

Brucellosis (Brucella species) Revision 05/25/15



Missouri Dept of Health and Senior Services (800) 392-0272 (24 hours) State Public Health Laboratory (573) 751-3334 or (573) 522-1444

Remember that these samples may be <u>highly infectious!</u> Extreme caution should be taken in collecting, preparing for shipment and transporting any material suspected of being contaminated with a biological agent.

Specimen collection and transport

Clinical:

Specimens best suited for culturing include: blood (multiple), infected tissues and abscess material; bone marrow and tissue from spleen or liver can also be cultured, but may be available only at autopsy. Brucella has also been isolated from CSF, pleural fluid, peritoneal fluid and even urine. The Missouri State Public Health Laboratory (MSPHL) does not routinely accept clinical specimens for identification. Exceptions can be made with prior approval from the DHSS and the MSPHL.

Reference cultures:

Any culture may be submitted to the MSPHL for confirmation/identification. Cultures suspected of being brucella should be submitted on a blood agar slant.

Environmental samples:

Transmission by milk, milk products, meat and direct contact with infected animals is documented. If environmental sampling is indicated, consult the MSPHL for guidelines on sample selection and submission.

Testing available:

Culture, isolate identification, and PCR.

Reporting:

All reporting times are the minimum time. Any individual specimen could take longer.

Brucella species grow very slowly and raw clinical specimens will have to be held up to 10 days before reporting as negative. If colonies appear a presumptive positive could be reported in 4-6 hours, with confirmation within an additional 48 hours.