

# epiConnections

A BIMONTHLY NEWSLETTER OF THE COMMUNICABLE DISEASE AND EMERGENCY MANAGEMENT DIVISION OF BOULDER COUNTY PUBLIC HEALTH

## Sexually Transmitted Infections (STI) on the Rise

### 2015 STI Summary

**Boulder County HIV rate at a five-year high:** Unlike other parts of the U.S. and Colorado where HIV rates are either remaining flat or decreasing, HIV infections in Boulder County increased significantly last year for the first time since 2009. In 2015, 16 people were diagnosed with HIV, resulting in a rate of 5.1 per 100,000, up from a rate of 1.6 in 2014 (Figure 1). This represents a 219% increase from 2014 and a 57% increase from the five-year average cases 2010-2014; it is also the highest rate since 2009 when the HIV rate in Boulder County was 7.5. In 2015 the Colorado HIV rate was 6.8 per 100,000. New HIV infections in Boulder County continue to occur primarily among men who have sex with men (56%). Nineteen percent of new HIV infections in Boulder County were reported among

## Zika Virus Transmission Being Investigated

To date, transmission of Zika virus has primarily occurred through the bite of an infected *Aedes aegypti* and *Aedes albopictus* mosquito species. These mosquitoes are found in the southern region of the United States but not in Colorado. For Colorado residents, people at risk for Zika virus are those with travel history to areas with active transmission or those who have a sexual partner with a travel history to areas with active transmission of the virus. As of March 9 there have been two confirmed travel-associated cases of Zika virus in Colorado. The areas of Central America, South America, Pacific Islands, Caribbean, Mexico, Puerto Rico, and Cape Verde have been most heavily affected. For a current list of affected countries, as well as *Aedes* mosquito distribution in the United States, visit [www.cdc.gov/zika](http://www.cdc.gov/zika). Due to the potential association with microcephaly, pregnant women are advised not to travel to countries where Zika virus has been found.

As of March 16, 2016, there have been six sexually transmitted cases in the U.S. Although all reported cases of sexual transmission have come from symptomatic male carriers, the Centers for Disease Control and Prevention (CDC) reports that the virus can be transmitted by a man to his sexual partners before, during, or after he becomes symptomatic. It is unknown if women can transmit the virus to their sex partners.

Reports suggest that the virus can be present longer in semen than in blood; however, the duration is currently unknown. The CDC recommends that men who have travelled to areas currently affected by Zika virus who have a pregnant partner should consistently use condoms during sex, or they should abstain from sex for the remainder of the pregnancy. According to the CDC, there are tests to detect Zika virus in semen, but they are not widely available, and interpretation of the results is not completely understood. Currently,

*Zika Virus Transmission, continued on page 2*

Figure 1. Gonorrhea, Syphilis, and New HIV Infections Incidence Rate per 100,000 Population in Boulder County, 2010-2015

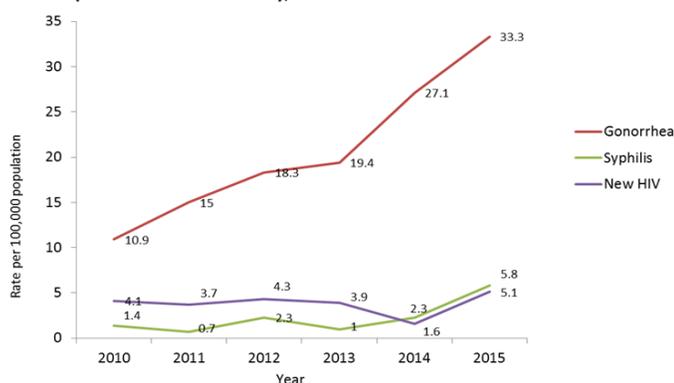
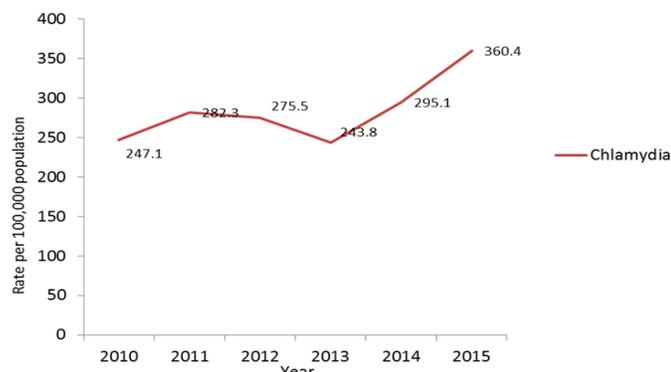


Figure 2. Chlamydia Infection Incidence Rate per 100,000 Population



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Communicable Disease Control Program  
 HIV Prevention Program  
 Emergency Management Program  
 Immunization Program  
 TB Control Program

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people who identify as heterosexual, while 25% did not specify.

**All reportable STIs are increasing in Boulder County:**

Trends for chlamydia, syphilis, and gonorrhea have been increasing nationally, in Colorado, and in Boulder County, with 2015 marking especially steep increases locally (Figures 1 and 2). After HIV, the second sharpest spike was seen in rates of syphilis, for which the one-year rate increased by 152% to 5.8 infections per 100,000 people. In 2015, there were 200 reported cases of ocular syphilis in 20 US states, including 9 detected in Colorado, primarily among men who have sex with men.

**People of color disparately impacted by STIs:**

Forty-four percent of syphilis infections and 37% of HIV infections in Boulder County occurred among people of color, including Hispanics of all races and non-Hispanic black individuals, while fewer than 15% of Boulder County residents identify in these categories. In addition, all 18 reported syphilis infections in 2015 were among men, as were 88% of new HIV infections, 72% of gonorrhea infections, and 36% of chlamydia infections. Differences were also seen by age group. The vast majority of chlamydia cases (70%) were among individuals 24 years and younger. Most gonorrhea cases (57%) were also reported among this age group. The majority of syphilis and HIV infections occurred in individuals 30 years and older.

**CDC guidelines and resources for providers:** New 2015 STI treatment guidelines were released by the CDC and are available at: <http://www.cdc.gov/std/tg2015/default.htm>. Guidance is also available for medical providers wishing to prescribe pre-exposure prophylaxis (PrEP) for people at increased risk of HIV: <http://www.cdc.gov/nchhstp/newsroom/2014/prep-guidelines.html#Audio>. The CDC also recommends the practice of expedited partner therapy for chlamydia and gonorrhea. More information is available at: <http://www.cdc.gov/std/ept/>.

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it is not recommended that asymptomatic men who have travelled to infected areas be tested for the virus.

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Source:  
[http://www.cdc.gov/mmwr/volumes/65/wr/mm6508e2er.htm?s\\_cid=mm6508e2er\\_e](http://www.cdc.gov/mmwr/volumes/65/wr/mm6508e2er.htm?s_cid=mm6508e2er_e)  
<http://www.cdc.gov/zika/transmission/sexual-transmission.html>

**Zika Virus Testing and Specimen Collection Guidelines**

Zika virus continues to expand among the Americas and beyond. Boulder County Public Health (BCPH) has received inquiries from health care providers requesting information about Zika virus testing for returned travelers. Currently, there is no commercially available laboratory test. All specimen collection must be performed by the traveler's provider and routed to the Colorado Department of Public Health and Environment (CDPHE). The following groups are eligible for testing for Zika virus through the CDPHE laboratory or the CDC:

**Symptomatic patients with recent travel:** Men and women who have had two or more symptoms (acute onset of mild fever, maculopapular rash, arthralgia, headache, malaise, conjunctivitis) during or within two weeks of travel to an area with local Zika virus transmission can be tested for Zika virus. Updated information about areas impacted by Zika virus is maintained by the CDC at: <http://www.cdc.gov/zika/geo/index.html>. Specimens should be collected within 7 days of symptom onset (sooner is better). The appropriate test within 7 days of onset is reverse transcription polymerase chain reaction (RT-PCR). If the person is sick for more than four days before sample collection, then IgM is also appropriate. CDPHE can perform RT-PCR.

**Asymptomatic pregnant patients with travel:** Asymptomatic pregnant women with a history of travel to an area with local Zika virus transmission may also be tested. Specimens should be collected 2-12 weeks after returning from travel. The appropriate test for this group is IgM, which are performed by the CDC. CDPHE will submit approved specimens to the CDC.

Specimens can be dropped off for CDPHE routine courier pick up at a local hospital or laboratory or sent to the CDPHE Laboratory Services Division by FedEx or courier. If your facility does not have a regular pick-up, the state laboratory offers a free courier system, operated by Kangaroo Express, to all Colorado clinical facilities. For more information visit <https://www.colorado.gov/pacific/cdphe/courier-information> or call 303-692-3086. BCPH and CDPHE cannot collect specimens directly from patients. BCPH does not provide courier services.

Zika virus testing and specimen collection guidance is available at [www.BoulderCountyDiseaseControl.org](http://www.BoulderCountyDiseaseControl.org) or <https://www.colorado.gov/pacific/cdphe/Zika-specimen-testing> and by calling CDPHE Communicable Disease Branch at 303-692-2700 or the CDPHE lab at 303-692-3485.

Updated February 24, 2016, from CDPHE

**U.S. Geographic Distribution of Mosquitoes that Transmit Zika Virus**