

SEPTEMBER 20, 2017

**HEALTH ADVISORY****Brucellosis Associated with Raw Milk Consumption**

The Centers for Disease Control and Prevention and the Texas Department of Health are investigating several cases of brucellosis caused by *Brucella* RB51 associated with the consumption of raw milk. Federal and Texas health officials have reported, and the North Dakota Department of Health (NDDoH) has confirmed that some North Dakota residents were exposed to the raw milk while traveling to Texas. Providers should use the following guidance from the CDC in determining the potential risks and post-exposure management for patients under their care. Note that the NDDoH recommends post-exposure antibiotic prophylaxis for persons who are not ill but consumed the milk. The North Dakota Department of Health encourages providers caring for patients with suspected brucellosis to consult with an infectious disease physician for further guidance on patient management.

Providers are encouraged to ask about raw milk exposure when caring for individuals with signs and symptoms of an infectious agent and should consider such diseases as brucellosis, tuberculosis and a host of enteric infections in the differential diagnosis for patients reporting of the history of raw milk consumption. To report possible cases or for further information, health care providers can contact the Division of Disease Control at 1.800.472.2180 or 701.328.2378.

This is an official  
**CDC HEALTH ADVISORY**

Distributed via the CDC Health Alert Network  
September 13, 2017  
[CDCHAN-00407](#)

**Rifampin/Penicillin-Resistant Strain of RB51 *Brucella* Contracted from Consumption of Raw Milk****Summary:**

The Texas Department of State Health Services, with assistance from CDC, is investigating *Brucella* RB51 exposures and illnesses that may be connected to the purchase and consumption of raw (unpasteurized) milk from K-Bar Dairy in Paradise, Texas. Symptoms of brucellosis can include fever, sweats, malaise, anorexia, headache, fatigue, muscle & joint pain, and potentially more serious complications (e.g., swelling of heart, liver, or spleen, neurologic symptoms).

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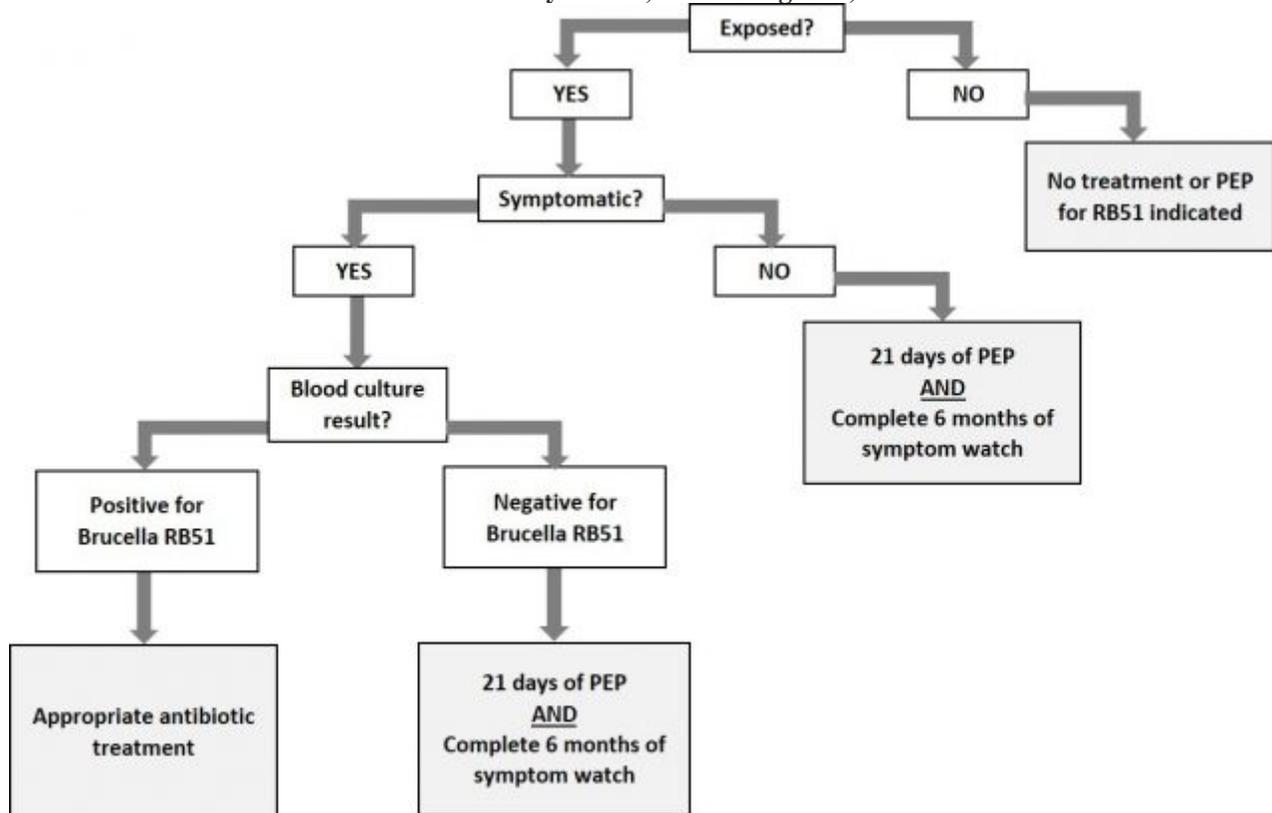
## Background

A person who drank raw milk from K-Bar Dairy in Paradise, Texas, has been hospitalized with brucellosis. Milk samples from the dairy have tested positive for a *Brucella* strain called RB51. People who consumed milk or milk products from this dairy from June 1, 2017, to August 7, 2017, are at an increased risk for brucellosis and should receive appropriate post-exposure prophylaxis (PEP). They are advised to consult with their healthcare providers regarding PEP care and possible diagnostic testing. Please note: the incubation period for brucellosis can range from five days to six months.

## Recommendations

*Brucella* strain RB51 is resistant to rifampin and penicillin. A combination of doxycycline and trimethoprim/sulfamethoxazole for 21 days is the recommended first-line PEP regimen for RB51 exposure. There is no serological test available to detect RB51 infection. Blood culture is the recommended diagnostic test for exposed symptomatic individuals. When ordering blood cultures to diagnose brucellosis, please advise the laboratory that blood culture may grow *Brucella*, and that appropriate laboratory<sup>1</sup> precautions should be observed. If brucellosis occurs despite prophylaxis, treatment regimens<sup>2</sup> should be selected based on antimicrobial susceptibility results. Please see the diagram below for information on developing an evaluation and treatment plan for exposed patients. Women who are pregnant or breastfeeding should consult with their healthcare provider.

### Treatment Decision Tree for Patients Who Were Exposed to (Consumed) Raw Milk/Raw Milk Products from K-Bar Dairy June 1, 2017 – August 7, 2017



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## For More Information

Risks from Unpasteurized Dairy Products

<https://www.cdc.gov/brucellosis/exposure/unpasteurized-dairy-products.html>

Exposure to RB51 through Raw Milk or Milk Products: How to Reduce Risk of Infection

<https://www.cdc.gov/brucellosis/clinicians/rb51-raw-milk.html>

<https://www.cdc.gov/brucellosis/symptoms/index.html>

Brucellosis and Expecting Mothers

<https://www.cdc.gov/brucellosis/exposure/expecting-mothers.html>

Raw Milk Questions and Answers

<https://www.cdc.gov/foodsafety/rawmilk/raw-milk-questions-and-answers.html>

CDC-INFO

<https://www.cdc.gov/cdc-info/index.html> or 1-800-232-4636

CDC Emergency Operations Center (EOC)

770-488-7100

Bacterial Special Pathogens Branch

[bspb@cdc.gov](mailto:bspb@cdc.gov) or 404-639-1711

## References

<sup>1</sup>Biosafety in Microbiological and Biomedical Laboratories

<https://www.cdc.gov/biosafety/publications/bmb15/bmb1.pdf>

<sup>2</sup>Treatment of Brucellosis (for alternative treatment guidance)

Ariza J *et al.* 2007. Perspectives for the Treatment of Brucellosis in the 21st Century: The Ioannina Recommendations. PLoS Med. 4(12): e317. <http://www.plosmedicine.org/article/info:doi/10.1371/journal.pmed.0040317>

Al-Tawfiq JA. 2008. Therapeutic options for human brucellosis. Expert Rev Anti Infect Ther. 6(1): 109-120.

<http://www.ncbi.nlm.nih.gov/pubmed/18251668>

Solera J. 2010. Update on brucellosis: therapeutic challenges. Intl J Antimicrob Agent. 36S, S18–S20.

<http://www.ncbi.nlm.nih.gov/pubmed/20692127>

Brucellosis Reference Guide

<https://www.cdc.gov/brucellosis/pdf/brucellosi-reference-guide.pdf>

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## DEPARTMENT OF HEALTH AND HUMAN SERVICES

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### Categories of Health Alert Network messages:

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**Health Advisory** May not require immediate action; provides important information for a specific incident or situation

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##This message was distributed to state and local health officers, state and local epidemiologists, state and local laboratory directors, public information officers, HAN coordinators, and clinician organizations##

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