



Clinical Health Advisory: Ocular Syphilis in the United States

Situation:

Since December 2014, at least 15 cases of ocular syphilis from California and Washington have been reported to the U.S. Centers for Disease Control and Prevention. At least five other states have cases under investigation including Nevada. The majority of cases have been among MSM with HIV, and a few cases have occurred among HIV-uninfected persons including heterosexual men and women. Several of the cases have resulted in significant sequelae including blindness. In Clark County, since April 2014, six cases of ocular syphilis have been reported; five of the affected patients also had HIV infection.

Neurosyphilis can occur during **any** stage of syphilis including primary and secondary syphilis. Ocular syphilis, a clinical manifestation of neurosyphilis, can involve almost any eye structure, but posterior uveitis and panuveitis are the most common findings in syphilitic eye disease. Additional manifestations may include anterior uveitis, optic neuropathy, retinal vasculitis and interstitial keratitis. Initial symptoms can be subtle, including floaters, flashing lights (photopsia), blurring of vision, and ocular pain.

Ocular syphilis may lead to decreased visual acuity including permanent blindness. While previous research supports evidence of neuropathogenic strains of syphilis, it remains unknown if some *Treponema pallidum* strains have a greater likelihood of causing ocular infections.

Actions Requested of Clinicians:

- **Consider syphilis in patients presenting with visual complaints if they have risk factors for syphilis.** This includes MSM, HIV-infected persons, others with risk factors, and persons with multiple or anonymous partners.
- **Test for syphilis in all sexually active patients with genital, oral, or anal ulcers or rash. All patients with syphilis should receive an HIV test if status is unknown or previously HIV-negative.**
- **Patients with positive syphilis serology and early syphilis without ocular symptoms should receive a careful neurologic exam, including all cranial nerves.**
- **Patients with syphilis and ocular complaints should receive immediate ophthalmologic evaluation.**
- **A lumbar puncture with cerebrospinal fluid (CSF) examination should be performed in patients with syphilis and ocular complaints.**

- **Promptly treat patients diagnosed with ocular syphilis according to treatment recommendations for neurosyphilis.** Aqueous crystalline penicillin G IV or Procaine penicillin IM with Probenecid for 10-14 days. See <http://www.cdc.gov/std/treatment/2010/toc.htm> for more information.
- **Report all cases of confirmed or suspected ocular syphilis (and all cases of syphilis) within 24 hours of diagnosis** via one of these three methods:
 - Call 702-759-0727,
 - Use online reporting form: <https://www.southernnevadahealthdistrict.org/diseasereports/forms/disease-reporting>, or
 - Fax a disease reporting form, <http://www.southernnevadahealthdistrict.org/download/epi/nv-morbidity-form.pdf>, to (702) 759-1414.

Please note in your report whether ocular syphilis is confirmed or suspected.

We are investigating all cases of ocular syphilis.

- The case definition for an ocular syphilis case is as follows: a person with clinical symptoms or signs consistent with ocular disease (i.e. uveitis, panuveitis, diminished visual acuity, blindness, optic neuropathy, interstitial keratitis, anterior uveitis, and retinal vasculitis) with syphilis of any stage.
- If possible, **pre-antibiotic clinical samples (whole blood, primary lesions and moist secondary lesions, CSF or ocular fluid) should be saved and stored at -80°C for molecular typing.**

To receive consultation regarding clinical management of ocular syphilis or assistance with shipment of clinical samples for molecular typing, please contact Dr. Robyn Neblett Fanfair at (404) 639-6044 or iyo5@cdc.gov.

General information about syphilis can be found online at www.cdc.gov/std/syphilis; updates to this clinical advisory will be posted on the [Syphilis: Treatment and Care](http://www.cdc.gov/std/syphilis/treatment.htm) (<http://www.cdc.gov/std/syphilis/treatment.htm>) section of the website.



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Health Alert: conveys the highest level of importance; warrants immediate action or attention

Health Advisory: provides important information for a specific incident or situation; may not require immediate action

Health Update: provides updated information regarding an incident or situation; unlikely to require immediate action

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