

## Valley Fever and Pregnant Women

### 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.

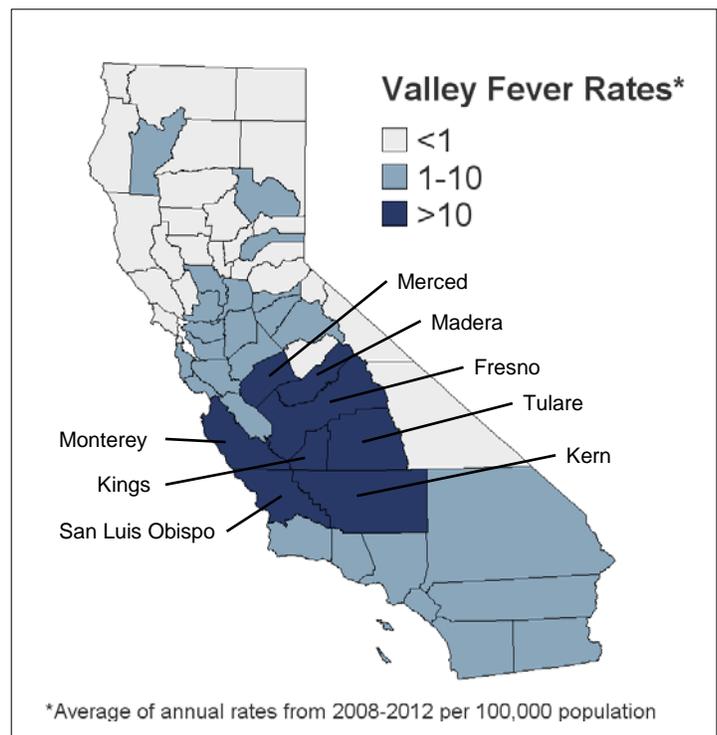
Pregnant women, especially during the third trimester of pregnancy and immediately after giving birth, are at a higher risk for getting severe Valley Fever than women who are not pregnant. In severe cases, patients may need to be hospitalized and, in rare cases, the infection can spread beyond the lungs to other organs (this is called disseminated Valley Fever).

### 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.



**Rates of reported Valley Fever cases in California counties from 2008–2012. Darkest colored counties had the highest rates of Valley Fever.**

### 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.

## Why do pregnant women need to be aware of Valley Fever?

Pregnant women who become infected with Valley Fever are more likely to develop a serious form of the infection that can spread outside of the lungs called disseminated Valley Fever. They are also more likely to be hospitalized due to Valley Fever.

Pregnant women are most likely to become very sick if they acquire Valley Fever during the third trimester of pregnancy or immediately after giving birth.

## Why are pregnant women more likely to develop severe Valley Fever?

Pregnant women's immune systems are not able to fight off infections like Valley Fever as well as when they are not pregnant. Also, some research has shown that the higher levels of hormones produced by pregnant women promote the fungus to grow.

## What can I do to protect myself if I am pregnant?

### 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:

- African Americans, Filipinos, and Hispanics
- 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 pregnant and you are part of one of these groups, you may be particularly vulnerable to develop severe Valley Fever.

If you have Valley Fever or are taking long-term medications for Valley Fever and you are pregnant or trying to get pregnant, talk to your doctor.

## 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:  
[http://www.youtube.com/watch?v=0d\\_RaKdqeck&feature=player\\_embedded](http://www.youtube.com/watch?v=0d_RaKdqeck&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.
  - 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
- Muscle or joint aches
- Headaches
- Tiredness
- Cough
- Night sweats
- Unexplained weight loss
- Chest pain
- 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
- Painful, swollen joint
- Headaches
- Extreme tiredness
- Bone pain
- Swollen lymph nodes
- Unexplained weight loss
- Back pain
- 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. Treatment may be recommended more often for persons at higher risk for severe disease, including pregnant women in their third trimester or women who have just given birth.

All persons with symptoms should see a healthcare provider who can determine if treatment is needed. Some medicines are not safe to take during pregnancy, so it is important to talk with your provider about treatment options.

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

#### **If I am diagnosed with Valley Fever while I'm pregnant, will the baby get the infection?**

Valley Fever is not passed from an infected mother to her baby. However, it is important that pregnant women follow the instructions given by the healthcare provider about treatment and follow up appointments so that mother and baby stay healthy.

#### **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?**

Contact your county health department or visit the CDPH and the US Centers for Disease Control and Prevention websites for more information:

<http://www.cdph.ca.gov/HealthInfo/discond/Pages/Coccidioidomycosis.aspx>

<http://www.cdc.gov/fungal/diseases/coccidioidomycosis/index.html>