

Health Advisory:

Ocular Syphilis

April 20, 2015

This document will be updated as new information becomes available. The current version can always be viewed at <http://www.health.mo.gov>

The Missouri Department of Health & Senior Services (DHSS) is now using 4 types of documents to provide important information to medical and public health professionals, and to other interested persons:

Health Alerts convey information of the highest level of importance which warrants immediate action or attention from Missouri health providers, emergency responders, public health agencies, and/or the public.

Health Advisories provide important information for a specific incident or situation, including that impacting neighboring states; may not require immediate action.

Health Guidances contain comprehensive information pertaining to a particular disease or condition, and include recommendations, guidelines, etc. endorsed by DHSS.

Health Updates provide new or updated information on an incident or situation; can also provide information to update a previously sent Health Alert, Health Advisory, or Health Guidance; unlikely to require immediate action.

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April 20, 2015

**FROM: GAIL VASTERLING
DIRECTOR**

SUBJECT: Ocular Syphilis

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 (CDC). At least five other states have suspect cases under investigation. The majority of cases have been among men who have sex with men (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.

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. Additional manifestations may include anterior uveitis, optic neuropathy, retinal vasculitis, and interstitial keratitis. 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.

- Clinicians should be aware of ocular syphilis and screen for visual complaints in any patient at risk for syphilis. This includes MSM, HIV-infected persons, persons with risk factors, and persons with multiple or anonymous partners.
- All patients with syphilis should receive an HIV test if status is unknown or previously HIV-negative.
- Patients with positive syphilis serology (using both non-treponemal and treponemal tests) 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.
- Ocular syphilis should be managed according to treatment recommendations for neurosyphilis. Aqueous crystalline penicillin G IV or procaine penicillin IM with probenecid for 10-14 days. See the 2010 Sexually Transmitted Diseases (STD) Treatment Guidelines at <http://www.cdc.gov/std/treatment/2010/> for more information.
- 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. Please contact the Missouri Department of Health and Senior Service's (DHSS') Bureau of HIV, STD and Hepatitis at 573/751-6439 for specimen collection, storage, and transport concerns.

- Suspected cases of ocular syphilis should be reported to the local public health agency (LPHA), or to DHSS at 573/751-6439, within one business day.
- The case definition for ocular syphilis 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.

Please also report any cases of ocular syphilis diagnosed since December 1, 2014, to the LPHA or to DHSS.

To request technical assistance regarding ocular syphilis, please contact Craig Highfill, DHSS' Bureau of HIV, STD and Hepatitis, at 573/751-6439 or 314/877-0245.

General information about syphilis can be found online at www.cdc.gov/std/syphilis.