Coccidioidomycosis (Valley Fever) in Washington State

Current situation in Washington State

Three cases of coccidioidomycosis reported in 2010-2011 from Benton, Franklin, and Walla Walla counties had no recent travel out of the state, but clinical and serologic evidence suggested they were recent infections. Investigation indicated these infections were acquired in eastern Washington, specifically in the south-central tri-county area. A report summarizing these cases was published in Clinical Infectious Diseases (see: Clin Infect Dis. 2013 Mar;56(6):847-50).

Washington State Department of Health and Benton-Franklin Health District collected soil samples to test for Coccidioides in the areas where the case-patients were likely exposed. Recent testing detected Coccidioides immitis in soil from Benton County. Further testing indicated that DNA from the soil isolates matches DNA from a clinical isolate from one of the case-patients.

This is the first time that Coccidioides has been detected in soil in Washington and there is still much to learn about the extent of this organism in the environment. We are increasing surveillance for coccidioidomycosis in an effort to identify other locally-acquired infections and plan to continue environmental sampling.

Background on Coccidioidomycosis (“Valley Fever”)

Coccidioidomycosis (“Valley Fever”) is a fungal infection caused by Coccidioides immitis and C. posadasii. Known endemic regions for these soil-dwelling fungi includes Arizona, the central valley and southern California, and parts of Utah, Nevada, New Mexico, Texas, and Central and South America.

Transmission occurs via inhalation of spores. Exposures typically occur when soil is disrupted, such as during excavation. Most infections (~60%) are subclinical. Symptomatic infections typically manifest as community acquired pneumonia or influenza-like illness 1-4 weeks after exposure. Some patients develop residual lung nodules or lung cavitations. Disseminated disease is rare (~1%), but may involve skin, bones, joints, and meninges. Severe disease may develop in anyone. Persons at highest risk for severe disease include those who are HIV-positive, immunocompromised, taking corticosteroids, pregnant (in their third trimester), and people of African or Filipino descent.

Many infections will resolve without treatment. Severe illness and disseminated disease usually require therapeutic intervention. See the resources below for further guidance.
Coccidioidomycosis cont.

Actions requested for healthcare providers:

- Be aware that *Coccidioides immitis* (the fungal cause of coccidioidomycosis or Valley Fever) has been identified in soil in eastern Washington, and 3 locally-acquired coccidioidomycosis cases have been reported.

- Consider the diagnosis of coccidioidomycosis in patients with clinically compatible illnesses who have traveled to endemic areas or spent time in eastern Washington, especially when illnesses are unresponsive to first line therapies or for patients with prolonged respiratory illness, fatigue or fevers of unknown etiology.
  - Commercial testing for coccidioidomycosis is widely available.
  - Serology options include enzyme-linked immunoassay (EIA), complement fixation (CF), and immunodiffusion (ID).
  - Sputum or other appropriate clinical specimens can be submitted for culture.

- If you suspect a patient acquired the infection in state, consult your local health jurisdiction about confirmatory testing at the Centers for Disease Control and Prevention (CDC).

- Report all coccidioidomycosis cases to your local health jurisdiction. It is a notifiable condition in Benton, Franklin, and Walla Walla counties. Statewide, cases are reportable as a rare disease of public health significance. [http://www.doh.wa.gov/AboutUs/PublicHealthSystem/](http://www.doh.wa.gov/AboutUs/PublicHealthSystem/)

Resources

- CDC: [http://www.cdc.gov/fungal/diseases/coccidioidomycosis/health-professionals.html](http://www.cdc.gov/fungal/diseases/coccidioidomycosis/health-professionals.html)
- Valley Fever Center for Excellence: [https://www.vfce.arizona.edu/Clinicians/default.aspx](https://www.vfce.arizona.edu/Clinicians/default.aspx)

Measles: Whatcom County case, potential public exposures in other counties

OLYMPIA - A person who was confirmed with measles traveled to several western Washington public locations while contagious. Most people in our state are immune to measles, so the public risk is low except for people who are unvaccinated. People who haven't been vaccinated or aren't sure if they’re immune should ask a health care professional for advice.

Public health officials say the Whatcom County woman in her 20s became contagious with measles March 26 after visiting a local family with measles linked to an outbreak in British Columbia. She worked at the Lynden Dutch Bakery while contagious. Measles is highly contagious and can cause severe illness with rash, fever, cough, eye irritation, and can be fatal.

[Read complete press release here](#)