



NC Department of Health and Human Services

# Congenital Syphilis: Partnerships and Initiative to Address a Public Health Crisis

North Carolina Division of Public Health  
Communicable Disease Branch

April 2024

1

## Acknowledgements

### NCDPH:

HIV/STD/Hepatitis B and C Surveillance Unit  
Field Services Unit  
Vicki Mobley, MD

### Contacts

Data lead: [erika.samoff@dhhs.nc.gov](mailto:erika.samoff@dhhs.nc.gov)

Data requests: [taylor.swankie@dhhs.nc.gov](mailto:taylor.swankie@dhhs.nc.gov)

Medical Director: [Victoria.mobley@dhhs.nc.gov](mailto:Victoria.mobley@dhhs.nc.gov)



2

# Congenital Syphilis: The Basics

3

## What is congenital syphilis?

- Syphilis transmitted from pregnant parent to baby during pregnancy or delivery
- It can lead to
  - Miscarriage
  - Issues with placenta and umbilical cord
  - Stillbirth
  - Low birth weight
  - Severe and life-long birth defects
  - Premature birth
  - Neonatal death



**Congenital syphilis is preventable**

4

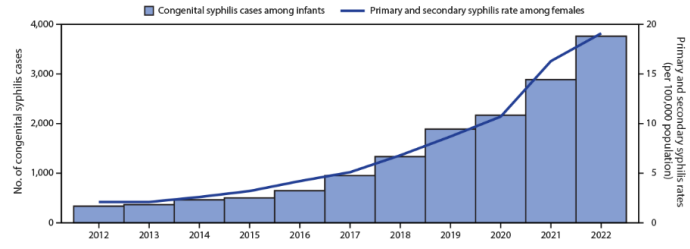
# A national crisis has been declared

The New York Times

## Infants Are Born With Syphilis in Growing Numbers, a Sign of a Wider Epidemic

Congenital syphilis has become more than ten times as common over the past decade, the C.D.C. reported. "The situation is dire," said one expert.

FIGURE 1. Reported number of cases of congenital syphilis among infants, by year of birth, and rates\* of reported cases of primary and secondary syphilis among females aged 15–44 years, by year — United States, 2012–2022



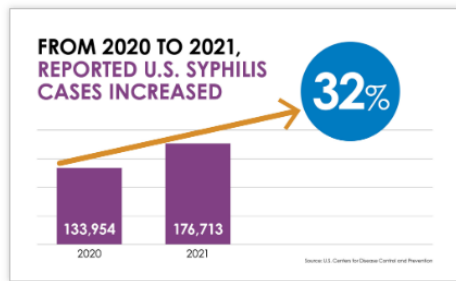
\* Cases per 100,000 population.

\* Primary and secondary syphilis case data for all U.S. territories and freely associated states and outlying areas were not available for all years; therefore, rates presented include only the 50 states and the District of Columbia.

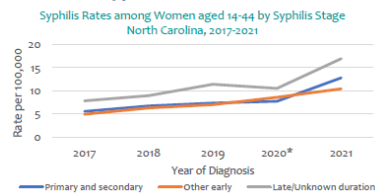
5

# In fact it's been growing for a while

Reported Syphilis Cases in the U.S., 2020-2021



## Syphilis continues to increase in women 14-44



In 2021, 600 women were diagnosed with primary, secondary, or other early syphilis, and 562 were diagnosed with late/unknown duration syphilis.

### Public Health Alert

December 19, 2022

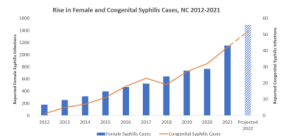
**TO:** North Carolina Medical Providers

**FROM:** Victoria Mobley, MD MPH  
Medical Director, HIV/STD Program

**SUBJECT:** Increase in Female and Congenital Syphilis Infections

Syphilis infection among women of reproductive age is on the rise in North Carolina. Between 2012 and 2021, there was a 538% increase in reported syphilis cases among women with an associated 4100% increase in congenital syphilis infections.

Congenital syphilis is entirely preventable through the early detection and appropriate treatment of maternal infection during pregnancy. Failure to conduct all required syphilis screenings and provide timely treatment can result in poor pregnancy outcomes such as miscarriage, stillbirth, preterm delivery, and perinatal death. Additionally, illnesses associated with congenital syphilis can manifest in the newborn or later in childhood including hydrops fetalis.



NC DEPARTMENT OF HEALTH AND HUMAN SERVICES

**ROY COOPER** • Governor  
**MANDY COHEN, MD, MPH** • Secretary  
**BETH LOVETTE, MPH, BSN, RN** • Acting Director  
Division of Public Health

Public Health Advisory

November 9, 2018

**TO:** North Carolina Medical Providers  
**FROM:** Victoria Mobley, MD MPH  
Medical Director, HIV/STD Program  
**SUBJECT:** Continued Increase in Congenital Syphilis Infections

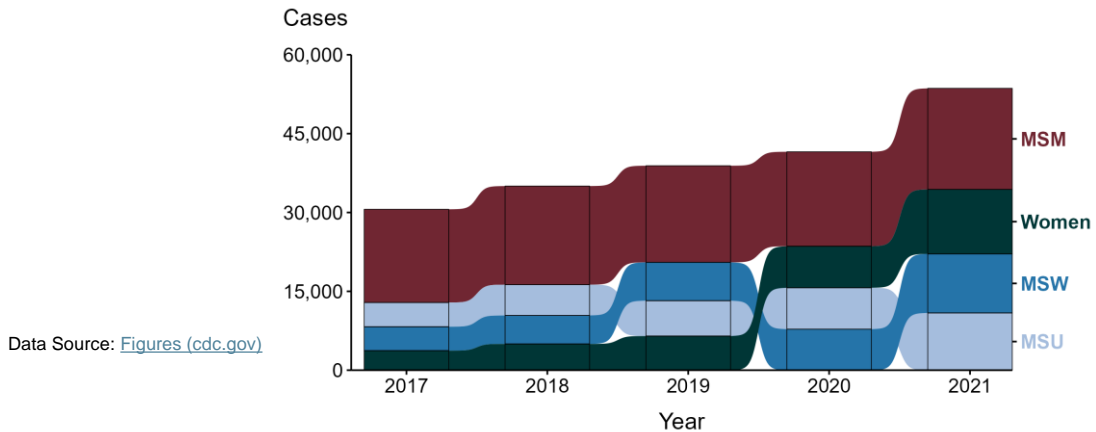
6

**How about you? Are people aware of this issue in your county? Do you feel like this is something you can prioritize, given other challenges?**

7

## Syphilis patterns are changing

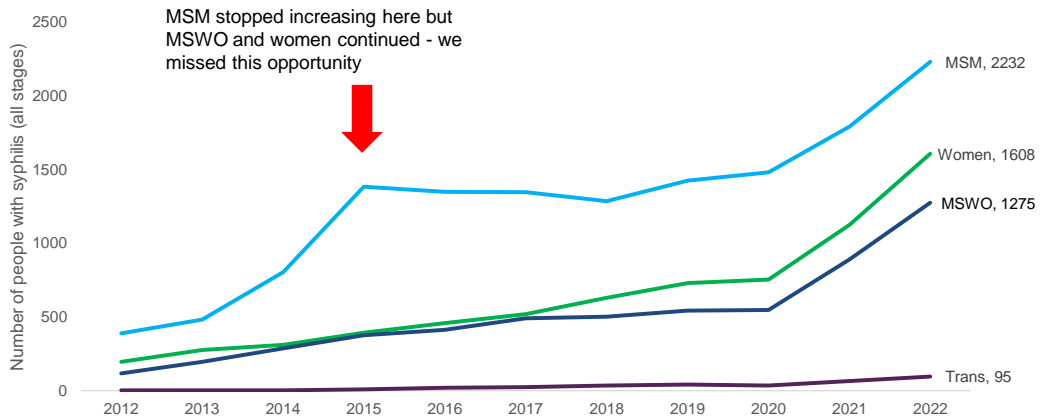
**Primary and Secondary Syphilis — Reported Cases by Sex and Sex of Sex Partners, United States, 2017–2021**



**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

8

### Syphilis by Gender and Partner Gender North Carolina, 2023 Preliminary Data

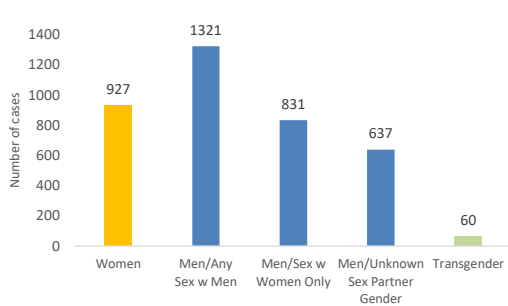


Not shown: Men with unknown partner gender (23% of total men)

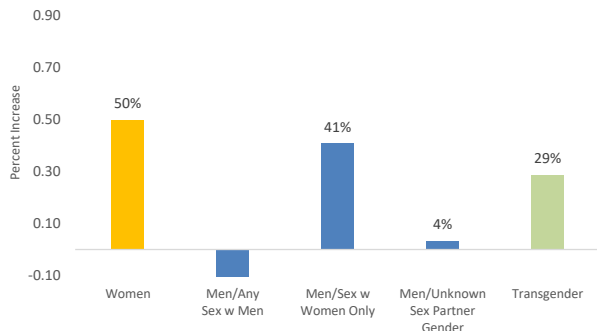
9

## Syphilis is most common among men, but increasing fastest among women, during 2023 (preliminary data)

Early Syphilis by Gender and Partner Gender  
North Carolina, 2023



Increase in Early Syphilis by Gender and Partner Gender  
North Carolina, 2023 Compared to 2020-2022 Average



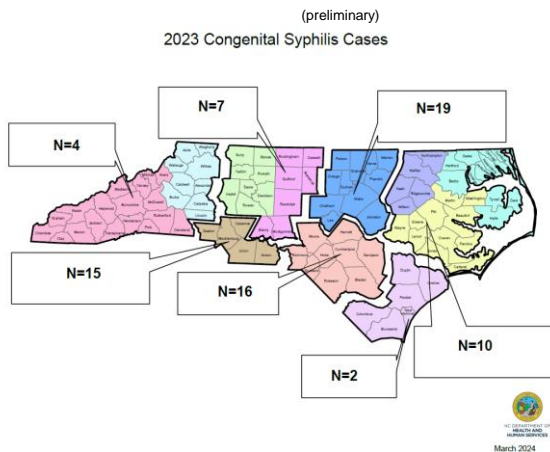
10

# Syphilis is increasing in many North Carolina populations

Increase in Early Syphilis by Race/Ethnicity  
North Carolina, 2023 (preliminary) Compared to 2020-2022 Average



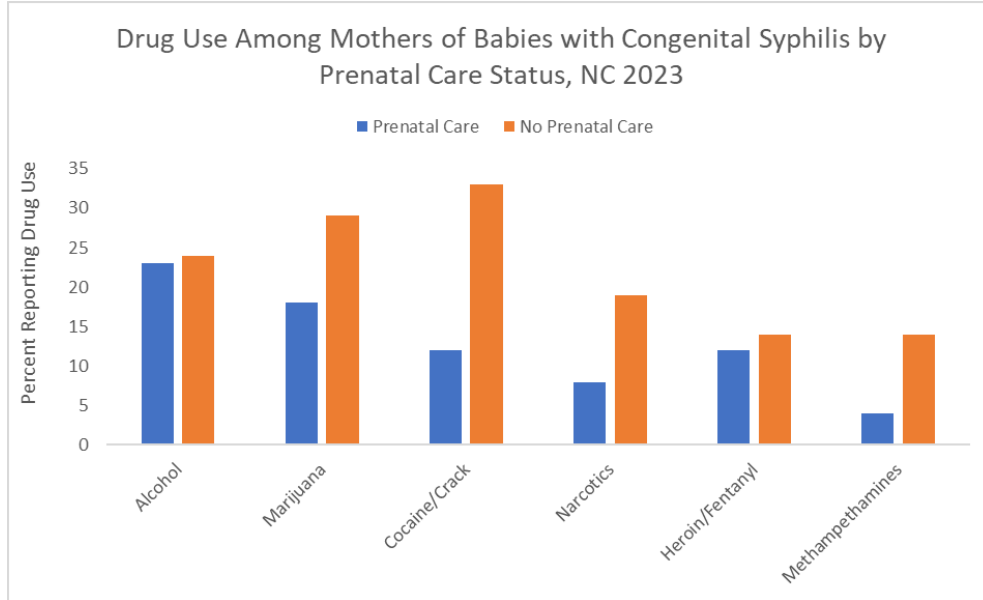
# Congenital syphilis is experienced across North Carolina



### Contributing Factors in 2023:

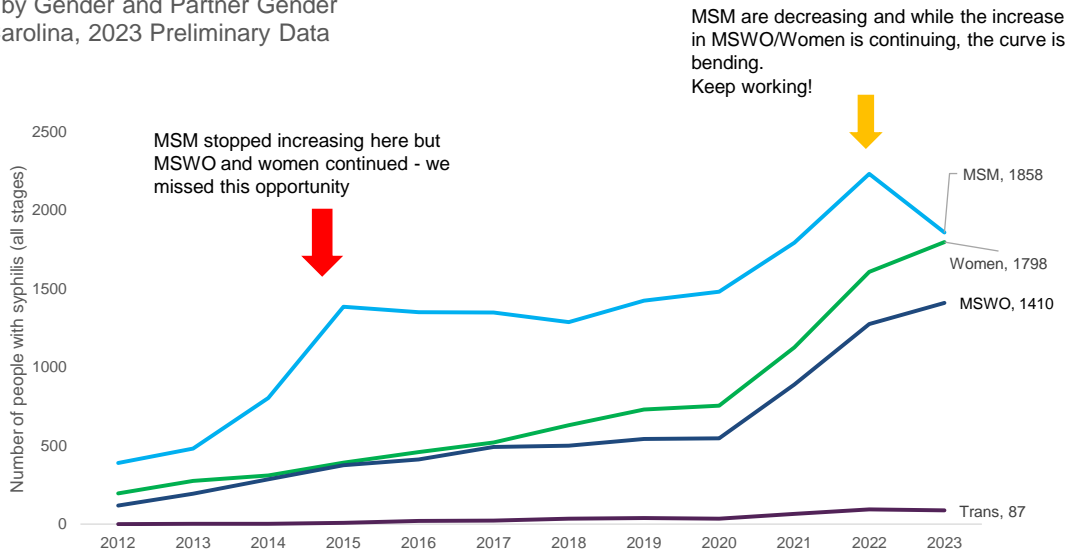
- 90% of CS mothers were asymptomatic at time of diagnosis
- 30% of women with babies with congenital syphilis had no prenatal care
- Of women who accessed prenatal care; 55% started prenatal care late (in the 2nd or 3rd trimester).
- Reported substance use is associated with lack of prenatal care

## Substance Use and Prenatal care



13

## Syphilis by Gender and Partner Gender North Carolina, 2023 Preliminary Data



Not shown: Men with unknown partner gender (23% of total men)

14

# Congenital syphilis is preventable

Women should be tested three times during pregnancy

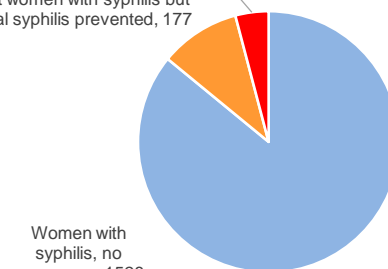
By testing and treating, we prevented 71% of congenital syphilis cases in 2023



Women with Syphilis, North Carolina 2023 preliminary

Pregnant women with syphilis but congenital syphilis prevented, 177

Congenital syphilis cases, 73



## Our approach

- **Know what's going on and understand barriers**
  - Quarterly case review
  - Calls with affected people
  - Conversation with providers
- **Make sure people know what's happening and what to do**
  - Public health alert to NC clinicians - November 9, 2023
  - New provider webpage with resources
  - Social and traditional media campaign (December 2023– June 2024)
- **Expand access to syphilis point of care testing**
  - Engaging clinics, CBOs, SSPs, other safety net venues
- **Use payer infrastructure to improve access to syphilis care**
  - Hosted SE Congenital Syphilis Payer Summit - October 17, 2023

<https://www.dph.ncdhhs.gov/epidemiology/communicable-disease/syphilis/congenital-syphilis-provider-resources>





**Is there something else we should be doing?**

## Congenital Syphilis: Legal Issues

# Working with Providers

- Syphilis can be diagnosed by many different providers
- Public health rule is enforceable for prenatal care providers
- We want ED providers and other non-prenatal care providers to know that they are also responsible for testing
  - Maybe not enforceable but worth talking about

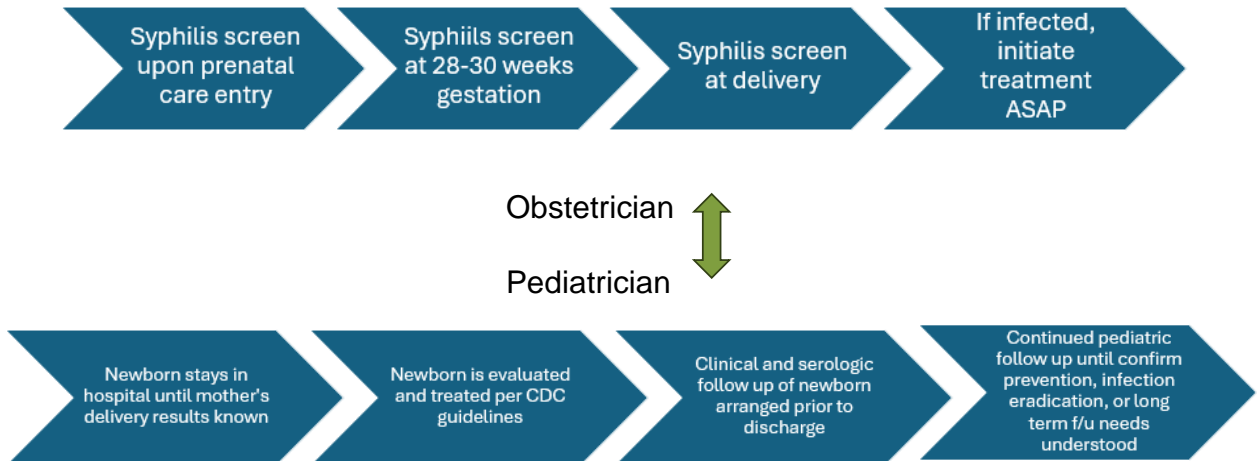
10 interviews with CS moms:

During this pregnancy, other than a prenatal care provider, where else did you go for any health care you needed? (check all that apply)

<span style="color: blue;">●</span> Emergency room	1
<span style="color: orange;">●</span> Urgent care	1
<span style="color: green;">●</span> Labor and delivery unit, but at a...	1
<span style="color: red;">●</span> General Practitioner	1
<span style="color: purple;">●</span> Infectious disease practitioner	0
<span style="color: brown;">●</span> Planned Parenthood	2
<span style="color: pink;">●</span> Local Health Department	1

19

## Provider Journey

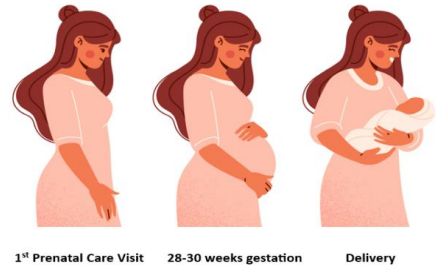


20

## Prior to delivery

- 10A NCAC 41A .0204 includes sexually transmitted disease control measures

(e) All pregnant women shall be tested for syphilis, chlamydia and gonorrhea at the first prenatal visit. All pregnant women shall be tested for syphilis between 28 and 30 weeks of gestation and at delivery.



Pregnant women 25 years of age and younger shall be tested for chlamydia and gonorrhea in the third trimester or at delivery if the woman was not tested in the third trimester.

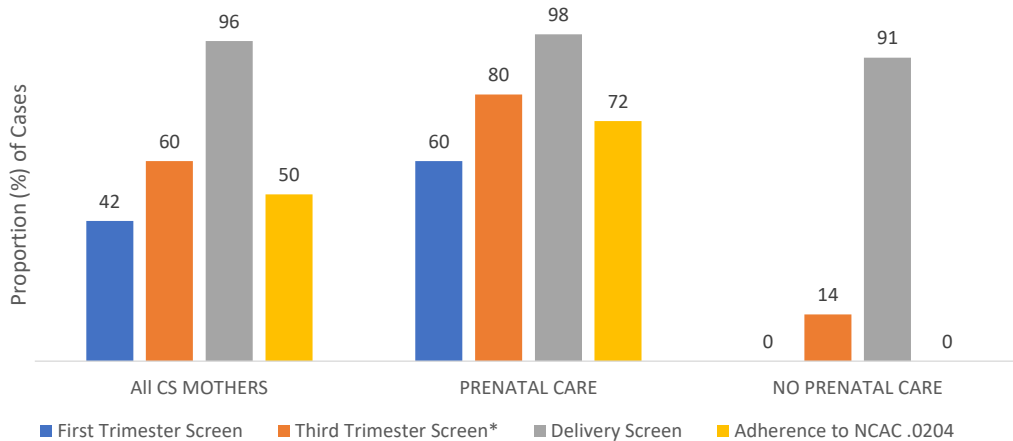
21

## At delivery

- Hospitals shall determine the syphilis serologic status of the mother prior to discharge of the newborn so that if necessary the newborn can be evaluated and treated as provided in 10A NCAC 41A .0204(c)(2).
- 10A NCAC 41A .0204(f) Any woman who delivers a stillborn infant shall be tested for syphilis.

22

## Syphilis Screening of CS Mothers During Pregnancy by Prenatal Care Status, NC 2023



Data Source: North Carolina Electronic Disease Surveillance System (NC EDSS) (data as of January 25, 2024).

23

## Why doesn't complete testing happen? Providers

Syphilis is rare

Focused on other testing and miss STIs

Testing recommendations are not uniform, and some recommend risk-based testing

Test once and trust a negative result

Entering prenatal care late makes it harder

In 2023, 14% of pregnant persons receiving prenatal care were not tested for syphilis at the first prenatal visit

Of people whose first prenatal visit wasn't until the third trimester, 50% were not tested



24

## Why doesn't complete testing happen? Pregnant people

- Pregnant person refuses testing or (more likely) just doesn't get the test done
  - Separate testing sites can be a barrier
  - Many providers don't stock bicillin so the parent has to go elsewhere
  - Does the person have support for accessing the testing or treatment?
- Parents who refuse testing of babies
  - Does the woman have support for baby testing and treatment?



25

## Partners

- Women can get reinfected during pregnancy

Persons infected with, exposed to, or reasonably suspected of being infected with syphilis, lymphogranuloma venereum, granuloma, and chancroid shall: (1) Refrain from sexual intercourse until examined and diagnosed and treatment is completed, and all lesions are healed; (2) Be tested, treated, and re-evaluated in accordance with the STD Treatment Guidelines published by the U.S. Public Health Service. 10A NCAC 41A .0204(b).

26

# What to do??

- Options

- Non-legal

- Prevent with education
    - Letter to provider

- Legal

- LHD Director issues an order to comply with control measures
    - Get a judge to order compliance (civil) (G.S. 130A-18)
    - Charge provider with misdemeanor via DA (G.S. 130A-25)
    - Report physician to medical board for failures related to practice standards

27

## Using Identified Cases to Engage Providers

Ensure providers are aware of NC Public Health Code requiring testing 3x during pregnancy

Consider a formal letter from your LHD ± DHHS to all providers in jurisdiction (quarterly?) with CS update

Letter can be co-signed by NC DPH and LHD



NC DEPARTMENT OF  
**HEALTH AND  
HUMAN SERVICES**

ROY COOPER • Governor  
KODY H. KINSLEY • Secretary  
MARK BENTON • Deputy Secretary for Health  
SUSAN KANSAGRA MD, MBA • Assistant Secretary for Public Health  
Division of Public Health

Dear Provider,

The North Carolina Department of Health and Human Services, Division of Public Health (NC DHHS/DPH) has recently identified a pregnant person who delivered a newborn with congenital syphilis in your region.

Over the last decade, North Carolina has experienced a 9-fold increase in reported syphilis infections among women and a 72-fold increase in reported congenital syphilis infections. In an effort to raise awareness, NC DHHS/DPH is sending a courtesy notice to all health care providers who provide clinical services to persons of reproductive age in your jurisdiction. Please consider using this case as an opportunity to review syphilis incidence, diagnosis, and treatment with your team.

As a reminder, North Carolina requires all pregnant persons to be screened for syphilis at least 3 times in pregnancy [10A NCAC 41A .0204.pdf \(state.nc.us\)](#):

- At the first prenatal care visit, AND
- Between 28-30 weeks gestation, AND
- At Delivery

Pregnant persons with suspected or confirmed syphilis should be initiated on treatment as soon as possible. Penicillin G is the only known effective antimicrobial for the treatment of fetal infection and the prevention of congenital syphilis. The appropriate treatment of syphilis during pregnancy depends on the stage of infection.

28



# Communicable Disease Law: Application to Congenital Syphilis

29

## Laws establishing control measures

### NORTH CAROLINA GENERAL STATUTES (G.S.)

G.S. 130A-144(g) authorizes the Commission for Public Health to adopt rules prescribing communicable disease control measures

### NORTH CAROLINA ADMINISTRATIVE CODE (N.C.A.C.)

10A NCAC 41A. 0204 establishes control measures for sexually transmitted infections

- Subpart (c): general control measures for syphilis, including general testing and treatment requirements
- Subpart (e): testing requirements for syphilis during pregnancy and at birth
- Subpart (f): testing for syphilis in the case of stillbirth

30

## Requirement to comply with control measure rules

---

All persons must comply with communicable disease control measures established by the Commission for Public Health

- G.S. 130A-144(f)

Law provides methods for enforcing rules when a person fails to comply

- G.S. 130A-25 (criminal)
- G.S. 130A-18 (civil)

Steps to take before pursuing enforcement

- Educate, persuade
- Health director may issue an order directing the person to comply

---

31

## Ordering compliance with control measures

---

Health director order to comply with communicable disease control measures

- Provides written notice & evidence that person was informed of control measures and their legal duty to comply

Isolation order (G.S. 130A-145)

- Under NC law, “isolation authority” means the authority to issue an order limiting the freedom of movement ***or freedom of action*** of a person known or reasonably suspected of being infected with a communicable disease.
- If used, must be limited to ordering compliance with the established control measures. 10A NCAC 41A .0201(d).
- **For syphilis, the control measures do not include physical isolation.**

---

32



# Enforcing communicable disease laws: Available public health remedies

## Injunction (G.S. 130A-18)

- A type of civil action that can be used to compel someone to comply with NC communicable disease laws & rules

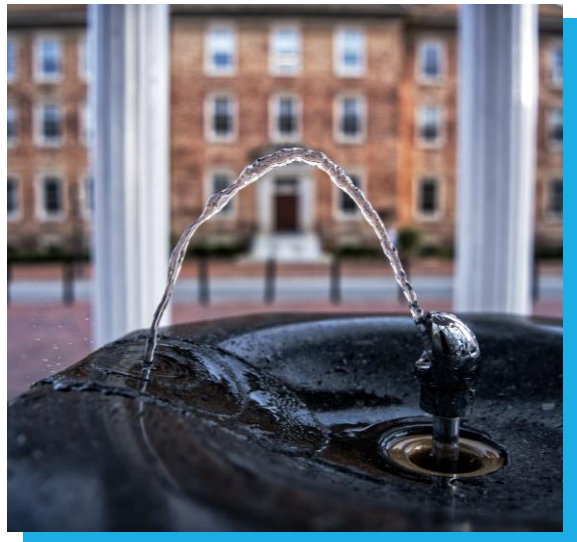
## Misdemeanor (G.S. 130A-25)

- A criminal misdemeanor charge can be brought against a person who fails to comply with NC communicable disease laws & rules
- If convicted, person may be sentenced for up to 2 years

33

### CONTACT INFORMATION

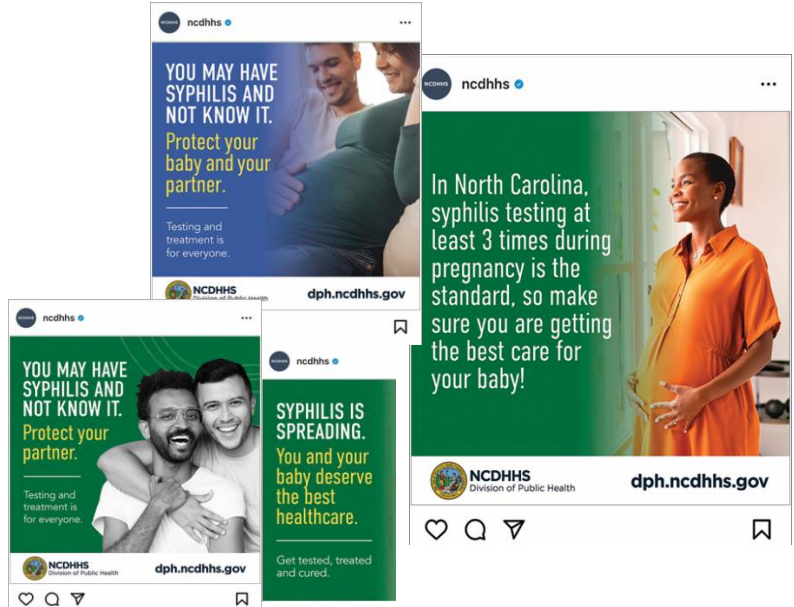
Jill Moore  
919.966.4442  
moore@sog.unc.edu



UNC SCHOOL OF GOVERNMENT

34

## Available materials



## Contact

Annual data available on our dashboard:

Search NC Communicable Disease Facts and Figures

[erika.samoff@dhhs.nc.gov](mailto:erika.samoff@dhhs.nc.gov)

[victoria.mobley@dhhs.nc.gov](mailto:victoria.mobley@dhhs.nc.gov)

