CONDITION

Rabbit fever

Rabbit fever is a bacterial infection acquired from animals, insect bites, contaminated water, or inhaled particles.

WHAT IT IS
Uncommon bacterial infection also called tularemia

BODY SYSTEM
Whole body, skin, lymph nodes, eyes, and lungs

MAIN SYMPTOMS
Fever, skin ulcer, swollen lymph nodes, cough

WHAT CAUSES IT
Infection with Francisella tularensis bacteria

HOW IT IS DIAGNOSED
Culture, PCR, or paired antibody blood tests

MAIN TREATMENT
Antibiotics, with hospital care for severe illness

CAN IT BE CURED?
Yes - appropriate antibiotics usually clear it

IS IT AN EMERGENCY?
Sometimes - breathing difficulty, confusion, or severe weakness

LONG-TERM OUTLOOK
Most recover fully; fatigue or swollen nodes may linger

Overview

Rabbit fever is the common name for tularemia, an infection caused by Francisella tularensis bacteria. The bacteria can infect people and many kinds of animals. Rabbits, hares, and rodents are often linked with the infection, but they are not the only sources.

People can become infected through tick or biting-fly bites, handling an infected animal, drinking contaminated water, or breathing in contaminated dust. The infection does not normally spread from one person to another.

Rabbit fever can affect the skin, lymph nodes, eyes, throat, lungs, or several parts of the body at once. Its symptoms can resemble other infections. Telling a healthcare professional about recent tick bites, animal contact, outdoor work, travel, or untreated water exposure can help point toward the correct tests.

The infection can become serious without treatment. However, most people recover when it is recognized and treated with an effective antibiotic like amoxicillin or doxycycline .

Symptoms

Symptoms usually begin within several days of exposure, although they can appear sooner or up to about two weeks later. A sudden fever is common. You may also have chills, headache, muscle aches, reduced appetite, and marked tiredness.

Other symptoms depend on how the bacteria entered your body.

A skin ulcer with swollen lymph nodes is a classic pattern, but not everyone develops it. Symptoms alone cannot confirm rabbit fever.

- Through the skin: A painful or painless bump may become an open sore, called an ulcer. Nearby lymph nodes may become swollen and tender.
- Through an insect bite without a visible ulcer: Swollen, painful lymph nodes and fever may occur even when no skin sore is found.
- Through the eye: Eye pain, redness, discharge, sensitivity to light, or swelling around the eye may develop. Lymph nodes near the ear or jaw can enlarge.
- Through the mouth or contaminated water: Symptoms may include a sore throat, mouth sores, swollen tonsils, neck swelling, abdominal pain, vomiting, or diarrhea.
- Through the lungs: A dry cough, chest discomfort, shortness of breath, or pneumonia may occur. Pneumonia means infection and inflammation within the lungs.
- Without a clear entry point: Some people have high fever and general illness without an obvious skin, eye, throat, or lung problem.

Causes and risk factors

Rabbit fever is caused by Francisella tularensis . It takes only a small number of these bacteria to cause infection.

Possible routes of exposure include:

Risk is higher for people who hunt, trap, skin animals, work with wildlife, landscape, farm, or spend time in areas where infected ticks occur. Veterinarians, laboratory workers, and people handling wild game may also have greater exposure.

The type of tick or biting fly involved differs by location. Not every tick bite carries the bacteria,

and most animal contact does not cause rabbit fever.

Person-to-person spread has not been documented as a usual route. You generally do not need to isolate yourself from family members because of rabbit fever.

- Bites from infected ticks or biting flies
- Skin contact with an infected rabbit, hare, rodent, or other animal
- A bite or scratch from an animal that recently handled infected wildlife
- Drinking untreated water contaminated by infected animals
- Breathing dust or droplets produced while mowing, landscaping, farming, or handling animal tissue
- Eating undercooked meat from an infected animal
- Laboratory or occupational exposure to the bacteria

Diagnosis

A healthcare professional will ask about your symptoms and possible exposures. Details such as a tick bite, contact with a sick or dead animal, hunting, untreated water, or recent landscaping can be important.

Tests may include:

Culture can confirm the infection, but the bacteria may be difficult to grow. They can also pose a risk to laboratory staff. If rabbit fever is suspected, the testing laboratory needs to know so that appropriate safety methods can be used.

Treatment may begin before final results are available when the symptoms and exposure history strongly suggest the condition.

- Antibody blood tests: These look for proteins made by your immune system in response to the infection. Antibodies may not be detectable early, so another sample taken later may be needed to show that levels have risen.
- PCR testing: This looks for genetic material from the bacteria in tissue, fluid, or a swab from an affected area.
- Culture: A laboratory attempts to grow the bacteria from blood, an ulcer, lymph node material, or another sample.

Treatment and management

Rabbit fever is treated with antibiotics. Commonly considered medicines include gentamicin, doxycycline, ciprofloxacin, and levofloxacin. The choice depends on the form and severity of the infection, age, pregnancy status, other health conditions, and local expert guidance.

This is not an infection for which leftover or unprescribed antibiotics should be used. Some antibiotics commonly used for routine skin or chest infections do not work reliably against F. tularensis .

People with severe illness, pneumonia, meningitis, very low blood pressure, or difficulty keeping fluids down may need hospital care. Treatment may begin through a vein or by injection. A person with milder illness may sometimes be treated with medicine taken by mouth.

Take the prescribed course exactly as directed. Stopping early can allow symptoms to return. Contact the treating healthcare team if you cannot take the medicine, develop troublesome side effects, or are not beginning to improve as expected.

A swollen lymph node may remain enlarged after the fever settles. Occasionally, a node forms a pocket of pus and needs drainage. This does not necessarily mean that the antibiotic failed, but it should be reassessed.

Complications

Untreated rabbit fever can spread beyond the original site. Possible complications include pneumonia, infection around the brain and spinal cord, inflammation around the heart, bloodstream infection, and dangerously low blood pressure.

Enlarged lymph nodes can soften, break down, or drain through the skin. Eye infection can threaten vision if it is not treated promptly.

Complications are more likely when diagnosis and effective treatment are delayed. Serious disease can occur even in someone who was previously healthy, but most treated people recover.

Prevention

Rabbit fever cannot always be prevented, especially when exposure is not noticed. You can reduce your risk by limiting contact with ticks, biting flies, infected animals, contaminated water, and airborne animal material.

When outdoors in areas with ticks, use an insect repellent according to its label. Wear long

sleeves and long trousers when practical, and check your skin, clothing, pets, and equipment for ticks afterward. Remove attached ticks promptly with fine-tipped tweezers.

Wear gloves when handling wild animals, especially animals that are sick or found dead. Wash your hands afterward. Cook game meat thoroughly, and avoid drinking untreated surface water.

Be cautious when mowing or cutting brush where dead animals are present. Do not mow directly over an animal carcass. People whose work may produce contaminated dust may need job-specific protective equipment and safety advice.

There is no tularemia vaccine routinely available to the general public. Antibiotics are not routinely needed after every tick bite or animal contact. Public health or infectious disease specialists may recommend preventive treatment after certain confirmed, high-risk exposures.

Living with it and what to expect

Fever and general illness often begin to improve after effective antibiotics are started, but recovery is not always immediate. Tiredness, weakness, reduced appetite, and swollen lymph nodes can last for several weeks.

Skin ulcers heal gradually and may leave a small scar. Large lymph nodes may shrink slowly over weeks or months. Occasionally, a node drains or requires a procedure. Keep any wound clean and follow the care instructions you receive.

Most people can return to normal activities as their fever, strength, breathing, and appetite improve. A gradual return may be easier if the illness caused significant fatigue or pneumonia.

Rabbit fever is usually an acute infection rather than a lifelong condition. Symptoms can return after treatment, particularly if treatment was delayed, interrupted, or ineffective. Arrange follow-up if fever returns, a lymph node becomes more painful, or other symptoms worsen after initial improvement.

Routine follow-up may include checking that fever has resolved, wounds are healing, lymph nodes are shrinking, and antibiotic treatment has been completed. Repeat blood tests are sometimes used when the original diagnosis was uncertain.

When to get medical help

Seek prompt medical advice if you develop fever after a tick or biting-fly bite, handling a wild

animal, drinking untreated water, or breathing dust around a dead animal. Mention the exposure even if it occurred up to two weeks earlier.

Arrange same-day assessment for:

Seek emergency care for severe trouble breathing, blue or grey lips, confusion, fainting, extreme drowsiness, severe chest pain, or signs of shock such as cold clammy skin with marked weakness. These symptoms can have many causes, but they need immediate assessment.

- A skin ulcer with swollen or painful lymph nodes
- A red, painful eye, especially with discharge or light sensitivity
- Persistent high fever or worsening weakness
- Cough, chest discomfort, or shortness of breath
- Symptoms that are not improving after antibiotics have started
- Fever that returns after treatment

Common questions

Is rabbit fever the same as tularemia?

Yes. Rabbit fever is a common name for tularemia. The name reflects its association with rabbits and hares, although ticks, biting flies, water, dust, and other animals can also spread the bacteria.

Can I catch rabbit fever from another person?

Person-to-person transmission is not considered a usual route. Normal household contact does not generally spread the infection. The main risks come from infected animals, insect bites, contaminated water, and inhaled particles.

Does every tick bite need testing or antibiotics?

No. Most tick bites do not result in rabbit fever. Testing is usually guided by symptoms and the likelihood of exposure. Seek advice if you develop fever, an ulcer, swollen lymph nodes, eye symptoms, or breathing symptoms after a bite.

How long does rabbit fever last?

The fever may begin improving within days of effective treatment, but the full recovery period can be longer. Fatigue, skin healing, and enlarged lymph nodes may continue for weeks. The course is longer when pneumonia or another complication occurs.

Can rabbit fever go away without antibiotics?

Some mild infections may eventually improve, but untreated rabbit fever can become serious and is not something to wait out without medical assessment. Effective antibiotics lower the risk of prolonged illness and complications.

Can my pet give me rabbit fever?

It is possible but uncommon. Cats can become infected while hunting and may pass the bacteria through a bite, scratch, or close contact. Dogs may carry infected ticks. Seek medical advice if you become unwell after contact with a sick pet or a pet that recently handled wildlife.

Sources

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