

Combating the Rising Syphilis Epidemic Through Local and State Leadership

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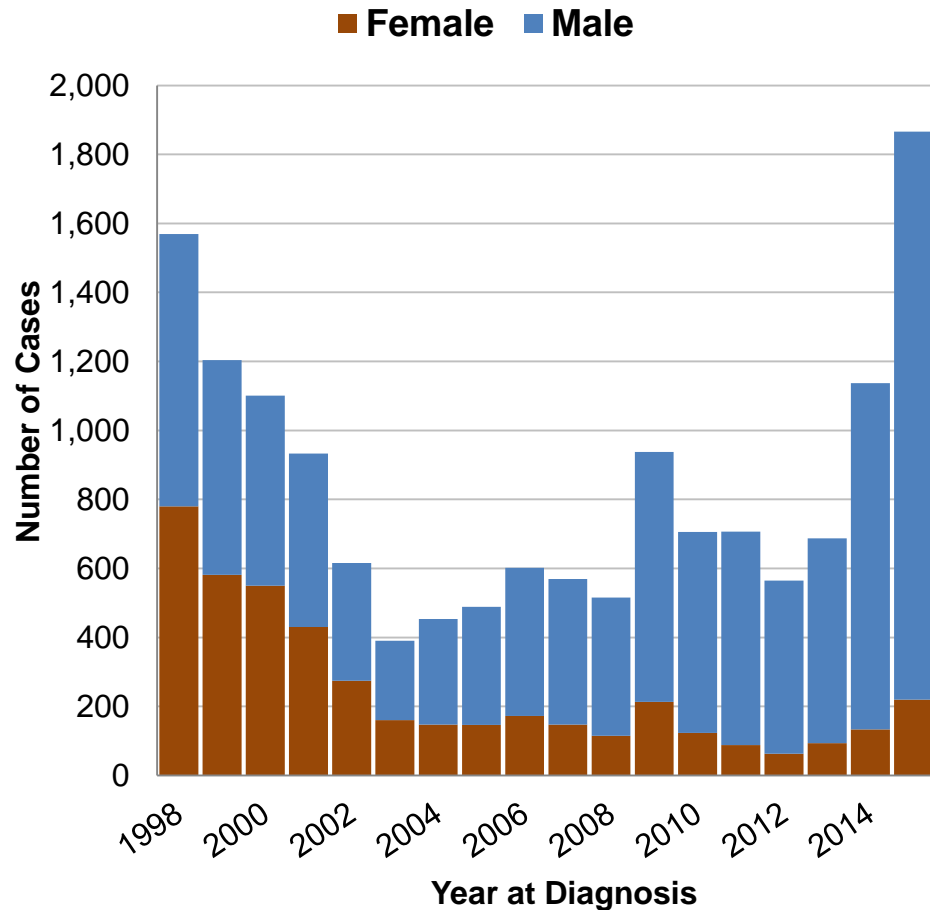
Cabarrus County

CDC Public Health Associate

Acknowledgements

- NC Local Health Departments
- Community Based Organizations
- State and County DIS
- Community Hospitals and Providers
- UNC AIDS Training and Education Center (NC ATEC)
- TATP nurses
- CDB/DPH staff

Why is syphilis prevention & control important?



- Continually evolving epidemic
- During non-outbreak times syphilis is forgotten
- Individual and public health consequences are severe
- Appropriate control programs require a village

Steps for addressing the epidemic

- Understand the epidemic
- Identify how well current prevention and control efforts are working
- Identify achievable goals
- Develop action steps to achieve those goals

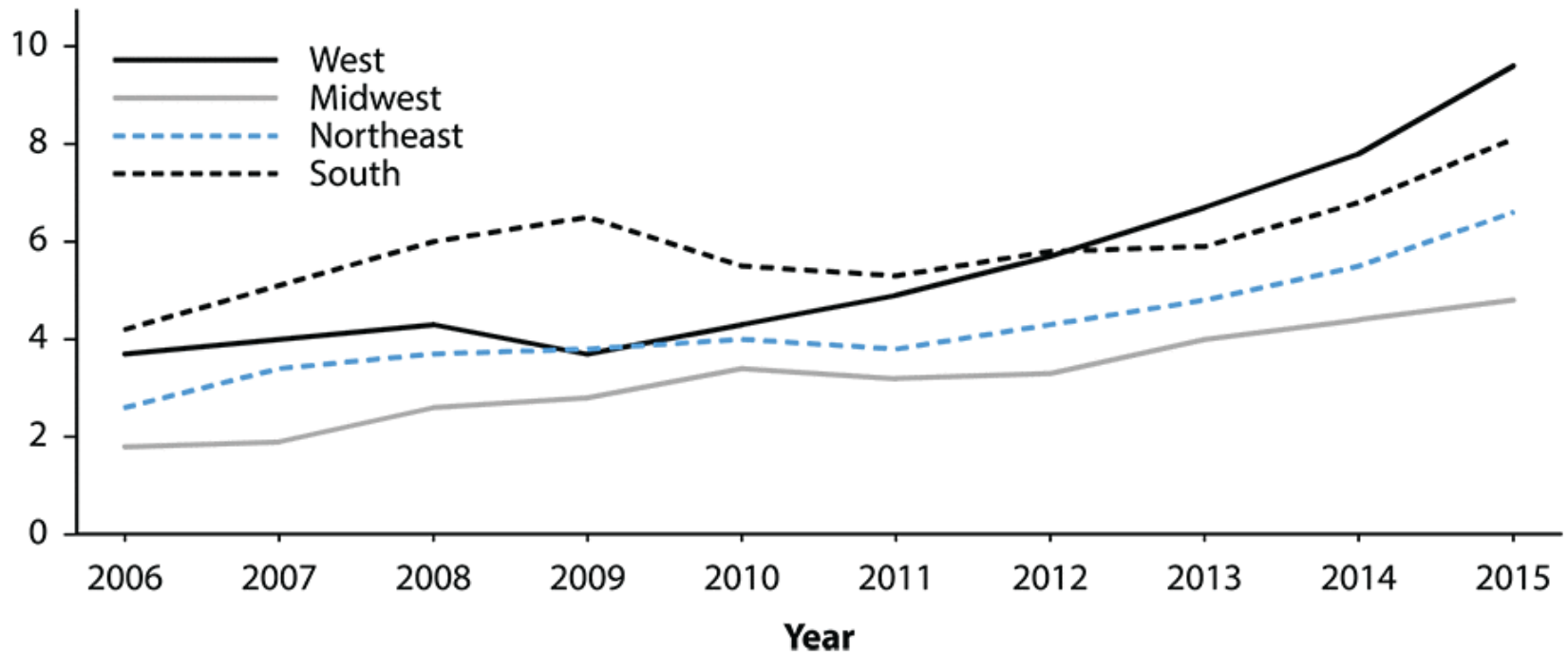
How many cases do we have, and among who?

SYPHILIS INCREASE IN NORTH CAROLINA, 2010-2016

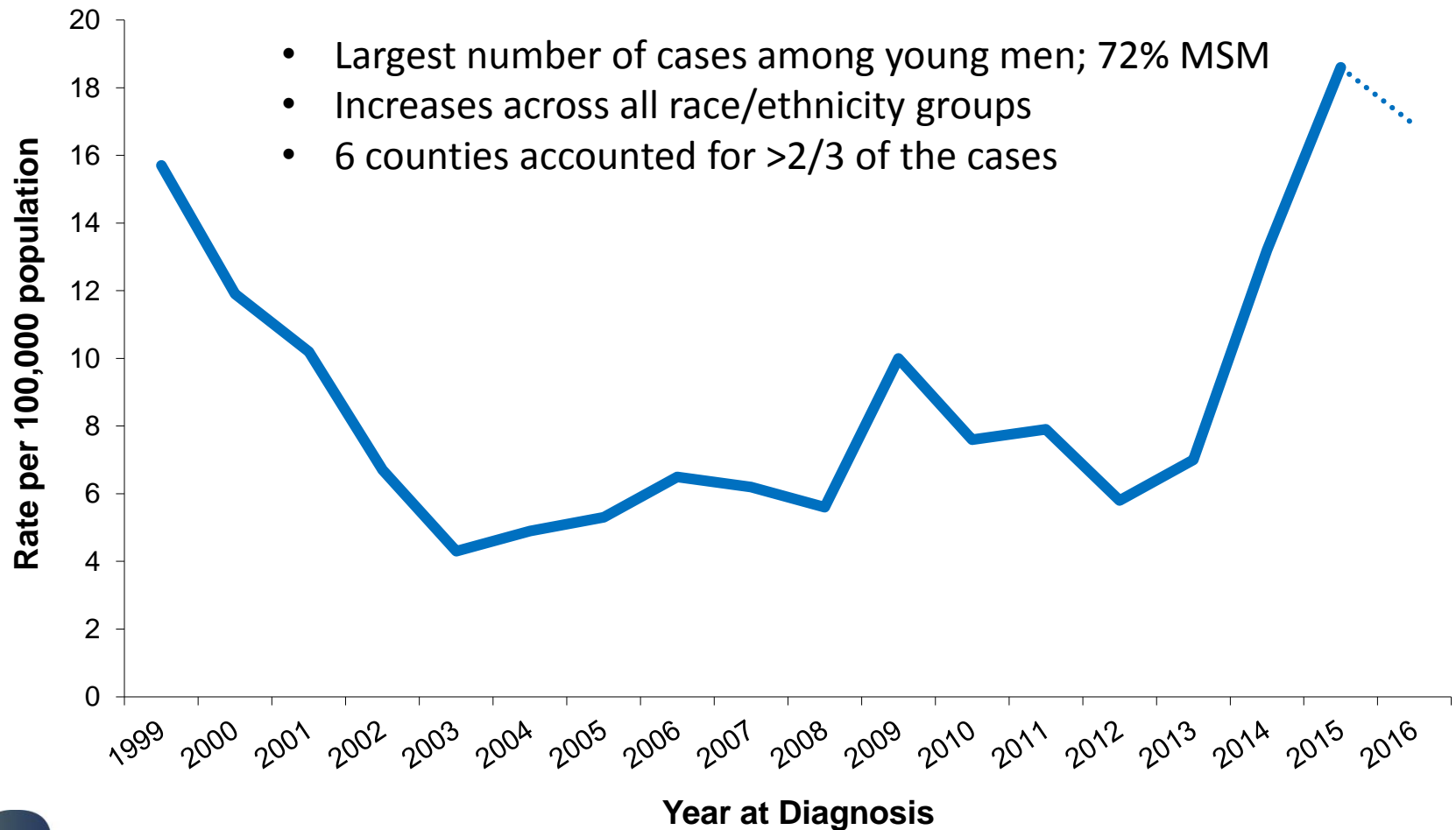
National increase

Primary and Secondary Syphilis — Rates of Reported Cases by Region, United States, 2006–2015

Rate (per 100,000 population)



Primary, Secondary, and Early Latent Syphilis Rates, North Carolina, 1999-2016 (*preliminary*) data



Data Source: North Carolina Electronic Disease Surveillance System (NC EDSS)
(data as of June 1, 2016).

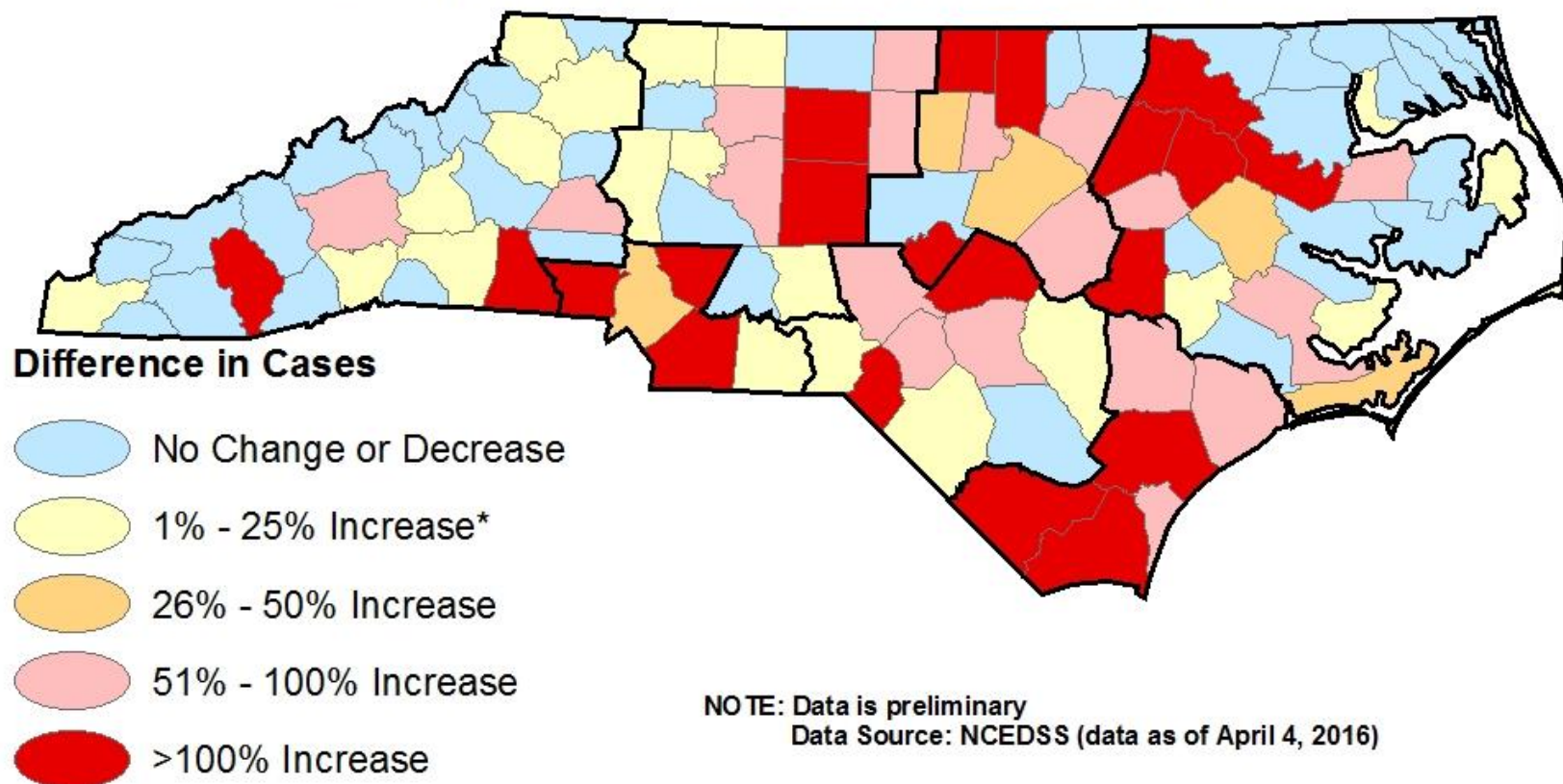
HIV/STD Surveillance Unit

North Carolina Early Syphilis Cases

Percent Change from 2014 (N=1121) to 2015 (N=1864) (66% Increase)

Jan. 1 through Dec. 31 by Date of Diagnosis

This is preliminary data and is subject to revision at any time.



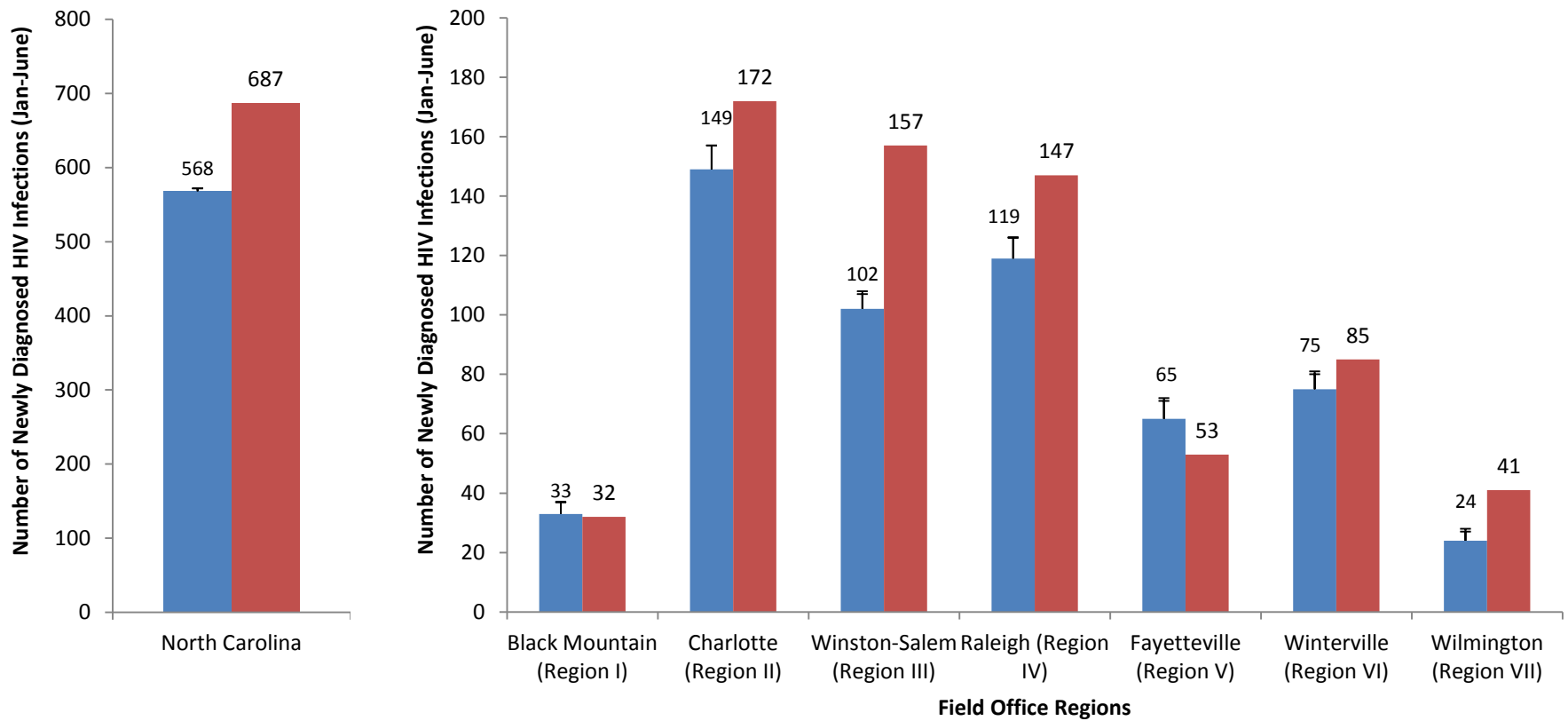
* Counties with 0 in previous year and increase cases are included in 1% -25% category

49% of men with syphilis also have HIV
Should we expect an increase in HIV?

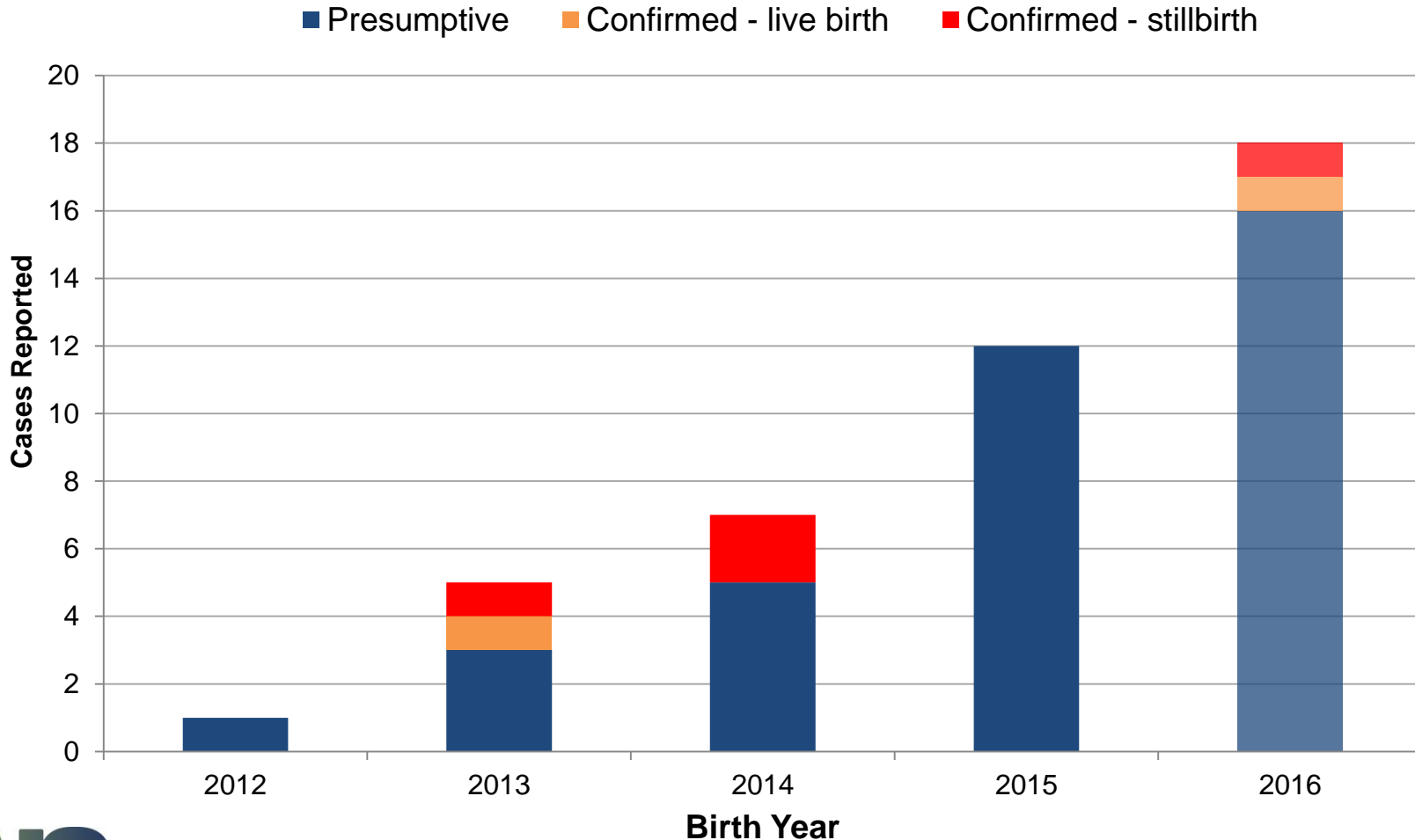
HIV appears to be increasing in 2016

New HIV diagnoses, Jan-July 2016 preliminary data

■ Jan-July Average (2013-2015) ■ Jan-July 2016



Congenital Syphilis, Cases by Birth Year North Carolina, 2006-2016 preliminary data



Data Source: Sexually Transmitted Disease Management Information System (STD*MIS) and North Carolina Electronic Disease Surveillance System (NC EDSS) (data as of January 17, 2016).

HIV/STD Surveillance Unit

Steps for addressing the epidemic

- Understand the epidemic
- Identify how well current prevention and control efforts are working
- Identify achievable goals
- Develop action steps to achieve those goals

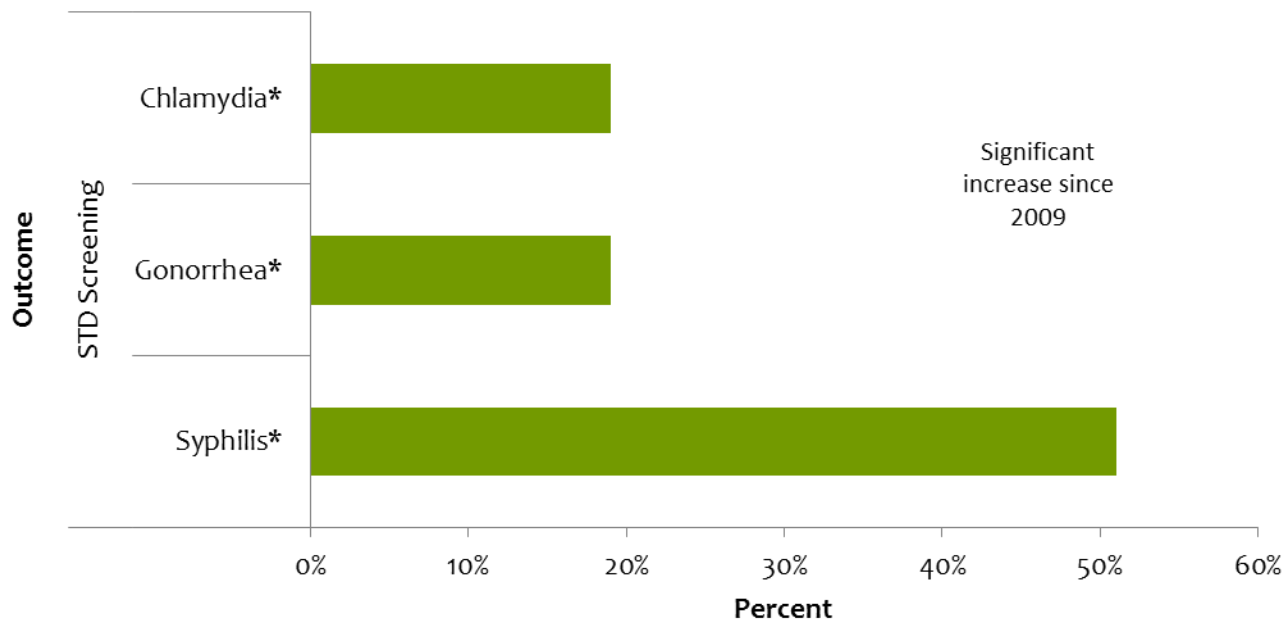
Screening for syphilis among sexually active people with HIV

Screening is most important among GBMSM and women of childbearing age

Medical Monitoring Project
Sexually active people with HIV who are in care
NC, 2014

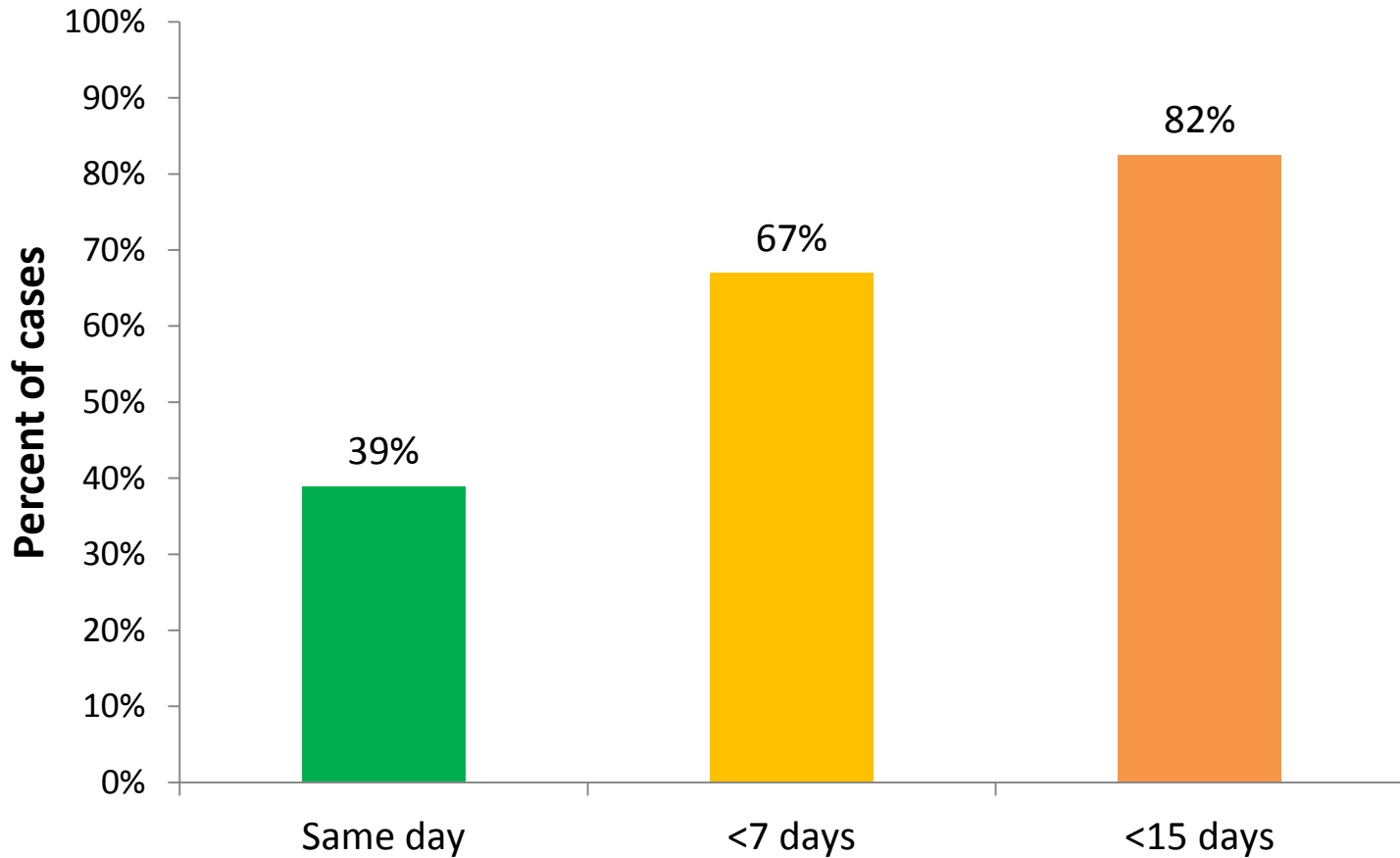
Ryan White Providers:

61%
screened for syphilis
in past year



Time to syphilis treatment, North Carolina, 2015

Total Early Syphilis



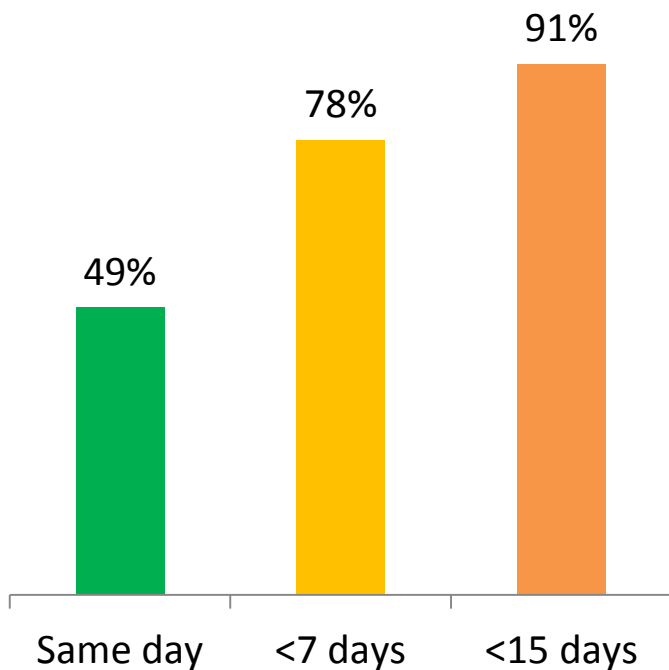
*Early Syphilis=Primary, Secondary and Early Latent Syphilis

*P&S Syphilis=Primary & Secondary Syphilis Only

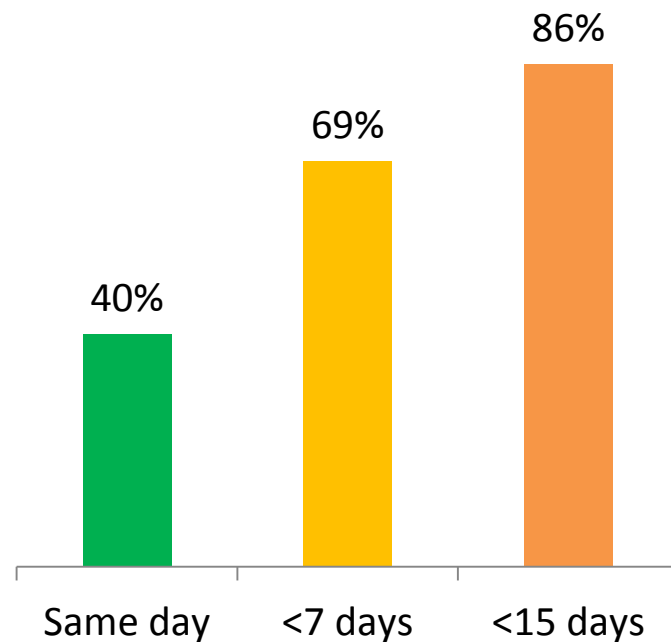
Time to syphilis treatment, North Carolina, 2015

Primary and secondary syphilis

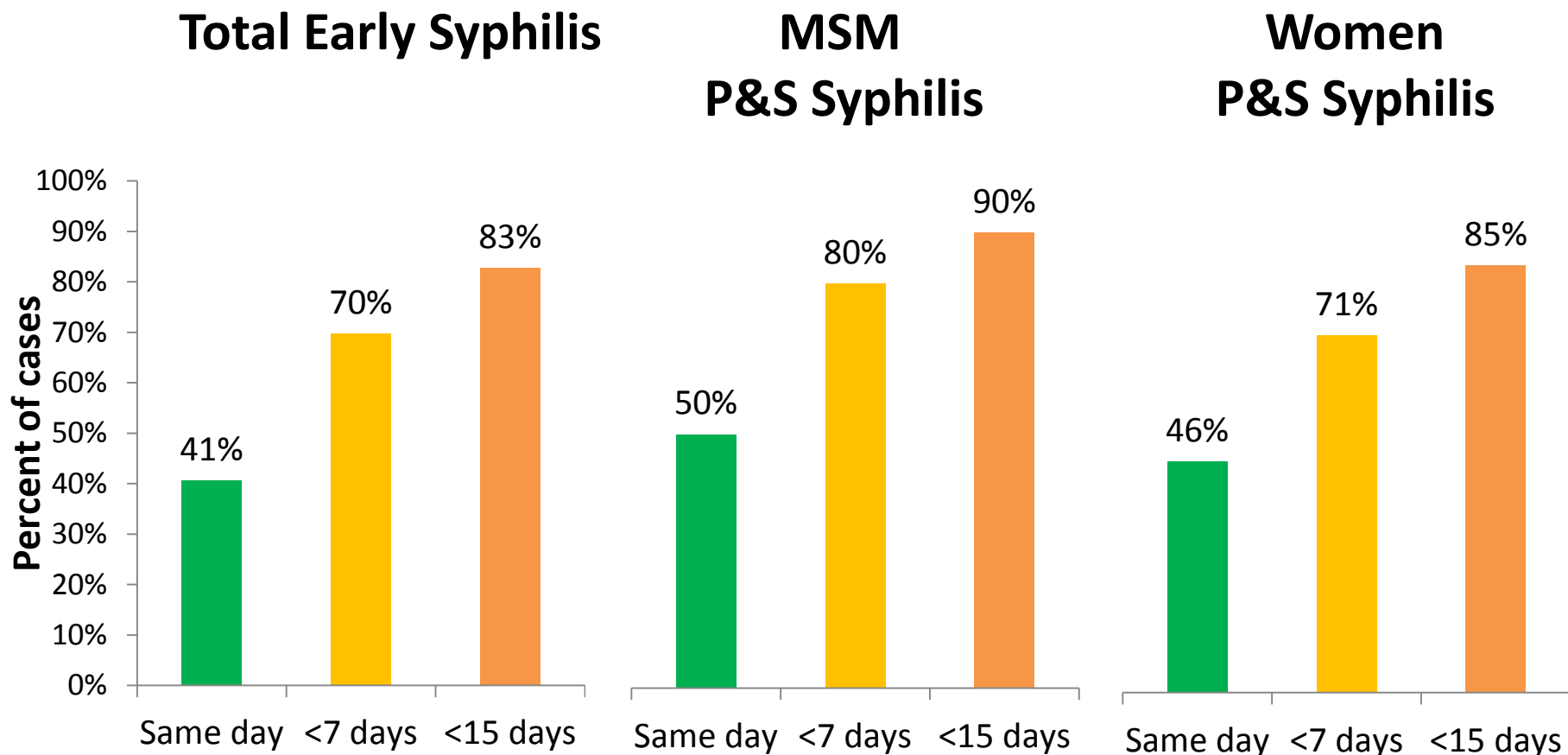
Gay, bisexual, and other MSM



Women



Time to syphilis treatment, 6 highest morbidity counties*, 2015

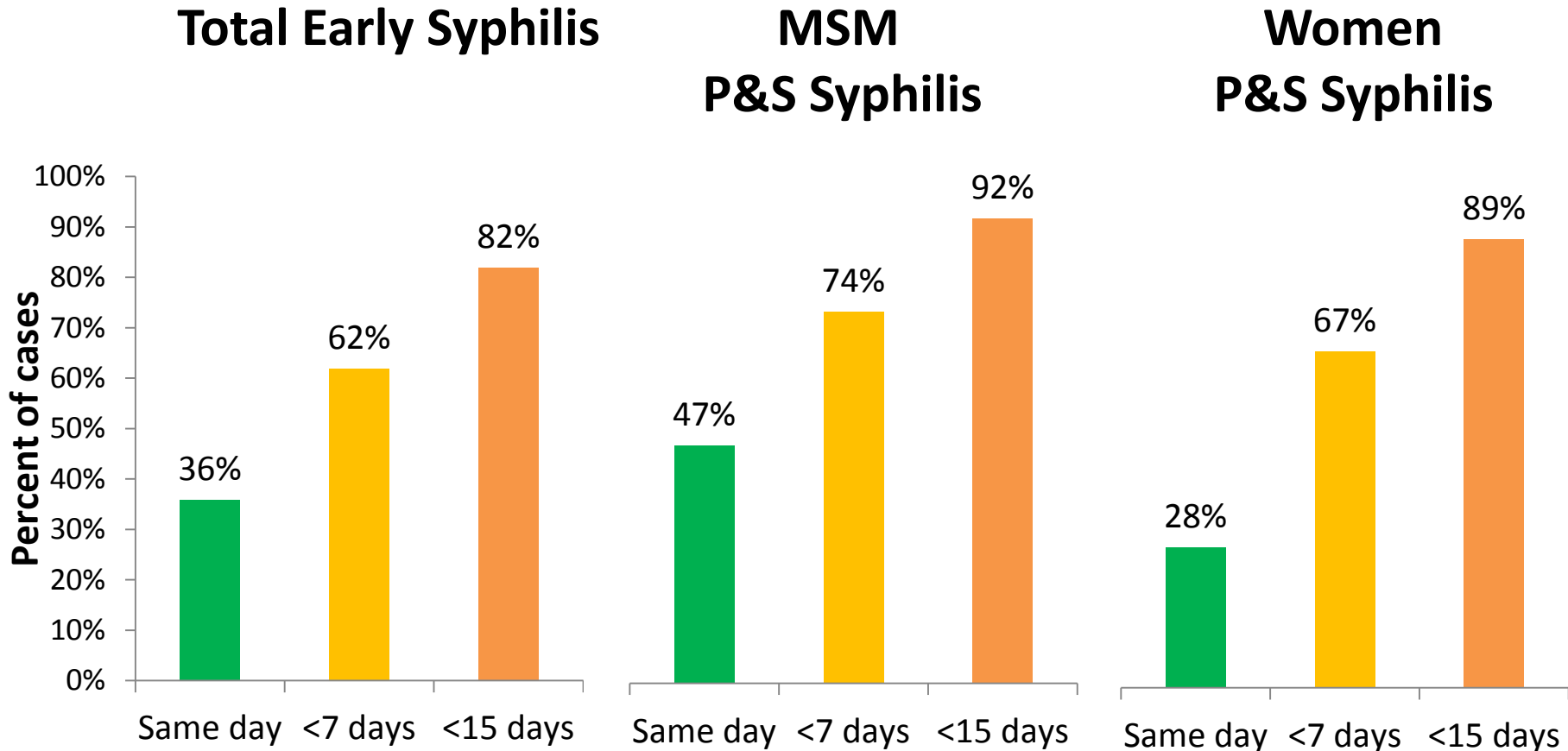


*Cumberland, Durham, Forsyth, Guilford, Mecklenburg, Wake Counties

*Early Syphilis=Primary, Secondary and Early Latent Syphilis

*P&S Syphilis=Primary & Secondary Syphilis Only

Time to syphilis treatment, 94 lower morbidity counties*, 2015



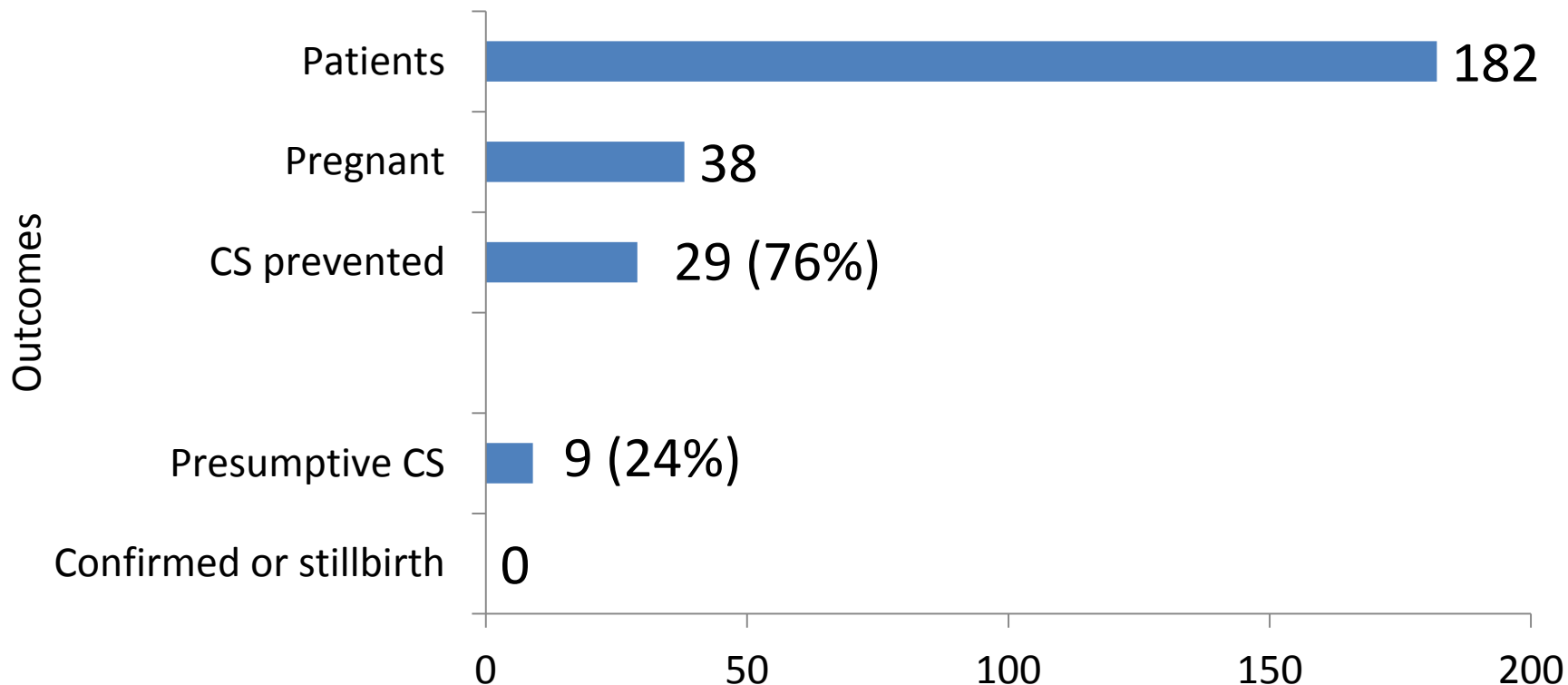
*All counties except Cumberland, Durham, Forsyth, Guilford, Mecklenburg, Wake Counties

*Early Syphilis=Primary, Secondary and Early Latent Syphilis

*P&S Syphilis=Primary & Secondary Syphilis Only

Pregnancy and treatment among syphilis patients

Female syphilis patients, NC, Jan-June 2016



DIS Partner Services Data, 2016

- 98% of assigned cases were located and interviewed
 - 86% of cases were interviewed \leq 14 days after assignment
- 76% of partners were located & brought to care
 - 60% of partners were located & brought to care \leq 14 days

Steps for addressing the epidemic

- Understand the epidemic
- Identify how well current prevention and control efforts are working
- Identify achievable goals
 - Increase community awareness and screening
 - Prevent congenital syphilis
 - Reduce disease-associated morbidity
- Develop action steps to achieve those goals


Steps for addressing the epidemic

- Understand the epidemic
- Identify how well current prevention and control efforts are working
- Identify achievable goals
 - Increase community awareness and screening
 - Prevent congenital syphilis
 - Reduce disease-associated morbidity
- **Develop action steps to achieve those goals**

CDB action steps to achieve goals

Increase awareness through communications with LHDs, CBOs, providers and the community

Provider Memos



NC
Public Health
HEALTH AND HUMAN SERVICES

RICHARD O. BRAJER
Secretary

DANIEL STALEY
Director, Division of Public Health

October 3, 2016

Public Health Advisory

TO: North Carolina Medical Providers

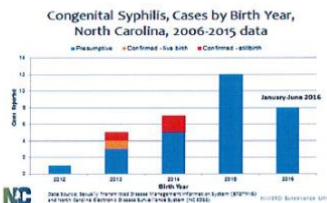
FROM: Victoria Mobley, MD MPH *VM*
Medical Director, HIV/STD Program

SUBJECT: Statewide Increase in Congenital Syphilis Infections

Congenital syphilis infections have been increasing in North Carolina since 2013. Between January and June of 2016, there have been 8 reported congenital syphilis cases in the state which is a 33% increase compared to the same time period in 2015.

Congenital syphilis occurs when a pregnant woman infected with syphilis transmits the infection to her unborn child. Untreated, congenital syphilis can result in devastating health consequences for the infant including birth defects, blindness, hearing loss, premature birth and low birth weight. Additionally, pregnant women infected with syphilis are at increased risk for miscarriage, stillbirth, and infant death (<http://www.cdc.gov/std/syphilis/stdfact-congenital-syphilis.htm>).


Congenital syphilis is preventable. But preventing it requires appropriate syphilis screening during pregnancy. The majority of congenital syphilis cases reported in NC since January 1, 2016 have been among infants born to mothers who acquired the infection during their pregnancy, often after having screened negative for syphilis during their first trimester.



Congenital Syphilis, Cases by Birth Year, North Carolina, 2006-2015 data

WE ASK PROVIDERS TO REVIEW AND FOLLOW THE BELOW ACTION STEPS:

Fact Sheets



NC
Public Health
HEALTH AND HUMAN SERVICES

Want More Information?

HIV/STD Facts and Figures website:
<http://epi.publichealth.nc.gov/cd/stds/figures.html>

Centers for Disease Control and Prevention (CDC) Fact Sheet on Syphilis:
<http://www.cdc.gov/std/syphilis/stdfact-syphilis.htm>

Contact Us

North Carolina DHHS
Communicable Disease Branch

Phone:
(919) 733-3419

Mailing Address:
Communicable Disease Branch
Epidemiology Section
1902 Mail Service Center
Raleigh NC 27699-1902

State of North Carolina • Pat McCrory, Governor
Department of Health and Human Services • Richard O. Brajer, Secretary
Division of Public Health • Randall W. Williams, M.D., State Health Director
HIV/STD Surveillance Unit • Erika Samoff, MPH, PhD

www.ncdhhs.gov • www.publichealthnc.gov

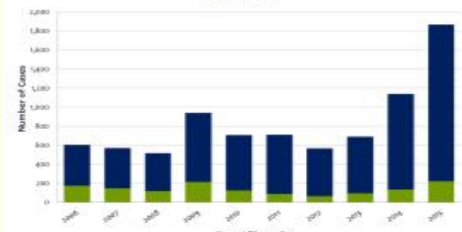
N.C. DHHS is an equal opportunity employer and provider.

Created by the HIV/STD Surveillance Unit
08/29/2016

Syphilis Infections in North Carolina Reported Syphilis Case Data, 2015

Reported syphilis infections have increased rapidly over the past few years.

Syphilis Infections by Gender and Diagnosed Year
2006-2015




Year of Diagnosis


In 2015:

- 1,866 early syphilis (primary, secondary, and early latent) infections were diagnosed in North Carolina. This is a 64% increase from 2014, where only 1,137 early syphilis infections reported.
- Severe clinical outcomes are being seen (see page 2).


Syphilis is increasing in many different groups. The majority of cases are among men, many of whom have HIV.



58% of new infections in men were in young men (10 years or younger)




54% of new infections were among Black/African American men



43% of infections in men were in men with HIV

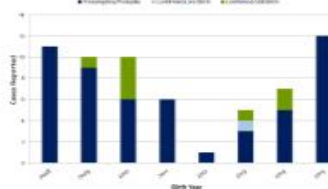
Syphilis among women and infants (congenital syphilis) is increasing.

Syphilis Rates among Women, 2012-2015



2012 rate: 1.3 per 100,000 population
2013 rate: 1.9 per 100,000 population
2014 rate: 2.7 per 100,000 population
2015 rate: 4.3 per 100,000 population

Congenital Syphilis Cases by Birth Year
2008-2015



CDB action steps to achieve goals

Provided new tools to assist LHDs understand county specific morbidity and identify gaps in service delivery

North Carolina Electronic Disease Surveillance System

Workflow Queues

Workflow Queues (Hide empty workflows)

Workflow Queue	Total Count (Assigned to me)
G.4 HIV/AIDS/Syphilis Specific Workflows: Acknowledgement	
330. LHD Acknowledgement of Syphilis Events: Initial Staging	335 (0)
335. LHD Acknowledgement of Syphilis Events: Re-Staged	21 (0)

North Carolina Electronic Disease Surveillance System

Maven Reporting

Maven Reporting

Category: Custom Reports

Select Report:

Run Report

- JM GDC
- Laboratory Report by Reporting Laboratory
- LHD Demographic Distribution CD
- LHD Demographic Distribution STD
- LHD Demographic Distribution STD line list
- LHD Demographic Distribution VPD
- LHD Syphilis Case & Risk Report
- LHD Syphilis Test & Treatment Report
- LTBI additional fields line list Tara

CDB action steps to achieve goals

Evolve outreach and partner notification practices to better address the dynamics of the epidemic

- Apps:
 - Post public health messages
 - Partner notification
- Social media:
 - Tweets and Facebook presence

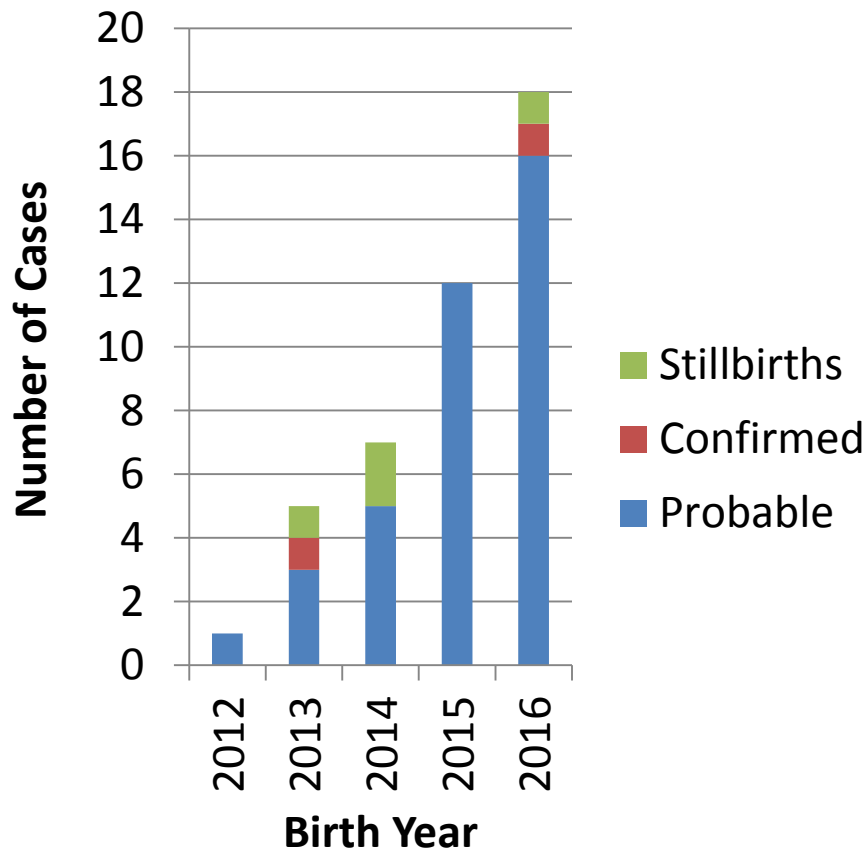
Top 10 Websites reported by syphilis patients, 2013-2015

- *Adam4Adam, 10%*
- *Jack'd, 8%*
- *Grindr, 7%*
- *Facebook, 4%*
- *BGC, 3%*
- *Instagram, 2%*
- *Craigslist, 2%*
- *Tagged, 1%*
- *Scruff, 1%*
- *KIK, 1%*

CDB action steps to achieve goals

Identify health care practices that have contributed to the rise in congenital syphilis infections

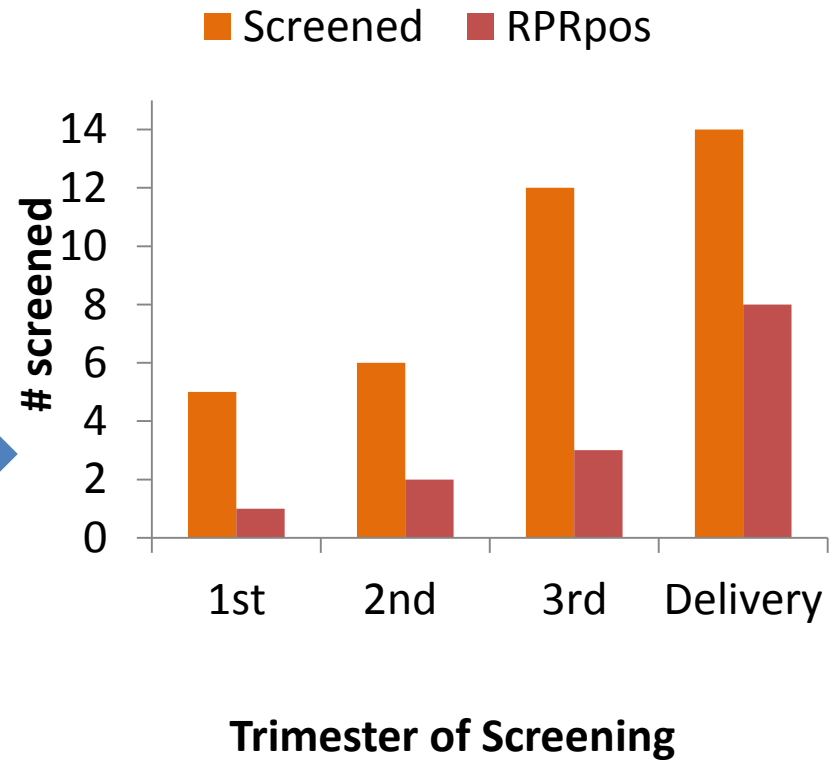
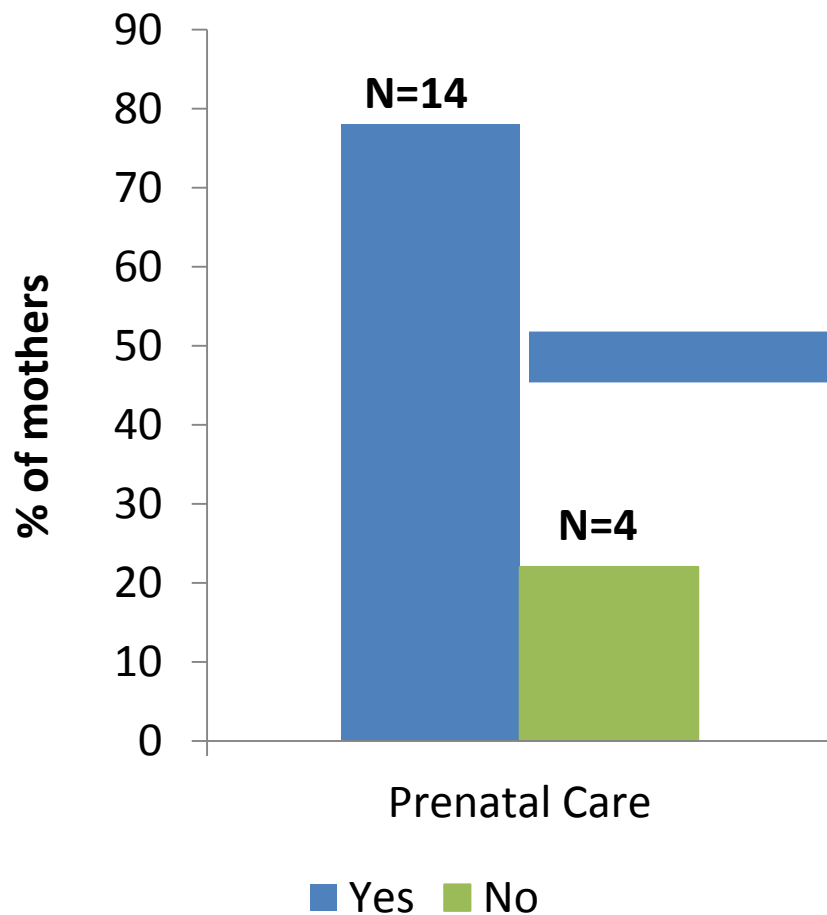
Rising Congenital Syphilis Cases



- 10A NCAC 41A .0204 requires that all pregnant women be tested for syphilis:
 - first prenatal visit
 - between 28-30 weeks gestation
 - at delivery
- Implemented a quarterly congenital syphilis review panel
 - Identify where we could have intervened

Results of 2016 quarterly syphilis case review

- first prenatal visit
- between 28-30 weeks gestation
- at delivery



CDB action steps to achieve goals

Support efforts aimed at preventing severe sequelae
from untreated disease

- Ocular syphilis
 - Provider memo, sponsored webinar for LHDs and CBOs, Press release and tweets
 - Participated in CDC-sponsored ocular syphilis case review –results were published as CDC MMWR, November 2016
- HIV infection
 - 52% of males diagnosed with early syphilis in 2015 were not know to be HIV positive at that time
 - Only 66% were HIV-tested at the time of syphilis diagnosis
- Refer all HIV negative patients diagnosed with syphilis to a Pre-Exposure Prophylaxis (PrEP) provider

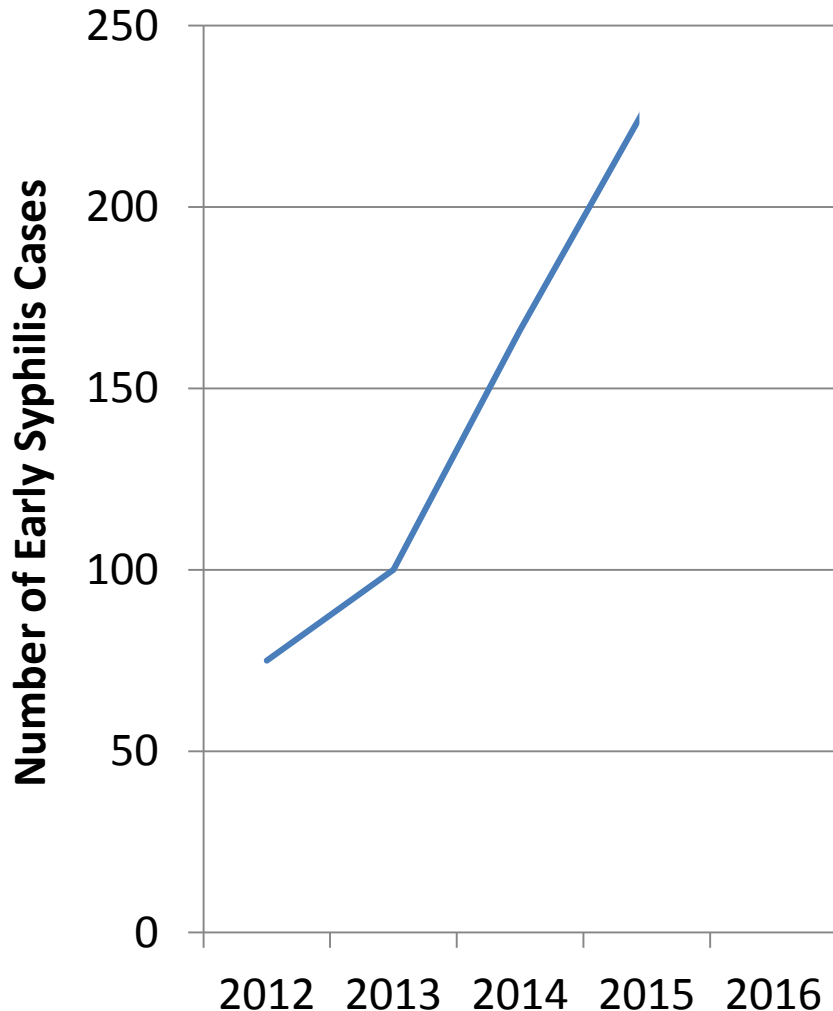
CDB action steps to achieve goals

Convene a planning meeting to bring the 6 highest morbidity counties together

- In October 2016, a 1-day syphilis summit was convened in Raleigh
 - LHD staff
 - Community Based Organizations
 - State and County Disease Intervention Specialists
 - CDB staff
- Goals were to:
 - Bring key stakeholders to the table
 - Identify county-wide resources
 - Develop county specific action steps

Wake County early syphilis numbers

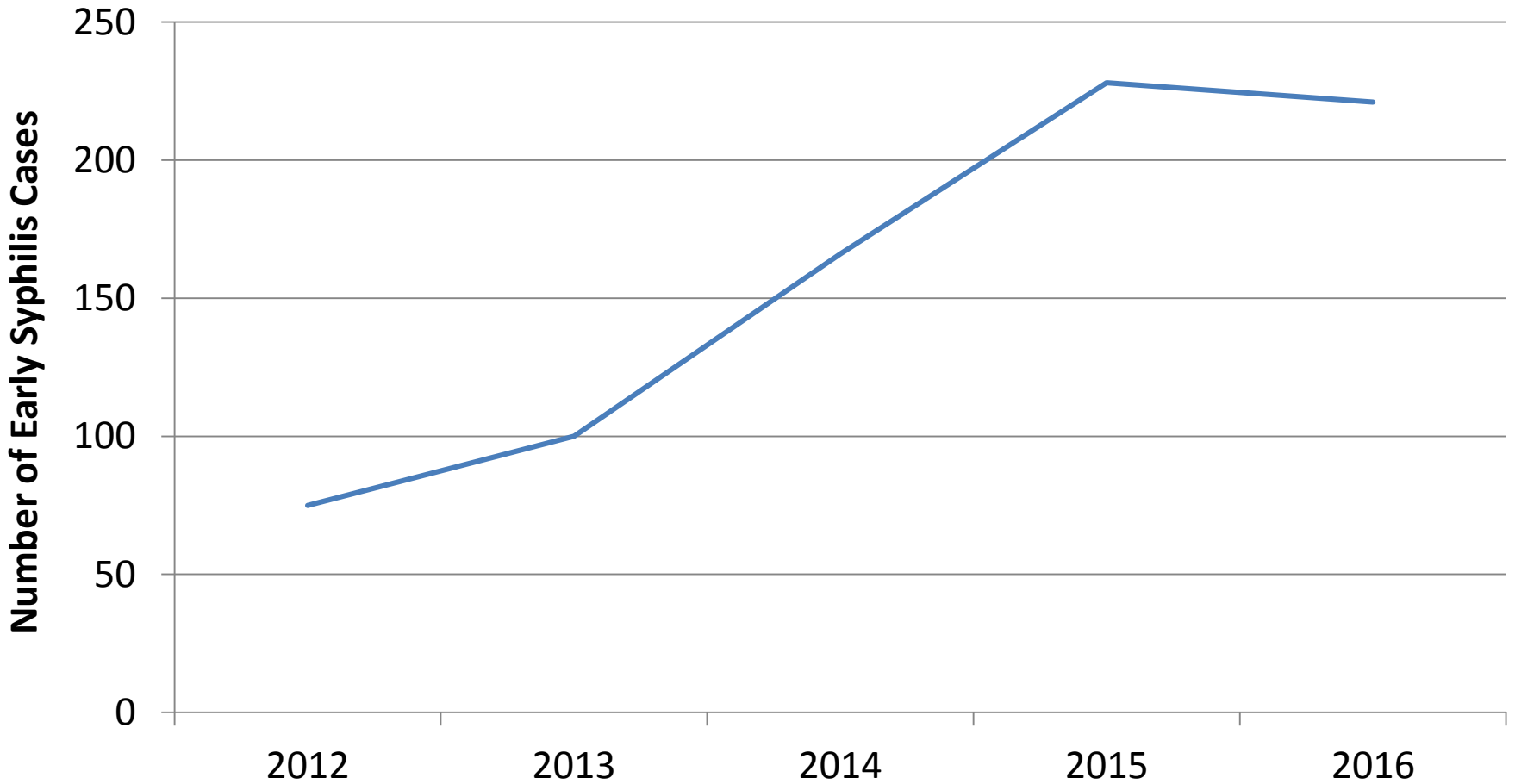
Jan 1 through Nov 30, 2012-2016



- Enhanced quantitative and qualitative surveillance (Co-morbidity trends, interviews with clients)
- Enhanced Outreach Testing Efforts - (Jails, LGBT Center, Universities)
- Media Outreach multiple venues (press/ social/ you tube, TV)
- CME Training opportunities for external providers and provided free reference book for STDs
- Partnered with local and state DIS, including have a DIS RN provide treatment and follow up at the LGBT center
- Provide clinical PrEP services

Wake county early syphilis numbers

Jan 1 through Nov 30, 2012-2016



PrEP Implementation: Local Health Departments

Whitney Schwalm

CDC Public Health Associate - HIV & STDs,
Communicable Disease Department



CABARRUS
HEALTH
ALLIANCE

The Public Health Authority of Cabarrus County

Cabarrus Health Alliance (CHA) Background

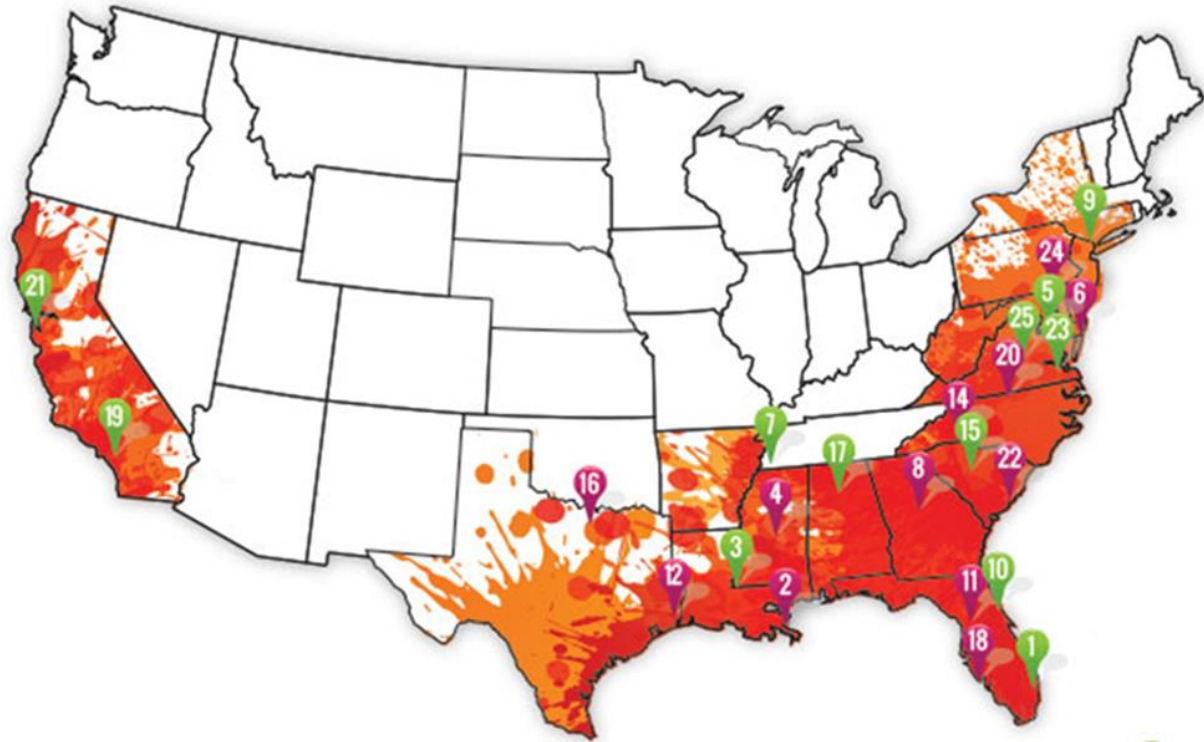
- CHA serves a population of 197,762 (U.S. Census, 2015)
- Clinic Staff: NPs, MDs, PA, RNs, ERRNS, lab technicians
- HIV Incidence, 3 Year Average Rate: 8.0/100,000 population, Rank: 50/92 counties (North Carolina Department of Health & Human Services, 2016)
- STD Visits
 - FY 2013-14: 1003
 - FY 2014-15: 1105
- HIV Tests
 - FY 2013-14: 808
 - FY 2014-15: 725

Implementation Timeline

December 2015

- Presentation of Need
- Project Proposal
- Formation of PrEP Work Group

Diagnoses of HIV infection, 2013, and persons living with diagnosed HIV infection (prevalence), year-end 2012, by metropolitan statistical area of residence—United States and Puerto



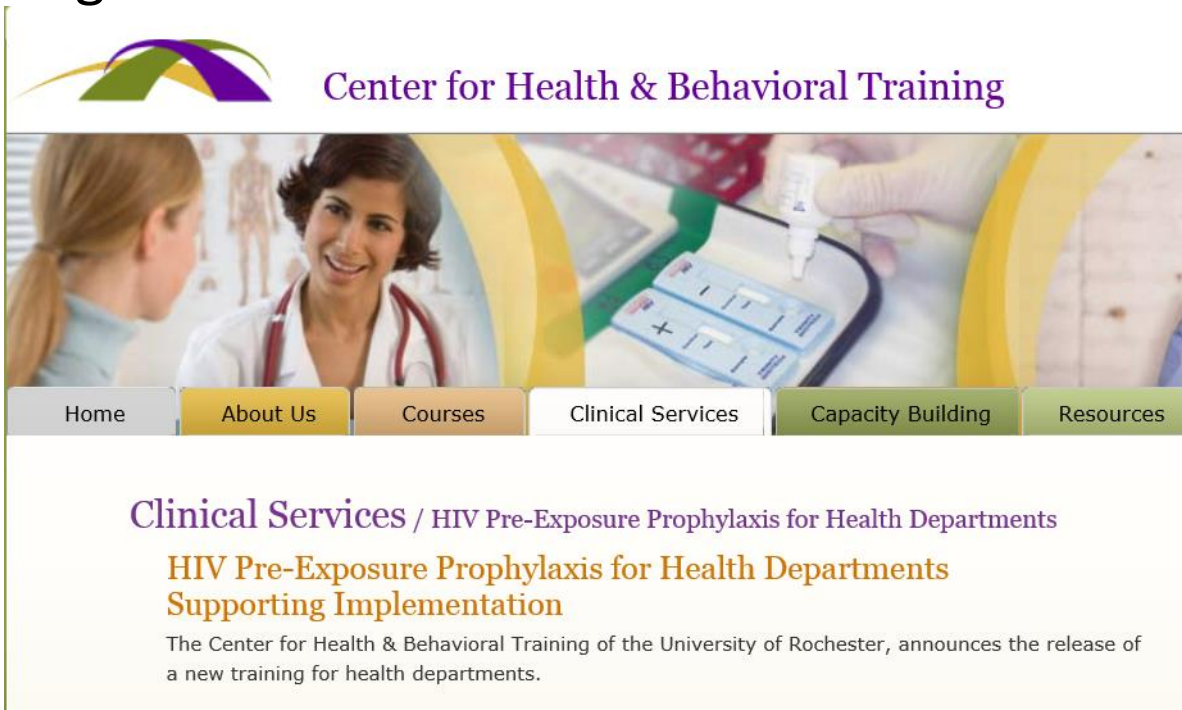
Centers for Disease Control and Prevention. *HIV Surveillance Report, 2013*; vol. 25. <http://www.cdc.gov/hiv/library/reports/surveillance/>. Published February 2015.



Implementation Timeline

Jan-Feb, 2016

- Trainings & Capacity Building Assistance
- Request use of 340B funds
- Compiling resources



Center for Health & Behavioral Training

Home About Us Courses Clinical Services Capacity Building Resources

Clinical Services / HIV Pre-Exposure Prophylaxis for Health Departments

**HIV Pre-Exposure Prophylaxis for Health Departments
Supporting Implementation**

The Center for Health & Behavioral Training of the University of Rochester, announces the release of a new training for health departments.

Implementation Timeline

March-May

- Policies, Protocols, Licensures
- Gilead Assistance

Initial Visit	30 Days	3 months	6 months	9 months	1 year
Comprehensive Metabolic panel <i>(80053; 322000)</i> eCrCl ≥60mL/min			Serum Creatinine <i>(82565; 001370)</i> eCrCl ≥60mL/min		Serum Creatinine eCrCl ≥60mL/min (cont. q 6 months)
Urinalysis <i>(81003)</i>					Urinalysis
Hep B sAg <i>(87340; 006510)</i> Hep B sAb <i>(86706; 006395)</i> *HCV Ab if needed by risk <i>(86803; 140659)</i>					*HCV Ab if needed
Syphilis RPR <i>(86592)</i> HIV-1 antigen, HIV-1/2 antibody <i>(87389)</i> NAAT STI Screen: <i>(183160)</i> Cervix in women; urine/urethra in men N.gonorrhoeae <i>(87591)</i> Chyldm trach <i>(87491)</i> Trichomonas vaginalis <i>(87661)</i> GC Pharynx/Rectal swab <i>(87081; 008128)</i>	prn	STI Screen	STI Screen	STI Screen	STI Screen (cont. q 6 months)
HIV rapid test: <i>Alice</i> <i>(87806)</i> If +, confirm with <i>Uni-Gold</i> <i>(86701)</i> Screen for Acute HIV Infection Fever, fatigue, skin rash, pharyngitis, cervical adenopathy	HIV rapid test Screen for AHI symptoms	HIV rapid test Screen for AHI symptoms	HIV rapid test Screen for AHI symptoms	HIV rapid test Screen for AHI symptoms	HIV rapid test Screen for AHI symptoms (cont. q 3 months)
Risk-Reduction & Adherence Counseling Start-Up Syndrome Mild headaches, nausea, flatulence; resolves within first month for most Give Condoms	Risk-Reduction & Adherence Counseling Assess side effects and need for continuing PrEP Give Condoms	Risk-Reduction & Adherence Counseling Assess side effects and need for continuing PrEP Give Condoms	Risk-Reduction & Adherence Counseling Assess side effects and need for continuing PrEP Give Condoms	Risk-Reduction & Adherence Counseling Assess side effects and need for continuing PrEP Give Condoms	Risk-Reduction & Adherence Counseling Assess side effects and need for continuing PrEP Give Condoms
Rx: 30 day Truvada 1 tablet PO daily	Rx: 60 day Truvada 1 tablet PO daily	Rx: 90 day Truvada 1 tablet PO daily	Rx: 90 day Truvada 1 tablet PO daily	Rx: 90 day Truvada 1 tablet PO daily	Rx: 90 day Truvada 1 tablet PO daily

Implementation Timeline

June-July, 2016

- Purchase Truvada
- Website
- Rapid HIV Testing
- Budget
- Internal education

The screenshot displays the website for Cabarrus Health Services, specifically the page for Pre-Exposure Prophylaxis (PrEP) to prevent HIV. The page features a navigation bar at the top with links for Clinical & Dental Services, Community Health, Environmental Health, Public Health Information, and How Do I...?. The main content area includes a sidebar with various service categories such as Sexually Transmitted Diseases (STD), Tuberculosis (TB), PrEP for HIV Prevention, International Travel, Dental Services, Resource Cafe, Healthy Cabarrus, Notify Me, Report a Concern, Online Payments, and Connect with CHA. The main text provides information about PrEP, including its effectiveness, appointment times (Wednesdays 8:00am - 4:30pm), and cost assistance. It also includes a section titled 'What is PrEP?' and 'Is PrEP Right for me?' with a link to 'Take the PrEP Quiz here!'. A video player is visible at the bottom of the page, titled 'What is PrEP?'. The background of the page features images of fresh produce like carrots and cucumbers.

www.cabarrushealth.org/prep

Implementation Timeline

August 2016 - Present

- Press release & Survey
- External education
- Clinic live
- Barrier Analysis
- Patient Cost Analysis

3 Clients active in care

CHA Offers PrEP

One pill, once a day provides very strong protection against HIV.

Website: www.cabarrushealth.org/prep

Appointments: Wednesdays 8:00am - 4:30pm. Please call (704)-920-1205 for questions & referrals. These services are open to everyone.

Cost: We help uninsured and insured clients apply for assistance programs. Truvada is covered by many insurance carriers and Medicaid. Clients who wish to pay out of pocket can call for pricing.

Care Schedule: Initial Visit and 30-day check-in; Follow-up every 3 months. We will also work with a client's regular doctor or care team.

Cabarrus Health Alliance | 300 Mooresville Rd, Kannapolis, NC 28081



#PrEPWORKS

Pre-exposure prophylaxis (or PrEP) is when people at high risk for HIV take HIV medicines daily to lower their chances of getting infected. The pill for PrEP is sold under the name Truvada®.

Daily PrEP use can lower the risk of getting HIV from sex by more than 90% and from injection drug use by more than 70%. You can combine additional strategies with PrEP to reduce your risk even further.

Is PrEP right for you?

PrEP may benefit adults 18 years and older who are HIV-negative and **ANY** of the following apply:

- | | | |
|---|--|---|
| <p>You are a gay/bisexual man and</p> <ul style="list-style-type: none">- have an HIV-positive partner.- have multiple partners, a partner with multiple partners, or a partner whose HIV status is unknown—and you also<ul style="list-style-type: none">o have anal sex without a condom, oro recently had a sexually transmitted disease (STD). | <p>You are a heterosexual and</p> <ul style="list-style-type: none">- have an HIV-positive partner.- have multiple partners, a partner with multiple partners, or a partner whose HIV status is unknown—and you also<ul style="list-style-type: none">o don't always use a condom for sex with people who inject drugs, oro don't always use a condom for sex with men who are bisexual or may have sex with other men. | <p>You inject drugs and</p> <ul style="list-style-type: none">- share needles or equipment to inject drugs.- recently went to a drug treatment program.- are at risk for getting HIV from sex. |
|---|--|---|
- * You live in an area where HIV is widespread, like Charlotte, NC and your sexual networks are more likely to put you in contact with HIV. Populations at risk include:**
- o Transgender women
 - o People who exchange sex for money or other things like food, drugs, medicine, and shelter.

Moving Forward

- Clinical Quality and Evaluation Measures
- Clinic Financial Analysis
- Social Marketing
- PEP?
- Expanding access to minors?
- Further Harm Reduction
 - Needle Exchange

Thank You!

Open Resource Drive:

<https://drive.google.com/folderview?id=0BxzdI9OjHqhQWjdLS01XcElxbnM&usp=sharing>

Whitney R Schwalm

CDC Public Health Associate

HIV & STDs, Communicable Disease

Cabarrus Health Alliance

300 Mooresville Road, Kannapolis, NC 28081

Office: 704-920-1378 | Mobile: 201-937-1594

Email: Whitney.Schwalm@CabarrusHealth.org

References

- North Carolina Department of Health and Human Services (DHHS), Communicable Disease Branch. (2016). *2015 North Carolina HIV/STD surveillance report*. Retrieved from <http://epi.publichealth.nc.gov/cd/stds/figures/std15rpt.pdf>
- United States Census Bureau. (2015). *Quick facts: United States*. Retrieved from <http://www.census.gov/quickfacts/table/PST045215/37025>

Resources

- National Public Health Information Coalition (NPHIC)
<https://www.nphic.org/toolkits/std>
- CDC partner notification
<http://www.cdc.gov/std/program/ips/components.htm>
- Purchasing advertising space on Manhunt, Jack'd, Dandy
<http://www.online-buddies.com/advertising/>
- Grindr contact: jack@grindr
- Free advertising for non-profits of scruff <https://ads.scruff.com/>
- CDC Syphilis webpage <http://www.cdc.gov/std/syphilis/default.htm>
- NC DPH syphilis webpage
<http://epi.publichealth.nc.gov/cd/diseases/syphilis.html>
- Alabama-North Carolina STD/HIV Prevention Training Center
<http://nnptc.org/nnptc-resources/>
- North Carolina AIDS Training and Education Center
<http://www.med.unc.edu/ncaidstraining>
- Review article on available HIV/STD apps
<https://www.jmir.org/2013/1/e1/#Results>