March, 2023

Welcome to the Valley Fever Center for Excellence's website. Here we try to provide reliable and timely information about coccidioidomycosis, the medical name for Valley fever.

As we move into the spring, it is timely to remember that dry weather brings on increased opportunity for the spores of the fungus that causes Valley fever to dislodge from the soil, become airborne, and potentially be inhaled to initiate an infection. This is an ongoing seasonal event. In Arizona it occurs in the spring, until we experience our summer rains, and then again in the fall, until winter rains begin. In California, the Valley fever season extends across the entire summer because there is much less rain during that time. The actual risk varies from year to year. An Arizona Department of Health Services (AzDHS) study found that in 2007 half of the persons who developed Valley fever had lived in the state for 12 years or less. This roughly suggests an average annual risk of developing an infection of 4.2%. However, the actual risk seems to depend upon rainfall in the off seasons, presumably because it allows for the fungus to germinate more in wet years and cause more spores to be released once the ground dries out.

Knowing about Valley fever and what symptoms it usually causes is valuable to anybody living or visiting where this disease can be acquired. In that same 2007 AzDHS study, it was found that persons who knew about Valley fever before they became sick were diagnosed sooner than those that did not. The reason for this is simply because they explicitly asked their doctor to be tested. Elsewhere on our <u>Center's website</u>, you can find the information you need to know when a test for Valley fever is warranted. Currently, that is the most important reason that the departments of health recognize the need to maintain surveillance on this disease.

Early diagnosis of Valley fever has many benefits. Once the correct diagnosis is made, a search for another diagnosis ceases and the unnecessary proscribing of antibacterial antibiotics can stop. Also, for those who have the more serious forms of Valley fever, early diagnosis can lead to treatments that can avoid much of the damage that the disease would otherwise do. Unfortunately, even where Valley fever is common clinicians do not know or forget to test patients when they should. A study published last month by the Valley Fever Center for Excellence and Banner Health demonstrated that by including education about Valley fever into the regular clinical updating program for urgent care doctors, physician assistants, and nurse practitioners that appropriate testing for patients with pneumonia increased. However, the study also showed that there was still a ways to go before this was done as often as it should. It is still the case that patient knowledge about Valley fever is very important.

In the future, there is hope for a vaccine to prevent Valley fever entirely. The Valley Fever Center for Excellence is working together with the NIH and private companies including <u>Anivive Lifesciences</u> and <u>Crozet Biopharma</u> to develop a vaccine discovered

at the University of Arizona. In February, this project was featured on the <u>NBC Nightly</u> <u>News</u>. It is hoped that a vaccine will be available to veterinarians within the next year to help dogs, and we are now developing a program to do the same thing for people. See the <u>Valley</u> Fever Vaccine Fact Sheet for more information about that.

In my October's message, I talked about the National Academies Workshop on Valley Fever which was to be held in November. That two-day program was very successful and the <u>entire proceedings are available</u> online. A written workshop summary is near completion and will also be available for download from the same site.