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 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.

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 precautions should be observed. If brucellosis occurs despite prophylaxis, treatment regimens 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

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 or 404-639-1711

References
1Biosafety in Microbiological and Biomedical Laboratories

2Treatment of Brucellosis (for alternative treatment guidance)


Brucellosis Reference Guide

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The Centers for Disease Control and Prevention (CDC) protects people’s health and safety by preventing and controlling diseases and injuries; enhances health decisions by providing credible information on critical health issues; and promotes healthy living through strong partnerships with local, national and international organizations.

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Categories of Health Alert Network messages:

Health Alert Requires immediate action or attention; highest level of importance
Health Advisory May not require immediate action; provides important information for a specific incident or situation
Health Update Unlikely to require immediate action; provides updated information regarding an incident or situation
HAN Info Service Does not require immediate action; provides general public health information

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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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