CDC RECOMMENDATIONS FOR BRUCELLA LABORATORY EXPOSURES

Recommendations for safe laboratory practices for Brucella spp.

- When brucellosis is suspected, clinicians should note "suspect or rule out brucellosis" on the laboratory submission.
- Review laboratory containment methods and microbiological procedures to ensure compliance with recommendations in the Biosafety in Microbiological and Biomedical Laboratories (BMBL), 5th edition.
- Use primary barriers: use safety centrifuge cups, personal protective equipment, and class II or higher Biological Safety Cabinets (BSCs) for procedures with a high likelihood of producing droplet splashes or aerosols.
- Use secondary barriers: restrict access to the laboratory when work is being performed and maintain the integrity of the laboratory's air handling system by keeping external doors and windows closed.
- Perform all procedures on unidentified isolates carefully to minimize the creation of splashes or aerosols.
- Prohibit sniffing of opened culture plates to assist in the identification of isolates. Manipulate isolates of small gram-negative or gram-variable rods within a BSC.

Recommendations for surveillance and post-exposure prophylaxis for laboratory exposure to Brucella isolates

1. Determine number of workers exposed to Brucella isolates and classify exposures into high- and low-risk
2. Recommend PEP for workers with high-risk exposures to Brucella:
   - doxycycline 100mg twice daily and rifampin 600mg once daily for 3 weeks
   - trimethoprimsulfamethoxazole should be considered for those patients with contraindications to doxycycline
   - pregnant workers with high-risk exposures should consider PEP in consultation with their obstetricians
3. Discuss PEP with workers with only low-risk exposures to Brucella
4. Obtain baseline serum samples from all workers as soon as possible after a potential Brucella exposure is recognized. If available, obtain pre-exposure stored specimens.
5. Arrange for sequential serologic testing on all workers exposed to Brucella (e.g. 2, 4, 6, and 24 weeks post exposure) using agglutination test at state public health laboratory or CDC.
6. Arrange for regular (e.g. weekly) active surveillance for development of febrile illness or other signs and symptoms of brucellosis among all workers exposed to Brucella isolates for 6 months following last exposure.


CDC Recommendations: [http://www.cdc.gov/nczved/divisions/dfbmd/diseases/brucellosis/recommendations.html](http://www.cdc.gov/nczved/divisions/dfbmd/diseases/brucellosis/recommendations.html)