COCCIDIOMYCOSIS
(Valley fever, Desert fever, Desert rheumatism, Coccidioidal granuloma)

1. **Agent**: *Coccidioides immitis*, a dimorphic fungus.

2. **Identification**:
   a. **Symptoms**: A systemic mycosis that begins as a respiratory illness.

   **Primary infection**: May be asymptomatic or present as an acute respiratory illness with fever, chills, cough and pleural pain. About 5% of clinically recognized infections develop erythema nodosum. Primary infection may heal completely; may leave fibrosis or calcified pulmonary lesions, or a persistent thin walled cavity; or may progress to disseminated disease.

   **Disseminated disease (coccidioidal granuloma)**: A progressive, rare granulomatous disease with high mortality characterized by lung lesions and diffuse single or aggregated abscesses, especially in subcutaneous tissues, skin, bone, peritoneum, testes, thyroid, and central nervous system. Coccidioidal meningitis resembles tuberculous meningitis.

   b. **Differential Diagnosis**: Influenza, viral infections with generalized rashes, other fungal infections, tuberculosis, and conditions associated with erythema multiforme or erythema nodosum.

   c. **Diagnosis**: Microscopic examination or culture of sputum, pus, urine, cerebral spinal fluid, or biopsies of skin lesions or organs; serologic tests, (immunodiffusion, EIA, complement fixation) for IgM and IgG.

3. **Incubation**:

   **Primary**: 1-4 weeks.

   **Disseminated disease**: Develops insidiously years after primary infection.

4. **Reservoir**: Soil from endemic areas (mostly southwestern United States and northern Mexico). San Fernando and San Joaquin Valleys in California.

5. **Source**: Soil and dust.

6. **Transmission**: Inhalation of spores from dust, soil, and in laboratories from cultures of the mold form.

7. **Communicability**: Not directly transmissible from animal or person to person. After 7-10 days, *C. immitis* on dressings may become infectious.

8. **Specific Treatment**: None for uncomplicated respiratory infection. Amphotericin B in disseminated infection. Fluconazole is the agent of choice for meningeal infection.

9. **Immunity**: Permanent.

**REPORTING PROCEDURES**

1. Report within 1 week of identification of case or suspected case (Title 17, Section 2500, California Code of Regulations).

2. **Epidemiologic Data**:
   a. Obtain any laboratory results and skin tests to confirm diagnosis of coccidioidomycosis (e.g., culture, serology).
   b. Indicate whether case is primary or disseminated.
   c. Determine date of onset.
   d. Travel history during incubation period (including dates and places) to endemic areas (see Reservoir section) where cases might have been exposed to dust.
   e. Occupational history, especially individuals working outdoors in...
endemic areas. Give dates of working and job description.

f. Similar illness in co-workers.

g. Outdoor recreational activities during incubation period where cases might have been exposed to dust from endemic areas. Include date, type of activity, and place.

CONTROL OF CASE, CONTACTS, & CARRIERS

CASE: Isolation: None.

CONTACTS: No restrictions.

PREVENTION-EDUCATION

1. Emphasize dust control in endemic areas.

2. Disinfect discharges and fomites.

3. Laboratory cultures should be sealed before disposal and technicians should not "sniff" fungus cultures.