TO: West Virginia Healthcare Providers, Hospitals and Other Healthcare Facilities

FROM: Ayne Amjad, MD, MPH, Commissioner and State Health Officer
West Virginia Department of Health and Human Resources, Bureau for Public Health

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LOCAL HEALTH DEPARTMENTS: Please distribute to community health providers, hospital-based physicians, infection control preventionists, laboratory directors and other applicable partners.

OTHER RECIPIENTS: Please distribute to association members, staff, etc.

West Virginia has continued to see an increase in cases of Early Syphilis (ES) every year since 2017. Cases increased 107.4% from 2017 to 2020 (94 to 195 cases). Illicit drug use is believed to be a leading cause of the resurgence of syphilis seen in West Virginia. ES is defined as cases found to be acquired within the last year based on laboratory and clinical evidence. The West Virginia Reportable Disease Rule, 64 CSR-7, requires facilities and providers to report cases of syphilis (at any stage) directly to the state health department within one week of diagnosis. ES cases are high priority for Disease Intervention Specialists (DIS), as it is when they are most infectious to spread the bacteria. DIS across the state work to stop the spread of infection by interviewing and ensuring adequate treatment of new cases and providing testing/treatment to sexual partners.

In West Virginia, cases of Congenital Syphilis (CS) have also increased, rising incidence is especially concerning for this preventable but potentially life-threatening condition. A common missed prevention opportunity for CS is lack of timely and adequate maternal treatment. Infected mothers will pass syphilis in the womb if adequate treatment is not initiated at least 30 days prior to delivery. Treatment must also be appropriate for the mother’s stage of syphilis, with adherence to stricter CDC-recommended guidelines for the treatment of syphilis in pregnancy with long acting benzathine penicillin G. Another common missed opportunity for CS prevention in West Virginia, is late identification of syphilis infection during pregnancy for those in prenatal care. These cases may not complete the recommended testing early in pregnancy or may have non-reactive nontreponemal tests early in pregnancy and are subsequently diagnosed with syphilis at or immediately before delivery. Implementation of the third trimester screenings will allow sufficient time for a pregnant person to begin a treatment regimen prior to delivery, leading to a reduction in CS cases.

Due to the high prevalence of illicit drug use in West Virginia, all pregnant women should be considered at “high-risk”, and therefore, it is recommended they be tested at all three points during their pregnancy: at first prenatal care visit, the start of their third trimester (28-32 weeks’ gestation), and again at delivery. Any woman who has a fetal death after 20 weeks’ gestation should be tested for syphilis again, regardless of previous lab results.
The Bureau for Public Health is asking all healthcare providers to take the following actions to address the rising increase in syphilis across West Virginia:

1. Test all women for syphilis at all three points during their pregnancy: at first prenatal care visit, again at 28-32 weeks gestation, and a final time at delivery.

2. Complete appropriate syphilis testing. Diagnosis requires use of 2 serologic tests:
   - Nontreponemal (RPR, VDRL): screening test reported as a titer that can be monitored to confirm successful treatment and/or identify re-infections.
   - Treponemal (TPPA, FTA-ABS, EIAs): confirmatory test that detects antibodies specific to syphilis and usually remains detectable even after successful treatment.
   - Since nontreponemal antibodies appear later and have a greater possibility of false positives, the “reverse” sequence of testing (treponemal, then nontreponemal) is recommended. Positive treponemal results should always default to a nontreponemal test. Titer history can help determine if the patient is a new infection, a re-infection that needs to be treated, or a previous infection with no indication for treatment or follow-up.

3. Healthcare providers and laboratories should report all syphilis infections in accordance with the West Virginia Reportable Disease Rule reporting requirements. Penicillin G is the only known effective antimicrobial for treating fetal infection and preventing CS. Therefore, desensitization must occur if penicillin allergy is a concern during pregnancy.

4. Treatment of syphilis in pregnant persons should be initiated as quickly as possible in accordance with the CDC Treatment Guidelines (updated July 2021).

Provider Resources
- Syphilis (Detailed) Fact Sheet (CDC)
- Syphilis Pocket Guide for Providers (CDC)
- Syphilis During Pregnancy (CDC)
- Syphilis Staging and Treatment Algorithm (WV)

For questions about this advisory, contact the Office of Epidemiology and Prevention Services, Division of STD, HIV, Hepatitis, and Tuberculosis (DSHHT) at (304) 558-2195 or call the West Virginia STD Hotline at 1 (800) 624-8244.