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HEALTH ADVISORY

Coccidioidomycosis (Valley Fever) in Ventura County

Key Messages:

- A cluster of coccidioidomycosis (Valley Fever) cases has been reported in a group of employees working at an outdoor job site located between the cities of Fillmore and Piru
- The number of new cases of Valley Fever reported through October 31, 2017 in Ventura County is higher than during the same period last year (2016)
- Persons whose outside activities would lead to dust or soil exposure are at risk
- The frequency of dissemination and severe disease is higher in infants, Filipinos, Hispanics and blacks
- Timely identification and reporting of confirmed and suspect Valley Fever cases is mandated by Title 17 of the California Code of Regulations for health care providers and laboratories and is critical for an effective public health response

Current Situation:

A cluster of coccidioidomycosis (Valley Fever) cases has been reported in a group of employees working at an outdoor job site located between the cities of Fillmore and Piru, in Ventura County. The employees were preparing the ground to put in an avocado orchard in previously undisturbed soil. Symptoms noted in several employees included: chest pain, night sweats, fevers, and cough. It was determined after investigation that the employees had contact with dust from digging activities during their work duties. At this time, 7 of the 17 employees have laboratory evidence of coccidioidomycosis infection.

The California Department of Public Health (CDPH) announced on November 13, 2017 an increase in the number of new Valley Fever cases reported from local health departments in California through October 31, 2017, compared with the number of cases reported for the same period in 2016. It is our perception that the number of reported coccidioidomycosis cases in Ventura County has also increased in 2017.

Coccidioidomycosis, commonly known as “Valley Fever,” is an infection caused by the inhalation of spores from the fungus *Coccidioides* that resides in soil. The fungus can be found in the Southwest United States, including California. Given the increase in risk of coccidioidomycosis, it is important for Ventura County providers to be familiar with and on the lookout for this infection.

Recommendations to providers:

- Suspect coccidioidomycosis in patients presenting with flu-like illness and/or community acquired pneumonia (CAP) with fever, cough, chest pain, and headache. Be particularly suspicious if the symptoms have lasted for two weeks or more. Systemic complaints include fatigue, myalgia, arthralgia,

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and night sweats that may last for weeks to months. Erythema nodosum and erythema multiforme also may occur. Chest x-ray may vary and may initially show an infiltrate, hilar adenopathy, or pleural effusions. Later chest imaging may demonstrate a cavitary or nodular lesion. Disseminated coccidioidomycosis may also present as meningitis, osteomyelitis, or skin lesions.

- Empiric treatment for CAP is not effective in the treatment of coccidioidomycosis.
- Persons who work in outside conditions i.e., construction workers, agricultural workers or persons whose recreational activities would lead to dust or soil exposure are at risk. Dust arising from previously undisturbed ground is of particular concern.
- The frequency of dissemination and severe disease is higher in infants, Filipinos, Hispanics and blacks.

Testing:

- Testing may be performed on serum, cerebrospinal fluid, or other body fluids with culture and/or serology.
- Diagnostics for the detection of coccidioidomycosis include IgM and IgG by immunodiffusion, enzyme immunoassay (EIA), and complement fixation (CF).
- Although cough associated with coccidioidomycosis is generally non-productive, if sputum is obtained, culture may be performed. The organism also may be isolated by culture of lung tissue or by bronchoscopy.
- Testing is available in many commercial laboratories and in laboratories specializing in *Coccidioides*. Many consider the laboratory of Dr. Demosthenes Papagiannis to be the gold standard. Staff there is also available to help the clinician interpret results.

UC DAVIS Coccidioidomycosis Serology Laboratory

Lab Phone (530) 752-1757

Fax (530) 752-6813

Treatment:

- For most cases, Valley Fever is self-limiting, and symptoms of Valley Fever will resolve within a few weeks without treatment.
- Treatment is usually with fluconazole or another type of antifungal medication.
- Choosing who to treat is somewhat involved and is not the subject of this communication. Please consult your infectious disease physician.

Remember to Report ASAP

As per Title 17 of the California Code of Regulations, coccidioidomycosis is a reportable disease in California. Clinicians and laboratories are mandated to report cases to the local public health department:

<http://www.vchca.org/for-health-care-providers-cmr-tb-forms>

Additional Resources

- California Department of Public Health, Coccidioidomycosis (Valley Fever):
<https://www.cdph.ca.gov/Programs/CID/DCDC/Pages/Coccidioidomycosis.aspx>
- Centers for Disease Control and Prevention. Valley Fever (Coccidioidomycosis):
<https://www.cdc.gov/fungal/diseases/coccidioidomycosis/index.html>

This bulletin is intended to improve the public health in our county by keeping physicians and nurses informed of noteworthy diagnoses, disease trends and other events of medical interest. Another goal of a public health department is to educate. We hope that you will use this information to increase your awareness. Please allow us to continue in our role of speaking to the press so that we may maximize the educational message to the benefit of all citizens of Ventura County.

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