

Trichinellosis (Trichinosis) Investigation Overview

The following guidelines provide a brief overview of the steps of a Trichinellosis investigation. Trichinellosis is a parasitic disease that people obtain by eating raw or undercooked meat from animals infected with the microscopic parasite *Trichinella*. Infection occurs commonly in certain wild carnivorous (meat-eating) animals such as bear or cougar, or omnivorous (meat and plant-eating) animals such as domestic pigs or wild boar.

This disease requires an additional CDC case report form. Contact a member of the enterics team for assistance.

For additional support, consult the NC Communicable Disease Branch at (919) 733-3419.

Basic Steps of a Trichinellosis Investigation

1. Collect clinical information	<ul style="list-style-type: none">• Usual initial symptoms include: nausea, diarrhea, vomiting, fatigue, fever, and abdominal discomfort• The following may come later: headaches, fevers, chills, cough, swelling of the face and eyes, aching joints and muscle pains, itchy skin, diarrhea, or constipation
2. Review Laboratory Information	<ul style="list-style-type: none">• Make sure lab report is <i>trichinella</i> not trichomonas. Trichinosis is frequently confused with positive <i>trichomonas vaginalis</i> lab reports
3. Determine the onset:	<ul style="list-style-type: none">• No person to person spread• Severity and duration of Trichinellosis vary<ul style="list-style-type: none">• Initial symptom onset typically 1-2 days after infection• Later symptoms: usually start 2-8 weeks after eating contaminated meat
4. Manage the case	<ul style="list-style-type: none">• Verify that case has been appropriately tested and treated• Evaluate laboratory results to determine if requirements for case definition are met.• Mild to moderate infections, most symptoms subside within a few months<ul style="list-style-type: none">• Fatigue, weakness, muscle pain, and diarrhea may last for months• Ensure reporting laboratory has forwarded the specimen to the SLPH for serotyping.• Interview the case and complete the Part 2 Form/risk history and clinical packages in NCEDSS
5. Case Finding	<ul style="list-style-type: none">• During the investigation, interview other exposed individuals for symptoms of illness.• Refer symptomatic individuals to healthcare providers for evaluation.
6. Identify source of exposure	<ul style="list-style-type: none">• If potential food or occupational source of exposure is not evident in clinical information, interview patient to obtain additional information regarding exposure to animals (especially slaughter or other contact with swine, cats, dogs, horses, crocodile, buffalo, elk or other wild animals), or work in laboratories• If source of exposure is suspected to be livestock for slaughter, licensed or unlicensed wild game meat processor or processing plant for pork products contact the North Carolina Department of Agriculture (NCDA)• The county agricultural extension agent may be an additional resource to consider• The state public health veterinarian can assist with contacting these agencies (919) 733-3419
7. Implement Control Measures	<ul style="list-style-type: none">• Use the CDC website www.cdc.gov to teach at risk people about the disease• Work with local health director and NCDA to stop distribution of any potentially contaminated meat products• If source of exposure is suspected to be restaurant related, involve environmental health specialist

Special Considerations	
8. State Laboratory of Public Health (SLPH) Testing	<ul style="list-style-type: none"> You may be asked to submit the case's stool for O&P as well as pressed meat samples for parasitology <ul style="list-style-type: none"> Collect meat samples if you can and freeze for possible testing; consult state enterics team Call Parasitology and Special Serology at the SLPH (919) 733-7837 for instructions on how to submit serum samples In high profile cases, consider verifying the laboratory test results by sending specimen(s) to the SLPH/CDC for reference testing <ul style="list-style-type: none"> Examples of high-profile cases: imminent health hazard, closing a business operation, sale of illegal products, hospitalized patients, outbreaks, etc.
9. Risk Communication	<ul style="list-style-type: none"> Trichinosis is a rare disease in this country An outbreak would need MD alerts, and possibly a press release NC DHHS Public Information Office (919) 733-9190 is available to assist local health departments as needed
Resources – https://www.cdc.gov/trichinellosis/about/?CDC_AAref_Val=https://www.cdc.gov/parasites/trichinellosis/	