
    3. Ensure integration and communication across levels of maternity care to ensure appropriate transfers.

https://www.whamglobal.org/images/PA_PQC_Maternal_Mortality_Driver_Diagram.pdf

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Alignment with PQC

- PQC Policy Group
  - **Perinatal Value Based Payment Models**
    - Recently completed recommendations on standards of care and quality measures
  - **Rural Maternal Health Care**
    - Beginning to discuss and respond to a Request for Information (RFI) from CMS, as well as PA specific questions from DHS and DOH.

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More info at Health.PA.gov

Health > All Health Topics > Healthy Living > Maternal Mortality

Maternal Mortality

Maternal mortality is devastating for families and communities worldwide. In Pennsylvania specifically, a large disparity exists between white and African American women for maternal mortality. Unfortunately, mortality is just the tip of the iceberg: for every woman who dies, there are more women who just barely survive. Because of this, Governor Wolf has made maternal and child health a priority for the state of Pennsylvania.

What is Maternal Mortality?

Maternal mortality is a death of a woman during pregnancy, or up to one year following the end of the pregnancy, regardless of the outcome of the pregnancy. Maternal mortality applies in cases of livebirth, stillbirth, abortion and miscarriage. When describing maternal mortality, deaths are divided into the following categories:

Pregnancy Associated Deaths: the death of a woman during pregnancy, or up to one year following the end of the pregnancy, regardless of the outcome of the pregnancy.

Resources

CDC Vital Signs Report on Maternal Mortality

Maternal Mortality in Philadelphia 2010-2012

Maternal Mortality Terminology

PA Perinatal Quality Collaborative

Review to Action

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THANK YOU

Thank you to our PA MMRC and Philadelphia MMRC Members

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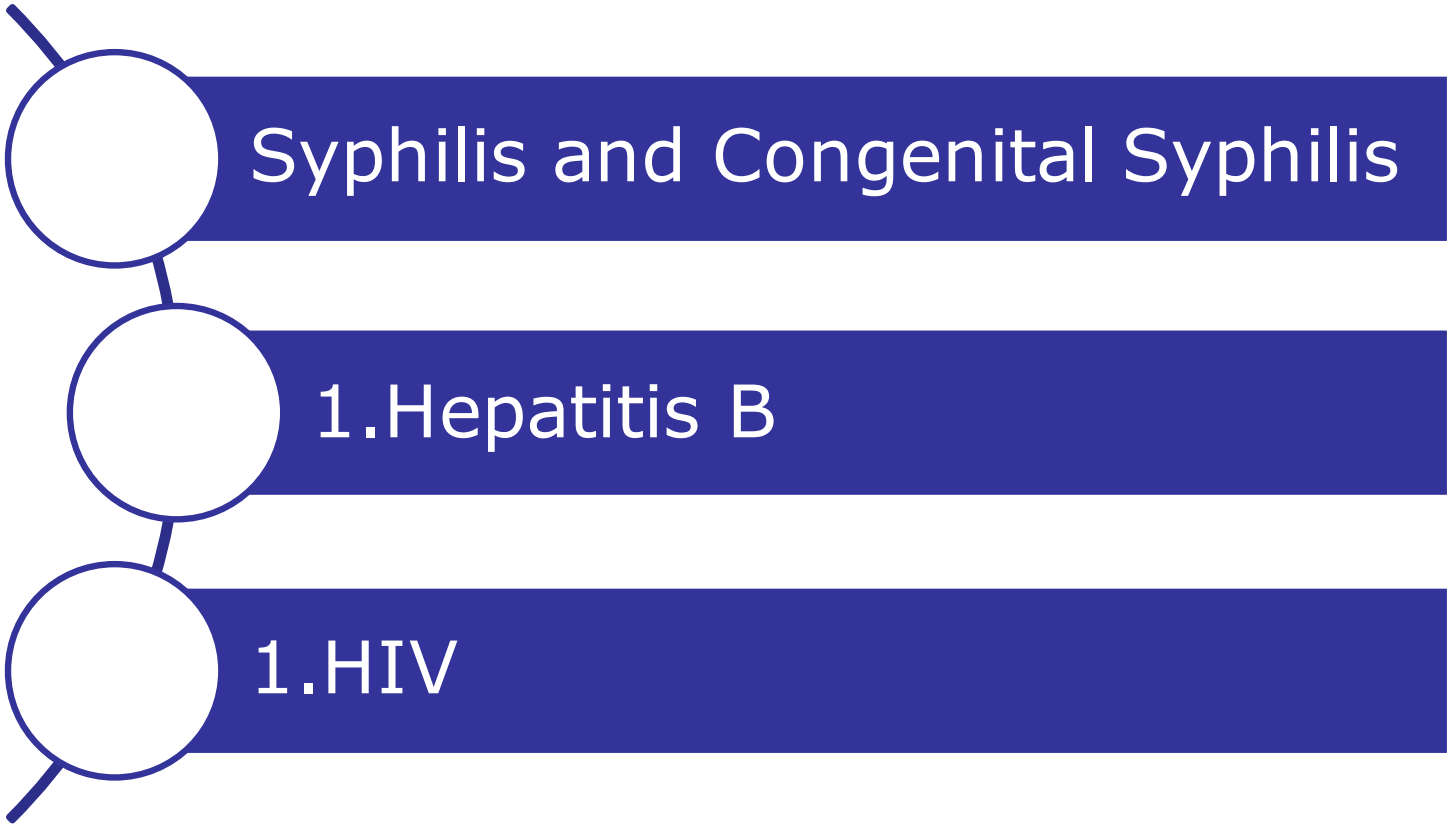
STI Screening and Response



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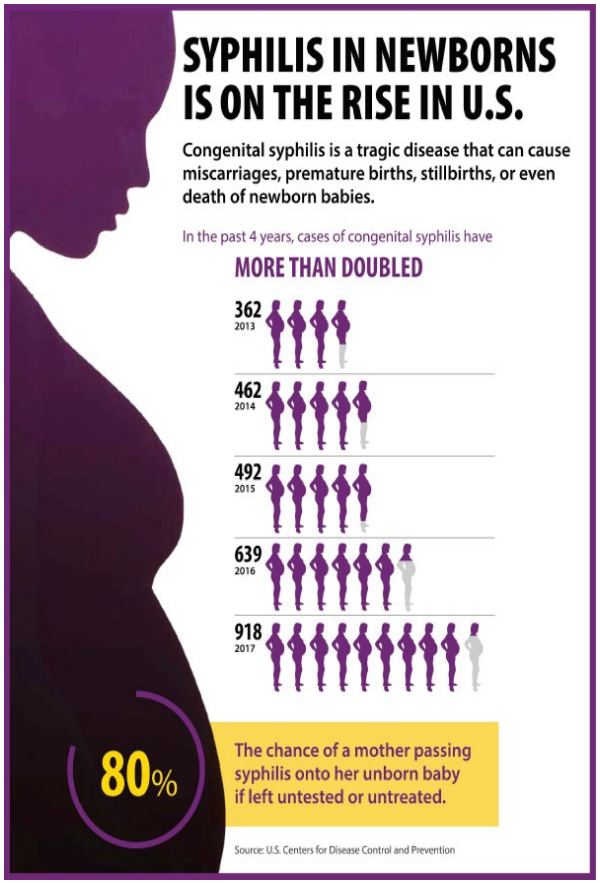
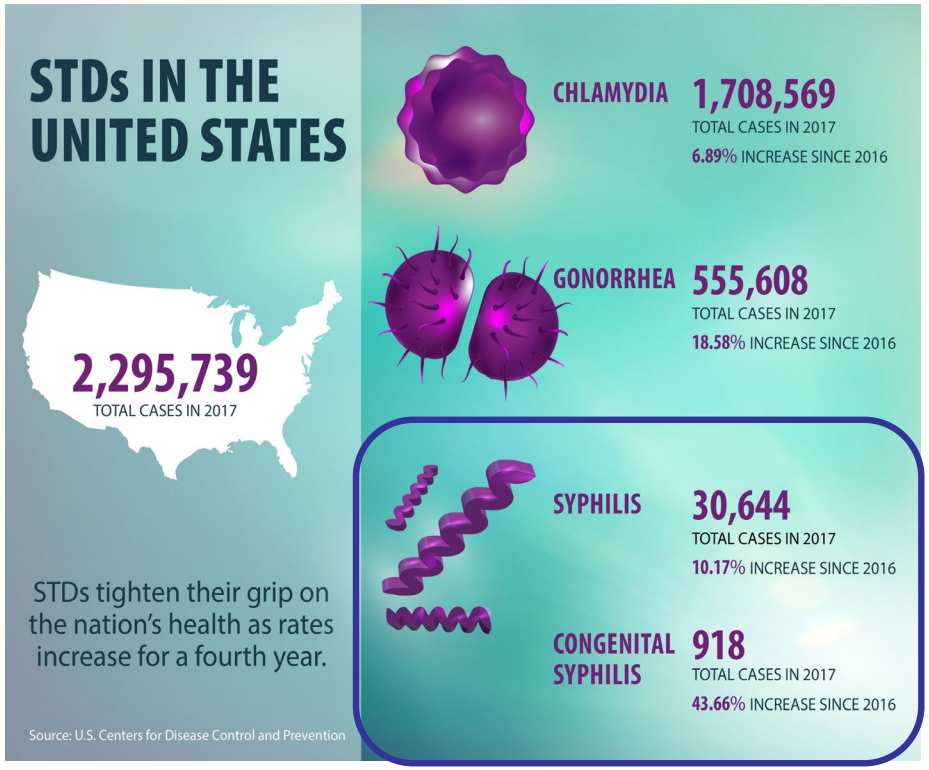
Syphilis in the United States

- A pregnant woman with untreated, active syphilis is likely to pass the infection to her unborn child.

- Miscarriage may occur in as many as 25 to 50 percent of women acutely infected with syphilis during pregnancy.





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Syphilis Stages

- **Early:** Patient has no overt symptoms, active infection less than 1 year duration, and only way to diagnose is through a serologic test for syphilis.
- **Primary:** characteristics include chancres (an elevated skin lesion which erodes and becomes and ulcer) which are highly infections and can easily spread infection through sex. Due to anatomical differences most females will miss primary symptoms. Symptoms will resolve in 1 to 5 weeks without treatment.
- **Secondary:** characteristics include skin and mucous membrane lesions; skin rash on trunk, hands, and feet; and can be highly infectious depending on nature of secondary symptoms. Often misdiagnosed as other conditions (psoriasis, herpes, allergic reactions, etc.). Symptoms will resolve in 2-6 weeks without treatment.

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Drug Use and Increases in Reported Syphilis

- A recent report* from the CDC indicated that during CY 2013–2017, the **primary and secondary (P&S) syphilis rate increased** 72.7% nationally and **155.6% among women**.

- During this same time, reported **methamphetamine, injection drug, and heroin use** increased substantially among women and heterosexual men with P&S syphilis

- According to CDC, the recent increases in heterosexual syphilis, together with **the concurrent increases in percentage of persons with P&S syphilis reporting methamphetamine use, sex with a person who injects drugs, injection drug use, and heroin use, are causes for concern.**

*Source:
www.cdc.gov/mmwr/volumes/68/wr/mm6806a4.htm

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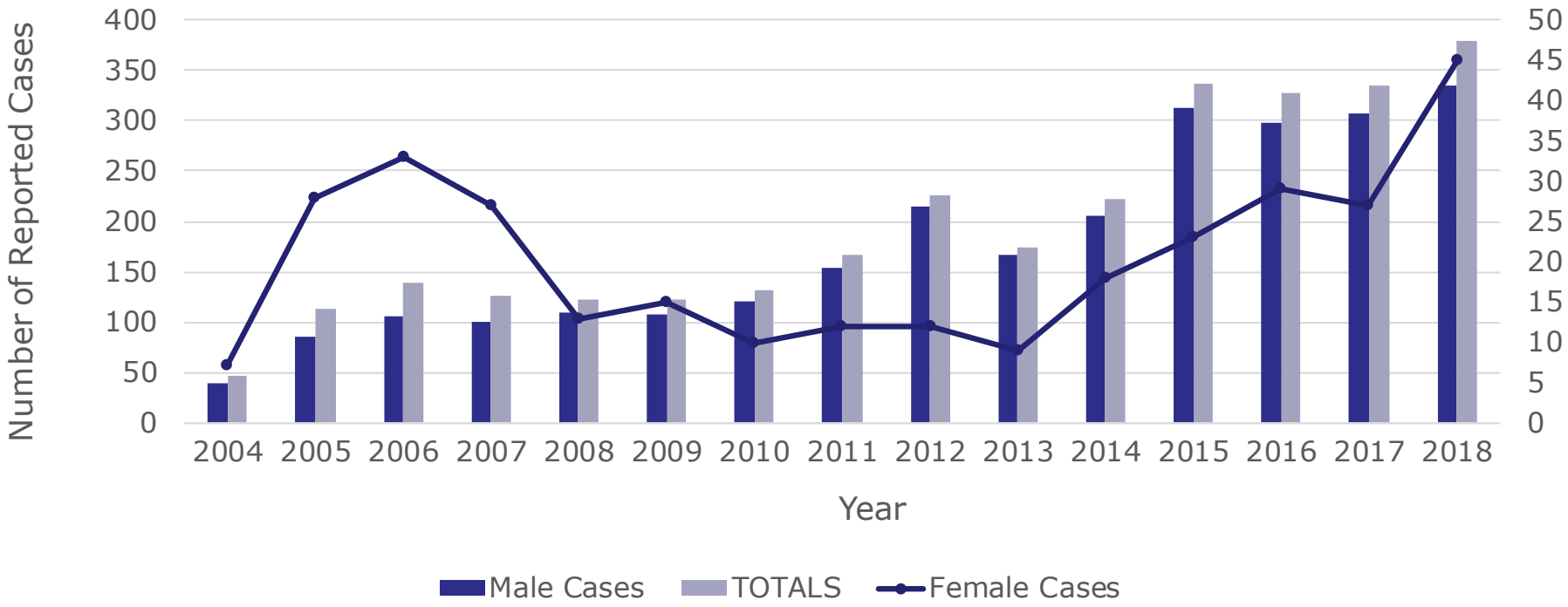
Syphilis in Pennsylvania

- Similar trend as national, PA saw a 500% increase in Primary and Secondary Syphilis among females from 2013 (9 cases) to 2018 (45 cases).



* Exclusive of Philadelphia

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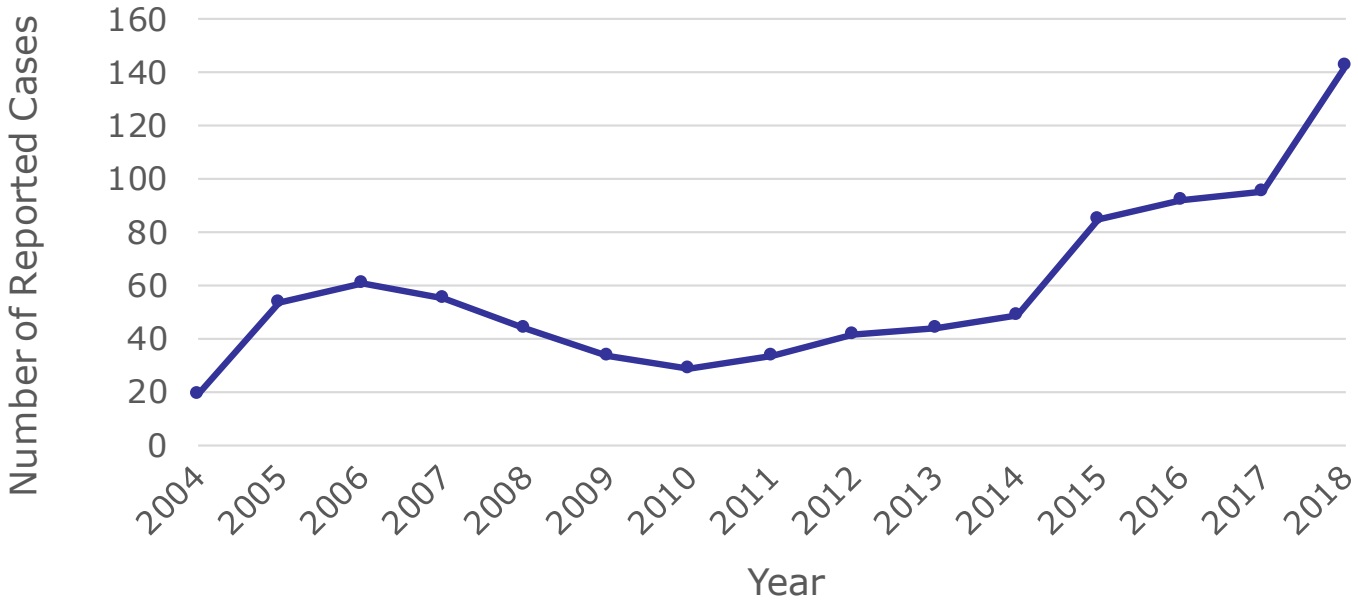
Early syphilis in women age 15-44

- **Early Syphilis reported in women of child bearing age (women age 15 to 44) increased 47%** from 87 cases in 2017 to 128 cases in 2018.
- The 128 cases of Early Syphilis reported in women of child bearing age represents the highest reported number of cases in Pennsylvania (PA Exclusive of Philadelphia) in more than two decades.



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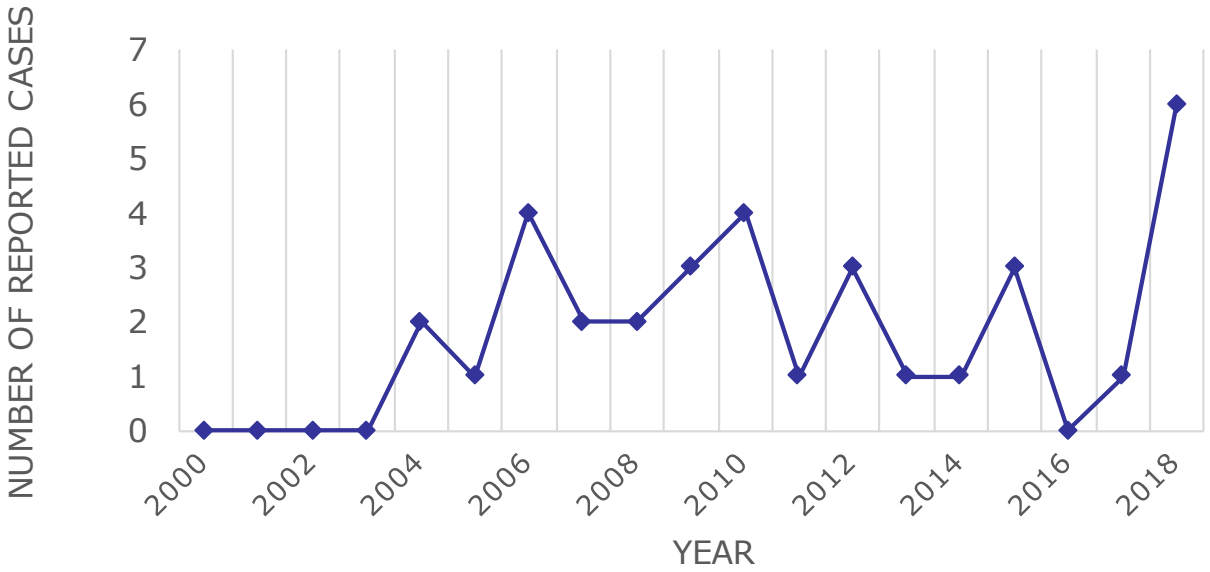
Congenital Syphilis in PA

- The number of reported congenital syphilis cases is at the highest rate in more than 25 years.
- In CY 2018, a total of seven congenital syphilis cases were reported in the state.
- **57% of these cases involved reported drug use by the mother.**



* Exclusive of Philadelphia

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Statewide Recommendations

- DOH issued a Health Alert Network (HAN) in March of 2019, in response to the recent increase in both Congenital Syphilis and reported Early Syphilis in women of child bearing age.

- **PADOH is recommending that all pregnant females be offered a test for syphilis at the following intervals**:
  - At the first prenatal visit;
  - At the third trimester of pregnancy;
  - At the delivery of a child, or;
  - At the delivery of a stillborn child

- Healthcare providers can register for HAN alerts by going to HAN.PA.GOV

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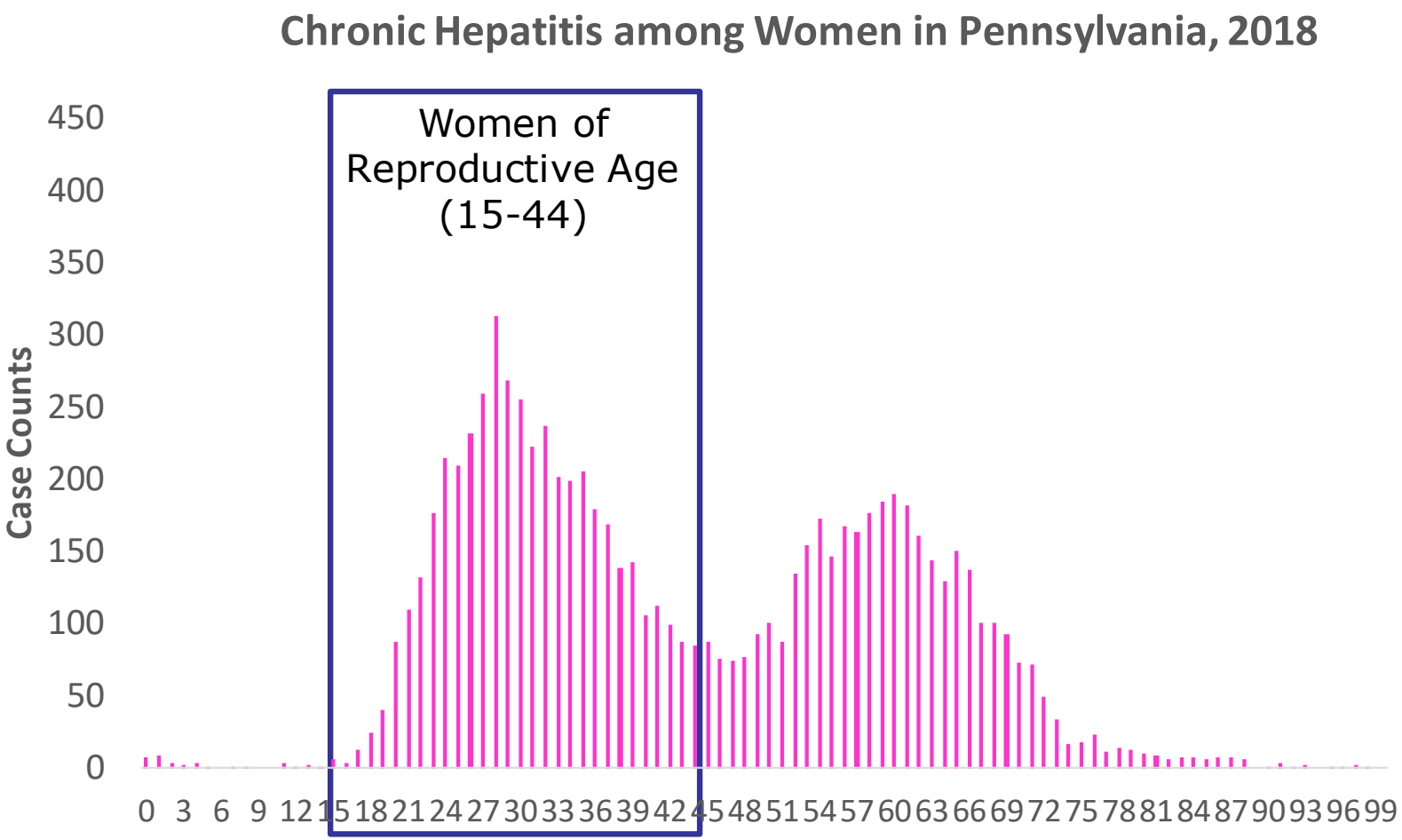
Chronic Hepatitis 2018



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Hepatitis B

- The perinatal transmission of the hepatitis B virus (HBV) poses a serious threat to infants born to mothers infected with the hepatitis B surface antigen (HBsAg).

- The Centers for Disease Control and Prevention estimates that close **to 500 women are positive at the time of delivery in Pennsylvania**.

- **Recommendation:** All pregnant women are to be screened for the hepatitis B surface antigen (HBsAg)on the first prenatal visit, or within 15 days, but no later than the time of delivery.

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https://www.health.pa.gov/topics/programs/immunizations/Pages/HepB.aspx

Prenatal Cases of HIV

- Mother to Child HIV transmission can occur at any time in the course of the pregnancy.
- Clinical attention is necessary to prevent HIV transmission during pregnancy, childbirth and postpartum.
- Between 2001 and 2019, **1,094 pregnant women were HIV positive** in Pennsylvania.
- **Recommendation**: All pregnant women be screened for HIV.

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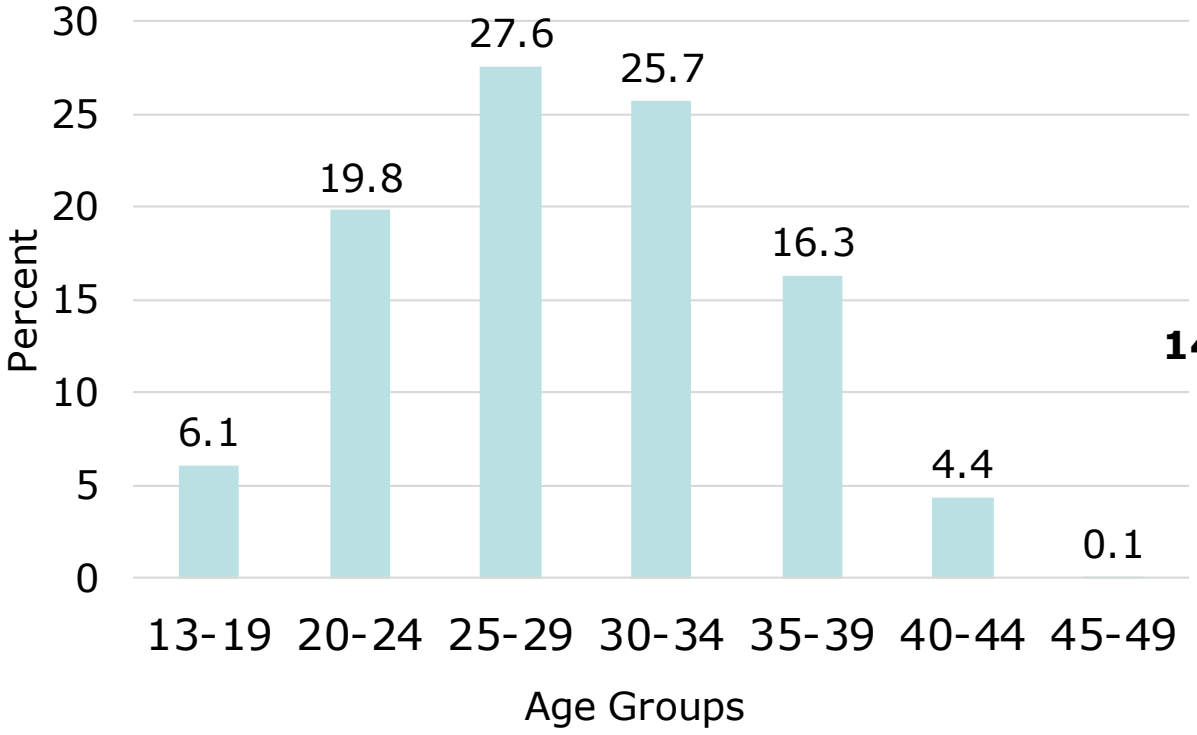
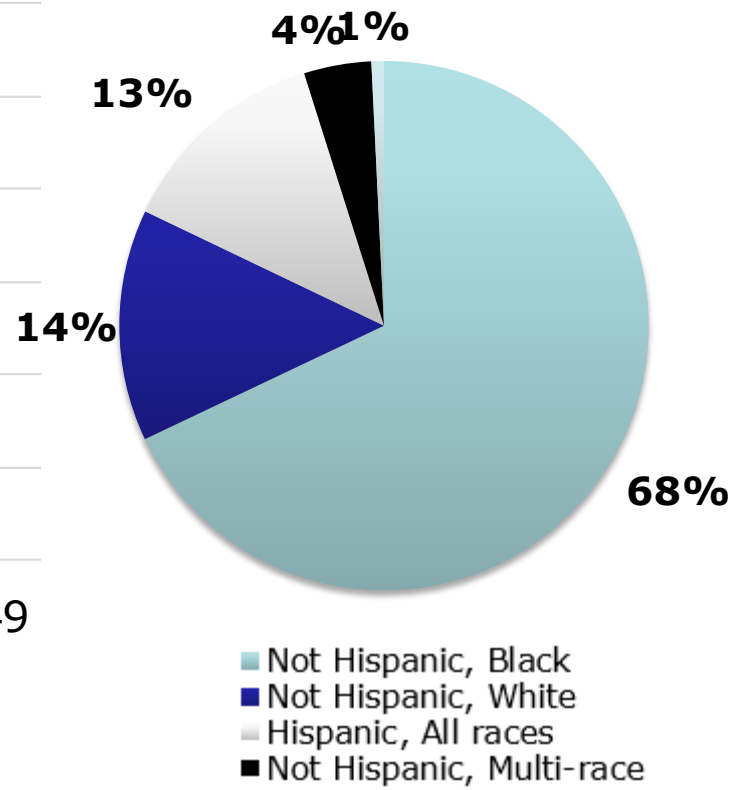
Percentage of HIV Positive Pregnant Women by Age-Group, PA, 2001-2019 (N=1,094)





Highest percentage of HIV Positive Pregnant Women are:

- Between the ages of 25-29; and
- Non-Hispanic black.

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Prenatal Care Visits among HIV Positive Pregnant Women, PA, 2001-2019

Number of Prenatal Visits	Number	Percent
Less than 11	474	43.3
Greater than or equal to 11	253	23.2
Unknown	367	33.5
Total prenatal cases of HIV	1,094	100.0

- Compliance with prenatal care visits is essential for the health of both pregnant woman and child.

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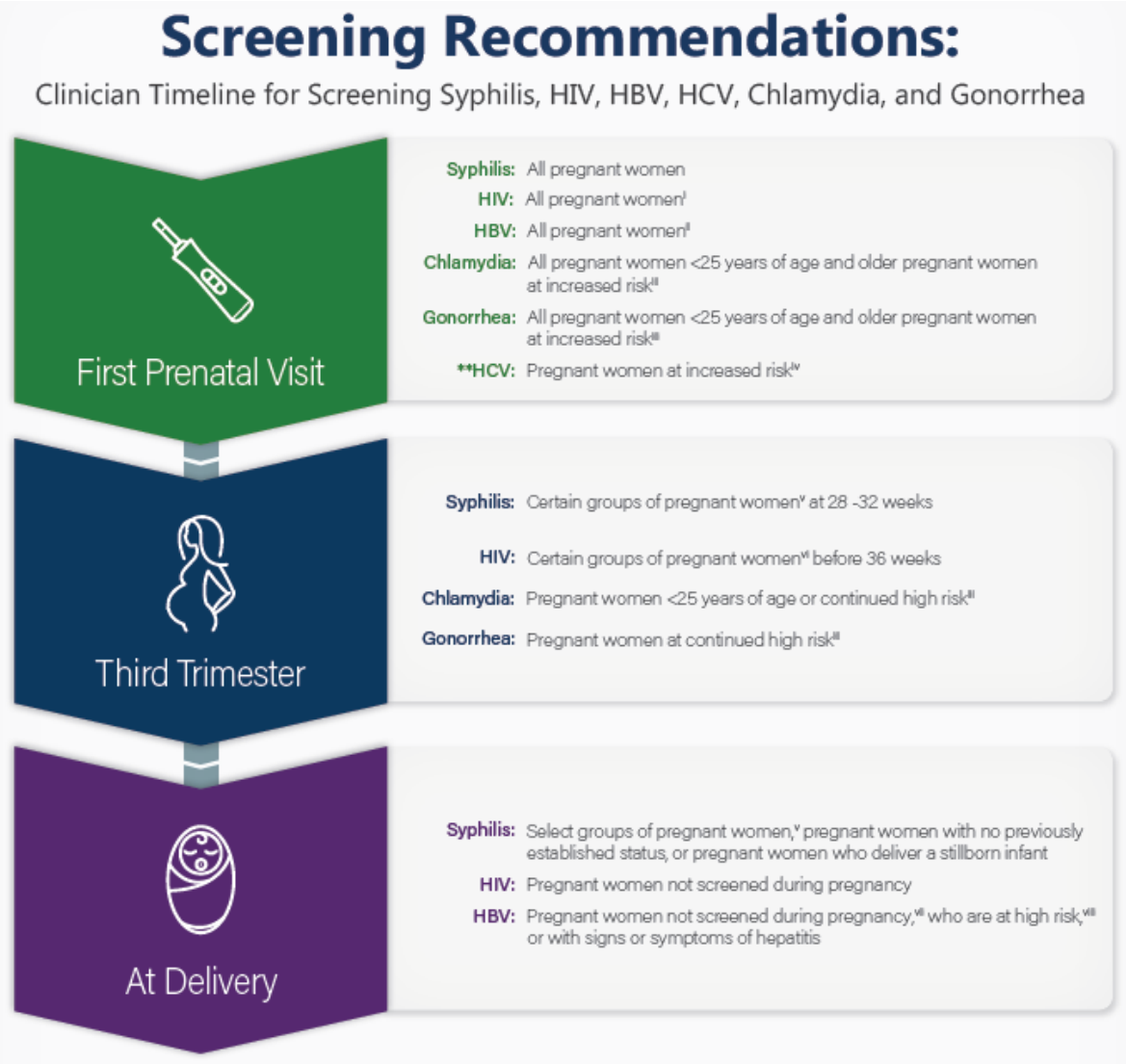
CDC Screening Recommendations



- CDC recommends **all pregnant women be screened for HIV, hepatitis B (HBV), and syphilis** during pregnancy.
- For women at higher risk of infection, CDC recommends prenatal screenings for hepatitis C (HCV), chlamydia, and gonorrhea.

https://www.cdc.gov/nchhstp/pregnancy/docs/pregnancy-screening-recs-clinician-timeline-H.pdf

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Resources – STIs

- Syphilis Diagnosis and Treatment in Pregnancy
  - https://www.health.pa.gov/topics/programs/STD/Pages/Syphilis.aspx
- Health Alert Network (HAN) for Healthcare Providers
  - https://han.pa.gov/
- Free STD CNE/CMEs
  - https://www.std.uw.edu/
- CDC STD Treatment and Screening Guidance
  - https://www.cdc.gov/std/treatment/default.htm
  - https://www.cdc.gov/nchhstp/pregnancy/docs/pregnancy-screening-recs-clinician-timeline-H.pdf

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STI Screening Contact Information

Beth Butler, bebutler@pa.gov
Public Health Program Director,
Division of TB/STD,
Bureau of Communicable Diseases

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NAS Reporting

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iCMS Case Reporting

- NAS case information was previously submitted to DOH in REDCap. As of **January 1, 2020** all NAS case information is submitted in iCMS to DOH.

- iCMS is the same system used for case management, tracking and managing the follow-up of newborn filter paper and point-of-care (POC) screening results for infants born/residing in PA .

- In iCMS, there is a new module that enables providers to report cases diagnosed with NAS to DOH.

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NAS Definition

- How is NAS defined?
  - **DOH uses the Council for State and Territorial Epidemiologists definition of NAS:** "NAS is **withdrawal** in neonates following chronic ***in utero*** exposure to prescribed medications or illicit drugs, most commonly opioids, benzodiazepines and barbiturates."
  - Withdrawal signs:
    - Central nervous system (high pitched cry, hypertonia, tremors, seizures, hyperactive Moro reflex, poor sleep, seizures, poor feeding)
    - Autonomic nervous system (sneezing, nasal congestion, frequent yawning, fever, mottling)
    - Gastrointestinal (regurgitation, vomiting, loose stools)
    - Respiratory dysregulation (tachypnea, respiratory distress)

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Patient Information

* Indicates Mandatory Field for Submit
** Indicates Mandatory Field for Save or Submit
* Indicates Conditionally Mandatory Fields for Submit

Patient Information

* Reporting Date: 1/13/2020
** Reporting Facility/Midwife:
** Medical Record #:
Initial FP #:
** Infant's Legal Last Name:
* Infant's Legal First Name:
* Infant's DOB:
* Gender:
* Birth Order:
Apgar Score 1 minute:
Apgar Score 5 minutes:
** Birth Facility/Midwife:

** Mother's Last Name:
** Mother's First Name:
* Mother's DOB:
* Location of Infant Care (check all that apply): ☐ Nursery ☐ Transfer ☐ Outpatient ☐ NICU ☐ Readmission
Principle Source of Payment:

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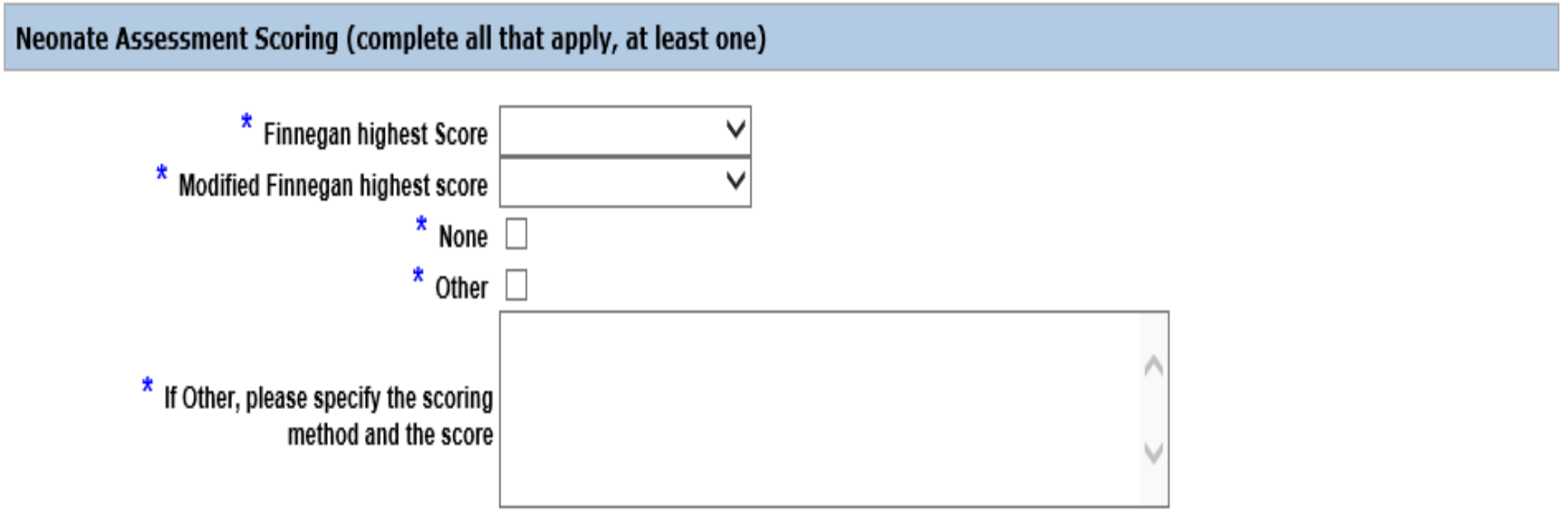
Neonatal Assessment Scoring



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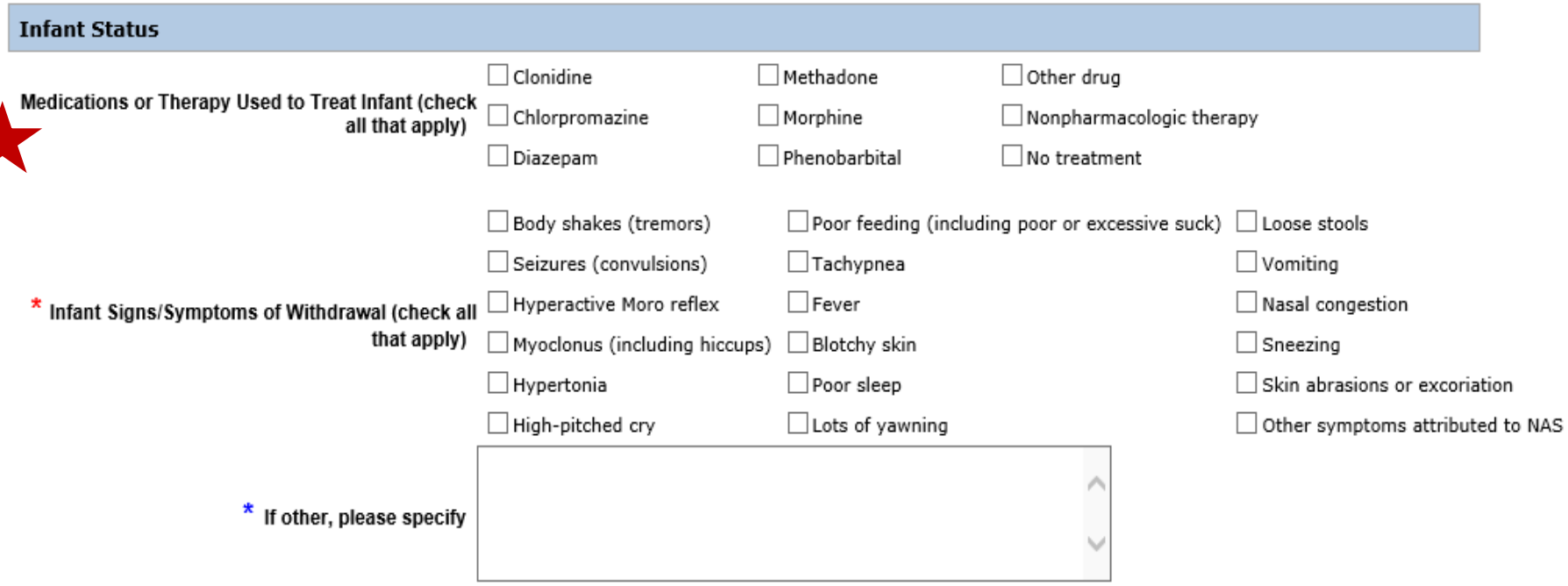
Infant Status



Infant Status

Medications or Therapy Used to Treat Infant (check all that apply)

- ☐ Clonidine
- ☐ Chlorpromazine
- ☐ Diazepam
- ☐ Methadone
- ☐ Morphine
- ☐ Phenobarbital
- ☐ Other drug
- ☐ Nonpharmacologic therapy
- ☐ No treatment

*** Infant Signs/Symptoms of Withdrawal (check all that apply)**

- ☐ Body shakes (tremors)
- ☐ Seizures (convulsions)
- ☐ Hyperactive Moro reflex
- ☐ Myoclonus (including hiccups)
- ☐ Hypertonia
- ☐ High-pitched cry
- ☐ Poor feeding (including poor or excessive suck)
- ☐ Tachypnea
- ☐ Fever
- ☐ Blotchy skin
- ☐ Poor sleep
- ☐ Lots of yawning
- ☐ Loose stools
- ☐ Vomiting
- ☐ Nasal congestion
- ☐ Sneezing
- ☐ Skin abrasions or excoriation
- ☐ Other symptoms attributed to NAS

*** If other, please specify**

Optional PQC Measures:

- *Percent of babies born with NAS who are treated with a non-pharmacologic bundle*
- *Percent of babies born with NAS who receive pharmacologic treatment*

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Laboratory Testing

Laboratory Testing Performed

* Was laboratory testing of neonate for substance exposure performed?

* If yes, what was the source of the lab sample?

* If other, please specify

* If positive results, which drug(s) did the infant test positive for?

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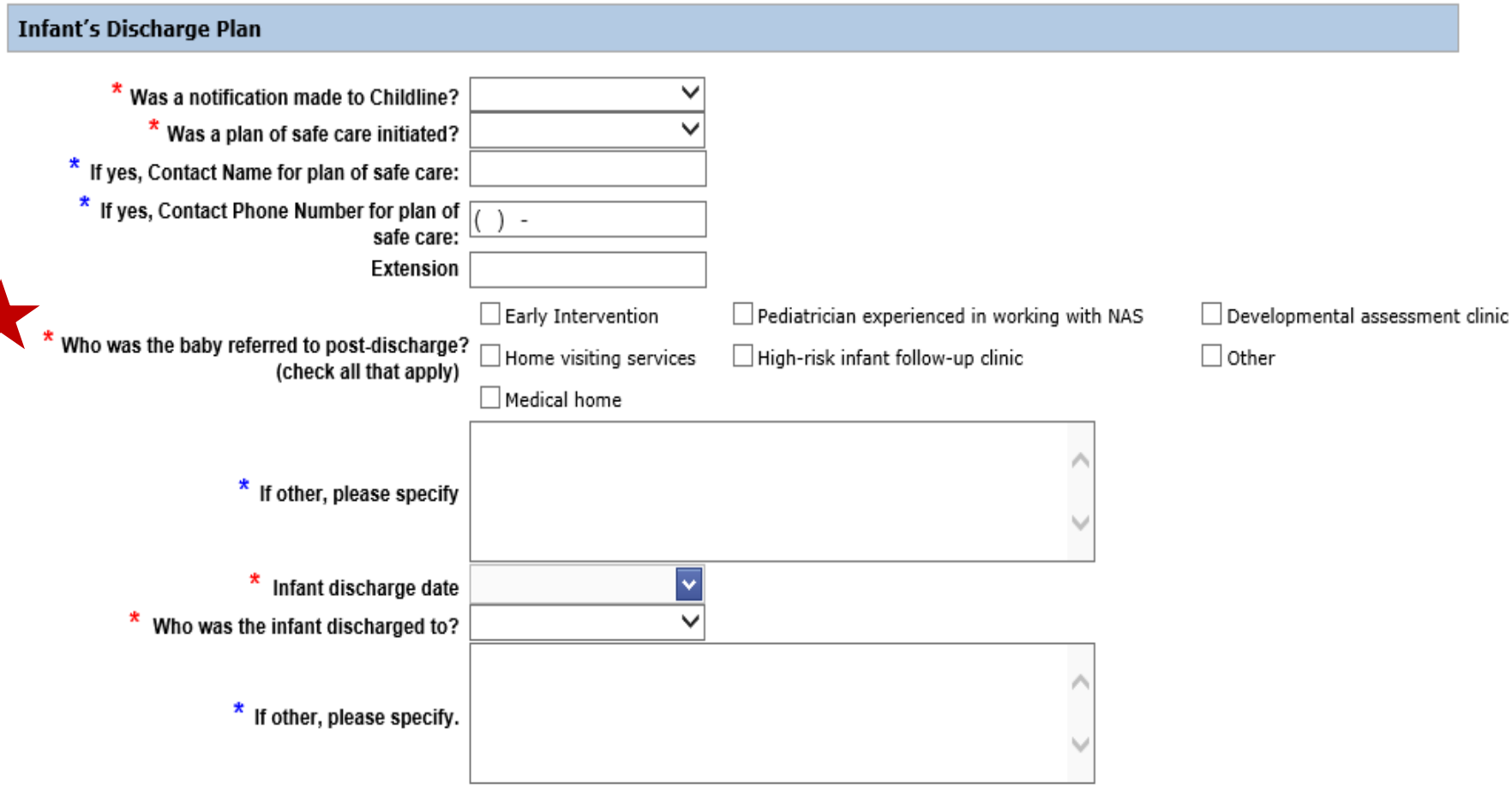
Infant's Discharge Plan



Optional PQC Measures:

- *Percent of babies born with NAS with appropriate follow-up at discharge*

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Infant's PCP Information

PCP Information

Infant's PCP ...

Name
Address
City, State, Zip
Phone #
Fax #

PCP Name	
Address 1	
Address 2	
City	
State	PA
Zip Code	
Phone #	( ) -
Fax #	( ) -
Email	

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Mother's Discharge Plan

Mother's Discharge Plan

Did the mother's discharge plan include referrals to any of the following? (check all that apply)

- ☐ Continued MAT treatment
- ☐ Parenting support
- ☐ Other behavioral health services
- ☐ Care for substance use
- ☐ Community support programs
- ☐ Other
- ☐ Home visitation services

* If Other, please specify

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Antenatal Maternal Drug Use

Antenatal Maternal Drug Use

Evidence of any maternal drug use in any medical record (mother or infant)?

Was the mother receiving MAT during pregnancy?

Maternal drugs used during antenatal period (check all that apply)

- ☐ Alcohol/ethanol
- ☐ Amphetamines
- ☐ Antidepressants
- ☐ Antipsychotics
- ☐ Barbiturates
- ☐ Benzodiazepines
- ☐ Buprenorphine (Subutex or Suboxone)
- ☐ Buproprion (e.g. Wellbutrin)
- ☐ Cocaine
- ☐ Codeine
- ☐ Fentanyl
- ☐ Gabapentin
- ☐ Hallucinogens/inhalants
- ☐ Heroin
- ☐ Hydrocodone
- ☐ Hydromorphine
- ☐ Hydromorphone
- ☐ Kratom
- ☐ Marijuana/hash
- ☐ Methadone
- ☐ Meperidine
- ☐ Methamphetamine
- ☐ Morphine
- ☐ Naltrexone
- ☐ Opiates
- ☐ Oxycodone
- ☐ Phencyclidine
- ☐ Propoxphene
- ☐ Tobacco/e-cigarettes
- ☐ Tramadol
- ☐ Other

* If Other, please specify

Relating only to antenatal opioid use, indicate mother's treatment received during delivery and/or postpartum

- ☐ Methadone
- ☐ Buprenorphine (Subutex or Suboxone)
- ☐ No treatment
- ☐ Unknown
- ☐ Other

* If Other, please specify

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NAS Case Reporting Contact Information

Stacey Gustin, sgustin@pa.gov
Public Health Director,
Division of Newborn Screening,
Bureau of Family Health

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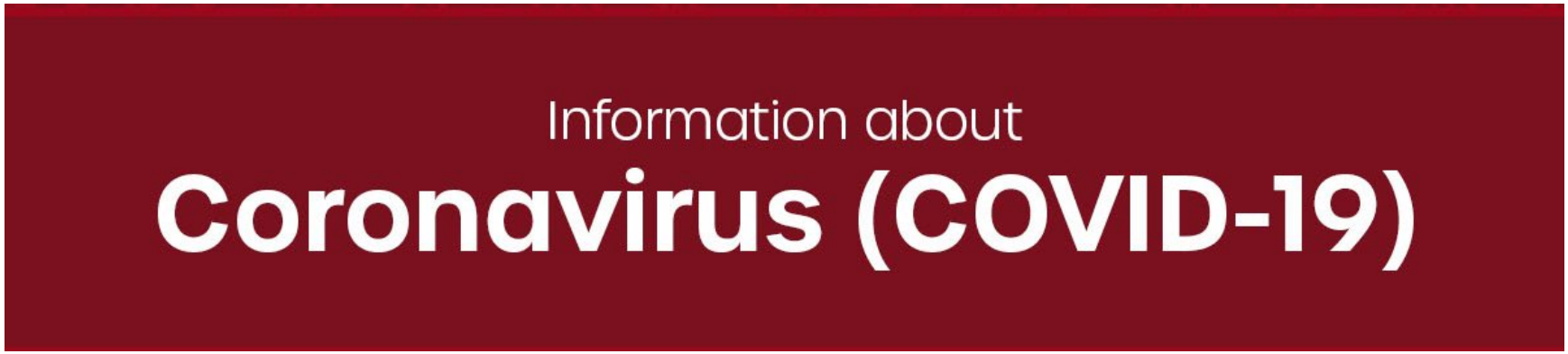
Covid19



- www.health.pa.gov
- Call 1-877-PA-HEALTH (1-877-724-3258)
- RA-DHCOVIDQUESTIONS@pa.gov

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Thank you

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