Coccidioidomycosis Care Guide

February 2025

CALIFORNIA CORRECTIONAL
HEALTH CARE SERVICES

Information contained in the Care Guide is not a substitute for a health care professional's clinical judgment. Evaluation and treatment should be tailored to the individual patient and the clinical circumstances. Furthermore, using this information will not guarantee a specific outcome for each patient. Refer to "Disclaimer Regarding Care Guides" for further clarification.

https://cchcs.ca.gov/clinical-resources/

Contents

Stakeholders and Reviewers

The Coccidioidomycosis Care Guide has been revised and feedback was solicited and incorporated from the following stakeholders:

- California Correctional Health Care Services (CCHCS) Public Health, Medical Services
- CCHCS Public Health Nurse Consultants Program Review, Nursing Services
- University of California Davis subject matter experts

Record of Changes

February 2025

- Added the following sections: Stakeholders and Reviewers, Record of Changes, Background, Reporting and Notification, and Prevention.
- To minimize redundancy, deleted duplicative tables.
- Expanded and clarified the Clinical Manifestations and Presentation of Coccidioidomycosis section, including expanding the presentation table.
- Separated the clinical manifestations discussion from diagnosis.
- Expanded the Diagnosis section and added the Centers for Disease Control and Prevention (CDC) algorithm for testing patients with symptoms consistent with Coccidioidomycosis/Valley fever
- Expanded the table on laboratory tests to include discussion of sensitivity/specificity.
- Edited the treatment section to highlight the need to have providers consider patients on a case-by-case basis given the unique challenges associated with these infections.
- Added discussion of alternative triazole and other antifungal treatments.
- Removed posaconazole, voriconazole, and amphotericin from the antibiotic tables as these agents will not be started within CCHCS.
- Updated patient information materials.

Purpose

This CCHCS Coccidioidomycosis Care Guide is a tool to aid health care practitioners, leadership, public health and infection control nurses, and other staff in the identification, treatment, and management of coccidioidomycosis (cocci).

Section I - Background: Microbiology, Epidemiology, Reporting, and Notification

A. Microbiology, Epidemiology

Coccidioidomycosis (also called Valley fever or "cocci") is caused by inhalation of the fungal spores of the genus *Coccidioides* (*C. immitis*, *C. posadasii*). It is most prevalent in the southwest United States, including the southern and central valleys of California, but cases are diagnosed throughout the state of California. *Coccidioides* spp. grow in soil as mycelia and in rainy periods grow closer to the surface of the soil. As the soil dries, the mycelial cells become brittle single-celled arthroconidia and may go airborne very easily. These arthroconidia may be inhaled and cause infection—within the body these develop into spherules/endospores.

CDCR has designated institutions as being in areas at higher risk for coccidioidomycosis for the purpose of applying Cocci Area medical restrictions (HCDOM, 1.2.14, Medical Classification System) as a prevention method for persons at higher risk of severe disease. These institutions include ASP, CCI, CMC, COR, KVSP, NKSP, PVSP, SATF, and WSP. However, coccidioidomycosis may be seen in patients at any institution. Almost all male patients pass through NKSP and WSP Reception Centers prior to being endorsed at their home institution and thus may be exposed early on in their CDCR stay.

B. Incubation Period

The majority of patients who are infected with coccidioidomycosis are asymptomatic. However, those who go on to develop symptoms usually become symptomatic after 21 days post-exposure.

C. Infectious Period

Coccidioidomycosis is not transmitted person-to-person, so there is no infectious period.

D. Diagnostic and Treatment Considerations

Clinicians should consider coccidioidomycosis as a potential diagnosis when evaluating a patient with community-acquired pneumonia or respiratory illness living in or with travel to endemic or emerging regions. In most who do develop symptoms, patients will present with a primary pulmonary infection which often resolves without therapy. In about 5% of cases, patients may develop pulmonary complications or chronic disease. In 1% of cases, severe disseminated disease (extrapulmonary infection) may develop. Most patients go on to develop lifelong immunity to second infections.

Providers should consider prior travel and occupational history to determine potential risk factors (e.g., exposure to high incidence area, exposure to outdoor dirt/dust such as incarcerated wildland firefighters). Providers should be especially alert for patients who are symptomatic for >7 days or who are not responding to treatment for community-acquired pneumonia. Early diagnosis for coccidioidomycosis can reduce unnecessary antibiotic use and improve the likelihood of patients receiving appropriate treatment and management. However, with the increased number of cases in California, health care providers should be alert for these more severe presentations of coccidioidomycosis. Section III Clinical Presentation, Treatment, and Diagnostic Studies provides more information.

E. Reporting and Notification

See HCDOM, 3.8.1, Public Health Disease Reporting, for general information regarding public health reporting and notification. Coccidioidomycosis is a reportable disease in California per California Code of Regulations, Title 17. Laboratory criteria for a confirmed coccidioidomycosis case includes any single positive *Coccidioides* test result, even if the case-patient had some tests that are negative, equivocal, or indeterminate. Acceptable tests include immunodiffusion, complement fixation, enzyme immunoassay, latex agglutination, tube precipitin, lateral flow assay, DNA probe/PCR, culture, or pathology. Please see CDPH guidance for managing coccidioidomycosis. Coccidioidomycosis cases should be reported regardless of the presence or absence of symptoms. Public health nurses (PHNs) should follow the CCHCS Cocci Case Reporting Instructions on the Public Health Services Lifeline page on cocci to report newly diagnosed coccidioidomycosis cases to their local health department. New cases should be reported to the local health department using the CDPH Confidential Morbidity Report (CMR) form or CalREDIE. To identify new cases diagnosed at an institution, PHNs may access the CCHCS Quality Management (QM) CocciRisk Registry, filter on “Confirmed cocci disease,” and review the cocci disease date.

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CCHCS providers and institution Utilization Management nurses should notify the PHN of new cases diagnosed at outside emergency departments or hospitals to facilitate the reporting of cases without CCHCS contracted laboratory results in EHRS.

PHNs should also report outbreaks or clusters of two or more coccidioidomycosis cases that may be epidemiologically linked in the CCHCS Public Health Outbreak Reporting System (PORS) application (http://pors). Outbreaks or clusters of coccidioidomycosis are identified in occupational or other settings with high risk of exposure to dust and dirt (e.g., construction sites, wildland fire fighting) as per California Code of Regulations, Title 17.

Section II - Prevention

Within CDCR/CCHCS, several prevention programs have been implemented, including:

- Medical restrictions for incarcerated persons with certain risk factors from residing within institutions designated as Cocci Area 1 or Cocci Area 2 – see Medical Restrictions section below.
- Environmental mitigation.
- Increased provider and resident education on risks for exposure to disturbed dirt, signs/symptoms, and when to present to care.

A. Medical Restrictions

These are outlined in HCDOM, 1.2.14, Medical Classification System; see Appendix A, Cocci Area Medical Restriction Criteria and Waiver Policy.

Cocci Area 1

Patients who are designated as medically restricted from residing in Cocci Area 1 institutions (ASP, CCI, CMC, COR, KVSP, NKSP, PVSP, SATF, and WSP) are:

- Patients with HIV infection
- Pregnancy
- History of lymphoma
- Status post solid organ transplant
- Chronic immunosuppressive therapy
- Moderate to severe chronic obstructive pulmonary disease (on intermittent or continuous o2) or cancer patients on chemotherapy and/or radiation therapy, unless they have a history of coccidioidomycosis.

Patients with any of these conditions cannot obtain a waiver of their Cocci Area 1 medical restriction (HCDOM, 3.8.5, Coccidioidomycosis Waiver).

Cocci Area 2

Patients who are designated as medically restricted from residing in Cocci Area 2 institutions (PVSP, ASP) include the following:

- Patients who are designated as Medical High Risk (per QM criteria) or whose most recent CST result is negative, incomplete, or the CST has not been offered, unless they have a history of coccidioidomycosis. These patients may not waive their Cocci Area 2 medical restriction.
- Patients diagnosed with Diabetes Mellitus or who are African American/Black or Filipino, unless they have a history of coccidioidomycosis or a positive CST result. These patients may request to waive their Cocci Area 2 medical restriction provided they do not meet any of the other Cocci Area 1 or Cocci Area 2 medical restrictions described above.

B. Coccidioides Skin Test (CST)

In addition to clinical and demographic medical restrictions, CCHCS employs a test-based strategy of determining a patient's risk for *Coccidioides* infection for the purpose of medically restricting patients at higher risk from residing at certain institutions. Coccidioidal antigens are injected intradermally, and the immune reaction is measured. A positive CST indicates prior infection and immunity. Most patients with a positive CST are immune from repeat infections. Patients entering CDCR between ages 18 and 64 are offered a CST as part of the Reception Center intake health

Section II Cont'd

assessment and routine opt-out screening tests (HCDOM, 3.1.8, Reception Center). Patients are informed that the purpose of the CST is to assess for prior infection to prevent patients who test negative, and thus without evidence of immunity, from placement at the institutions with the highest rates of coccidioidomycosis (Cocci Area 2). Patients may also request a CST at any time during incarceration. (See Workflow 600-14 for CST Placement and results documentation.)

Section III - Clinical Presentation, Treatment, and Diagnostic Studies

A. Clinical Manifestations and Presentation of Coccidioidomycosis

Up to 60% of patients with coccidioidomycosis do not present for care as their symptoms are minimal. However, for the other 40%, diagnosis may be delayed as coccidioidomycosis symptoms are non-specific. Early diagnosis improves patient outcomes.

In general, after a patient is exposed to coccidioidomycosis, infection may develop one to four weeks later. The most common symptoms are fatigue, night sweats, and pulmonary symptoms like cough, shortness of breath, and pleuritic chest pain. Fever, weight loss, and headache are also very common. These symptoms may persist for weeks to months.

The most common manifestation of coccidioidomycosis is primary pulmonary disease which may look very similar to bacterial community-acquired pneumonia. Approximately 5% of patients may develop significant pulmonary complications including cavitation, residual nodules, and chronic fibrocavitary pneumonia. Approximately 1% of patients develop severe disseminated disease.

Risk factors for severe disease include:

- Immunocompromised patients:
  - HIV with CD4 <250
  - Patients on TNF-alpha inhibitors or other immunosuppressive agents
  - Patients on glucocorticoids at doses of >15 mg daily for more than 2 weeks
  - Patients with malignancies especially those on active chemotherapy
  - IL-12 deficiencies
- Black and Filipino patients (please note that there may be significant socioeconomic and other confounding factors)
- Pregnancy
- Diabetes

B. Primary Pulmonary Cocci

This is the most common manifestation of coccidioidomycosis infections. Patients present generally 1-3 weeks post-exposure with a very similar presentation to community acquired pneumonia.

Common Symptoms:

- Fever
- Cough
- Fatigue
- Weight loss

Other Symptoms:

- Chest pain
- Shortness of breath
- Chills
- Arthralgias
- Myalgias
- Sputum production
- Headache (common even without meningitis)
- Erythema nodosum

Complicated and chronic pulmonary disease develops in approximately 5% of those infected with cocci (pulmonary nodule, cavity, chronic pneumonia).

- Patients may have increasing pulmonary involvement with persistent symptoms or findings for months or years.
- Chest X-Ray (CXR) may demonstrate progressive interstitial changes, fibrosis, volume loss, inflammation, and possibly cavitary lesions.
- Prognosis may be worse in elderly patients and/or diabetics.
- These patients should be co-managed with pulmonary or infectious disease specialists and may require a higher level of care depending upon presentation.

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Section III Table 1. Complications and Chronic Pulmonary Coccidioidomycosis

	PRESENTATION
Residual pulmonary nodules	▸ Usually asymptomatic. ▸ May persist for months to years after symptom resolution. ▸ May be several centimeters in diameter, often solitary and peripheral. ▸ Ensure appropriate documentation of coccidioidal pulmonary nodules to ensure patients do not have unnecessary procedures.
Cavitary lesions	▸ Occur in 2-8% of cocci pulmonary infections. ▸ 50% resolve within two years. ▸ Cavities may be thin-walled and stable. Usually asymptomatic, solitary, and peripherally located. Asymptomatic patients may be monitored with imaging. When close to pleura, patients should be treated to prevent complication/rupture. ▸ Cavity rupture: often forms a bronchopleural fistula with symptoms of dyspnea and chest pain suggesting pneumothorax. On CXR there is commonly an effusion with an air fluid level. These patients should always be referred to higher level of care for consideration of surgical resection.
Chronic Fibrocavitary pneumonia	▸ Constitutional symptoms – night sweats, fatigue, weight loss. ▸ More likely to occur in patients with immunosuppression, diabetes, or underlying lung disease. ▸ Will require treatment with antifungal therapy to resolve.
Diffuse reticulonodular pneumonia	▸ Usually arises from diffuse fungemia producing multiple septic emboli. ▸ Usually occurs in those with cellular immune deficiency. ▸ May occur with high inoculum exposure in immunocompetent patient. ▸ Symptoms include severe dyspnea and often fever and night sweats for days to weeks. ▸ Bronchoalveolar washings positive for fungal organisms. ▸ Serologic tests may be negative in up to 1/3 of patients.
Acute Respiratory Distress Syndrome	▸ Infrequent. ▸ High inoculum exposure. ▸ Consider steroid therapy. ▸ These patients should be managed at higher level of care.
Miliary Disease	▸ Patients likely to be immunocompromised. ▸ Requires management at higher level of care. ▸ Patients will need lifelong therapy.

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C. Severe and Disseminated Disease

- Approximately 1% of *Coccidioides* infections disseminate. Disseminated disease may be the initial presentation or manifest later (within weeks or more than two years after initial cocci diagnosis or with reactivation of previously treated cocci especially among immunocompromised individuals)
  - The skin is the most common site of dissemination.
  - Other common sites are subcutaneous soft tissue, bones, joints, and meninges/central nervous system.
- May be rapidly fatal. CNS disease has a very high morbidity/mortality rate.
- General symptoms that may suggest dissemination:
  - Fatigue, fever, weight loss, night sweats in a previously exposed or infected individual.
  - Persistent or worsening symptoms despite therapy.

Section III Table 2. Disseminated Cocci Disease and Associated Symptoms

Type of disseminated disease	Symptoms
Skin or soft tissue disease • Most common site of dissemination. • Many patients with dissemination to skin and soft tissue have other extrapulmonary sites of infection.	• New unexplained skin lesions
Bone or joint disease	• Bone pain or mass • Arthritis, usually monoarticular, knee most common site • Back pain with/without neurologic symptoms (vertebral disease, single or multiple sites) • Abnormal x-ray or bone scan

Meningeal or CNS disease	• Headaches:
	  ○ Worsening
	  ○ Unusually severe
	  ○ Change in pattern of existing headache disorder
	• Fever
	• Blurred vision
	• Signs of meningeal irritation
	• Cognitive impairment or changes in mental status
	• Gait abnormalities
	• Focal neurologic deficits
	• Lumbosacral back pain (if lumbar meninges affected)

Other sites: Endocrine glands, eye, liver, kidneys, genital organs, prostate, peritoneal cavity, others.	• Symptoms in these tissues are not specific, often consistent with unspecified infection in these organs.

D. Diagnosis

The most important step in diagnosis of coccidioidomycosis is to consider the possibility of the disease when presented with a patient with signs and symptoms of community-acquired pneumonia or other findings with a history of exposure.

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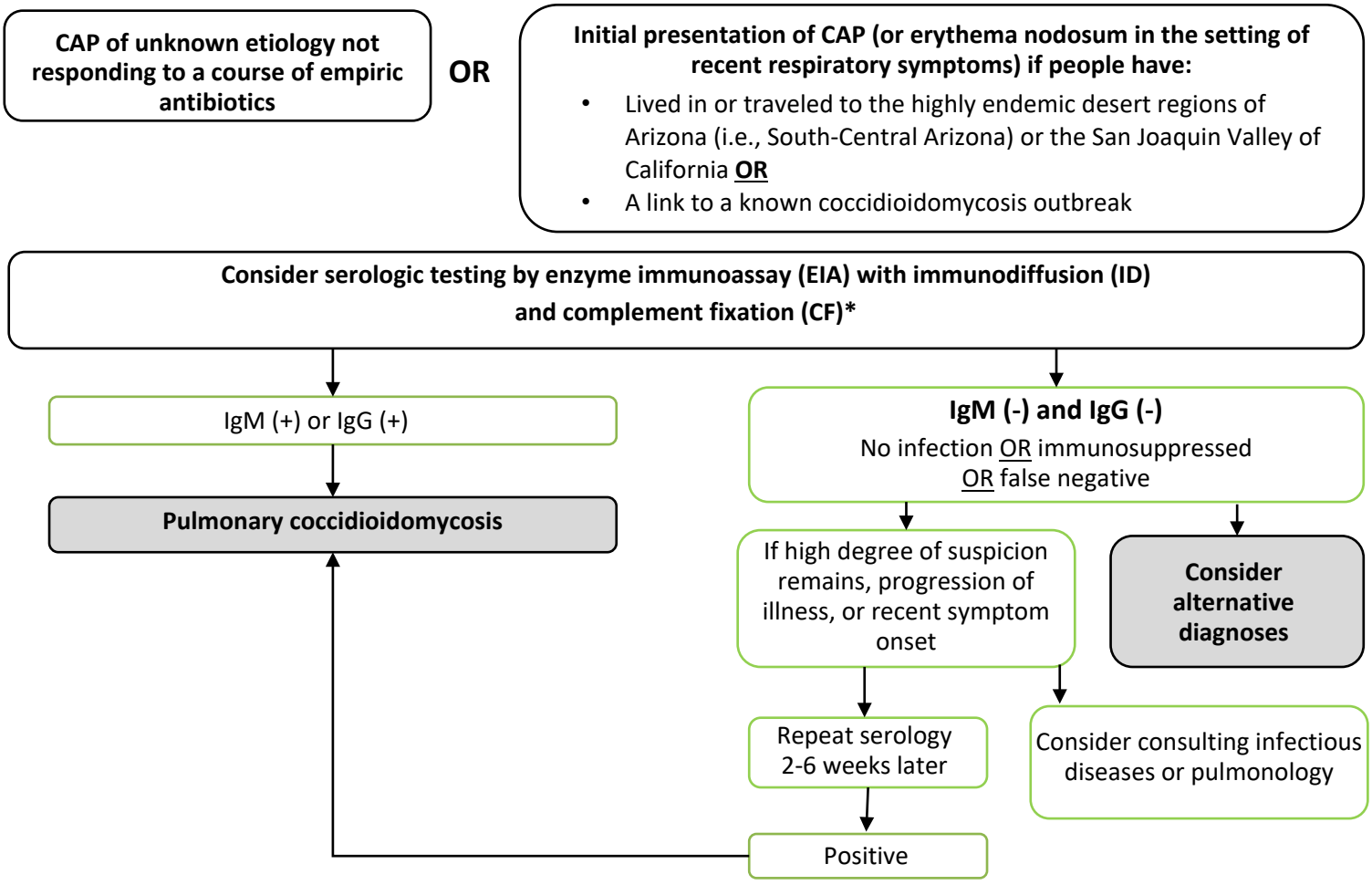
The diagnosis of coccidioidomycosis relies primarily on serology, which can be difficult to interpret. If you order serologic tests to detect Coccidioides IgM and IgG antibodies, please consider the following:

- Enzyme immunoassay (EIA), immunodiffusion (ID), and complement fixation (CF) tests are the most used coccidioidomycosis serologic tests and have variable sensitivities and specificities.
- A negative result from one test type does not necessarily invalidate a positive result from another test type.
- Not all patients with coccidioidomycosis will have a detectable CF titer.
- A patient with a positive *Coccidioides* IgM OR IgG (or both) could have acute coccidioidomycosis.
- Depending on factors such as the timing and level of exposure and patient immune status, antibody development may lag illness onset by several weeks.
- If there is high clinical suspicion of coccidioidomycosis, clinicians may consider repeating serologies 2-4 weeks later.

Patients with severe disease or immunosuppression may have negative serologic tests and clinicians should consider alternate diagnostic methods including PCR or culture.

The CDC algorithm for coccidioidomycosis evaluation is included below:



Source: CDC Testing Algorithm for Coccidioidomycosis. At https://www.cdc.gov/valley-fever/hcp/testing-algorithm/index.html.

CAP denotes community-acquired pneumonia.

*Note: Initial testing with EIA or ID and CF may depend on availability and performance characteristics of test at facility. Within CCHCS, initial tests are generally the ID and CF instead of EIA. Patients diagnosed outside CCHCS may have different tests performed with different performance characteristics.

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Section III Table 3. Laboratory Studies for Coccidioidomycosis Diagnosis and Test Performance

LABORATORY STUDIES	CHARACTERISTICS	SENSITIVITY/SPECIFICITY
Immunodiffusion (ID)	• Initial test within CCHCS • Detects antibodies (IgM or IgG) to coccidioidomycosis • Less sensitive than EIA but more specific • Reported as positive or negative • Mostly qualitative, but may be quantitative in some instances	• 60%/99%
Complement fixation (CF)	• Along with ID, may be initial test within CCHCS • Measures the binding of complement by IgG antibody • Reported as a titer • Can be measured in serum and other bodily fluids (such as CSF to rule out coccidioidomycosis meningitis) • Should be followed over time to assess response to therapy • May be low or undetectable in mild disease or in immunosuppressed patients • CF IgG usually positive within three months of infection • Remains detectable six to eight months or longer • Resolves as infection clears, desirable endpoint is usually titer 1:2, 1:4 or undetectable. (Titer may never revert to undetectable.) • Persistence of titer > 1:4 may indicate active infection including dissemination. • Titer of CF should be performed at initial diagnosis, repeated at least once two to four weeks after the initial diagnosis, then at least every three months until titers drop to 1:4 or less	• 65-83%/High
Enzyme Linked Immunoassay (EIA)	• Detects antibodies (IgM or IgG) to coccidioides • Relatively sensitive but may be negative in early disease; if high suspicion repeat assay in 2 weeks • Reported as positive or negative • Not generally used within CCHCS	• 59-88%/68-96% (cross-reacts with other dimorphic fungi)
Histopathology	• Stains for fungal elements from biopsies of suspicious lesions or sputum are helpful in diagnosis	• 23-84%/High
Culture	• Isolation of cocci in tissue, wound, or sputum. If clinician has suspicion for cocci and sends culture, **notify** lab as this requires biosafety level 3 procedures. Coccidioides is a major lab hazard.	• Variable/High
Polymerase Chain Reaction (PCR)	• Generally done on tissue specimens, sputa, or CSF but availability varies	• 56-75%/99-100%
Skin test	• Coccidioidal antigens are injected into dermis and immune reaction measured • A positive skin test indicates prior infection • Most patients with a positive skin test are immune from repeat infections	Sensitivity approximately 70% in persons with prior infection; not generally used for acute diagnosis
Routine labs (CBC, CMP)	• Usually normal • Eosinophilia > 5% occurs in up to 25% of cases	
Erythrocyte Sedimentation Rate (ESR)	• May be elevated up to twice normal in most cases	

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Section III Table 4. Imaging Studies in Coccidioidomycosis

Chest X-ray (CXR)	▸ Recommended for patient diagnosed with or considered at high risk for cocci ▸ PA and lateral views are normal in 50% of patients ▸ May show a unilateral infiltrate or ipsilateral hilar adenopathy ▸ Useful to document pulmonary lesions due to cocci ▸ In 4-8% of cases the CXR has cavities or nodules ▸ Useful to monitor course of disease
Bone scan	▸ Useful to diagnose bone or joint involvement in those with skeletal pain or to screen for skeletal involvement in asymptomatic patients with persistent or rising cocci titers
CT scan brain	▸ Identify complications of CNS disease (hydrocephalus, abscess, focal lesion)
MRI with gadolinium	▸ More sensitive than CT to assess meningeal or vasculitic complications ▸ Baseline MRI desirable to determine extent of disease and for comparison during the course of illness ▸ Also useful to identify and evaluate spinal arachnoiditis

E. Treatment and Management

Management decisions are informed by site of disease, severity of disease, and patient co-morbidities and other factors. In many instances of primary pulmonary cocci, antifungal therapy is not required, however, patients should be closely followed to ensure that complications do not develop. This is because many of the symptoms are related to the immune response and not to active fungal growth. However, treatment with triazole antifungal therapy should be considered for patients at risk for complications. In addition, patients with severe or disseminated disease, or patients with complications should be co-managed with infectious diseases, pulmonary, or other specialist, and there should be a low threshold for transfer to a higher level of care.

Treatment decisions should be individualized to the patient and take into consideration the Infectious Diseases Society of America guidelines. Triazole antifungals have many drug interactions and providers should review these carefully prior to beginning treatment. Any patient who requires intravenous antifungal medication (e.g., amphotericin B) should be managed at a higher level of care.

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Section III Table 5. Management of Primary Pulmonary, Chronic, and Disseminated Coccidioidomycosis

PRIMARY PULMONARY COCCI	
➢ Community recommendations are that otherwise healthy patients without evidence of extensive coccidioidal infection or risk factors for more serious infection do not need antifungal therapy, including patients with pulmonary nodules or cavities that are asymptomatic and stable. ➢ In CDCR, clinicians should consider management options including observation and monitoring without treatment and the risks and benefits of treatment vs. no treatment. Factors to review when considering therapy include: severity of illness, risk factors for severe disease and dissemination. ➢ Oral triazole antifungal agents are the customary initial drug of choice within CCHCS when treatment is indicated, with the exception of pregnant patients. Triazole antifungal agents are teratogenic and contraindicated in the first trimester of pregnancy. Clinicians should consider transfer of pregnant patients to a higher level of care for consideration of intravenous amphotericin therapy (severe disease) and consider early referral to a specialist for co-management for primary pulmonary disease. ➢ Duration of therapy for uncomplicated primary coccidioidal infection generally ranges from three to six months to one year or longer. There is no consensus regarding which factors should guide decisions about the duration of therapy and each case should be decided individually based on severity and extent of disease and response to therapy (when treatment is given). Useful indicators include a significant drop in CF titer and/or resolution of hilar adenopathy. These decisions may be made in conjunction with infectious disease or pulmonary specialists, especially for complicated patients, and patients with immunosuppression. ➢ Follow-up should be frequent (e.g., once or twice per month) until the patient stabilizes and immunoglobulin titer is decreasing, then every one to three months for six months to one to two years or more, regardless of whether or not treatment is initiated. Progression of disease during treatment requires reevaluation of antifungal regimen. Patients with progression of disease should be co-managed by a specialist (infectious disease or pulmonary).	
Monitor during treatment for:	**Monitor after apparent symptom resolution**
◗ Improvement or progression of symptoms including night sweats, weight loss, cough, pain. ◗ Signs of dissemination including persistence of symptoms, headache, bone pain, new skin lesions, increasing titers. ◗ Fall in titer, increase in titer or titer failing to drop.	◗ Pertinent symptom review and examination. ◗ If titers do not normalize but fall to 1:4 or less and remain stable with monthly reevaluation for at least three months, may increase monitoring interval. Consider discontinuing monitoring if asymptomatic and titers remain stable at 1:4 or less after at least three months off treatment. ◗ Patients whose titers remain ≥ 1:8 require ongoing periodic monitoring of symptoms and titers.

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CHRONIC COCCI	
PERSISTENT PULMONARY DISEASE ▸ Monitor for evidence of dissemination (worsening symptoms or new symptoms suggesting dissemination, increase in cocci titer) ▸ Monitor CXR when indicated ▸ Consultation with specialist (Pulmonary, Infectious Diseases, or surgery) may be required.	
Residual pulmonary nodules	▸ If nodule known to be result of cocci infection, usually asymptomatic and no treatment indicated. ▸ If found incidentally, may require invasive diagnostic test to rule out malignancy—discuss with pulmonary and infectious disease specialists.
Cavitary lesions	**Thin-walled** ▸ Usually asymptomatic and no treatment indicated. May change appearance, monitoring CXR at six-month to two-year intervals is useful to assess increase or decrease in size. ▸ When present, symptoms often improve with oral antifungals but may return if treatment is discontinued. ▸ Patients should be co-managed with pulmonary or infectious disease specialty input. **Ruptured Cavity** ▸ Surgery required and patients should be referred for higher level of care. **Fibrocavitary pneumonia** ▸ Usually require treatment with oral antifungal agents for at least one year and patients should be co-managed by pulmonary or infectious disease specialist.
Diffuse reticulonodular pneumonia	▸ Initial treatment usually IV amphotericin B which should be initiated within a higher level of care. May require extended course of therapy with either oral or parenteral antifungal medication. Monitor CF lgG titer as well as response to therapy to determine medication used and dosage as well as duration of therapy. ▸ After clinical improvement, may change to oral antifungal agent for at least one year. ▸ Indefinite treatment indicated for immunocompromised patients.
ARDS	▸ Should be managed in the inpatient setting only.
Miliary Disease	▸ Should be initially managed in the inpatient setting only.

DISSEMINATED COCCI	

General	• Most of these patients should be referred to higher level of care.
	• Early consultation to infectious diseases specialists.
	• To determine medication used, dosage, and duration of therapy, monitor symptomatic. response and CF lgG titer initially and at least monthly for:
	  ○ Improvement
	  ○ Failure to improve
	  ○ Worsening
	• Often requires extended course or lifetime therapy with either oral or parenteral antifungal medication (The current agents are fungistatic not fungicidal.). Best co-managed with infectious disease consultant familiar with coccidioidomycosis.

Skin or soft tissue	• Skin and soft tissue infection may be associated with disseminated disease elsewhere (especially bones and joints) and additional sites of dissemination should be considered.
	• Evaluation for other foci of infection (which may be asymptomatic) is indicated if cocci titers rise or do not improve or if symptoms persist.
	• Treat with oral antifungal agent:
	  ○ Oral fluconazole 400 mg once daily or itraconazole 200 mg twice daily.
	  ○ Duration of treatment determined by resolution of lesions, a minimum of 1 to 2 years of therapy is recommended in most cases.
	• Surgical intervention may be required.

Bone or joint (outside the spine)	• Duration and type of therapy of symptomatic bone disease outside the spine depends upon many factors. Consultation with an Infectious Disease specialist is advised. • Lifelong therapy may be required. • May require surgical treatment.
Vertebral Disease	• Vertebral cocci is a very complex condition which requires evaluation and management by infectious disease and neurosurgical consultants very familiar with this complication. • Treatment depends on extent of disease, stability of vertebral bodies, risk to spinal cord, and response to therapy. • Without cord compression or vertebral instability, medical treatment alone may be indicated with close monitoring of neurologic examination and repeat imaging. • May continue medical management with stable or improved lesions. • For progressive lesions, surgical debridement or stabilization may be important and even critical adjunctive treatment. Evidence of spinal cord impingement usually requires immediate surgical decompression.
Meninges/CNS	• Consultation with a specialist is indicated for all cases of CNS cocci. These patients should be transferred to a higher level of care for diagnosis (including lumbar puncture). • Generally, requires lifelong therapy. Oral agents are the preferred initial therapy. In some cases, intrathecal amphotericin is initial therapy; in other cases, it is reserved for those who do not respond to oral antifungal agents, when it may be given alone or concurrently with azole treatment. • Monitor clinical and CNS parameters at least monthly, increase space of visits with improvement, minimum of every three months for life. • Symptoms to monitor include headache, nausea and vomiting, personality changes, gait abnormalities, other focal neurologic findings. • Significant adherence problems are common with this lifelong treatment. Patients should understand that therapy will likely be lifelong because relapses upon discontinuation are common and potentially fatal. • A decrease in titer usually reflects improvement, and an increase in titer suggests poorly controlled disease.
Other	• Management of cocci in other sites is variable and consultation with a cocci specialist is recommended.

Section III Cont'd

F. Medications

ORAL ANTIFUNGALS GENERAL COMMENTS

- Triazole antifungals have many significant drug interactions. Consult prescribing information for complete list.
- Several of the triazoles have black box warnings, consult product labeling or www.fda.gov for the full text of these warnings.
- Serious/fatal hepatotoxicity has occurred with triazoles.
- Triazoles are contraindicated in pregnancy.
- Preferred oral antifungals for coccidioidal infection are fluconazole and itraconazole.

Section III Table 6. Coccidioidomycosis Antifungal Therapy

MEDICATION	DOSING	SIDE EFFECTS*	COMMENTS
Fluconazole (Diflucan®) Tablets: 50 mg, **100 mg, 150 mg, 200 mg** Oral Suspension 10 mg/ml, 40 mg/ml IV:100 mg, 200 mg, 400 mg strengths $	Uncomplicated primary pulmonary cocci: 400 mg orally once daily for three to six months or longer Complicated or severe disease: 400 to 800 mg once daily orally or IV, some use 1000 mg/day initially for cocci meningitis Take without regard to meals	Very high potential for drug interactions. Consult package information for full list. Skin reactions, occasional dizziness or seizures, rare, serious or fatal hepatotoxicity. Contraindicated to co-administer with drugs that prolong QT interval (citalopram, methadone, quinidine, etc.).	Use with caution in liver disease. Dose adjustment may be needed in renal disease. Avoid use in pregnancy. Category D: Positive evidence of risk, for all indications except single dose for vaginal candidiasis. Avoid with breastfeeding.
Itraconazole (Sporanox®) **200 mg** capsule $$	Uncomplicated primary pulmonary cocci: 200 mg twice daily Severe disease (note fluconazole preferred for cocci meningitis): 400-600 mg/day in two to three divided doses Take capsule with food	Do not use with antacids. Use with caution with calcium channel blockers (increases negative inotropic effect of CCBs). Transient or permanent hearing loss, neuropathy, rare cases of serious or fatal hepatotoxicity. **Black box warning**: Serious cardiovascular events including sudden death have occurred due to itraconazole induced increase in serum concentrations of cisapride, dofetilide, ergot alkaloids, felodipine, levomethadyl, lovastatin, methadone, midazolam, nisoldipine, pimozide, simvastatin, quinidine, triazolam. Concurrent use with these agents is contraindicated. **Black box warning**: Contraindicated for onychomycosis in patients with ventricular dysfunction or history of heart failure.	May be more effective for skin, soft tissue, and bone disease than fluconazole. Monitor liver function in patients with preexisting liver disease and in those treated for > 1 month Possibly monitor serum levels due to erratic bioavailability of capsules. Use with caution in renal disease, limited information. Pregnancy: Category C, risk cannot be ruled out. Avoid with breastfeeding.

*Side effect list is not all inclusive

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Additional antifungal agents

Voriconazole, posaconazole, and isavuconazole are triazole antifungals that may be utilized in some situations for patients with extrapulmonary disease not responding to fluconazole or itraconazole. These medications should be discussed with an infectious disease specialist prior to starting and are non-formulary.

For patients who require intravenous therapy with amphotericin B formulations, these should be managed in a higher level of care. Amphotericin can be very nephrotoxic and requires significant monitoring (e.g., frequent electrolyte monitoring and repletion).

Section IV - Provider and Patient Resources

Provider resources include clinical and case management training for primary care physicians and other health care professionals, information about community-acquired pneumonia (CAP) and clinical testing algorithms for coccidioidomycosis, and external links to information and advisories from CDPH and CDC. CCHCS clinicians may also consult with the CCHCS Public Health physician on-call at (916) 691-9901, Monday to Friday, 8:00 a.m. to 5:00 p.m.

Patient educational resources include materials that can be printed as brochures or posters describing individuals who are at greater risk of being exposed to *Coccidioides* or at greater risk of severe or disseminated coccidioidomycosis due to clinical or demographic characteristics. More detailed information is available in the Valley Fever Fact Sheet.

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Appendix A. Cocci Area Medical Restriction Criteria and Waiver Policy

CDCR/CCHCS
Cocci Area Medical Restriction Criteria and Waiver Policy

COCCI AREA 1
ASP, CCI, CMC, COR, KVSP, NKSP, PVSP, SATF, WSP

Cocci Area 1 – Medical Restriction Criteria

No waiver allowed
- HIV infection
- Pregnancy
- History of lymphoma
- Status post solid organ transplant
- Chronic immunosuppressive therapy
- Moderate-severe COPD on oxygen
- Cancer patient on chemotherapy or radiation

COCCI AREA 2
ASP, PVSP

Cocci Area 2 – Medical Restriction Criteria

No waiver allowed
- High medical risk
- Over 65 years of age

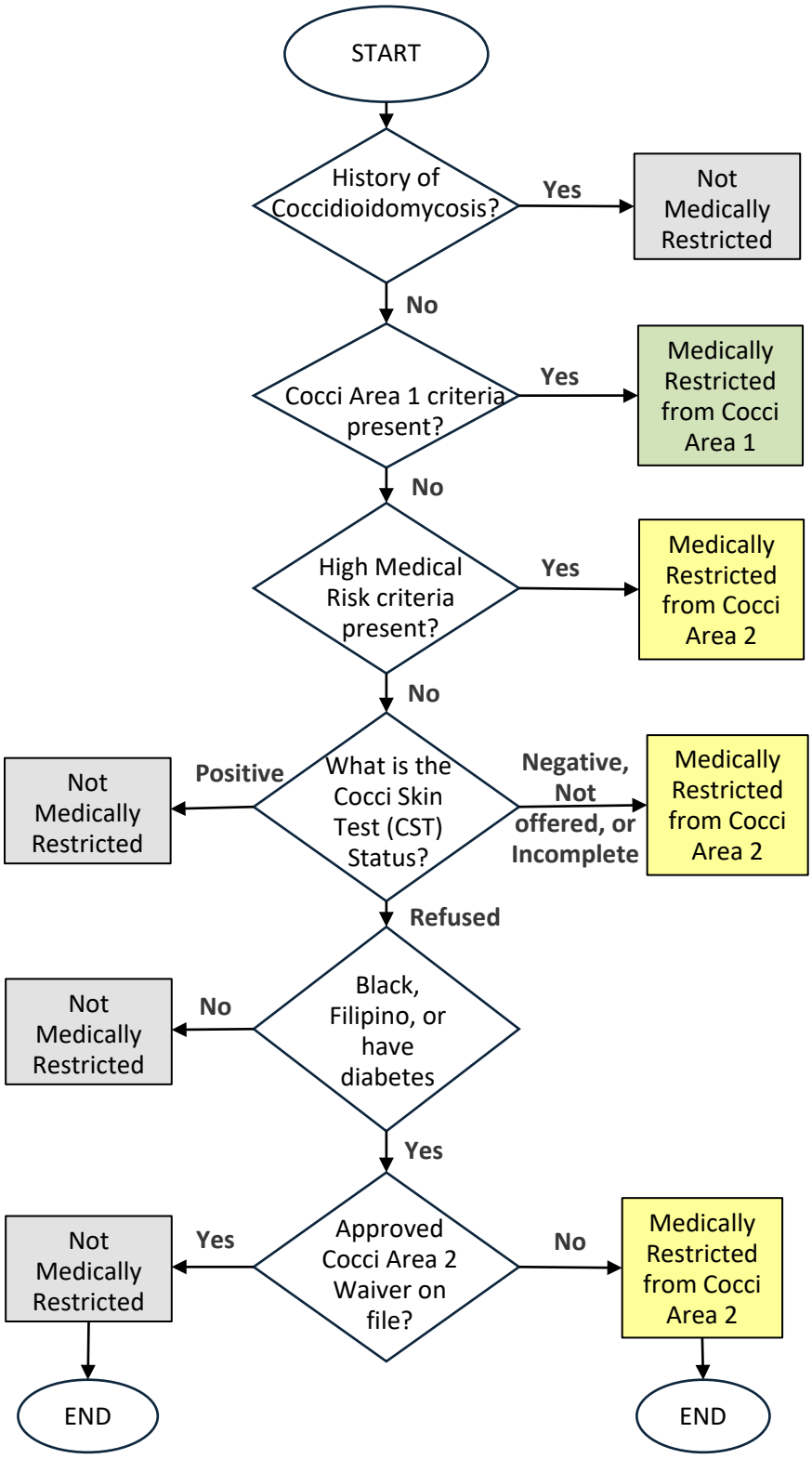
Waiver allowed
- African American/Black
- Filipino
- Diabetes Mellitus

See HCDOM 1.2.14

NOTE: If at any time there is a change in a patient's status that meets criteria for a Cocci Area 1 or 2 Medical Restriction, the patient's Cocci Area Medical Restrictions will be automatically updated in the eMCC.

For example:

- If a patient with an approved Cocci Area waiver has a subsequent negative CST, their waiver will become invalid, and they will now be medially restricted from Cocci Area 2.
- If a patient with a Cocci Area 2 Medical Restriction is later diagnosed with Lymphoma, they will now be medically restricted from Cocci Area 1.

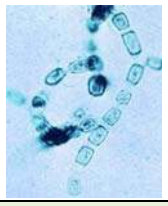


Revised: 8/22/24

PATIENT EDUCATION

Coccidioidomycosis (Valley Fever): What you Should Know

What is Valley fever?



- Valley fever is a disease caused by a fungus found in the ground in parts of Mexico and the Southwest region of the United States, including parts of California's Central Valley.
- You get sick from breathing in the fungus spores from the dust in the air. You cannot get Valley Fever from another person.
- There are nine CDCR prisons where the fungus is more common: ASP, CCI, CMC, COR, KVSP, NKSP, PVSP, SATF, and WSP.

What are the symptoms of Valley fever?

- Most people who have Valley fever have very few symptoms and may not know they are sick.
- Common symptoms of Valley fever are:
  - Fever
  - Cough
  - Tiredness
  - Headaches
  - Rash
  - Joint/muscle aches
  - Night sweats
  - Weight loss/lack of appetite
  - Pneumonia

You could have Valley fever even if you have only a few of these symptoms.

- Let your health care provider know if you have any of these symptoms. You may need lab tests or x-rays if your health care provider thinks you may have Valley fever.
- If a person gets very sick, the fungus can spread to other parts of the body causing skin rashes, bone pain, and sometimes infections in the brain.

What is the Treatment for Valley Fever?

- If you are normally healthy, Valley fever will usually go away without any treatment
- You may be treated with antifungal medication if you have symptoms that do not go away
- Patients with serious infections may need to be put in the hospital for treatment
- Sometimes treatment is needed for a very long time for some Valley fever infections

Who can get Valley fever?

- Anyone who lives, visits, or travels in areas where the fungus grows can get Valley fever. Tell your health care provider if you have lived in an area or been in a prison where Valley fever occurs.
- People who have certain other diseases are more likely to have serious symptoms of Valley fever. If you have any of the conditions listed below, you should talk to your health care provider to discuss your risk of getting very sick from Valley fever.
  - HIV
  - Lymphoma
  - Organ transplant
  - Cancer or are on chemotherapy
  - Medications that make your body less able to fight disease, such as steroids
  - You require oxygen therapy

How do I keep from getting Valley fever?

- If you are in an area where there is Valley fever:
  - Minimize your exposure to dust in the air.
  - On windy days, stay indoors. If you must go outside, cover your nose and mouth with a mask.
  - Before digging in the ground, get the dirt wet and use a mask

CALIFORNIA CORRECTIONAL HEALTH CARE SERVICES **1/4/2024**

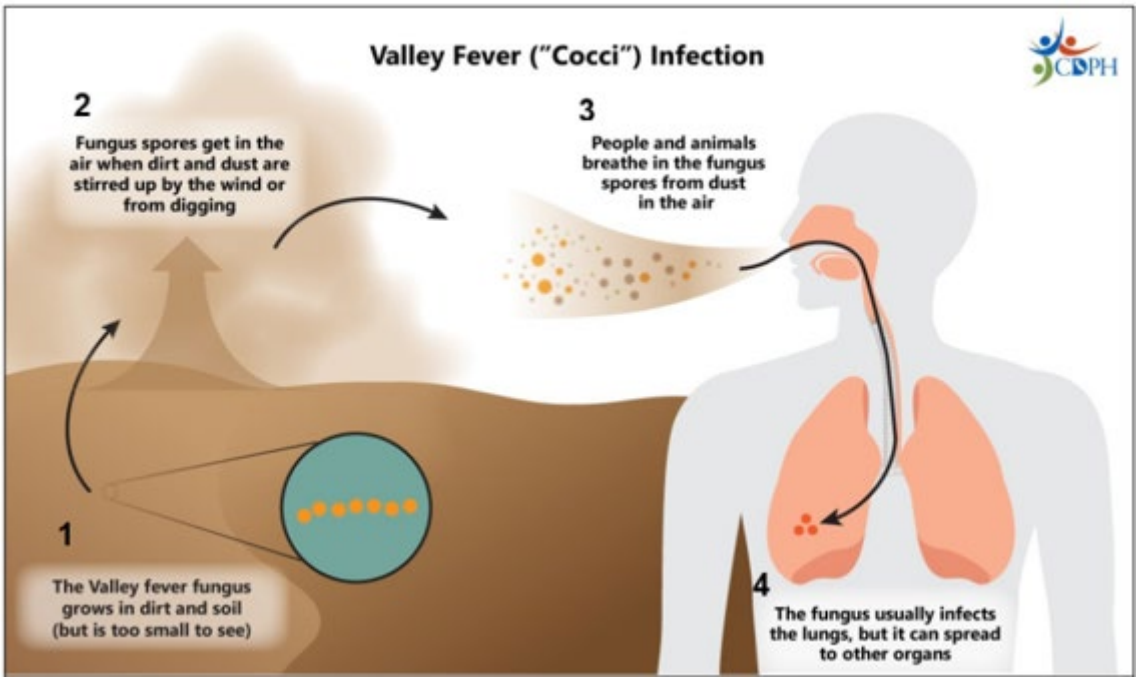
Valley Fever Fact Sheet

What is Valley Fever?

- Valley fever (also called coccidioidomycosis or "cocci") is a disease caused by a fungus called *Coccidioides***.** This fungus lives in the dirt in some parts of California.
- In the past few years, many people have been getting Valley Fever.

How do people get Valley Fever?

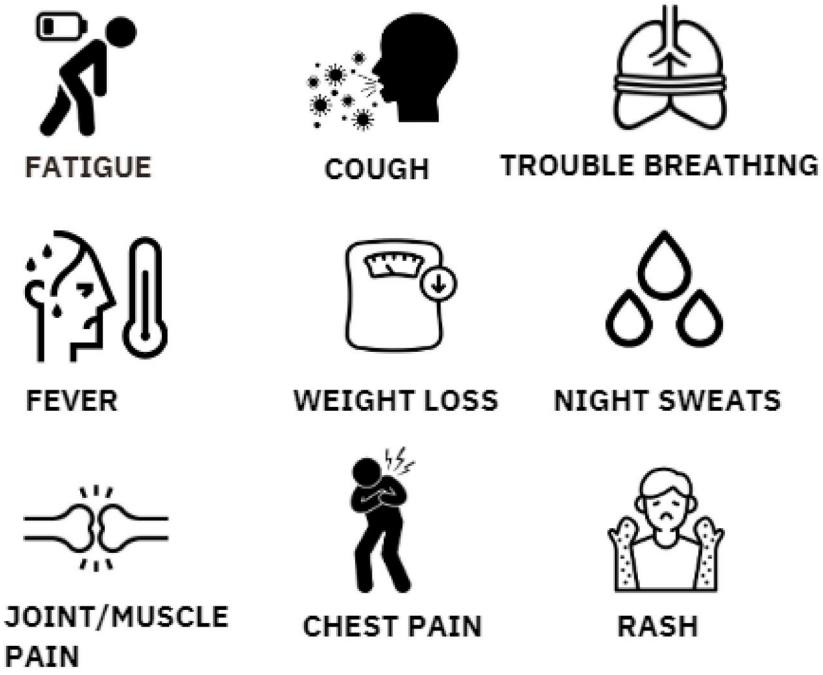
- People can get Valley fever from breahing in dust that has spores of the fungus.
- Valley fever is not contagious. People with Valley fever cannot give the infection to others



When and Where do People get Valley Fever?

- People can get Valley fever any time of the year, but more people get sick in thes summer and fall.
- Most cases of Valley fever in California are reported in people who live in the Central Valley and Central Coast areas. These are the darker blue areas on the map and where Avenal (ASP), Pleasant Valley (PVSP), California Correctional Institution (CCI), California Men's Colony (CMC), Corcoran (COR), Kern Valley (KVSP), North Kern (NKSP), Substance Abuse Treatment Facility (SATF), and Wasco (WSP) are located.

What are the symptoms of Valley fever?



- People who do get sick usually have symptoms 1 to 3 weeks after breathing in the fungus.
- People with Valley fever can be sick for a long time (a month or more).
- Valley fever usually infects the lungs. Some people can develop pneumonia (a lung infection).
- It is very rare, but Valley fever can spread from the lungs to other parts of the body like the brain, joints, bone, or skin. These infections can be very serious.

How is Valley fever diagnosed and treated?

If you have Valley fever symptoms submit a CDCR 7362, Health Care Services Request Form. Your provider may order a blood test or other tests (such as a chest x-ray).

Some people may need medicine. Some people will get better on their own.

If I had Valley fever before, can I get it again?

If you already had Valley fever, you usually don't get sick with Valley fever again. People with a weak immune system, like people who have cancer or take certain medications, can get sick more than once with Valley fever.

Who can get Valley fever?

Anyone can get Valley fever, including healthy adults. Certain groups of people may be at higher risk of getting Valley fever, and other groups of people may be at higher risk of being very sick.

In the California Department of Corrections and Rehabilitation (CDCR) all incarcerated persons are offered a skin test (Spherusol) to see if they have had Valley fever in the past. If positive, this means they have had Valley fever before. If negative, persons may become infected with Valley fever in the future if exposed.

People at higher risk of <u>getting Valley fever:</u>

People who live, work, or travel in certain parts of California, especially the Central Valley or Central Coast who:

- Do outdoor activities that involve close contact to dirt or dust, including yard work, gardening, and digging.
- Live or work near areas where dirt and soil are stirred up, such as construction or excavation sites.
- Work in jobs where dirt and soil are stirred up, including wildland firefighting.

People at higher risk getting very sick with <u>Valley fever</u>

- Older adults (60+ years old)
- People who are Black or Filipino
- Pregnant women, especially in the later stages of pregnancy
- People with diabetes
- People with health conditions that weaken their immune system such as:
  - Cancer
  - HIV or AIDS
  - Treatment with chemotherapy, steroids, or other medications that affect the immune system
  - Organ transplant

How can I help reduce my risk of getting Valley fever?

Try to avoid dusty areas as much as possible to reduce the risk of breathing in the Valley fever fungus from dust in the air. There is no vaccine to prevent Valley fever. Some tips may help reduce the risk of getting Valley fever.

<u>Avoid dust in places where Valley fever is common:</u>

- Avoid or limit yard time when it is windy outside and the air is dusty, especially during dust storms.
- Close cell window when it is windy outside.
- Avoid outdoor activities like gardening, and digging in dirt, especially if you are in one of the groups at higher risk for severe Valley fever.
- If you must be outdoors in dusty air, consider wearing an N95 or KN95 mask.

<u>When digging in dirt or stirring up dust in areas where Valley fever is common:</u>

- Stay upwind of the area where dirt is being disturbed.
- Wet down soil before digging.
- Consider wearing an N95 mask,
- After returning indoors, change out of clothes if covered with dirt.
  - Do not shake clothing or breathe in the dust when changing your clothes.

Valley fever is caused by a fungus that lives in dirt.

Protecting yourself from dust may help you stay safe from Valley fever.

Try to avoid dust outside, especially at the following prisons: Avenal (ASP), Pleasant Valley (PVSP), California Correctional Institution (CCI), California Men's Colony (CMC), Corcoran (COR), Kern Valley (KVSP), North Kern (NKSP, Substance Abuse Treatment Facility (SATF), and Wasco (WSP).

Stay inside when it is windy and the air is dusty, especially during dust storms

If you have to be outside when it is dusty, wear a N95 mask

When digging in dirt or stirring up dust in areas where Valley fever is common:

Stay upwind of the area where dirt is being disturbed.

Wet down soil before digging or disturbing it.

Change out of your dusty clothes when you are done.

Do not shake out your clothes when you take them off or do laundry.

Submit a 7362 to see a provider if you are having symptoms or have other questions about Valley fever.
Adapted with permission from the California Department of Public Health. 1/18/24

Valley fever is a disease caused by a fungus. This fungus lives in the dirt in many areas of Southern California and is found very frequently in parts of the Central Valley and Central Coast where several prisons including Avenal (ASP) and Pleasant Valley (PVSP)** are located.

Some people are at higher risk of getting Valley fever and some people may get very sick.

People at risk of getting Valley fever include:

- People who live, work, or travel in parts of California and:
  - Do outdoor activities with dirt including yardwork, gardening, or digging.
  - Live or work near areas where dirt and soil are stirred up, such as construction or excavation sites.
  - Work in jobs where dirt and soil are stirred up including wildland firefighting.
  - Have a negative Valley fever skin test (spherusol)

People at higher risk of getting very sick if they are infected include:

- Older adults (60+ years old)
- People who are Black or Filipino
- Pregnant women, especially in the later stages of pregnancy
- People with diabetes
- People with health conditions that weaken the immune system such as:
  - Cancer
  - HIV or AIDS
  - Treatment with chemotherapy, steroids, or other medications that affect the immune system
  - Organ transplant

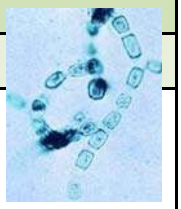
To learn more about Valley fever or to request a cocci skin test, submit a 7362 to speak with a provider.

**California Correctional Institution (CCI), California Men's Colony (CMC), Corcoran (COR), Kern Valley (KVSP, North Kern (NKSP), Substance Abuse Treatment Facility (SATF), and Wasco (WSP).

Adapted with permission from the California Department of Public Health 1/18/24

EDUCACIÓN PARA PACIENTES

Coccidioidomicosis (Fiebre del Valle): Lo que debe saber



¿Qué es la fiebre del valle?

- La fiebre del valle es una enfermedad causada por un hongo que se encuentra en el suelo en partes de México y la región suroeste de Estados Unidos, incluso en partes del Valle Central de California.
- Se contrae al respirar las esporas del hongo del polvo en el aire. No puede contagiarse la fiebre del valle a partir de otra persona.
- Hay nueve prisiones del CDCR donde el hongo es más común: ASP, CCI, CMC, COR, KVSP, NKSP, PVSP, SATF y WSP.

¿Cuáles son los síntomas de la fiebre del valle?

- La mayoría de las personas que padecen la fiebre del valle tienen muy pocos síntomas y es posible que no sepan que la padecen.
- Los síntomas comunes de la fiebre del valle son:
  - Fiebre
  - Tos
  - Cansancio
  - Dolores de cabeza
  - Sarpullido
  - Dolores articulares/musculares
  - Sudores nocturnos
  - Pérdida de peso/falta de apetito
  - Neumonía

Podría tener fiebre del valle incluso si solo tiene algunos de estos síntomas.

- Dígale a su médico si tiene alguno de estos problemas. Es posible que necesite pruebas de laboratorio o radiografías si su médico cree que puede tener fiebre del valle.
- Si una persona se enferma gravemente, el hongo puede propagarse a otras partes del cuerpo causando sarpullido en la piel, dolor en los huesos y a veces infecciones en el cerebro.

¿Cuál es el tratamiento para la fiebre del valle?

- Si su estado de salud es normal, la fiebre del valle suele desaparecer sin necesidad de tratamiento.
- Es posible que lo traten con medicamentos antifúngicos si tiene síntomas que no desaparecen.
- Los pacientes con infecciones graves pueden necesitar hospitalización para recibir tratamiento.
- A veces se necesita tratamiento durante mucho tiempo para algunas infecciones de fiebre del valle.

¿Quién puede contraer la fiebre del valle?

- Cualquier persona que viva, visite o viaje a zonas donde crezca el hongo puede contraer la fiebre del valle. Dígale a su médico si ha vivido en una zona o ha estado en una prisión donde hay fiebre del valle.
- Las personas que tienen otras enfermedades específicas tienen más probabilidades de tener síntomas graves de la fiebre del valle. Si tiene alguna de las afecciones mencionadas a continuación, debe hablar con su médico sobre su riesgo de enfermarse gravemente de la fiebre del valle.
  - VIH
  - Linfoma
  - Trasplante de órganos
  - Cáncer o quimioterapia
  - Medicamentos que reducen la capacidad del organismo para combatir enfermedades, como los esteroides
  - Requiere oxigenoterapia

¿Cómo puedo evitar contraer la fiebre del valle?

- Si está en una zona donde hay fiebre del valle:
  - Minimice su exposición al polvo en el aire.
  - En días ventosos, quédese en el interior. Si tiene que salir, cúbrase la nariz y la boca con una mascarilla.
  - Antes de remover la tierra, humedézcala y utilice una mascarilla.

CALIFORNIA CORRECTIONAL HEALTH CARE SERVICES **4/1/22024**

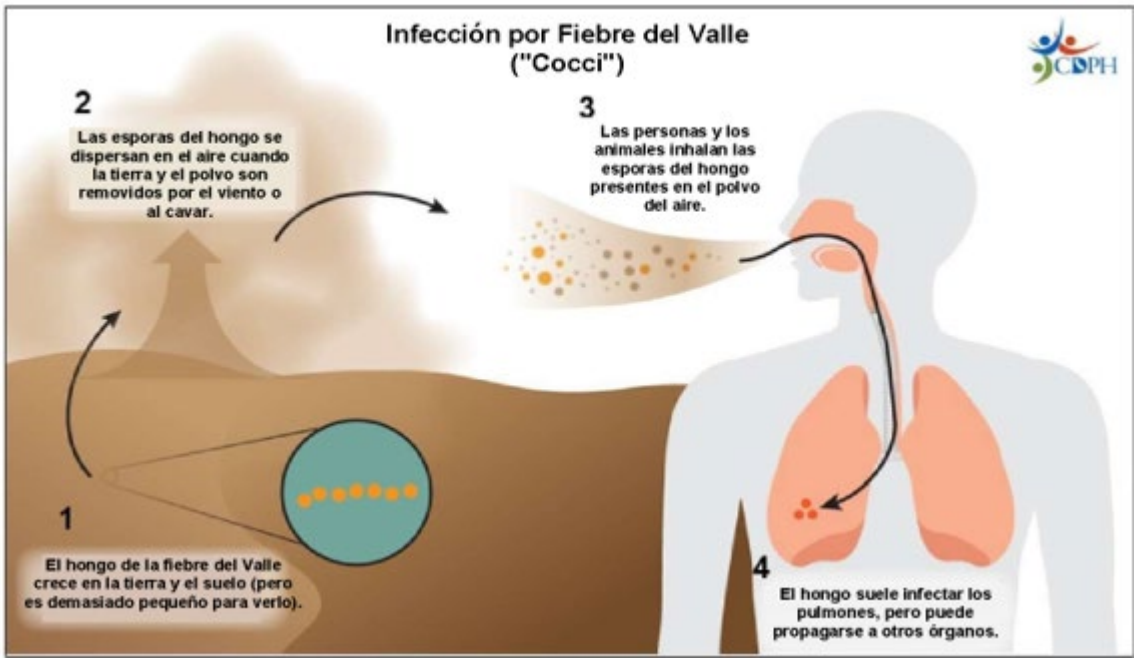
Hoja Informativa de la Fiebrea del Valle

¿Qué es la fiebre del valle?

- La fiebre del valle (también llamada coccidioidomicosis o "cocci") es una enfermedad causada por un hongo llamado *Coccidioides***.** Este hongo vive en la tierra en algunas partes de California.
- En los últimos años, muchas personas han contraído la fiebre del valle.

¿Cómo se contrae la fiebre del valle?

- Las personas pueden contraer la fiebre del valle al sumergirse en el polvo que tiene esporas del hongo.
- La fiebre del valle no es contagiosa. Las personas con fiebre del valle no pueden transmitir la infección a otras personas



¿Cuándo y dónde se contrae la fiebre del valle?

- Las personas pueden contraer la fiebre del valle en cualquier época del año, pero más personas se enferman en el verano y el otoño.
- La mayoría de los casos de fiebre del valle en California se reportan en personas que viven en las áreas del Valle Central y la Costa Central. Estas son las áreas azules más oscuras en el mapa y donde se encuentran Avenal (ASP), Pleasant Valley (PVSP), California Correctional Institution (CCI), California Men's Colony (CMC), Corcoran (COR), Kern Valley (KVSP), North Kern (NKSP), Substance Abuse Treatment Facility (SATF) y Wasco (WSP).

¿Cuáles son los síntomas de la fiebre del valle?

- Las personas que se enferman suelen tener síntomas de 1 a 3 semanas después de inhalar el hongo.
- Las personas con fiebre del valle pueden estar enfermas durante mucho tiempo (un mes o más).
- La fiebre del valle suele infectar los pulmones. Algunas personas pueden desarrollar neumonía (una infección pulmonar).
- Es muy poco frecuente, pero la fiebre del valle puede propagarse de los pulmones a otras partes del cuerpo como el cerebro, las articulaciones, los huesos o la piel. Estas infecciones pueden ser muy graves.

¿Cómo se diagnostica y trata la fiebre del valle?

Si tiene síntomas de fiebre del valle, envíe un CDCR 7362, Formulario de solicitud de servicios de atención médica. Su proveedor puede ordenar un análisis de sangre u otras pruebas (como una radiografía de tórax).

Algunas personas pueden necesitar medicamentos. Algunas personas mejorarán por sí solas.

Si tuve fiebre del valle antes, ¿puedo volver a contraerla?

Si ya tuviste fiebre del valle, por lo general no vuelves a enfermarte de fiebre del valle. Las personas con un sistema inmunitario débil, como las personas que tienen cáncer o toman ciertos medicamentos, pueden enfermarse más de una vez con la fiebre del valle.

¿Quién puede contraer la fiebre del valle?

Cualquier persona puede contraer la fiebre del valle, incluidos los adultos sanos. Ciertos grupos de personas pueden tener un mayor riesgo de contraer la fiebre del valle, y otros grupos de personas pueden tener un mayor riesgo de enfermarse gravemente.

En el Departamento de Correcciones y Rehabilitación de California (CDCR, por sus siglas en inglés), todas las personas encarceladas se les ofrece una prueba cutánea (Spherusol) para ver si han tenido fiebre del valle en el pasado. Si es positivo, significa que han tenido fiebre del valle antes. Si el resultado es negativo, las personas pueden infectarse con la fiebre del valle en el futuro si se exponen.

Personas con mayor riesgo de contraer la fiebre del valle:

Personas que viven, trabajan o viajan en ciertas partes de California, especialmente el Valle Central o la Costa Central que:

- Realizen actividades al aire libre que impliquen un contacto cercano con la tierra o el polvo, como trabajos de jardinería, jardinería y excavación.
- Vive o trabaja cerca de áreas donde se remueve la tierra y el suelo, como sitios de construcción o excavación.
- Trabaje en trabajos donde se remueve la tierra y el suelo, incluida la extinción de incendios forestales.

Las personas con mayor riesgo de enfermarse gravemente de fiebre del valle

- Adultos mayores (60+ años)
- Personas negras o filipinas
- Mujeres embarazadas, especialmente en las últimas etapas del embarazo
- Personas con diabetes
- Personas con afecciones de salud que debilitan su sistema inmunitario, tales como:
  - Cáncer
  - VIH o SIDA
  - Tratamiento con quimioterapia, esteroides u otros medicamentos que afectan el sistema inmunitario
  - Trasplante de órganos

¿Cómo puedo ayudar a reducir el riesgo de contraer la fiebre del valle?

Trate de evitar las áreas polvorientas tanto como sea posible para reducir el riesgo de respirar el hongo de la fiebre del valle a través del polvo en el aire. No existe una vacuna para prevenir la fiebre del valle. Algunos consejos pueden ayudar a reducir el riesgo de contraer la fiebre del valle.

Evite el polvo en lugares donde la fiebre del valle es común:

- Evite o limite el tiempo en el patio cuando haya viento afuera y el aire esté polvoriento, especialmente durante las tormentas de polvo.
- Cierre la ventana de la celda cuando haya viento afuera.
- Evite las actividades al aire libre como la jardinería y cavar en la tierra, especialmente si pertenece a uno de los grupos con mayor riesgo de fiebre del valle grave.
- Si debe estar al aire libre con aire polvoriento, considere usar una mascarilla N95 o KN95.

Al cavar en la tierra o levantar polvo en áreas donde la fiebre del valle es común:

- Permanezca a barlovento del área donde se está removiendo la tierra.
- Humedece la tierra antes de cavar.
- Considere usar una mascarilla N95,
- Después de regresar al interior, cámbiese de ropa si está cubierta de tierra.
  - No sacuda la ropa ni respire el polvo al cambiarse de ropa.

La fiebre del valle es causada por un hongo que vive en la tierra.

Protegerse del polvo puede ayudarlo a mantenerse a salvo de la fiebre del valle.

Trate de evitar el polvo al aire libre, especialmente en las siguientes prisiones: Avenal (ASP), Pleasant Valley (PVSP), California Correctional Institution (CCI), California Men's Colony (CMC), Corcoran (COR), Kern Valley (KVSP), North Kern (NKSP, Substance Abuse Treatment Facility (SATF) y Wasco (WSP).

Permanezca adentro cuando haya viento y el aire esté polvoriento, especialmente durante las tormentas de polvo

Si tiene que estar afuera cuando hay polvo, use una mascarilla N95

Al cavar en la tierra o levantar polvo en áreas donde la fiebre del valle es común:

Permanezca a barlovento del área donde se está removiendo la tierra.

Humedece la tierra antes de cavar o perturbarla.

Cámbiate la ropa polvorienta cuando termines.

No sacuda su ropa cuando se la quite o lave la ropa.

Envíe un formulario 7362 para consultar a un proveedor si tiene síntomas o tiene otras preguntas sobre la fiebre del valle.
Adaptado con permiso del Departamento de Salud Pública de California. 1/18/24

La fiebre del valle es una enfermedad causada por un hongo. Este hongo vive en la tierra en muchas áreas del sur de California y se encuentra con mucha frecuencia en partes del Valle Central y la Costa Central, donde se encuentran varias prisiones, incluidas Avenal (ASP) y Pleasant Valley (PVSP)** .

Algunas personas corren un mayor riesgo de contraer la fiebre del valle y otras pueden enfermarse gravemente.

Las personas en riesgo de <u>contraer la fiebre del Valle</u> incluyen:

- Personas que viven, trabajan o viajan en partes de California y:
  - Realice actividades al aire libre con tierra, como jardinería, jardinería o excavación.
  - Vive o trabaja cerca de áreas donde se remueve la tierra y el suelo, como sitios de construcción o excavación.
  - Trabaje en trabajos donde se remueve la tierra y el suelo, incluida la extinción de incendios forestales.
  - Tener un resultado negativo en la prueba cutánea de fiebre del valle (esferusol)

Las personas con mayor riesgo de <u>enfermarse gravemente</u> si se infectan incluyen:

- Adultos mayores (60+ años)
- Personas negras o filipinas
- Mujeres embarazadas, especialmente en las últimas etapas del embarazo
- Personas con diabetes
- Personas con afecciones de salud que debilitan el sistema inmunitario, tales como:
  - Cáncer
  - VIH o SIDA
  - Tratamiento con quimioterapia, esteroides u otros medicamentos que afectan el sistema inmunitario
  - Trasplante de órganos

Para obtener más información sobre la fiebre del valle o para solicitar una prueba cutánea de cocos, envíe un formulario 7362 para hablar con un proveedor.

**Institución Correccional de California (CCI), Colonia de Hombres de California (CMC), Corcoran (COR), Kern Valley (KVSP), North Kern (NKSP), Centro de Tratamiento de Abuso de Sustancias (SATF) y Wasco (WSP).

Adaptado con permiso del Departamento de Salud Pública de California 1/18/24