

Safety Note #202

Valley Fever Awareness



Valley Fever is an infection caused by the fungus *Coccidioides immitis* that lives in the top 2 to 12 inches of soil in many parts of the state. When soil containing this fungus is disturbed by activities such as digging, vehicles, or by the wind, the fungal spores can become airborne and potentially be inhaled by workers. People can become infected with Valley Fever by breathing in fungal spores that grow and reproduce in their body. According to the Centers for Disease Control and Prevention (CDC), most people who breathe in the spores don't get sick, and it's difficult to prevent exposure to *Coccidioides* in areas where it's common in the environment. Valley Fever is not contagious, the illness is not spread from one person to another. While there is no vaccine to prevent Valley Fever, there are important steps to take in order to limit risk and reduce employee exposure.

- Determine if your worksite is in an area where Valley Fever is endemic (consistently present). Fungal spores are more likely to be present in the soils of the Central Valley, including the Counties of Fresno, Kern, Kings, Madera, Merced, Monterey, San Joaquin, San Luis Obispo, Santa Barbara, Tulare, and Ventura.
- Determine if the work is reasonably anticipated to cause exposure to substantial dust disturbance (visible airborne dust for one hour or more on any day). This could include digging, grading, or other earth moving or *agricultural operations, or vehicle operation on dirt roads, or high winds. (*Cultivated, irrigated soil may be less likely to contain the fungus compared to undisturbed soils.)
- Train workers and supervisors on endemic areas, how to recognize symptoms of illness, and ways to minimize exposure. Encourage workers to report respiratory symptoms that last more than a week.
- Follow practices that limit workers' exposure to outdoor dust in disease-endemic areas:
 - minimize the area or amount of soil disturbed
 - use water, appropriate soil stabilizers, and/or re-vegetation to reduce airborne dust
 - wet the soil before disturbing it and continuously wet it while digging
 - stabilize all spoils piles by tarping or other methods
 - Stay upwind of digging, when possible
 - suspend work during heavy wind or dust storms
- Take measures to reduce transporting spores offsite by cleaning tools, equipment, and vehicles with water to remove soil before leaving the site; have separate work clothes, coveralls or Tyvek suits that can be removed at the end of the workday; remove work boots at the worksite, use water or boot scrapers/brushes.
- When exposure to dust is unavoidable, provide NIOSH-approved [respiratory protection](#) with particulate filters rated as N95, N99, P100 or HEPA. Household materials such as washcloths, bandanas, and handkerchiefs do not protect workers from breathing in dust and spores.
- Symptoms of Valley Fever can be mistake for other diseases such as the flu (influenza) and TB (tuberculosis), so it is important for workers to obtain medical care for an accurate diagnosis and possible treatment. Early diagnosis and treatment are essential because the effectiveness of medication is greatest in early stages of the disease.
- The most common signs and symptoms of Valley Fever include fatigue, cough, fever, shortness of breath, headache, muscle aches or joint pain, rash on upper body or legs, and symptoms similar to flu that linger longer than usual. When infected, symptoms usually occur 7 to 21 days after breathing in spores.
- Valley Fever can affect people of any age, but it's most common in adults aged 60 and older. Certain groups of people may be at higher risk for developing more severe infection, such as: people who have weakened immune systems, pregnant women, and people with diabetes.
- Follow ANR's procedures for [reporting a workplace injury/illness](#) if infected, see [Safety Note #123](#).
- A new California law, [AB 203](#), requires construction employers in highly endemic Valley Fever Counties to train employees. Further information, resources and training can be found at: http://safety.ucanr.edu/Programs/Respiratory_Protection_Program/Valley_Fever_Awareness/