

Be Aware of Tick-Borne Relapsing Fever



What is tick-borne Relapsing Fever (TBRF)?

Tick-borne relapsing fever (TBRF) is a rare infection linked to sleeping in rustic cabins, particularly cabins in mountainous areas of the western United States. The main symptoms of TBRF are high fever (e.g., 103° F), headache, muscle and joint aches. Symptoms can reoccur, producing a telltale pattern of fever lasting roughly 3 days, followed by 7 days without fever, followed by another 3 days of fever. Without antibiotic treatment, this process can repeat several times.

Tick bite



Incubation period

Fever

No fever

Fever

No fever

Fever

~ 7 days

~ 3 days

~ 7 days

~ 3 days

~ 7 days

~ 3 days

How do you get TBRF?

The bacteria that cause TBRF are transmitted by certain types of ticks, called “soft” ticks (see photo) that live in the nests of squirrels, chipmunks, and other small animals. People become exposed when they sleep in cabins and other rustic buildings in which rodents have built nests. These nests are usually located inside the walls or in the attic or crawl space. Soft ticks emerge at night and feed briefly, like bed bugs. Because the bites are quick and painless, most people do not know that they have been bitten.

What should I do if I think I may have TBRF?

Call or visit your healthcare provider. Explain your symptoms and your concerns.

How is TBRF diagnosed and treated?

TBRF is usually diagnosed by examining a sample of blood under a microscope. Other blood tests are available but require that the patient has been sick for several weeks. TBRF is treated with antibiotics. Your healthcare provider will need to monitor you during the first dose of antibiotics in case of a bad reaction. Although deaths are very rare, TBRF can be a particularly serious disease for pregnant women and the elderly.

What can I do to prevent TBRF?

- Avoid sleeping in rodent-infested buildings whenever possible. Although rodent nests may not be visible, other evidence of rodent activity (e.g., droppings) are a sign that a building may be infested.
- Prevent tick bites. Use insect repellent containing DEET (on skin or clothing) or permethrin (applied to clothing or equipment).
- If you are renting a cabin and notice a rodent infestation, contact the owner to alert them.
- If you own a cabin, consult a licensed pest control professional who can safely:
 - » Identify and remove any rodent nests from walls, attics, crawl spaces, and floors. (Other diseases can be transmitted by rodent droppings—leave this job to a professional!)
 - » Treat “cracks and crevices” in the walls with pesticide.
 - » Establish a pest control plan to keep rodents out.



Before feeding

After feeding

TBRF is spread through the bite of soft ticks, which feed very quickly and painlessly. Above, a soft tick before and after feeding (not to scale).

For more information about TBRF, visit www.cdc.gov/relapsing-fever/