

RURAL **HEALTH** WORKSHOP

# Syphilis and Congenital Syphilis in Lake Charles: Understanding Impacted Populations



# Speakers

- Elizabeth Lindsay, MPH
  - Perinatal Surveillance Supervisor
  - Louisiana STD/HIV/Hepatitis Program
- Lawrencina Gougisha, MPH, BSN, RN
  - Perinatal Case Manager (Regions 2 and 4)
  - Louisiana STD/HIV/Hepatitis Program



# Syphilis & Congenital Syphilis in Lake Charles: Understanding Impacted Populations



**Elizabeth Lindsay, MPH – Perinatal Surveillance Supervisor**

**Lawrencia Gougisha, MPH, BSN, RN – Perinatal Case Manager  
(Regions 2 & 4)**

Louisiana Department of Health

Office of Public Health

HIV/STD/Hepatitis Program

# THE STATE OF STDs IN THE UNITED STATES, 2021

**STDs continue to forge ahead, compromising the nation's health.**

Note: These data reflect the effect of COVID-19 on STD surveillance trends.



**1.6 million**  
CASES OF CHLAMYDIA  
3.8% decrease since 2017



**710,151**  
CASES OF GONORRHEA  
28% increase since 2017



**176,713**  
CASES OF SYPHILIS  
74% increase since 2017



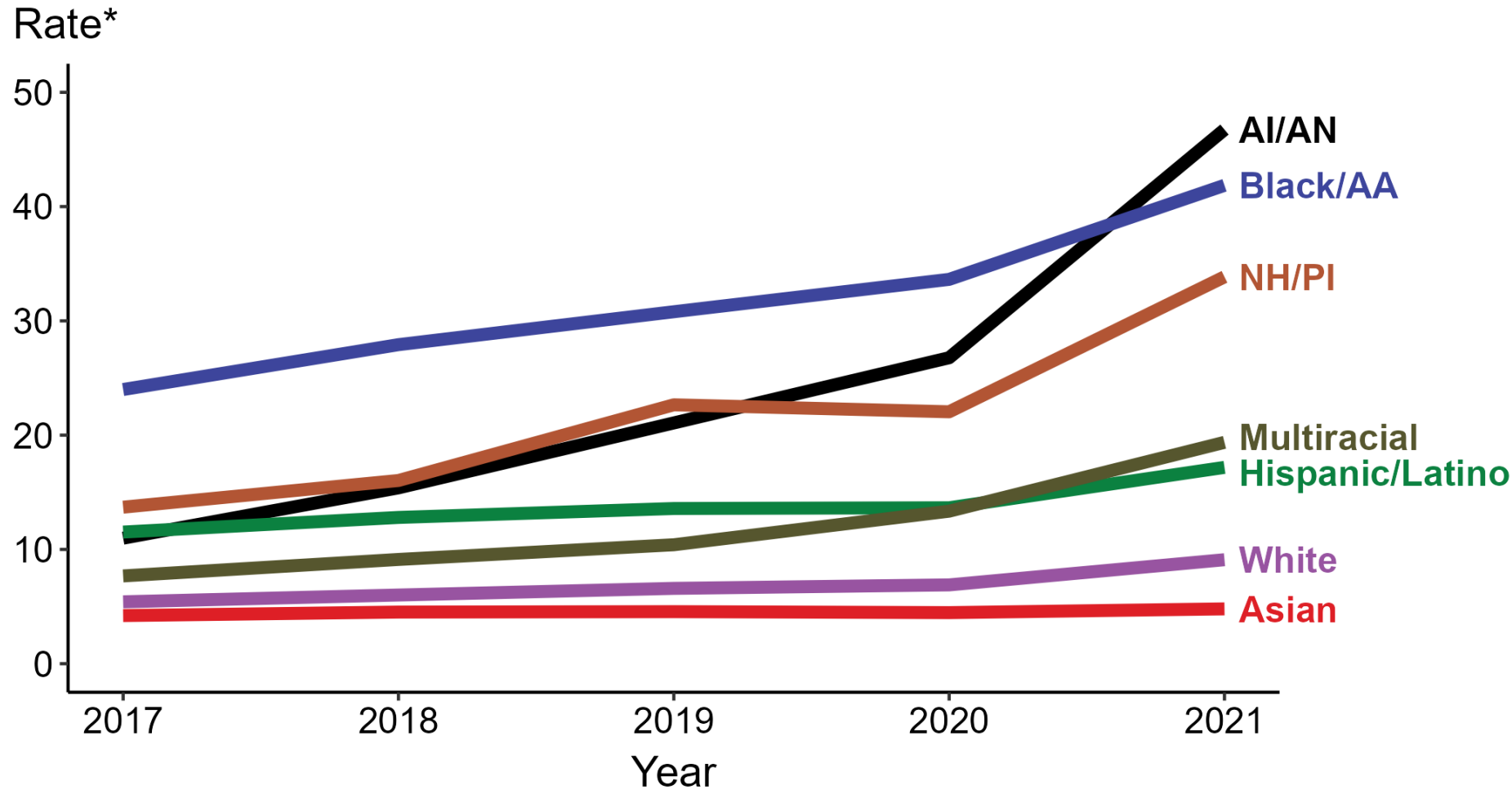
**2,855**  
CASES OF SYPHILIS  
AMONG NEWBORNS  
203% increase since 2017

LEARN MORE AT: [www.cdc.gov/std/](http://www.cdc.gov/std/)

**ANYONE WHO HAS SEX COULD  
GET AN STD, BUT SOME GROUPS  
ARE MORE AFFECTED**

- YOUNG PEOPLE AGED 15-24
- GAY & BISEXUAL MEN
- PREGNANT PEOPLE
- RACIAL & ETHNIC MINORITY GROUPS

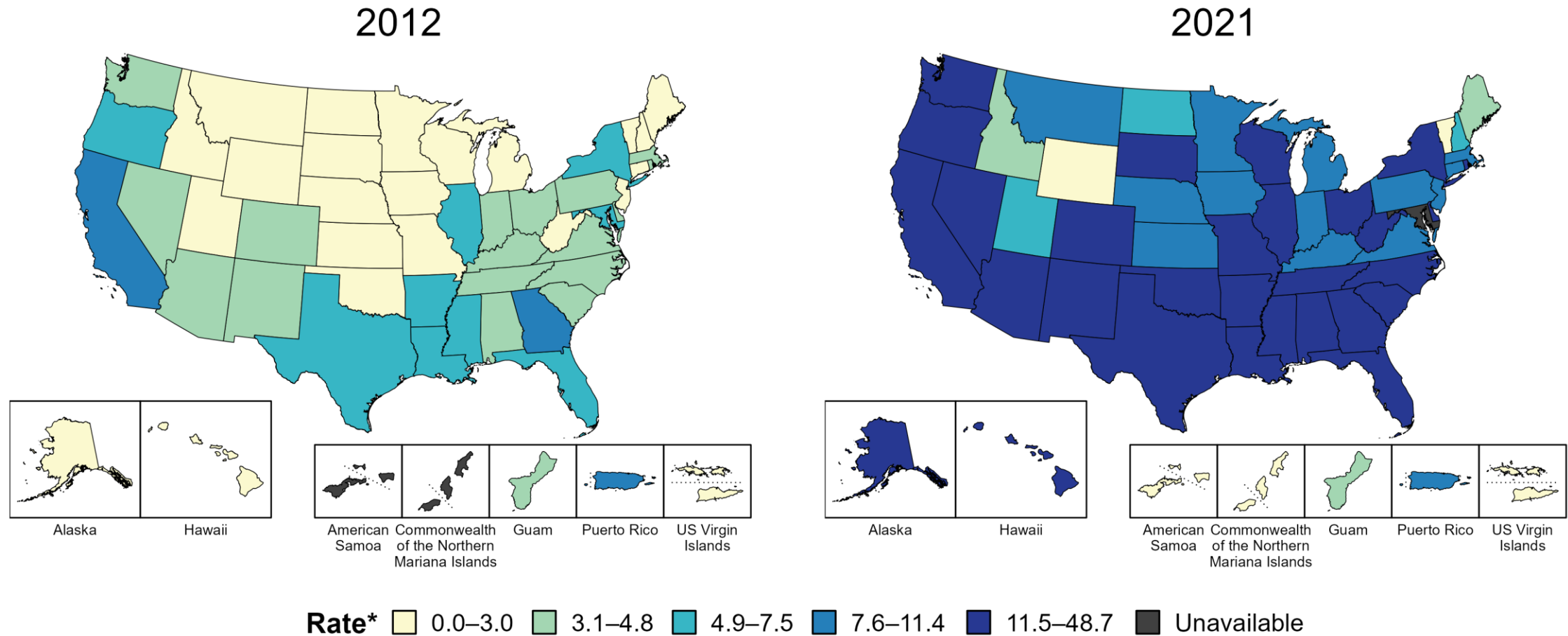
# Primary and Secondary Syphilis — Rates of Reported Cases by Race/Hispanic Ethnicity, United States, 2017–2021



\* Per 100,000

ACRONYMS: AI/AN = American Indian or Alaska Native; Black/AA = Black or African American; NH/PI = Native Hawaiian or other Pacific Islander

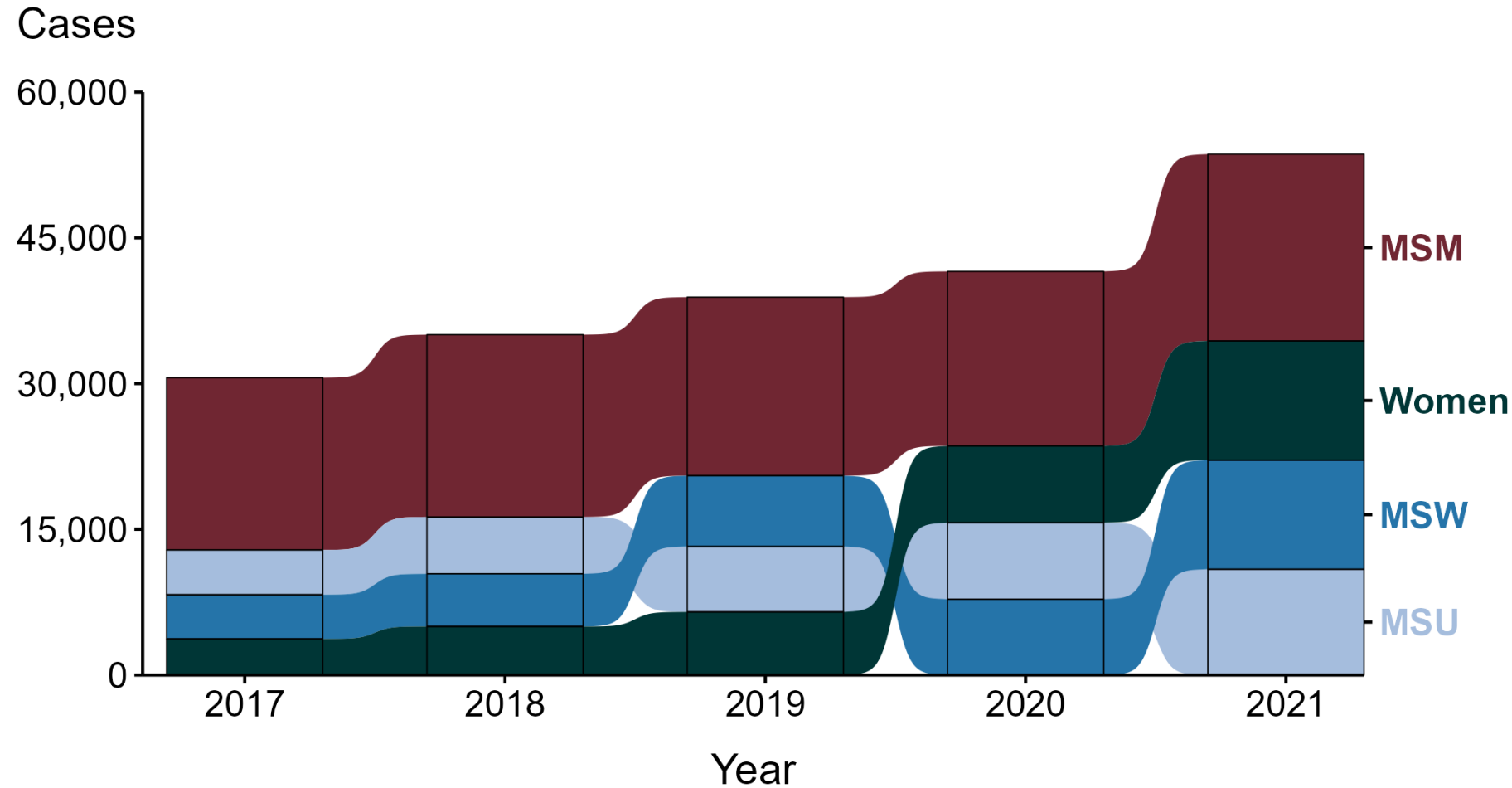
# Primary and Secondary Syphilis — Rates of Reported Cases by State, United States and Territories, 2012 and 2021



\* Per 100,000



# Primary and Secondary Syphilis — Reported Cases by Sex and Sex of Sex Partners, United States, 2017–2021



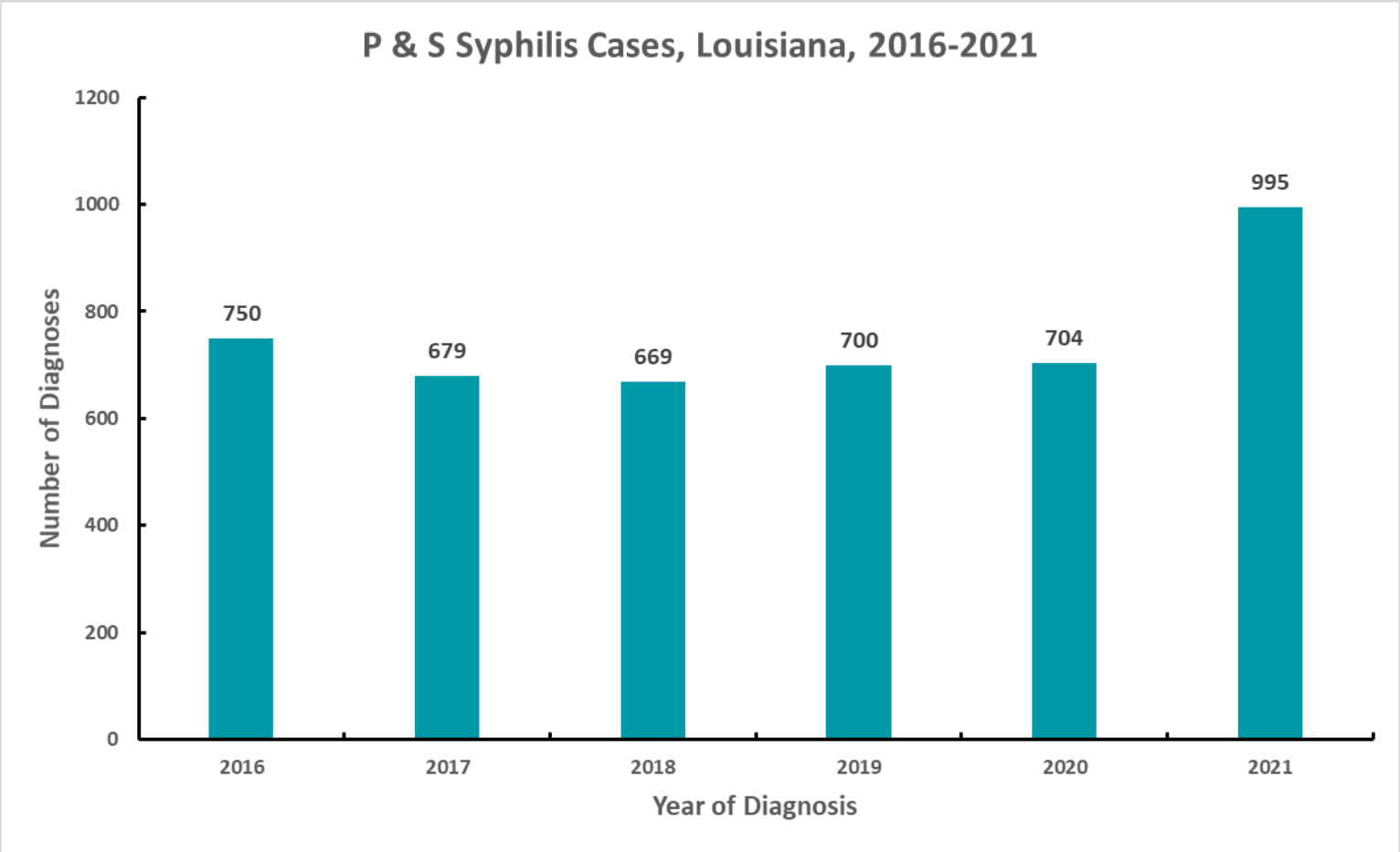
**ACRONYMS:** MSM = Gay, bisexual, and other men who have sex with men; MSU = Men with unknown sex of sex partners; MSW = Men who have sex with women only

**NOTE:** Over the five year period, 0.2% of cases were missing sex and were not included.

# Primary & Secondary Syphilis in Louisiana

In 2021, Louisiana ranked 11<sup>th</sup> in the nation for P&S syphilis rates.

P&S syphilis cases have remained around 700 cases per year, but there was a significant increase in 2021 with 995 cases.



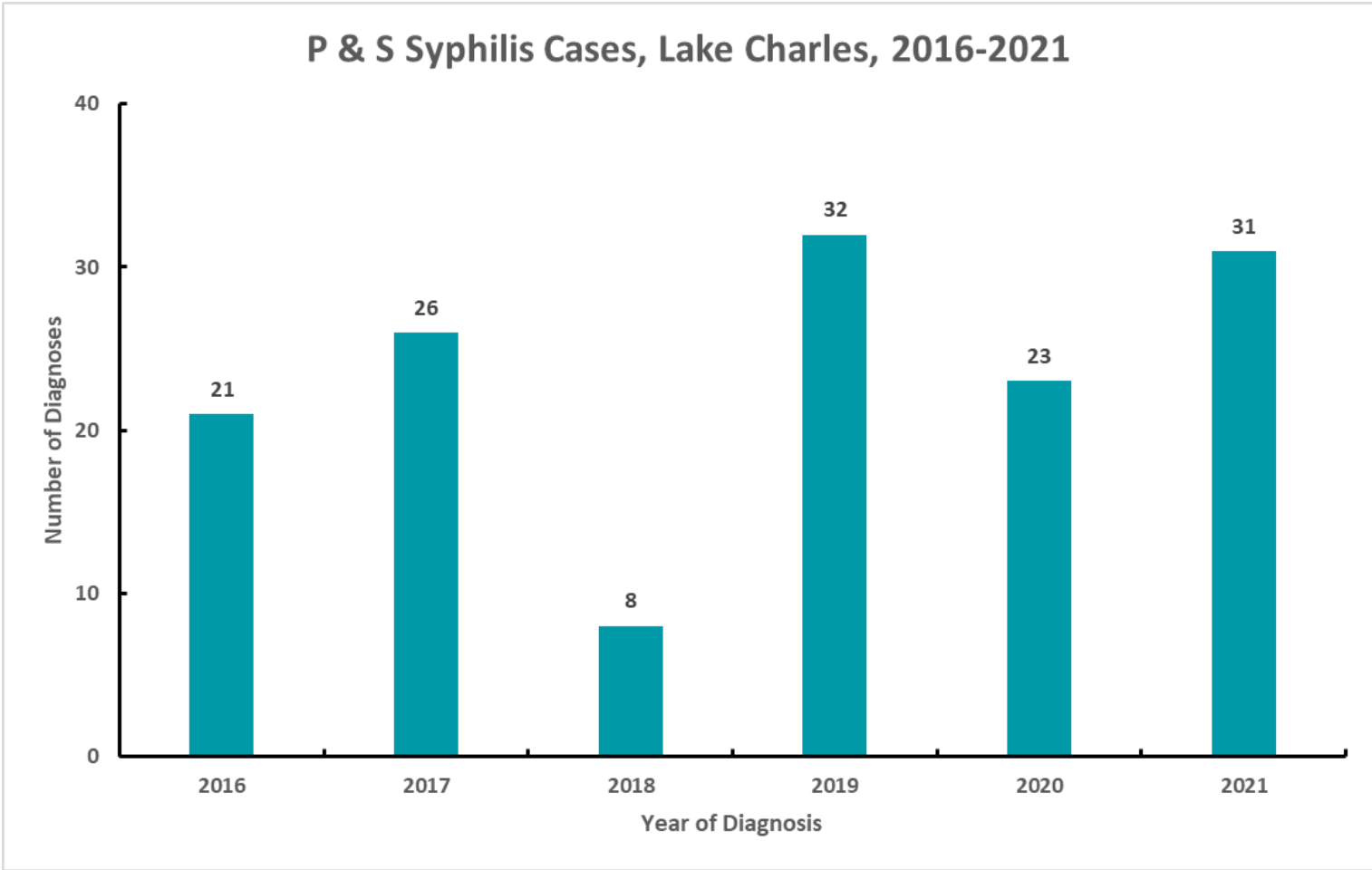


# Primary & Secondary Syphilis in Lake Charles

The Lake Charles Region has been experiencing an increase of P&S syphilis since 2016.

In 2021, a total of 31 cases were reported in the region. This is almost 1.5 times higher than what was seen in 2016.

In 2021, the majority of P&S syphilis cases were residents of Calcasieu Parish (77%).



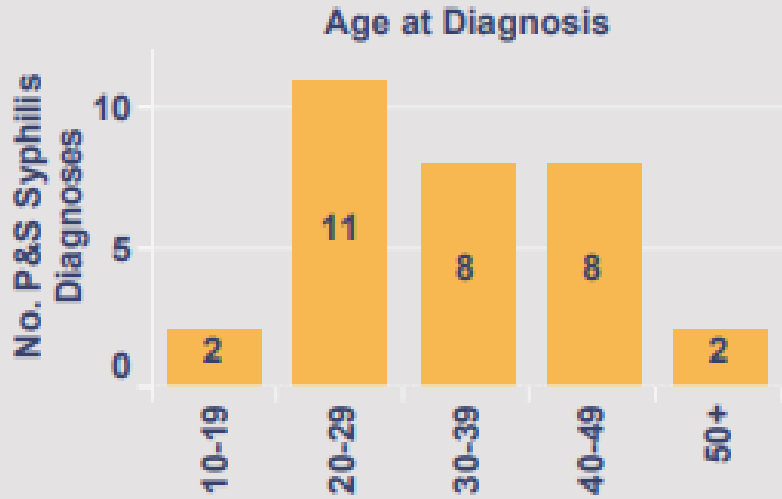
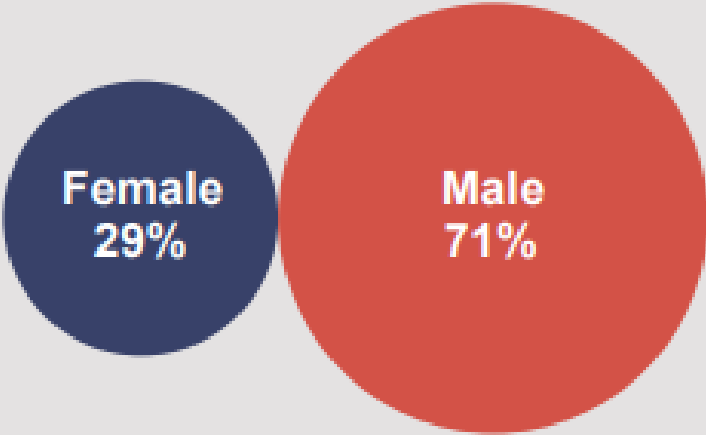
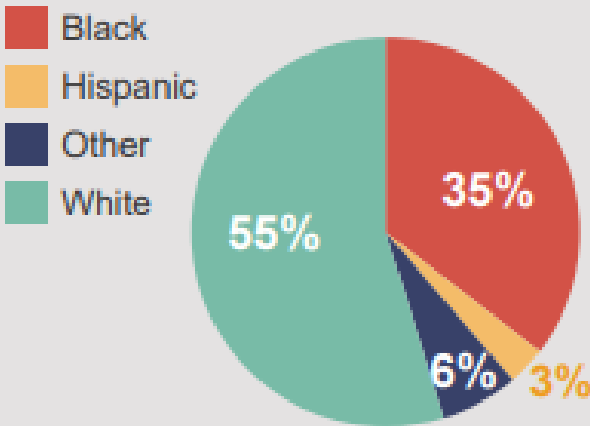
# Primary & Secondary Syphilis Diagnoses, Lake Charles, 2021

## Of the 31 P&S syphilis diagnoses in 2021:

Over half (55%) of the diagnoses were among White people.

Males comprised 71% of diagnoses.

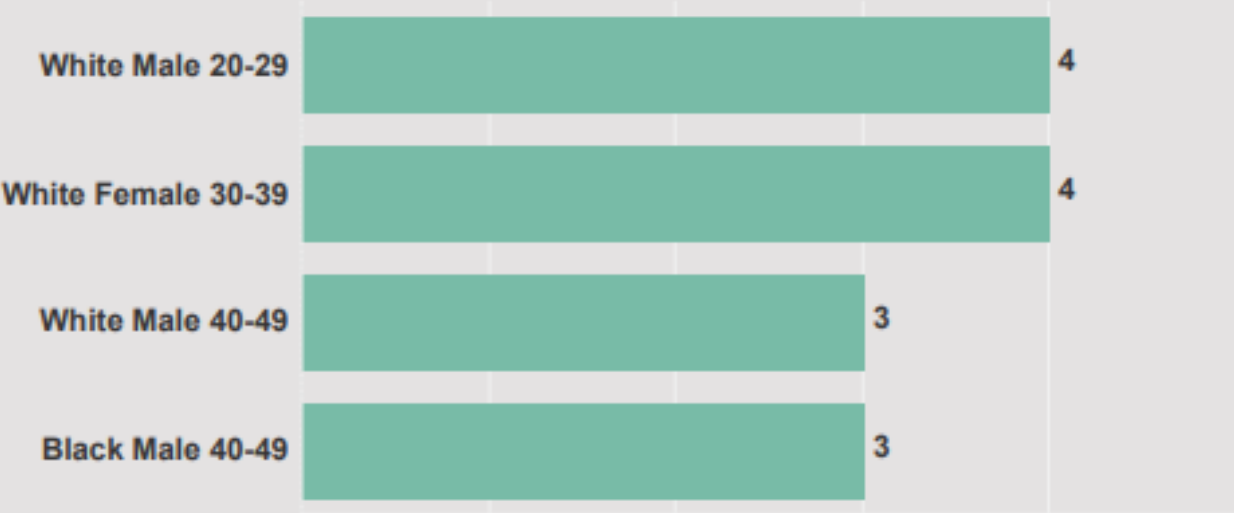
The age group with the most diagnoses was 20-29 year-olds (35%).



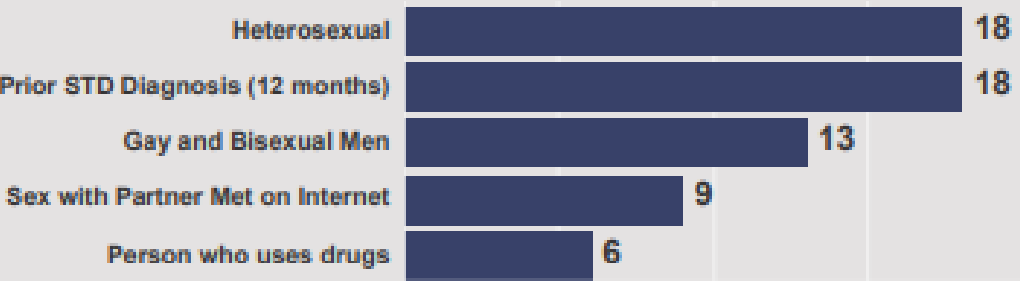
# Primary & Secondary Syphilis Diagnoses Lake Charles, 2021

## Affected subpopulations

Males are more impacted by P&S syphilis than other groups. In 2021, Black and White males comprised 61% of diagnoses in Region 5.



## Behavioral Factors



# Congenital Syphilis



# Case Definition

- Congenital syphilis
  - A case of congenital syphilis (CS) occurs when a pregnant woman diagnosed with inadequately treated syphilis passes the infection on to her infant in utero or during delivery. This may result in stillbirth, death of the newborn, or significant future health and developmental problems.
    - A thorough history and an accurate diagnosis are critical to ensure adequate treatment.

# Healthy Mom, Healthy Baby

It is possible for women diagnosed with syphilis to have a healthy pregnancy and a healthy child

- When can transmission occur?
  - In utero
  - Labor/Delivery
- Prenatal care is KEY
  - Lack of prenatal care is one of the factors that most significantly impacts perinatal transmission since women who are not in prenatal care are less likely to get tested for HIV/STIs and receive treatment during their pregnancy.
- Early and repeat testing during key periods of pregnancy can be an effective way of preventing mother to child transmission

*Adequate treatment for syphilis during pregnancy is 98% effective in reducing congenital syphilis*

# Timeline for Prenatal STI Testing

## First Prenatal Visit

- ✓ Syphilis: All pregnant women
- ✓ HIV: All pregnant women
- ✓ HBV: All pregnant women
- ✓ Chlamydia and Gonorrhea: All pregnant women <25 years of age and those at increased risk
- ✓ HCV: All pregnant women

## Third Trimester

- ✓ Syphilis: All pregnant women between 28 – 32 weeks
- ✓ HIV: All pregnant women before 36 weeks

## At Delivery

- ✓ Syphilis: Pregnant women living in high morbidity areas, pregnant women with no previously established status, or pregnant women who deliver a stillborn infant
- ✓ HIV: Pregnant women not screened during pregnancy
- ✓ HBV: Pregnant women not screened during pregnancy, who are at high risk or who have signs/symptoms of hepatitis
- ✓ Chlamydia: Pregnant women < 25 years of age or continued high risk
- ✓ Gonorrhea: Pregnant women at continued high risk

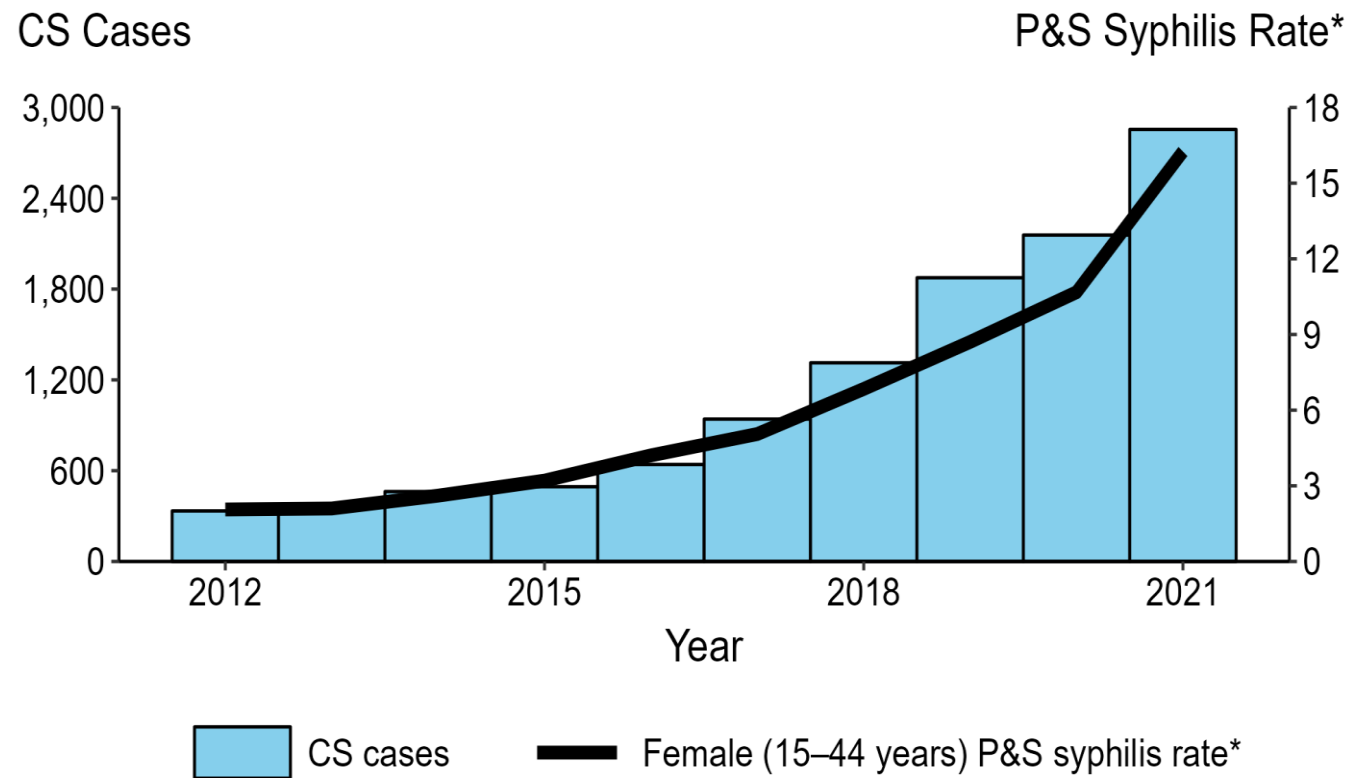


# CDC Treatment Guidelines

STAGE OF SYPHILIS		REGIMEN	DOSE
Early Syphilis	Primary and Secondary Early non-primary/non-Secondary (less than 12 months)	Benzathine Penicillin G* (Bicillin-LA)	2.4 million units IM single dose
Late Syphilis	Unknown Duration or Late (greater than 12 months)	Benzathine Penicillin G* (Bicillin-LA)	7.2 million units IM given as 3 doses at 1- week intervals

**\*Benzathine Penicillin G is the *only* CDC-approved treatment for pregnant women\***

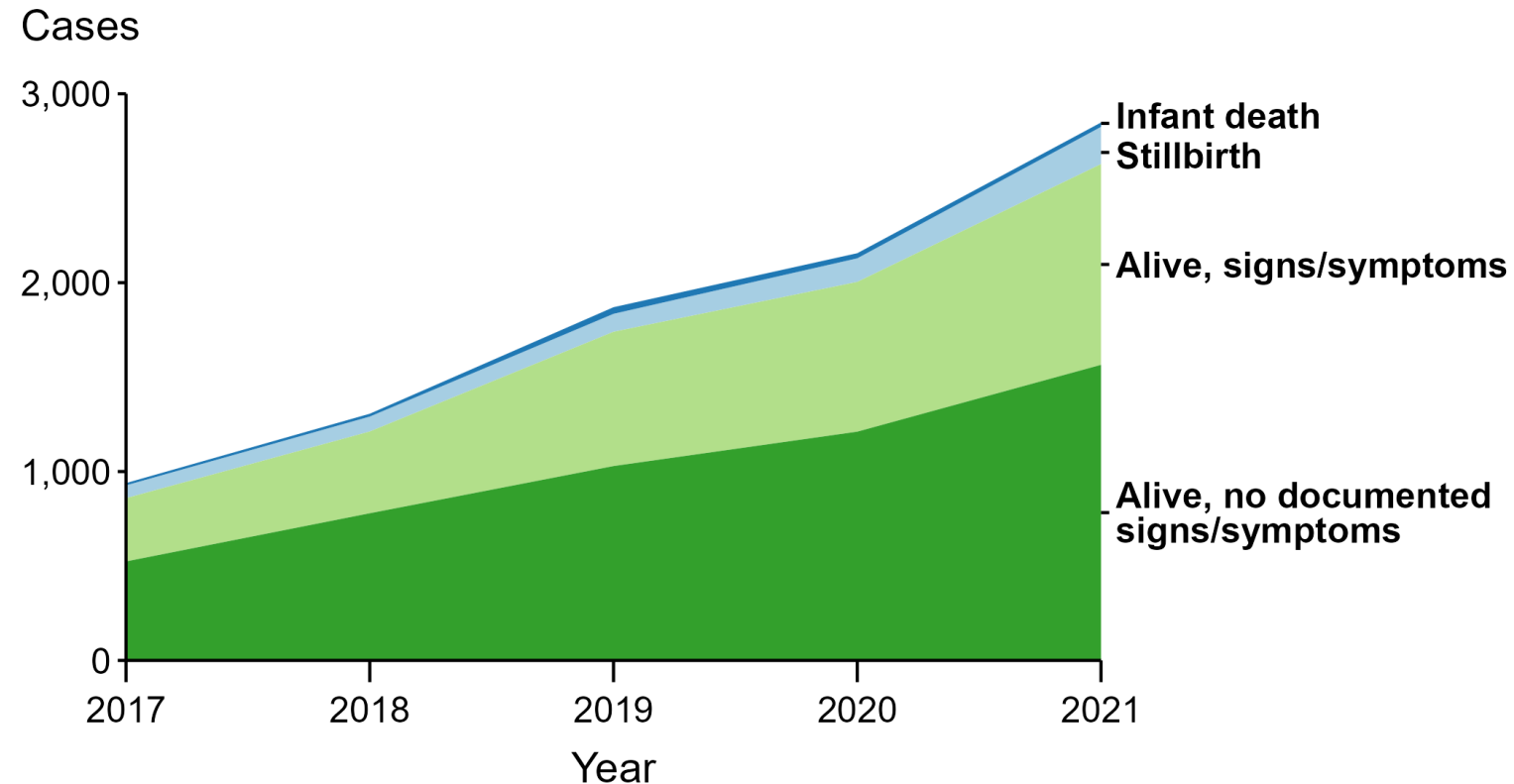
# Congenital Syphilis — Reported Cases by Year of Birth and Rates of Reported Cases of Primary and Secondary Syphilis Among Women Aged 15–44 Years, United States, 2012–2021



\* Per 100,000

ACRONYMS: CS = Congenital syphilis; P&S Syphilis = Primary and secondary syphilis

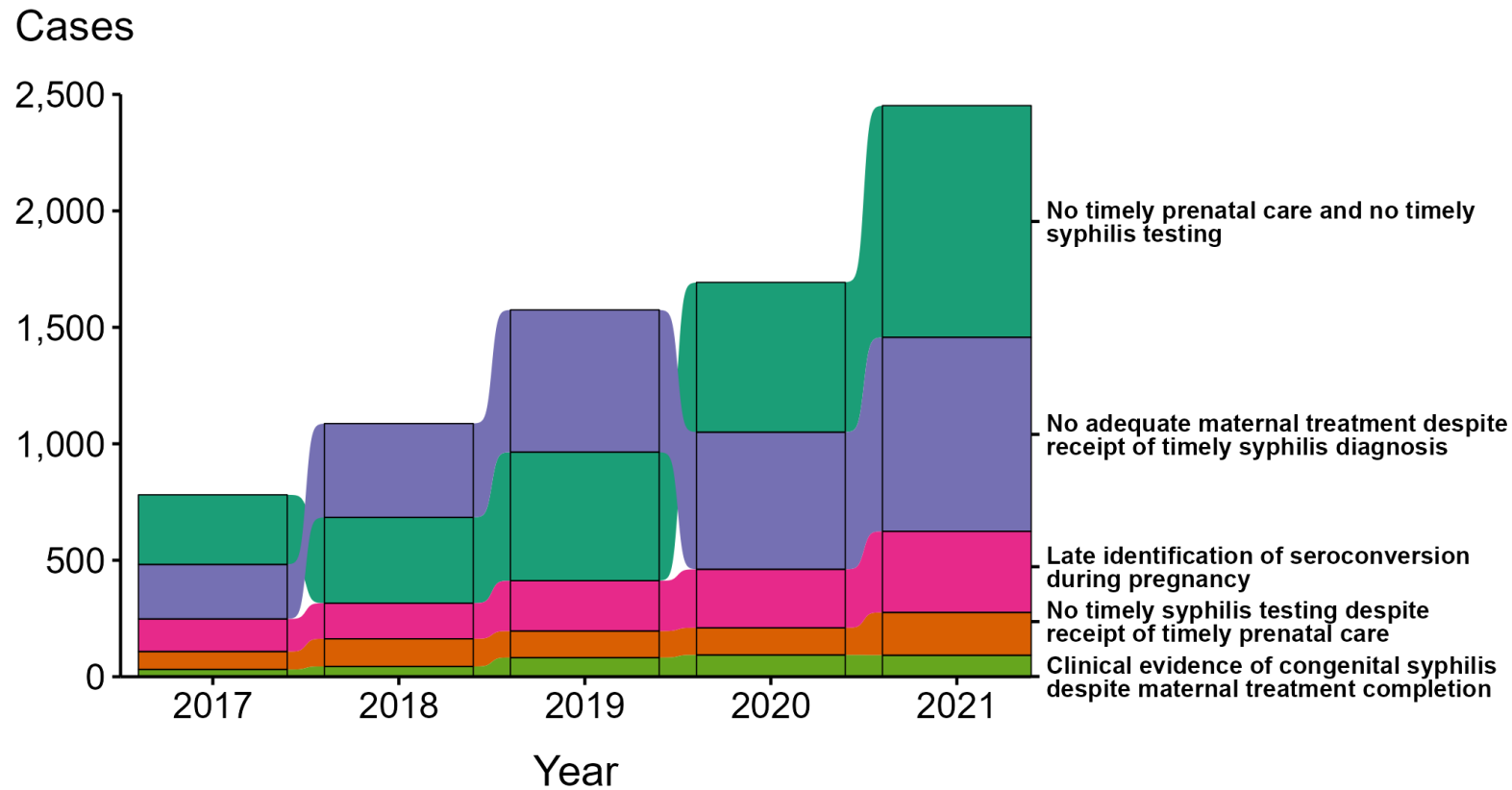
# Congenital Syphilis — Reported Cases by Vital Status and Clinical Signs and Symptoms\* of Infection, United States, 2017–2021



\* Infants with signs/symptoms of congenital syphilis have documentation of at least one of the following: long bone changes consistent with congenital syphilis, snuffles, condylomata lata, syphilitic skin rash, pseudoparalysis, hepatosplenomegaly, edema, jaundice due to syphilitic hepatitis, reactive CSF-VDRL, elevated CSF WBC or protein values, or evidence of direct detection of *T. pallidum*.

**NOTE:** Of the 9,141 congenital syphilis cases reported during 2017 to 2021, 22 (0.2%) did not have sufficient information to be categorized.

# Congenital Syphilis — Missed Prevention Opportunities among Mothers Delivering Infants with Congenital Syphilis, United States, 2017–2021



NOTE: Of the 9,141 congenital syphilis cases reported during 2017 to 2021, 1,553 (17.0%) were not able to have the primary missed prevention opportunity identified due to insufficient information provided to CDC related to maternal prenatal care, testing, or treatment.



# Congenital Syphilis (CS)

Annual Summary - 2021

Louisiana

Pregnant Mothers  
Diagnosed with Syphilis  
**229**

Congenital Syphilis Cases

**110**

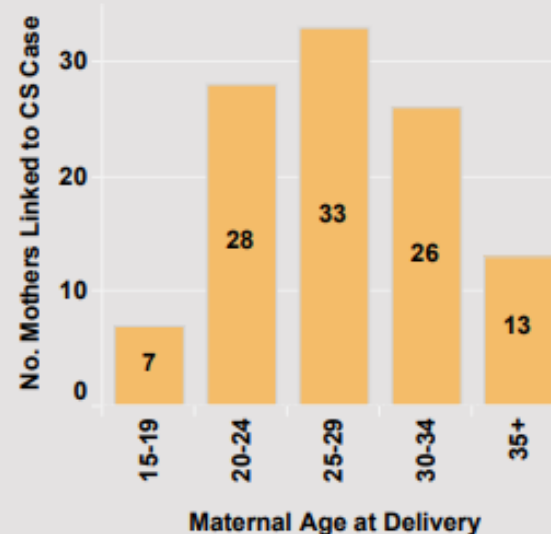
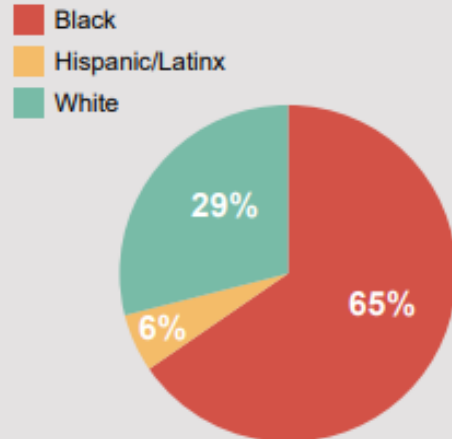
Case count reflects the total number of  
individual infants

Infant Deaths Linked to  
Congenital Syphilis  
**5**

## Of the 107 pregnant mothers linked to a 2021 CS case:

The majority (65%) were Black women.

31% of mothers were between 25 to 29  
years of age at delivery.

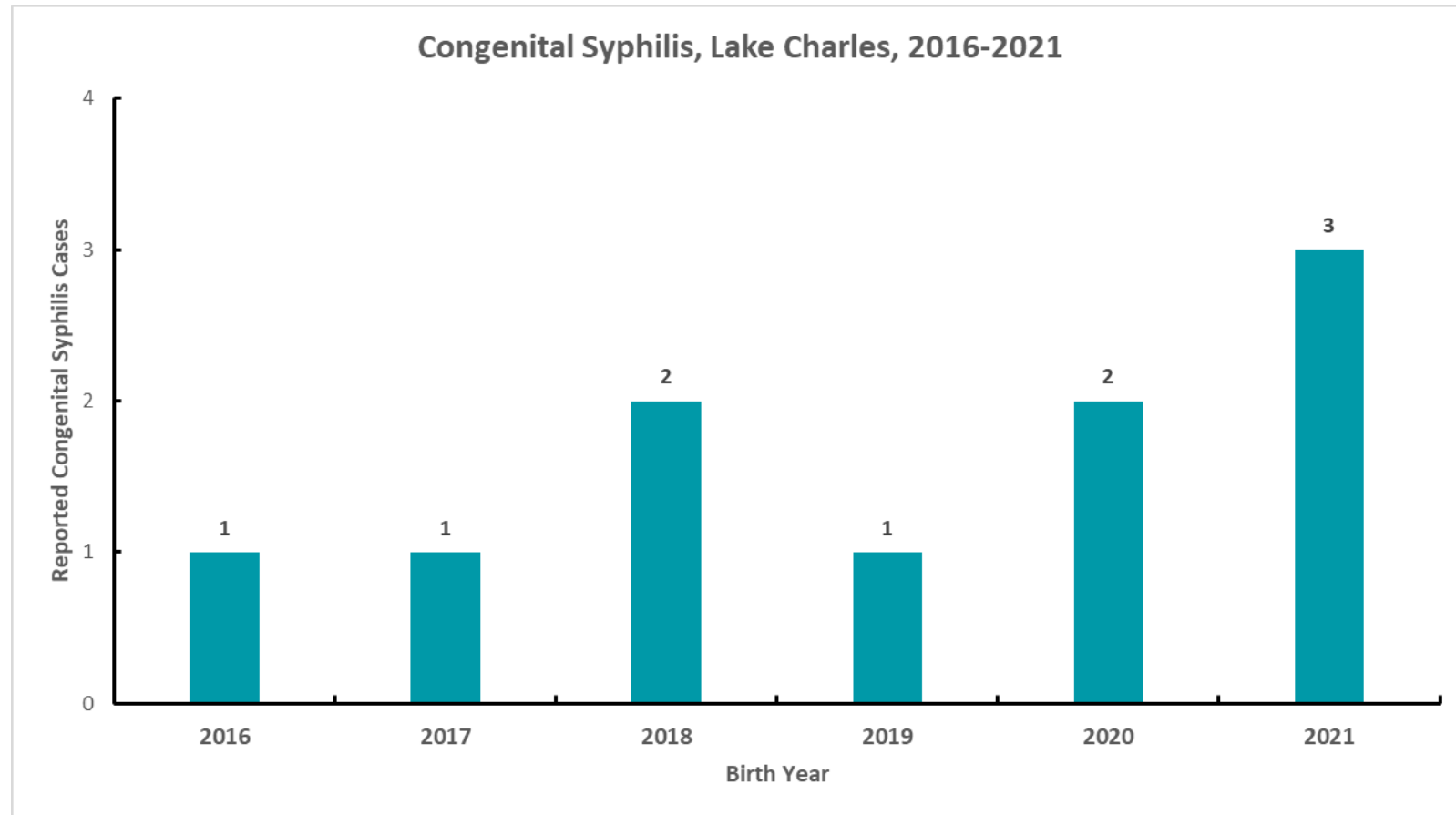


**1 in 532**  
live births were born with  
CS in 2021

2021 National Ranking  
**3rd**  
Highest Case Rate

# Congenital Syphilis – Lake Charles

- The Lake Charles region has seen about two congenital syphilis cases per year since 2016
- A total of 3 cases were reported for 2021.
  - Two-thirds of mothers linked to cases were White/Non-Hispanic.
  - 60% were diagnosed with early syphilis
- For 2022, 7 cases have been reported so far, however this number is expected to change



# Congenital Syphilis Care Continuum

	Timely PNC	Timely PNC w/ Initial Syphilis Test	Timely PNC w/ Recommended Testing
Louisiana	73.0%	96.0%	56.0%
Lake Charles	67.0%	100.0%	0.0%

\*PNC = Prenatal Care

- Timely PNC = PNC initiated at least two months prior to delivery
- Timely PNC w/ Timely Initial Test = PNC initiated at least two months prior to delivery and initial syphilis test completed at least 45 days before delivery
- Timely PNC w/ Recommended Testing = PNC initiated at least two months prior to delivery, initial syphilis test at least 45 days before delivery, and repeat syphilis test at least 45 days before delivery.



# Perinatal Prevention Activities

- **Testing and reporting requirements**

- **Act 459 - Third Trimester Testing Law:** Louisiana law requires “opt-out” syphilis and HIV testing for all women at the first prenatal visit, the 1st prenatal visit in the 3rd trimester and at delivery (if testing/status is not noted in medical charts).
- Louisiana Sanitary Code §107 (Laboratory and Healthcare Facility Reporting Requirements) updated with required reporting of negative results for specific disease conditions, including HIV, hepatitis C and syphilis.

# Perinatal Prevention Activities, continued

- **Regional Reviews**

- Congenital Syphilis Case Reviews (held on a quarterly basis)
  - Objective: identify barriers and missed opportunities that contributed to the incidence of a congenital syphilis case.

## Major case review findings:

- Lack of early third trimester testing
- Lack of consistency among providers with unknown/late latent treatment during pregnancy
- High rate of reinfection during pregnancy
- Lack of care coordination between providers

# Perinatal Case Management Program

## **The Perinatal Case Managers:**

- 1) *Connect pregnant women newly diagnosed with syphilis to medical care and community-based supportive services,*
- 2) *Offer services to support treatment adherence services; and*
- 3) *Offer navigation services to promote adequate and timely syphilis treatment and reduce the risk of re-infection during pregnancy to prevent congenital syphilis*

Addressing Social Determinants of Health



# SHOT

Syphilis Home Observed Treatment

There has been a continued increase in the number of women with syphilis in Louisiana.

Louisiana ranks #1 in the nation for congenital syphilis case rates.

Louisiana's rate is 4x the national average.

Untreated syphilis infections can lead to severe health issues.

In pregnant women and newborns, syphilis can cause: miscarriage, stillbirth, low birth weight or other birth defects

Syphilis can be treated and cured with antibiotics.

If you are diagnosed with syphilis, your healthcare provider may be able to refer you for treatment at home.



- Pilot project in Regions 4, 6, and 7 for pregnant women and their partners.
- Criteria for eligible patients
  - No history of penicillin allergy
  - Must have access to working telephone landline or cellular service
  - Live in an area with 911 and EMS
- Any pregnant women must also have no complications of pregnancy which would preclude treatment in the home
- Home visits conducted by OPH Nurses accompanied by Disease Intervention Specialists and/or Perinatal Case Managers

# Successes

- ▶ Treatment completion
- ▶ Increased collaboration with Healthcare Providers
- ▶ Fewer infants born with the presence of congenital syphilis



# Challenges

- ▶ COVID-19 pandemic
- ▶ Opioid/meth epidemics
- ▶ Lack of reliable addresses/phone numbers for eligible clients
- ▶ Staff hesitancy due to clients living in high risk areas
- ▶ Clients who are contraindicated to receive in home treatment.
- ▶ Examples: PCN allergy, no home phone service, decreased availability to EMS in the area, clients with complicated pregnancies.

# Enhanced Bicillin Access

## **SHPDirect<sub>Rx</sub>**

**Benzathine Penicillin (Bicillin L-A) Delivery Program**

**Untreated syphilis infections can lead to severe health issues.**

**In pregnant women and newborns, syphilis can cause:**  
miscarriage, stillbirth, low birth weight or other birth defects

**Bicillin is the only CDC-recommended treatment for syphilis in pregnant women.**

**You may qualify to receive deliveries of individual Bicillin doses for your patients free of charge.**

For more information, contact the Office of Public Health (OPH) Disease Intervention Specialist (DIS) in your area, or the OPH STD/HIV Program (SHP) SHPDirect<sub>Rx</sub> Coordinator at (800) 992-4379



- Facilitate timely syphilis treatment by utilizing Disease Intervention Specialists to deliver Bicillin to private OB/GYN providers and community health centers that do not maintain the medication on-site





- ▶ **Goal: lift burden of cost from provider (one dose ~\$1,500) to ensure adequate treatment is achieved.**
- ▶ Implemented in October 2019 through a partnership with the Centers for Disease Control and Prevention
- ▶ Piloted in Regions 4, 6, and 7 and limited to OB providers; has since expanded to additional regions
- ▶ Medical providers are responsible for administering the injections, as well as assuring that patients are suitable candidates for bicillin injections
- ▶ 360 syringes of bicillin provided through this program; over 70 patients treated

# Acknowledgements

- ▶ Dr. DeAnn Gruber, Director, Bureau of Infectious Disease
- ▶ Samuel Burgess, Program Director, STD/HIV/Hepatitis Program
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- ▶ Anthony James, Deputy Director of Programs, STD/HIV/Hepatitis Program
- ▶ Chaquetta Johnson, Program Director, Office of Public Health Immunization Program
- ▶ Joy Ewell, CDC Lead Public Health Advisor
- ▶ Terri Gray, CDC Lead Public Health Advisor
- ▶ Dr. Mohammad Rahman, CDC Epidemiologist
- ▶ Dr. Stephanie Taylor, STD Medical Director
- ▶ Jessica Fridge, STD/HIV/Hepatitis Surveillance Manager
- ▶ LDH Regional Medical Directors
- ▶ All Perinatal Case Managers
- ▶ All LDH Disease Intervention Specialists
- ▶ All Regional PHU Nurses

# Contact Information

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**Questions?**

# We want to hear from you!

<https://www.surveymonkey.com/r/BW59S9F>



# RURAL **HEALTH** WORKSHOP

**Break with Exhibitors: 2:00 – 2:30 p.m.**

