

# North Carolina Response to Syphilis 2010-2011

## HIGHLIGHTS

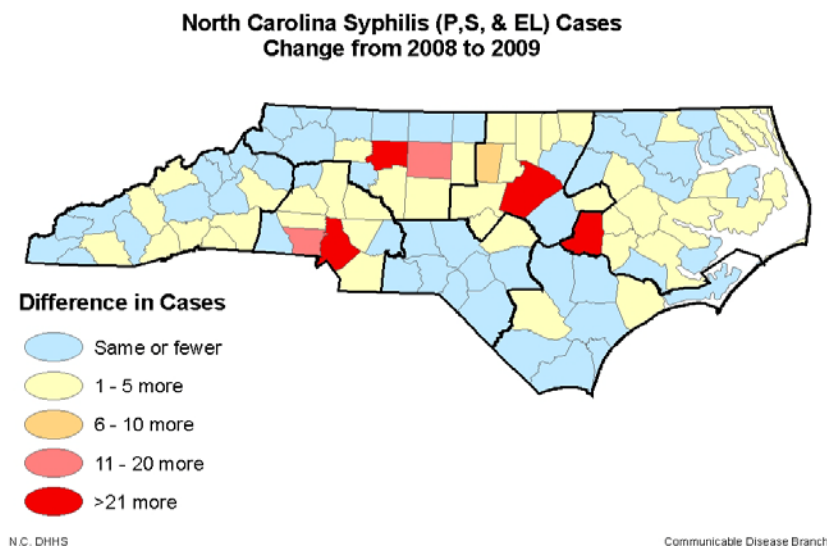
## **Problem Statement**

North Carolina is experiencing a sharp increase in syphilis. Nine hundred thirty seven (937) new cases of early syphilis (primary, secondary, and early latent) were reported in 2009. This was an 84 percent increase over the 509 cases reported in 2008. Because early syphilis is very infectious, it is critical to identify case patients early in their infections and intervene immediately with treatment, education, and cluster investigations.

In the urban counties, the epidemic is predominantly affecting males, suggesting transmission through men who have sex with men (MSM), but in Wayne County cases are evenly split between males and females. Overall, case patient ages were younger than have been seen historically in syphilis cases in North Carolina. The highest rates were in 20-24 year olds (44.8/100,000), followed by 25-29 year olds. Increases in morbidity were noted for almost all demographic groups, but were most prominent among Black males. Among all males, 45% were already infected with HIV when diagnosed with early syphilis.

Persons with ulcerative sexually transmitted diseases, like syphilis, are more likely to transmit HIV if they are positive, or to become infected with HIV if a sex partner is HIV positive. Thus, there is serious concern that this growing syphilis epidemic will also lead to increases in new HIV infections in the state.

The increase in syphilis in 2009 occurred throughout the state and included many counties that follow interstate highways 40 and 85 and several eastern counties. Forsyth, Mecklenburg, Wake, Guilford, Wayne and Durham counties each contributed at least 40 or more new early syphilis cases to the overall morbidity of the state. All of these counties except Durham had substantially more cases in 2009 compared to 2008; Forsyth County experienced a dramatic increase in syphilis cases—over four-fold. Other counties that experienced notable increases between 2008 and 2009 included Gaston, Edgecombe and Pitt counties. Other counties had more cases in 2009 compared to 2008, but none had large numbers of cases.



## **Epidemic Response**

### **Organization**

The Communicable Disease Branch (CDB) has created an Epidemic Response Team (ERT) composed of field staff, prevention, surveillance and epidemiology staff, the syphilis and HIV outbreak response staff, and Branch leadership. Additionally, NC DPH OMHHD has been invited to detail a staff member to the ERT. The team leader will rotate as necessary to maintain staff resilience in a sustained and intensive response. The Communicable Disease Director and State Epidemiologist will provide oversight as needed to this team.

### **Active Surveillance/Provider Awareness**

CDB has initiated a clinician education campaign to review the signs, symptoms and treatment for syphilis with frontline medical providers.

- CDB will send another alert letter to local health departments notifying them of the increase in syphilis and the impact of syphilis and HIV co-infection risks.
- Emergency Department (ED) Grand Rounds have been performed or scheduled in major hospitals featuring the HIV/STD Medical Director, Communicable Disease Director or local expert in STD treatment.
- Hospital-based Public Health Epidemiologists (PHEs) will be educated on syphilis and trained to provide a brief standard presentation to ED staff and other outpatient providers in the 10 largest hospital systems in the state.
- CDB will work with local health departments in the most highly affected counties to identify emergency rooms and/or urgent care centers that might encounter patients with STDs including HIV to provide them with an alert letter and treatment and referral information.
- State AIDS/STD Director and AIDS Care Unit will contact HIV clinics and providers with updated alert letters notifying them of the increase in syphilis and providing guidance to increase frequency of routine testing of HIV+ patients for syphilis at a minimum of a quarterly basis.

### **North Carolina MSM Task Force**

The North Carolina MSM (men who have sex with men) Task Force, comprised of many thought leaders from around the state, is being established in order to foster dialogue and effective partnership with the MSM community, currently at highest risk for syphilis and/or new HIV infection. The first meeting is scheduled for May 3, and will focus on:

- Developing strategies to reach the MSM population, because that's where we are seeing the largest increase in syphilis.
- Creating appropriate prevention messages, reinforcing early awareness of signs and symptoms, linkage to care, and risk reduction.
- Addressing issues of stigma and other social issues that may prevent someone from getting tested and treated.
- Developing an environment of a 'safe space' for this population to be able to express their feelings, concerns, and experiences particularly those that may be cause hesitancy to access care or affect risk behaviors.
- Planning for outreach, education and testing in non-traditional ways (meeting the people where they are).

## **Outbreak Targeted Testing Efforts**

CDB testing efforts need to be streamlined and focused in order to reach the highest risk individuals in this epidemic. While efforts in most counties will focus on reaching the MSM networks at highest risk for infection, careful monitoring of testing data is imperative. Historically, STD transmission in MSM can cross over into female populations, so outreach and testing efforts may need to be adjusted if the demographics of the epidemic change.

- CDB will use information learned in case interviews to identify testing sites most likely to yield new cases. For example, CDB staff is working with local health departments and community-based organizations (CBOs) to test in local clubs known to be popular among persons at risk for syphilis and HIV. These clubs go in and out of popularity with the target group, so it is important that CDB field staff and leadership maintain active communication with local health department and community-based testing sites.
- Testing efforts must be mobile and flexible to accommodate the needs of the population we are trying to reach.
- CDB and partners will continue to create communication that advertises and describes the multiple testing opportunities that people have in North Carolina to be tested for HIV and/or STDs.
  - In 2007, the CDB program received critical expansion funds from the General Assembly to provide integrated HIV and STD testing and referral programs to increase the growth of HBCU and community-based programs. These programs continue to serve as a solid foundation to enable us to reach people at highest risk of HIV and other STDs.
  - The GET REAL GET TESTED Campaign will continue to work with partners to broaden our message that sexually active adults and adolescents should be tested for HIV and STDs especially if they don't know their status or their partner's status.
  - The web site associated with this campaign helps people find testing locations nearest them.
  - Local community and technical colleges have expressed interest in providing students with HIV/STD education and screening opportunities.
  - Peer to Peer programs within many venues including college campuses will be supported
- Local health departments and CBOs in counties seeing higher numbers of syphilis cases are involved in choosing promising locations for testing high risk individuals.
- Currently, there are six specific Syphilis Elimination Programs in six counties across the state. The counties are Durham, Forsyth, Guilford, Mecklenburg, Robeson, and Wake.
- There are county jails in affected counties that are not conducting syphilis or HIV testing for a variety of reasons. One concern may be about the cost of treatment for identified cases. CDB and LHDs will meet with local jail officials in the most affected counties to identify obstacles and develop solutions.

## **Data Analysis**

CDB Surveillance Team and the Field Services staff perform weekly, monthly and quarterly analysis of syphilis and HIV surveillance reports and case investigation reports. These reports are also shared with field staff and CDB leadership. Additionally in-depth analysis will be performed on a monthly basis to track such factors as:

- Demographics
- Hierarchical risk factors
- Site of clinical care/diagnosis (e.g., ED, urgent care, LHD, private provider)

Additionally, CDB staff will analyze the following data to assess and monitor most efficient use of resources

- Results from large screening events
- Results from routine HIV and syphilis testing (e.g. jail screenings) by county
- Results from NTS testing (CBO testing)
- Results from cluster testing and outbreak targeted testing

Field staff will review cluster investigations with in-depth information from client interviews with the outbreak response coordinator on a regular basis

## **National Partners**

The Communicable Disease Branch is working with the CDC, receiving consultation and technical assistance on addressing the increase in syphilis from CDC's Syphilis Elimination and STD Disparities Unit and the STD Program and Training Branch. CDC SESDU has also referred CDB to organizations in other states that can provide "best practices". For example, CDB staff has contacted Dr. Bambi Gaddist, Director of the South Carolina HIV/AIDS Council, to request the opportunity to meet with her and some of her staff to learn about the outreach they have been doing with MSM in South Carolina. We have also been participating in a national workgroup that discusses and shares best practices with regard to using the internet to perform partner investigations or other education strategies. The CDB is also actively working with HIV/STD experts at UNC, Duke and Wake Forest Universities. We are also working actively with the CDC STD Program and Training Branch to participate in a webinar with other southern states also experiencing dramatic increases in early syphilis and increased HIV/syphilis co-infection. The purpose of the multi-state call is to share experiences, encourage collaboration and share best practices.