

Montana Health Alert Network

# DPHHS HAN

## ADVISORY

### Cover Sheet

#### DATE

May 13, 2024

#### SUBJECT

Updated Syphilis Screening Recommendations

#### INSTRUCTIONS

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For LOCAL HEALTH DEPARTMENT reference only  
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DPHHS CDCP

HIV/STD/Hep C Section  
1-406-444-3565

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Please update your HAN contact information on the Montana Public Health Directory

# DPHHS HAN

## Information Sheet



### DATE

May 13, 2024

### SUBJECT

Syphilis Screening Recommendations

### BACKGROUND

Between 2020 and 2023, Montana syphilis case counts (all stages) have risen from 92 cases in 2020 to 762 cases in 2023, constituting a 728% increase. During the same period, there has been a shift in the most impacted populations. While syphilis in Montana was historically most prevalent in men, women of reproductive age (15-44 years) now constitute nearly 50% of annual case counts. The rise in syphilis prevalence among women of reproductive age tracks directly with a concerning increase in congenital syphilis cases. In 2023 alone, Montana recorded 19 cases of congenital syphilis, representing an 1,800 percent increase from 2020 when there were two cases. On review of case investigations for congenital syphilis cases between 2020 and 2023, fifty-one percent of Montana women who delivered an infant with congenital syphilis did not have prenatal care during pregnancy prior to delivery. Among the forty-nine percent of pregnant mothers with documented prenatal care, sixty-nine percent entered care in the second trimester or later. According to the Centers for Disease Control and Prevention (CDC), 88% of congenital syphilis cases could have been prevented with timely screening and treatment (McDonald, et al., 2022). For the reasons noted above, it is important to make any health care or other encounter during pregnancy an opportunity to screen and treat for syphilis, including those in emergency departments, correctional settings, syringe service programs, substance use disorder treatment programs, and maternal and child health programs.

### INFORMATION

#### *Pregnant women*

The CDC recommends syphilis screening at the first prenatal visit or offering syphilis testing and treatment at the time of pregnancy testing when the receipt of prenatal care is not optimal. Additional screening twice during the third trimester of pregnancy is recommended for women who live in communities with high rates of syphilis and for women who have been at risk for syphilis acquisition during pregnancy. CDC also recommends that any woman who didn't receive prenatal care before delivery and women who experience a fetal death after 20 weeks' gestation should be tested for syphilis prior to discharge (Centers for Disease Control and Prevention, 2021).

However, in the context of the rapidly increasing rates of congenital syphilis in Montana, the Montana Department of Public Health and Human Services (DPHHS) issued guidance to women's health providers on October 10, 2023, to screen all pregnant women for syphilis at the initial prenatal visit, 28 weeks gestation, and delivery, regardless of risk factors. DPHHS also recommended syphilis screening at the time of a positive pregnancy test, regardless of the purpose of the visit; for pregnant women when evaluated for any medical service (e.g. office visit, urgent care), if they had not initiated prenatal care; and to test and treat the pregnant patient's sexual partner(s) to avoid reinfection later in pregnancy.

In April 2024, the American College of Obstetricians and Gynecologists (ACOG) recommended health care providers screen all pregnant women serologically for syphilis at the first prenatal care visit, followed by universal rescreening during third trimester and at birth, rather than use a risk-based approach to testing (American College of Obstetricians and Gynecologists, 2024).

### *Non-pregnant individuals*

The CDC recommends taking a risk-based approach to syphilis screening in non-pregnant individuals (Centers for Disease Control and Prevention, 2021). Risk factors for syphilis include sex with multiple partners, incarceration of the person or their partner, sex in conjunction with drug use, transactional sex, unstable housing or homelessness, methamphetamine or heroin use, and geographic disease prevalence.

The CDC recommends offering syphilis testing to all sexually active people aged 15-44 years in counties with a rate of primary and secondary syphilis among women aged 15-44 years greater than 4.6 per 100,000 people (Centers for Disease Control and Prevention, 2024). Counties in Montana with a rate that meets this criterion include Big Horn, Cascade, Deer Lodge, Flathead, Gallatin, Glacier, Golden Valley, Hill, Lake, Madison, Pondera, Roosevelt, Rosebud, Silver Bow, Teton, Toole, and Yellowstone. For many people, the most significant risk factor for syphilis is living in a community with high rates of syphilis, not individual risk factors.

### *Syphilis Screening and Disease Staging*

Serologic tests that measure antibodies to both nontreponemal and treponemal antigens related to syphilitic infections should be used in combination when the primary test is reactive to aid in the diagnosis of syphilis (Papp, et al., 2024). Sole reliance on one reactive serologic test results can misclassify a patient's syphilis status. Both the traditional syphilis screening algorithm and the reverse syphilis screening algorithm are acceptable.

Briefly, the traditional syphilis screening algorithm begins with a nontreponemal (e.g., rapid plasma reagin (RPR), Venereal Disease Research Laboratory (VDRL)) test, and any reactive specimens are tested for confirmation by a treponemal test (e.g., *T. pallidum* particle agglutination (TPPA), fluorescent treponemal antibody-absorption (FTA-ABS)). For the reverse syphilis screening algorithm, initial screening with an automated treponemal test (e.g., enzyme immunoassay (EIA), chemiluminescence immunoassay (CIA)) of a sample with a positive result must be followed by a quantitative nontreponemal (e.g., RPR, VDRL) test. When the reverse sequence algorithm is used, any discordant results should be adjudicated by a second treponemal assay (e.g., TPPA) that has a different format and includes different antigens (see Figure below). Nontreponemal tests (e.g., RPR, VDRL) are not interchangeable when used to determine antibody titers; testing on follow up samples must be performed with the same type of test.

Syphilis is divided into stages of disease based on clinical findings, which guide treatment and follow up (Centers for Disease Control and Prevention, 2021). Primary, secondary, and tertiary syphilis present with symptoms, while latent infection will lack clinical manifestations and is detected by serologic testing. The individual's clinical history, diagnostic testing results, and physical examination findings will inform the clinical staging assessment.

## **RECOMMENDATIONS**

### **Recommendations for Clinicians**

1. Screen all pregnant women serologically for syphilis using an approved syphilis screening algorithm (e.g., traditional or reverse) at the first prenatal care visit, followed by universal rescreening at 28 weeks gestation and at the time of delivery. Serologic testing for mother and baby at the time of delivery is imperative for proper clinical management when syphilis was present (whether diagnosed or undiagnosed) during pregnancy and/or was untreated or inadequately treated during pregnancy.
2. Screen all pregnant women for syphilis in the following circumstances:
  - a. At the time of a positive pregnancy test, regardless of the purpose of the visit.

- b. When evaluated for any medical service (e.g. office visit, urgent care), if prenatal care is absent or inconsistent.
  - c. When other sexually transmitted infections are diagnosed.
  - d. Prior to discharge after delivery when prenatal care was absent or limited during pregnancy.
  - e. When a woman experiences a fetal death after 20 weeks' gestation.
3. Treat syphilis during pregnancy promptly with the recommended stage-specific course of Bicillin. If your clinical testing site does not offer syphilis treatment, directly connect the pregnant woman with treatment sites in your community.
4. Test and treat the pregnant patient's sexual partner(s) to avoid reinfection later in pregnancy.
5. Screen non-pregnant individuals for syphilis in the following circumstances:
  - a. Asymptomatic individuals, per CDC recommendations, using an individual, risk-based approach to syphilis screening. Risk factors for syphilis include multiple sexual partners, incarceration of the person or their partner, sex in conjunction with drug use, transactional sex, unstable housing or homelessness, methamphetamine or heroin use, living in an area of high geographic prevalence, and males younger than 29 years of age.
  - b. All sexually active people in counties with a rate of primary and secondary syphilis among women aged 15-44 that is greater than 4.6 per 100,000 people. In Montana, this includes Big Horn, Cascade, Deer Lodge, Flathead, Gallatin, Glacier, Golden Valley, Hill, Lake, Madison, Pondera, Roosevelt, Rosebud, Silver Bow, Teton, Toole, and Yellowstone counties.
  - c. Given the prevalence of non-primary and non-secondary syphilis in Montana, consider offering syphilis testing to all sexually active people aged 15-44 years in counties with a rate of primary and secondary syphilis lower than 4.6 per 100,000 people.
6. Fully implement one of the recommended syphilis diagnostic algorithms (e.g., traditional or reverse) for screening. Given the required algorithmic approach to screening, include an order for reflex testing when the initial test is positive. Use the same lab for all testing, when feasible, to ensure comparability of results and to allow for accurate patient monitoring in response to treatment.
7. Report all suspected cases of syphilis and congenital syphilis to the [local or tribal health department](#) by telephone within 24 hours, as per MCA 37-2-301 and ARM 37.114.201,37.114.203, and 37.114.204 (Montana Department of Public Health and Human Services, 2024).

### Recommendations for Local Health Departments

1. Distribute this HAN message to hospitals, health care providers, harm reduction sites, substance use treatment centers, correctional settings, and other community partners who interact with pregnant women.
2. Suspected, probable, and confirmed syphilis cases should be reported to the state health department within 24 hours after it is received by the local health department, as per ARM 37.114.204,
3. Local public health must conduct a case investigation and confirm pregnancy status, appropriate treatment, and to contact and ensure sexual partner(s) are tested and treated.

### References

1. McDonald R, O'Callaghan K, Torrone E, et al. *Vital Signs: Missed Opportunities for Preventing Congenital Syphilis – United States, 2022*. MMWR Morb Mortal Wkly Rep 2023;72:1269–1274. DOI: <http://dx.doi.org/10.15585/mmwr.mm7246e1>
2. Centers for Disease Control and Prevention. (2021). *STI Treatment Guidelines*. Retrieved from Sexually Transmitted Infections Treatment Guidelines: <https://www.cdc.gov/std/treatment-guidelines/default.htm>

3. American College of Obstetricians and Gynecologists. (2024, April). *Screening for Syphilis in Pregnancy*. Retrieved from Practice Advisory: <https://www.acog.org/clinical/clinical-guidance/practice-advisory/articles/2024/04/screening-for-syphilis-in-pregnancy>
4. Centers for Disease Control and Prevention. (2024). *County-level Syphilis Rates Can Help Direct Syphilis Screening Efforts*. Retrieved from NCHHSTP AtlasPlus: <https://www.cdc.gov/nchhstp/atlas/syphilis/index.html>
5. Papp, J., Park, I., Fakile, Y., Pereira, L., Pillay, A., & Bolan, G. (2024). CDC Laboratory Recommendations for Syphilis Testing, United States, 2024. *Morbidity and Mortality Weekly Report (MMWR)*. Retrieved from [https://www.cdc.gov/mmwr/volumes/73/rr/rr7301a1.htm?s\\_cid=rr7301a1\\_w](https://www.cdc.gov/mmwr/volumes/73/rr/rr7301a1.htm?s_cid=rr7301a1_w)
6. Montana Department of Public Health and Human Services. (2024). *Montana Public Health Directory*. Retrieved from <https://phd.hhs.mt.gov/>

Figure: Papp, J., et al. (2024)

