

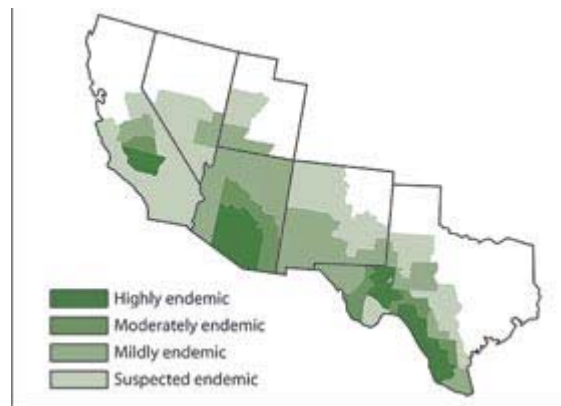
## Coccidioides Screening Recommendations Prior to Initiation of Anti-TNF therapy

It is likely that, based on immunologic effect of anti-TNF medications, persons undergoing therapy are at greater risk of infection with coccidioides and that infection may be more severe and disseminate.

It is important to consider screening persons that may be at higher risk for reactivation of past infection and to monitor for symptoms for development of new/recurrent infection.

Important history points:

- Prior diagnosis of coccidioides or Valley fever
- Prior history of pneumonia or febrile illness after visiting area where highly endemic
- History of living in area or frequent visitation (> 1 month per year) to area where highly endemic (southwest US, parts of Mexico, Central and South America)



<http://www.cdc.gov/features/valleyfever/> - Data based on 1950's studies – further study needed to confirm full extent of current endemic areas <http://www.cdc.gov/features/valleyfever/>

Screening tests:

- CXR
- Coccidioides EIA IgG and IgM antibodies (more sensitive, less specific – therefore best first test)

If negative it is reasonable to proceed with therapy

If positive, test Coccidioides AB complement fixation and immunodiffusion (more specific, less sensitive)

If IgG and IgM AB are positive but titer is low (equivocal) and CF and ID are negative – telephone communication with infectious disease specialist. May consider initiation of therapy with recheck of AB in 4 weeks, close monitoring of symptoms, educating patient regarding risks and symptoms.

If positive, delay therapy and refer to infectious disease for evaluation and treatment; therapy can be considered once ID has cleared patient based on decreased disease activity. Therapy is usually initiated with fluconazole 400 mg a day and may need 6 weeks to 6 months for adequate suppression of infection. Pt will usually be maintained on antifungal therapy for duration of anti-TNF treatment, if stable may use fluconazole 200 mg a day

Monitoring of disease activity can be accomplished by following CF AB

It is important to closely monitor for and educate patients to report signs and symptoms of infection

- Cough
- Shortness of breath
- Fever
- Headache
- Bone/joint pain
- Rash (erythema nodosum or erythema multiforme)

Consider screening persons for histoplasmosis with similar exposure to areas where is highly endemic (Mississippi and Ohio River Valleys)

Screening test

- Histoplasmosis urine and serum antigen
- Consider Histoplasmosis AB by CF or ID