



STATE OF WEST VIRGINIA  
DEPARTMENT OF HEALTH AND HUMAN RESOURCES  
Bureau for Public Health  
Office of Epidemiology and Prevention Services

Sherri A. Young, DO, MBA, FAAFP  
Interim Cabinet Secretary

Matthew Q. Christiansen, MD, MPH  
Commissioner & State Health Officer

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## Recommendations for the Management of Neurosyphilis

Neurosyphilis is the syphilitic infection of the central nervous system, presenting as persistent headache that does not improve with medication, vision loss, hearing loss, loss of balance, general paresis, or other neurological symptoms. Neurosyphilis may occur at any syphilis stage. As syphilis cases continue increasing in West Virginia, neurosyphilis cases have also increased. The West Virginia Department of Health and Human Resources (WVDHHR) recommends the following for the management of neurosyphilis:

1. Upon clinical evidence of central nervous system involvement, a cerebrospinal fluid (CSF) evaluation should be considered prior to treatment. However, for otic and ocular signs, a normal CSF evaluation cannot rule out neurosyphilis.
2. Any person suspected of neurosyphilis should also be HIV tested.
3. The Centers for Disease Control and Prevention's recommended regimen for neurosyphilis treatment is **18-24 million units IV aqueous crystalline penicillin a day, as 3-4 million units every 4 hours, for 10-14 days, or as a continuous infusion.**
4. The recommended regimen covers a duration of treatment shorter than necessary for late latent or unknown duration syphilis. Therefore, **benzathine penicillin, 2.4 million units IM once per week for 1-3 weeks** can be considered after neurosyphilis treatment completion to provide a comparable total duration of therapy.
5. Should a patient be penicillin allergic, limited data indicates **ceftriaxone 1-2 g daily either IM or IV for 10-14 days** can be used as an alternative treatment. **This regimen is not indicated for the treatment of late latent syphilis.**
6. Pregnant patients who have neurosyphilis **must be desensitized to penicillin.**

If you have questions about syphilis testing and treatment, call DHHR's Division of STD, HIV, Hepatitis, and Tuberculosis at 304-558-2195 or email [wvstd@wv.gov](mailto:wvstd@wv.gov).