What is Valley Fever?

Valley Fever (coccidioidomycosis or “cocci”) is an infectious disease caused by a fungus called Coccidioides which lives in the soil and dirt in certain areas. The fungus usually infects the lungs causing flu-like symptoms. Most of the time symptoms get better on their own.

People of all races and ethnicities are at risk for Valley Fever in California. However, some racial or ethnic groups are at risk for severe Valley Fever. When Valley Fever is severe, patients may need to be hospitalized and in rare cases, the infection can spread beyond the lungs to other organs (this is called disseminated Valley Fever). African Americans and Hispanics in California have higher rates of hospitalization compared with whites, and African Americans and Filipinos appear to be at higher risk for disseminated disease.

When and where do people get Valley Fever?

Valley Fever infection can occur year-round and tends to occur in areas with dry dirt and desert-like weather conditions that allow the fungus to grow.

Cases of Valley Fever have been reported from most counties in California. Over 75% of cases have been in people who live in the San Joaquin (Central) Valley. In California, the number of reported Valley Fever cases has increased greatly since 2000, with more than 4,000 cases reported in 2012.

Outside of California, Valley Fever is found in some areas of Arizona, Nevada, New Mexico, Utah, and Texas, and parts of Mexico and Central and South America.
How do people get Valley Fever?

People can get Valley Fever by breathing in dust containing a form of the *Coccidioides* fungus called spores which are too small to be seen. Anyone who lives, works, or visits in an area with Valley Fever can be infected. Animals, including pets, can also be infected. Valley Fever is not contagious and cannot be spread from one person or animal to another.

How are African Americans, Filipinos, and Hispanics affected by Valley Fever?

African Americans and Hispanics in California are more likely to be hospitalized with Valley Fever compared with whites.

Valley Fever usually infects the lungs but it can spread outside of the lungs and infect the brain, joints, bone, skin, or other organs. This is called disseminated disease. This form of the disease is rare but can be very serious and could be fatal. Persons of any race or ethnicity can get infected with Valley Fever and develop disseminated disease. However, African Americans and Filipinos appear to have a higher risk of developing disseminated disease than other racial or ethnic groups.

Why do persons of certain racial or ethnic groups get more severe disease?

To date, we still do not understand why persons of certain racial or ethnic groups are at higher risk of severe Valley Fever than others.
What can I do to protect myself?

1. Know your risk

Know if you live, work, or are traveling in an area where Valley Fever is common. You can look at the map above or contact your local health department.

In areas where Valley Fever is common, people who work in jobs or participate in recreational activities where dirt and dust are disturbed may be at more risk of getting infected than others. Valley Fever has been reported among persons doing construction, farming, military work, and archaeology.

There are several other groups that are also at risk for severe Valley Fever. These include:

- Older adults (≥60 years old)
- Pregnant women especially in the later stages of pregnancy
- Persons with diabetes
- Persons with conditions that weaken their immune system such as:
  - Cancer
  - Human immunodeficiency virus (HIV) infection
  - Treatment with chemotherapy or steroids
  - Organ transplant

If you are African American, Filipino, or Hispanic and you are part of one of these groups, you may be particularly vulnerable to develop severe Valley Fever.

2. Reduce your risk

The best way to reduce your risk of getting Valley Fever is to avoid breathing in dirt or dust in areas where Valley Fever is common. Valley Fever can be difficult to prevent but some common sense recommendations that may help are below:

When it is windy outside and the air is dusty, especially during dust storms:
- Stay inside and keep windows and doors closed.
- While driving, keep car windows shut and use “recirculating” air conditioning if available.
- If you must be outdoors in dusty air, consider wearing an N95 mask or respirator.
  - N95 masks are available at drug and hardware stores
  - To be effective, N95 masks must be fitted properly. Instructions can be found at several online sites, including the U.S. Centers for Disease Control and Prevention instruction video for using disposable respirators: (http://www.youtube.com/watch?v=0d_RaKdqecck&feature=player_embedded).

When working or playing in areas with open dirt:
- Wet down soil before disturbing it to reduce dust.
- Consider wearing an N95 mask or respirator.

Other things you can do:
- Cover open dirt areas around your home with grass, plants, or other ground cover.
• After work or play, change out of clothes if covered with dirt.
  o Take care not to shake out clothing and breathe in the dust before washing. Warn the person washing these clothes if you are not washing them yourself.
• Carry a couple of N95 masks or respirators in the car in case they are needed.

3. Know the symptoms

About 60% of persons infected with Valley Fever have no symptoms. The people who get sick usually develop a flu-like illness 1-3 weeks after breathing in the fungus. These symptoms can last a month or more. People who get sick can experience some of the following symptoms:

- Fever
- Tiredness
- Unexplained weight
- Muscle or joint aches
- Cough
- Chest pain
- Headaches
- Night
- Rash

People who are at a higher risk for disseminated disease should also be familiar with the unusual symptoms that can occur if the brain, bone, joints, or skin are infected.

Disseminated disease symptoms:

- Unexplained fevers
- Extreme tiredness
- Unexplained weight loss
- Painful, swollen joint
- Bone pain
- Back pain
- Headaches
- Swollen lymph nodes
- Unexplained weight loss
- Bumps/sores on the skin

4. Get diagnosed

If you think you might have Valley Fever, visit your healthcare provider. Since Valley Fever symptoms are similar to those of other illnesses, your provider may order a blood test or other tests, such as a chest x-ray, to help diagnose Valley Fever.

What happens if I am diagnosed with Valley Fever?

Treatment is usually not necessary for mild infections which often get better on their own. However, treatment may be recommended more often for persons at high risk for severe disease.

All persons with symptoms should see a healthcare provider who can determine if treatment is needed.

It is very important to follow instructions given by your healthcare provider about treatment, follow-up appointments, and testing if you have Valley Fever.

What is being done about Valley Fever in California?

State and local health departments:

- Monitor the numbers of persons who get Valley Fever in California
- Raise awareness of Valley Fever among healthcare providers and the public
Where can I get more information about Valley Fever?

For more information, contact your county health department or visit:

CDPH Valley Fever webpage
(https://www.cdph.ca.gov/Programs/CID/DCDC/Pages/Coccidioidomycosis.aspx)

U.S. Centers for Disease Control and Prevention Valley Fever webpage
(http://www.cdc.gov/fungal/diseases/coccidioidomycosis/index.html)

January 2016