



**Not A Time for “Clapping” — Increased Gonorrhea Transmission in Montana**

Gonorrhea is a sexually-transmitted disease (STD) caused by infection with the bacterium *Neisseria gonorrhoeae*. Gonorrhea is the 2<sup>nd</sup> most common notifiable disease in the United States and 4<sup>th</sup> most common reportable disease in Montana. In females, gonorrhea can lead to pelvic inflammatory disease (PID), which can result in infertility, ectopic pregnancy, and chronic pelvic pain. Gonorrhea can also facilitate the sexual transmission of other organisms, such as HIV and *Treponema pallidum*. Nearly 225 cases of gonorrhea were reported during 2013 compared with an average of 113 cases each year during 2000–12 (Figure). Over 100 cases have already been reported in 2014. In Montana and the United States, gonorrhea occurs at a higher rate among racial minorities compared with whites. Detection and reporting can be enhanced by careful assessment and testing which can effect the reported disease rate. Timely detection of *N. gonorrhoeae* infection and treatment can help reduce transmission in a community.

In this issue of *Montana Public Health*, we summarize recent gonorrhea trends in Montana and provide recommendations for screening (Table 1), treatment (Table 2), and conducting public health investigations.

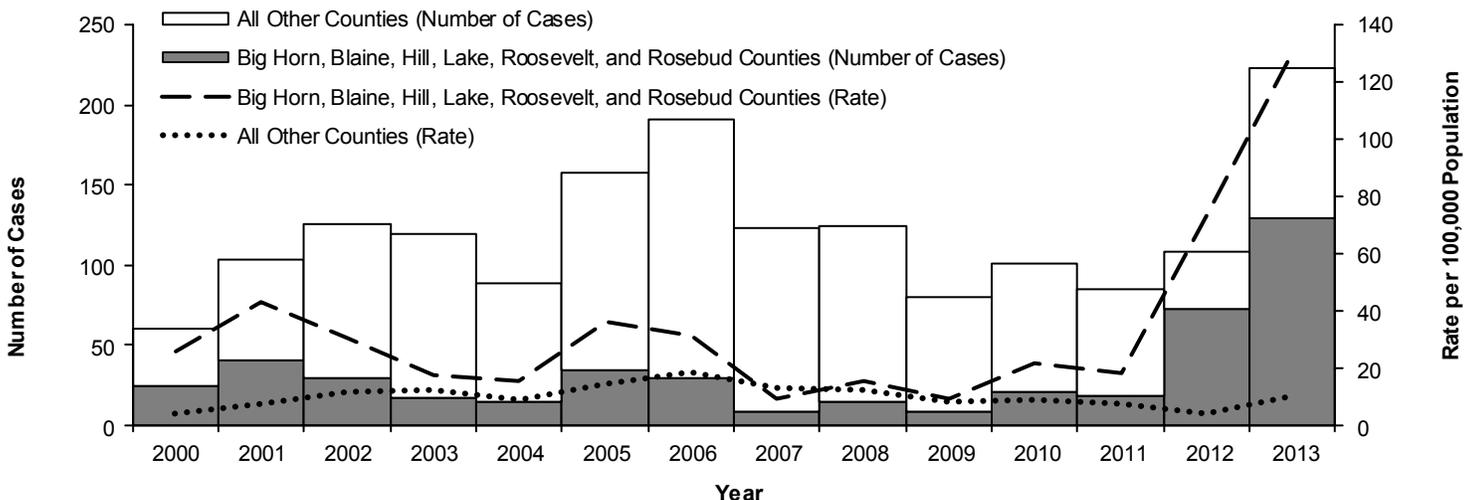
**Gonorrhea Trends**

During 2007–09, the incidence rate of gonorrhea in counties associated with American Indian Reservations (Big Horn, Blaine, Glacier, Hill, Lake, Roosevelt, and Rosebud Counties) was fewer than 20 cases per 100,000 population and comparable with all remaining counties in Montana (Figure). In 2013, the incidence rate in counties associated with American Indian Reservations increased to over 130 cases per 100,000 population, nearly 13-times the rate of all remaining counties in Montana and comparable with the 2012 U.S. gonorrhea rate of 122 cases per 100,000 population. Recent gonorrhea outbreaks in Lake, Roosevelt, and Rosebud Counties contributed to this increase. During 2011–13, 181 (43%) cases occurred among males and the median age was 25 years (range: 15–70 years). Approximately 40% of sexual contacts of cases were identified and examined. Nearly 20% of cases were identified through public health investigation of sexual contacts to cases.

**Table 1.** Gonorrhea screening recommendations

- Screen pregnant and non-pregnant sexually-active females at increased risk of gonorrhea (e.g., persons living in areas of increased gonorrhea transmission, new or multiple sex partners, risky sexual practices, other STDs)
- For males, only those who are sexually-active and symptomatic, or asymptomatic and living in areas of increased gonorrhea transmission, should be tested for *N. gonorrhoeae* infection
- Endocervical, vaginal, urethral (men only), or urine specimens can be tested for presence of *N. gonorrhoeae* infection
- Culture, nucleic acid hybridization tests, and nucleic acid amplification tests (NAATs) can be used for testing
- *Symptomatic males only:* Gram stain of a male urethral specimen that demonstrates polymorphonuclear leukocytes with intracellular Gram-negative diplococci is considered diagnostic for *N. gonorrhoeae* infection

**Figure.** Number of reported gonorrhea cases and crude incidence rate\* in counties associated with American Indian Reservations and all other counties, Montana, 2000–13



\*2013 incidence rates calculated using 2012 US Census data.

**Table 2.** Treatment recommendations for uncomplicated gonorrhea of the cervix, urethra, and rectum

**Recommended regimen**

- Ceftriaxone 250 mg in a single intramuscular dose PLUS
- Azithromycin 1 gram orally in a single dose OR doxycycline 100 mg orally twice daily for 7 days

NOTE: No additional testing (test-of-cure) required unless symptoms persist — then use culture-based testing

**Alternative regimens**

If ceftriaxone is not available:

- Cefixime 400 mg in a single oral dose PLUS
- Azithromycin 1 gram orally in a single dose (preferred) OR doxycycline 100 mg orally twice daily for 7 days PLUS
- Test-of-cure in 1 week

NOTE: if the patient has a severe cephalosporin allergy, use azithromycin 2 grams in a single oral dose PLUS test-of-cure in 1 week

**Public Health Investigation**

Public health investigations leading to the timely identification, testing, and treatment of sexual contacts of gonorrhea cases are essential to limiting spread of gonorrhea in a community. Therefore, **healthcare providers must immediately report any case of gonorrhea to their local health department** as required by the Administrative Rules of Montana (ARM) 37.114.203. Once a gonorrhea case is reported, public health authorities should interview the patient and identify any recent sexual contacts. All identified sexual contacts should be examined, tested, and treated if the last sexual contact occurred within 60 days of the case developing symptoms. The most recent sexual contact should be examined, tested, and treated even if the last known contact with the case occurred over 60 days since symptoms began. It is important each sexual contact is tested for infection as this practice can help identify other infected persons who require treatment.

Patients diagnosed with gonorrhea should be counseled to abstain from sex until antibiotic treatment is completed. To avoid re-infection, patients should abstain from sex with recent sexual contacts until those persons have completed treatment. In addition, the case should be counseled to use condoms, avoid risky sexual practices including having sex with multiple partners and engaging in anonymous sex.

**Recommendations for healthcare providers**

- Test persons at high-risk of gonorrhea for *Neisseria gonorrhoeae* infection (see **Table 1** for screening recommendations).
- All persons diagnosed with gonorrhea should be tested for other STDs, including chlamydia, syphilis, and HIV.
- The preferred treatment regimen for gonorrhea is ceftriaxone 250 mg in a single intramuscular dose PLUS azithromycin 1 gram orally in a single dose (see **Table 2** for alternative regimens).
- Healthcare providers should immediately report any case of gonorrhea to their local health department (ARM 37.114.203).
- Sexual contacts to gonorrhea cases should be identified, examined, tested, and treated.

For more information, contact the HIV/STD Section at 406-444-3565.

**References available on web version. Visit <http://www.dphhs.mt.gov/publichealth/publications.shtml>**

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