

CDC Risk assessment and post-exposure prophylaxis (PEP) for potential exposure to *Brucella* spp.

NOTE: If there are any questions regarding implementation of the risk assessments and recommendations provided in this table, please do not hesitate to contact CDC at (404) 639-1711.

Risk level	Risk area	Definition defining risk	PEP** considerations
High	Individual	Individual working with <i>Brucella</i> specimen 1. Sniffed culture plate, 2. Mouth pipetted specimen material, OR 3. Worked in class II biosafety cabinet, but without using BSL-3 precautions.	Recommended for the individual(s) working with <i>Brucella</i> specimen
	5 foot radius of work with <i>Brucella</i>	Work (beyond that defined in "Individual" risk, above) with <i>Brucella</i> outside of class II biosafety cabinet on an open bench BUT work DID NOT involve widespread aerosol generating procedures*	Recommended for those within 5 feet of the work with <i>Brucella</i> on an open bench while the implicated work occurred
	Laboratory room	Work with <i>Brucella</i> outside of class II biosafety cabinet on an open bench INVOLVING widespread aerosol generating procedures*	Recommended for those present in laboratory room while widespread aerosol generating procedures involving <i>Brucella</i> specimen were conducted
Low	Laboratory room	Present in the lab at the time of manipulation of <i>Brucella</i> on an open bench, but who do not have high-risk exposures as defined above	May be offered to those present in laboratory room while work involving <i>Brucella</i> specimen was conducted
None	Laboratory room	Handling and testing of <i>Brucella</i> in a class II biosafety cabinet using BSL-3 precautions	None

* Widespread aerosol generating procedures include, but are not limited to, centrifuging without sealed carriers, vortexing, sonicating, and accidents resulting in spillage or splashes (i.e. breakage of tube containing specimen). Other manipulations such as automated pipetting of a suspension containing the organism, grinding the specimen, blending the specimen, shaking the specimen or procedures for suspension in liquid to produce standard concentration for identification may require further investigation (i.e. inclusion of steps that could be considered major aerosol generating activities).

** Post-exposure prophylaxis should include doxycycline 100 mg orally twice daily and rifampin 600 mg once daily for at least 21 days. For those with contraindication to doxycycline, trimethoprim-sulfamethoxazole 160mg/800 mg orally once daily or a divided dose for at least 21 days may be used. Persons with contraindications to these antimicrobial agents should consult with their health care provider for alternative post-exposure prophylaxis.

Additional/supporting information:

1. CDC website http://www.cdc.gov/ncidod/dbmd/diseaseinfo/brucellosis_g.htm
2. CDC. Laboratory-Acquired Brucellosis --- Indiana and Minnesota, 2006. MMWR 2008; 57(02):39-42.
<http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5702a3.htm>