



Philadelphia Department of Public Health
Division of Disease Control

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Health Advisory

Ocular Syphilis

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Between December 2014 and March 2015, 12 cases of ocular syphilis were reported to the Centers for Disease Control and Prevention (CDC) from two major cities, San Francisco and Seattle. Subsequent case finding nationwide identified an additional 150 cases from 20 states over the past two years. The majority of cases have been among HIV-infected men-who-have-sex-with-men (MSM); some have occurred among HIV-uninfected persons including heterosexual men and women. Several of the cases experienced significant sequelae including blindness.

Syphilis is a complex illness with many varied symptoms. Ocular involvement is a known manifestation, which can be seen in all stages of syphilis. Review of recent syphilis cases in Philadelphia has not shown an increase in ocular involvement compared to previous years. In 2014, there were a total of 10 syphilis cases reported with neurologic involvement, of whom 5 had an ocular component to their presentation. To date in 2015, 11 individuals have been reported with syphilis and neurologic involvement. Of those, 2 cases have ocular symptoms reported. Both of these cases are among MSM.

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. While previous research supports evidence of neuropathogenic strains of syphilis, it remains unknown if some *Treponema pallidum* strains have a greater likelihood of producing ocular involvement.

Recommendations for Healthcare Providers

- **Be on the alert for ocular syphilis.** Patients with positive syphilis serology and ocular complaints should receive immediate ophthalmologic evaluation.
- **Patients with suspected ocular syphilis should receive a lumbar puncture (LP) and be treated for neurosyphilis** regardless of LP results. Recommended treatment for neurosyphilis is aqueous crystalline penicillin G IV or procaine penicillin IM with probenecid for 10-14 days.
- All patients with syphilis should be **tested for HIV**, if not already known to be HIV-infected.
- **Report all confirmed and suspected cases of ocular syphilis to the Health Department** at 215-685-6737.
- If possible, pre-antibiotic clinical samples (whole blood, primary lesions and moist secondary lesions, cerebrospinal fluid or ocular fluid) should be saved and stored at -80°C for molecular typing.

**For additional information or assistance with syphilis diagnosis, testing, or treatment,
please call the Philadelphia Department of Public Health STD Control Program at 215-685-6737
All patients with syphilis should be promptly reported to 215-685-6737.**

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Philadelphia Department of Public Health

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