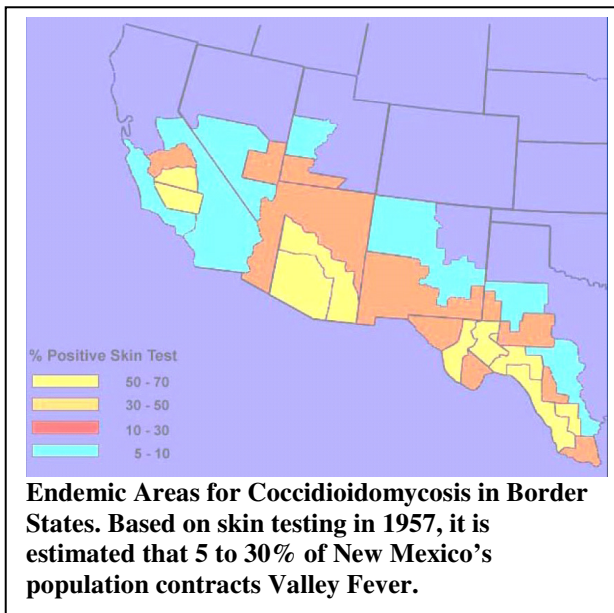


## Improving Coccidioidomycosis (Valley Fever) Diagnosis and Treatment

Coccidioidomycosis (“cocci”, also known as valley fever) is an infectious respiratory disease caused by inhalation of fungal spores which are endemic in desert soils throughout the U.S.-Mexico Border Region, including New Mexico, and are dispersed during moderate and high wind events. Areas of disturbed soil, including clearing for residential, commercial and industrial development, grading of roads, and bare agricultural soils, are especially prone to dispersal of fungal spores. Cocci is often misdiagnosed and/or mistreated as community-acquired pneumonia, influenza, tuberculosis, chronic bronchitis and asthma. While the majority of those contracting the disease suffer mild to moderate respiratory distress similar to allergies or influenza, the disease in its disseminated form (affecting 1-3% of all who contract the disease) can cause encephalitis, chronic skin rashes, and tumors. Arizona reported more than 10,000 cases of the disease in 2009 and more than 12,000 in 2010, while New Mexico reports only 40-60 cocci cases per year. As cocci is considered vastly underreported, staff of the New Mexico Department of Health (NMDOH) Office of Border Health and the Infectious Disease Epidemiology Bureau have initiated a new program to improve the surveillance, epidemiology, diagnosis and treatment of cocci.



The first activity under the initiative consisted of a CME training event offered in Las Cruces to 80 clinicians by members of the Valley Fever Center of Excellence, affiliated with the University of Arizona. OBH then carried out a “knowledge, attitudes and practice” (KAP) survey of clinicians throughout New Mexico to ascertain the need and focus of training in the diagnosis and treatment of cocci. OBH is in the process of preparing and disseminating the report on the results of the KAP survey. A road-show type training module is in development for face-to-face (seminar) training events to be delivered at strategic locations throughout the State. In addition, a web-based module will be developed in conjunction with the Valley Fever Center of Excellence and made available to clinicians of all types (MDs, CNPs, PAs, RNs).

OBH has also begun discussions with staff of Chihuahua State Health Services, Sonora State Health Services and with the Office of Border Health in Arizona to develop the project “*Four Corners: Improved Diagnosis, Surveillance and Treatment of Coccidioidomycosis in the Binational Border Region of Arizona-Sonora-New Mexico-Chihuahua*” to include actions to improve regional capacity in clinical

diagnosis, laboratory analysis, and data sharing to improve understanding of the burden of cocci in the binational region. In order to bring more focus to cocci, the initiative also includes a public awareness campaign to be carried out in conjunction with binational partners, to explain the etiology and manifestation of cocci exposure and infection, and to encourage patients to request that their physicians consider cocci during diagnostic testing should they exhibit consistent symptoms. Using the Arizona public awareness campaign as a model, OBH and its partners will develop bilingual (English/Spanish) multimedia such as pamphlets, posters, video, billboards, and website materials, applicable for the general public and differentiated media for use in the clinical setting. An informational seminar for the public (including the press media) will be conducted, with educational presentations (slideshows) from cocci experts in the field and participating in a Q&A session with a panel of experts, similar to a Valley Fever Center of Excellence seminar lecture entitled “Ask the Doctor Your Questions”. OBH’s Director and Border Infectious Disease Surveillance (BIDS) Officer will take the lead in coordinating this initiative within New Mexico with the NMDOH Infectious Disease Epidemiology Bureau and Scientific Laboratory Division, and with counterparts in Arizona, Sonora and Chihuahua. OBH, with funding from CDC, will also produce a documentary on the “Burden of Valley Fever in New Mexico” to raise awareness of the disease among the general public.

For more information or inquiries, please contact:

**Katharine Perez-Lockett, BIDS Surveillance Officer** ([katharine.perez@state.nm.us](mailto:katharine.perez@state.nm.us))  
**or Paul Dulin, Director** ([paul.dulin@state.nm.us](mailto:paul.dulin@state.nm.us))  
**Office of Border Health**  
**New Mexico Department of Health,**  
**1170 North Solano, Suite L**  
**LAS CRUCES NM 88001 USA**

TEL: (575) 528-5103 [www.nmborderhealth.org](http://www.nmborderhealth.org)

