

TICK IDENTIFICATION AND TESTING

A. Telephone: (614) 752-1029

Tick identification and testing is conducted at the Vector-borne Disease Program, ODH. Specimens should be sent to:

Tick Testing, Vector-borne Disease Program
900 Freeway Drive North
Columbus, Ohio 43229

B. Diseases

Rocky Mountain Spotted Fever group (RMSF)
Lyme Disease (LD)

C. Materials

Place the tick in a tightly sealed, non-breakable container as described under section F, "Storage," or use a tick mailer available from the Vector-borne Disease Program.

D. Specimens

Any tick, especially those attached to humans, or small, unusual-looking ticks should be submitted. Specimens must be received alive to be tested for pathogens.

E. Collection of specimens

Proper removal of attached ticks is necessary to assure that the structures needed for identification are not lost. Using sharp-pointed tweezers or your fingers protected by rubber gloves, paper towel, or tissue paper, grasp the tick as close to the skin as possible and pull straight out with steady, even pressure. Do not twist or jerk the tick as this will cause the mouthparts to break off in the skin. Do not use petroleum jelly, fingernail polish, alcohol, hot objects like cigarettes or matches, etc. Disinfect the bite site before and after removing the tick. Wash hands after removing the tick.

F. Storage

Specimens should be kept alive by placing the ticks in a tightly sealed, non-breakable container. Place a moistened piece (1/4" by 1") of paper towel in the container with the tick. Be sure the paper towel is just moist, not dripping wet. Containers should be mailed as soon after collection of the specimen as possible. If specimens must be held, keep them in a refrigerator but do not freeze them.

G. Shipping

The container holding the tick should be put in a non-breakable mailing container with packing material around the container to insure that the container will not break in transit. On a slip of paper, include the name and address of the patient, the name and address of the person to receive the results, the date the tick was collected, the state and county where the ticks was most likely picked up, what the tick was found on (human, dog, floor, etc.), and if it was attached or not attached. Hand deliver, mail, or ship via courier service to the VBDP at the above address. Mailing containers are available free from the VBDP upon request.

H. Identification

All ticks received will be identified to species and a written report of the identification returned to the submitter. Ticks do not need to be alive for identification.

I. Tests

Tests performed on ticks are not diagnostic. They can determine if the tick is infected, but not if it can transmit or has transmitted a pathogen. Ticks must be received alive to be tested for disease. The test being used for RMSF is a general screening test and does not differentiate pathogenic from non-pathogenic organisms. The test for LD is an isolation protocol that requires several weeks to complete.

Sometimes ticks are submitted by private citizens who have not yet consulted a physician. These persons should be advised to consult a physician if they develop fever, headache, rash, or other symptoms, regardless of the results of tick testing.