



Coccidioidomycosis (Valley Fever)

What is Coccidioidomycosis?

Coccidioidomycosis is an infection of the lungs caused by the fungal species *Coccidioides*. *Coccidioides* grow in soil, particularly in arid areas of North, Central and South America.

Who is at risk for Coccidioidomycosis?

The disease affects all ages, however, men and the elderly are most frequently affected. People who engage in activities that expose them to dust, such as agricultural work and construction, or in dust storms in places where the fungus is found in the soil are at a higher risk for getting the disease. In the United States, *Coccidioides* is most commonly found in soil in the southern and central parts of California, Arizona and portions of New Mexico, Texas, Nevada and Utah. It can also be found in parts of Mexico and Central and South America.

What are the symptoms of Coccidioidomycosis?

Symptoms may be influenza-like and include fever, cough, headache, muscle aches, rash, chills, and chest pain. In very rare cases, long term damage to the nervous system can occur. Most people with coccidioidomycosis do not experience symptoms, but certain groups of people are at risk for more severe disease. These high-risk groups include people of Asian descent (particularly Filipino), African Americans, children under one year of age, pregnant women in their third trimester and those with weakened immune systems (such as people with HIV/AIDS, diabetes, chronic pulmonary disease or people undergoing cancer treatment).

How soon do symptoms appear?

Symptoms usually appear one to three weeks after exposure.

How is Coccidioidomycosis spread?

Coccidioidomycosis is spread by inhaling infective fungal spores found in the soil, usually as dust. It does not spread between people and/or animals.

When and for how long is a person able to spread the disease?

The disease cannot be spread from person to person.

How is a person diagnosed?

Coccidiomycosis is diagnosed based on medical history, symptoms, and physical examination. Imaging tests may be performed to look for signs of pneumonia, and biopsy samples may be taken for examination under a microscope. Laboratory testing for the fungus is also available.

What is the treatment?

For most cases, treatment is not necessary and symptoms will go away on their own. Antifungal medication may be prescribed in some cases to prevent more serious disease from developing, such as for people in high-risk groups. A health care provider can decide if treatment with antifungal medications is necessary. Rarely, supportive care in a hospital setting may be needed for very severe cases.

Does past infection make a person immune?

Infection of coccidioidomycosis is thought to provide lifelong immunity. However, a relapse of symptoms has been seen in some people after their initial recovery.

Should children or others be excluded from child care, school, work or other activities if they have Coccidioidomycosis?

No. Coccidioidomycosis cannot be spread from person to person, so people with the disease do not need to be separated from others.

What can be done to prevent the spread of Coccidioidomycosis disease?

The spread of Coccidioidomycosis can be prevented by controlling dust in areas with endemic infection in sites such as construction sites, archaeological project sites, or other locations where activities cause excessive soil disturbance. Controlling dust can be achieved by taking measures such as wearing a facemask (such as N95) when exposed to a dusty environment, planting grass and paving airfields. Protective anti-fungal medication may be prescribed to certain at-risk individuals if deemed necessary by their medical provider.

Additional Information:

Is available at www.ndhealth.gov/disease or by calling the North Dakota Department of Health at 800.472.2180.

This disease is a reportable condition. As mandated by North Dakota law, any incidence of this disease shall be reported to the North Dakota Department of Health.

Resources:

1. *Red Book: 2015 Report of the Committee on Infectious Diseases*. 30th ed. [Children in Out-Of-Home Care]. Kimberlin, DW; Brady, MT; Jackson, MA; Long, SS. American Academy of Pediatrics. 2015: 132-151.
2. *Red Book: 2015 Report of the Committee on Infectious Diseases*. 30th ed. [Coccidioidomycosis]. Kimberlin, DW; Brady, MT; Jackson, MA; Long, SS. American Academy of Pediatrics. 2015: 302-305.