

How do I protect myself from TBRF?

When you stay in a building where soft ticks may be found:

- Pull beds away from the walls and avoid sleeping on the floor.
- Ensure bedding does not touch the floor.
- Change and wash all bedding before use.

How do I prevent rodents from nesting in and around buildings?

- Inspect the inside and outside of the building, particularly bedrooms and sleeping areas, for evidence of rodents.

- Seal gaps, or other openings where rodents may enter buildings.



- Eliminate rodents from buildings.
- Remove rodent nests from in and around buildings.

- Do not store firewood, storage boxes, or other materials that may attract rodents:
 - against the exterior of buildings,
 - in building crawl spaces,
 - underneath raised structure buildings.
- Store food in sealed containers.

For more information on reducing rodents in and around buildings, please see: <https://www.cdph.ca.gov/Programs/CID/DCDC/Pages/TBRF.aspx> or contact a local pest control professional.



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Facts About Tick-Borne Relapsing Fever In California



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Tick-borne relapsing fever (TBRF) is an illness caused by bacteria called *Borrelia hermsii* that are carried by soft ticks. Although TBRF is rare in California, it can cause serious illness in people.

How do people get TBRF?

People get TBRF when they are bitten by an infected soft tick. You cannot get TBRF from another person.

The few people who get sick with TBRF



are infected while visiting mountainous areas and staying in cabins or buildings that are rodent and tick infested.

What does a soft tick look like?

Soft ticks have 8-legs, are very small, dull grey in color, wrinkly, and leathery in appearance.



Where are soft ticks found in California?



Soft ticks are found mainly in forested foothill and mountainous regions above 4,000 feet (red areas on the map).

Soft ticks live in close association with rodents and may be found in places such as:

- rodent nests,
- shaded woodpiles outside buildings,
- inside walls and attic voids,
- beneath wallboards or floorboards inside buildings.

Soft ticks prefer to feed on rodents like squirrels, chipmunks, or mice. If those rodents are scarce, soft ticks may seek humans or other animals to feed on. Soft ticks feed quickly and then return to a dark, protected location. It is possible a person fed on by a soft tick will not know they have been bitten.

How would I know if I have TBRF?

About a week after being bitten by an infected tick, persons with TBRF develop a sudden high fever, chills, headache, and muscle aches. They may also have nausea, vomiting, stomach pain, and a rash. These symptoms last three to five days, and then quickly disappear.



A few days later, the fever and symptoms occur again (relapse). This cycle may continue for several weeks if not treated. If you develop these symptoms you should see your doctor right away.

How is TBRF diagnosed and treated?

Medical professionals diagnose TBRF by observing the spiral-shaped bacteria in a patient's blood sample. Antibiotics are used to treat TBRF and most people with TBRF start feeling better about 24 hours after beginning treatment. People rarely develop long-term problems or die from TBRF.