Deer Hunter Fact Sheet
Protection from Ticks

FACT SHEET 18-079-0919

Ticks found on deer may spread diseases to people, pets, and other animals. Ticks will leave the carcass and seek another warm-bodied host as the deer's body temperature drops. The next warm-bodied host could be you, another family member, or your family pet. Infected ticks can transmit disease-causing organisms to humans or animals through their saliva as they feed. Lyme disease, babesiosis, Rocky Mountain spotted fever, and human ehrlichiosis are some of the diseases transmitted by ticks.

How can I reduce the chances of bringing back ticks to my home after the hunt?

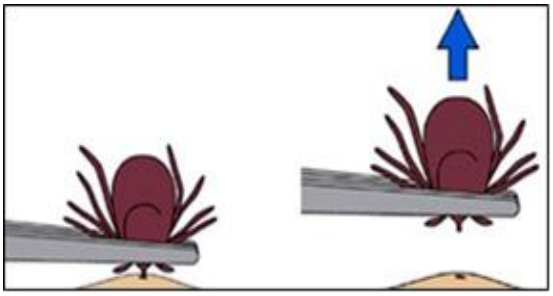
A deer with numerous ticks, including engorged females, on its ears

- Routinely examine your clothing and body, and remove ticks when in potential tick habitat. Carefully check your clothes and entire body after leaving tick habitat. Ticks are frequently found on the head, neck, groin, and armpits, but can attach anywhere on the body. Use the buddy system to check areas that you cannot see yourself during a self-examination.
- Inspect the deer carcass for ticks prior to transport. Ticks come in multiple sizes depending on their life stage and how much blood they have ingested. Ticks fill with blood and may look like a swollen pea, ranging from dull green to olive in color. Place your harvested deer on a large sheet of plastic or a bed sheet that you can wrap around the entire animal. This will help to keep ticks and other potential external parasites (fleas, flies, lice or mites) contained. Discard the wrapping material after each use. The truck bed provides a barrier between you and any ticks that may have fallen off your deer during transport. However, ticks can survive long enough in your vehicle to later find another suitable host.
- If you typically bring your deer home to hang prior to butchering, hang your deer over a tub of water with a little added liquid dish detergent. Ticks on deer will start dropping off and fall into the tub and die in the soapy water.
- Engorged female ticks could fall into your yard and lay eggs if they are not contained. The immature ticks can create a local infestation around your home after hatching.

An engorged female deer tick filled with blood (left) and an unengorged female deer tick (right)

What do I do if I find a tick on me?

Unattached ticks do not present a threat by crawling on you. Remove attached ticks as soon as you find them. Use tweezers to firmly grasp the tick's mouthparts up against the skin and pull back firmly and steadily (see diagram on the right). Do not pull back abruptly or the tick's mouthparts may break off, leaving them embedded in the skin. If the mouthparts do break off, don't panic—the mouthparts alone cannot transmit disease because the infective body of the tick is no longer attached. However, to prevent secondary infection, remove the mouthparts like you would a splinter. Never squeeze tick's body or use methods to "make the tick let go," such as covering it in petroleum jelly or fingernail polish remover, or a burning it with a lighted match. Those alternate methods could force more infective fluid into the skin. For specific information on tick removal, please review our fact sheet "How to Check Yourself for Ticks and How to Remove an Attached Tick". You can also visit http://www.tickencounter.org/ to see a video about tick removal.



Will I get a disease if I find an attached tick?

Not all ticks are infected, and you cannot tell if a tick is infected just by looking at it. Ticks also need to be attached before they are able to transmit any diseases that they may be carrying; therefore, it is important to remove any attached tick as soon as possible. Ticks removed from military personnel, their dependents, or DOD Civilians can be turned in at military medical treatment facilities for identification and disease testing through the U.S. Army Public Health Center's DoD Human Tick Test Kit Program. For more information see:
https://phc.amedd.army.mil/topics/envirohealth/epm/Pages/HumanTickTestKitProgram.aspx

Army Public Health Center, Entomological Sciences Program
8252 Blackhawk Road, APG, MD 21010-5403
COM 410-436-3613 / DSN 312-584-3613/Website: http://phc.amedd.army.mil

What are common symptoms of tick-borne diseases?

Symptoms for tick-borne diseases are often flu-like and may include one or more of the following: fever, headache, fatigue, chills, rash (not always a bull's-eye shape), joint pain, muscle aches, loss of appetite, eye pain, vomiting, decreased concentration, memory loss, sleeplessness, restlessness, partial face paralysis (Bell's palsy), and delirium. If you know or suspect you may have been bitten by a tick and have any of these symptoms, seek medical attention.

Additional Preventive measures include:

- **Wear clothing treated with permethrin**. Aerosol products containing 0.5% permethrin and permethrin impregnated garments are commercially available. When applying permethrin products to clothing, **always follow the directions for use. DO NOT** apply permethrin to skin.
- Once ticks crawl onto you, they will climb upward until they find an opening in your clothing. Tuck pants inside boots and shirts inside pants to keep ticks out and away from your skin.
- **Use caution when handling your deer carcasses**. Wear waterproof gloves when field-dressing or butchering deer, and DO NOT splash blood into your eyes, nose, or mouth since these are also potential routes of infection.

What are the standard military insect repellent products available for use on exposed skin?

Approved military insect repellents for use on exposed skin come in a variety of formulations. Always refer to the label to determine frequency of repellent application based on your level of activity. Do not apply repellent to eyes, lips, or to sensitive or damaged skin. Available military insect repellents (pictured right) are:

- **Cutter**® pump spray (NSN 6840-01-584-8598) contains 25% DEET; one application protects for up to 10 hours.
- **Ultra 30™ Insect Repellent Lotion** (NSN 6840-01-584-8393) contains 30% Lipo DEET; one application protects for up to 12 hours.
- **Bullseye**™ Bug Repellent pump spray (NSN 6840-01-656-7707) contains 20% IR3535®; one application protects for up to 8 hours.
- **Natrapel**® pump spray (NSN 6840-01-619-4795) contains 20% picaridin; one application protects up to 8 hours.
- **Ultrathon**™ (NSN 6840-01-284-3982), contains 34% controlled-release DEET lotion; one application protects for up to 12 hours.

All standard approved skin repellents contain the active ingredient DEET or picaridin, or IR3535 and are registered by the U.S. Environmental Protection Agency. These products are safe to use and effectively repel mosquitoes, sand flies, fleas, ticks and other potential disease vectors and pests. Photo: VID, APHC

How do I know if my uniform is treated with permethrin repellent?

Factory-treated permethrin Operational Camouflage Pattern uniforms (OCP Permethrin) are now available to all Soldiers. The OCP Permethrin trouser and coat will have a sewn-in label indicating the uniform is factory-treated with permethrin. If not factory-treated, Soldiers can field-treat using either the Individual Dynamic Absorption kit (NSN 6840-01-345-0237), which can last up to 50 washings, or the 0.5% aerosol spray can (NSN 6840-01-2781336), which should be reapplied after six weeks and the sixth washing. When applying permethrin, always read and follow the label directions. Permanently mark the uniform label with the permethrin field-treatment date. **NEVER APPLY PERMETHRIN TO THE SKIN**! Aerosol products containing 0.5% permethrin and clothing factory-treated with permethrin are also commercially available for civilian use.

Where can I find additional information about ticks and tick-borne diseases?

- U.S. Army Public Health Center (APHC), Entomology Products https://phc.amedd.army.mil/topics/envirohealth/epm/Pages/APHC-Entomology-Products.aspx
- The Centers for Disease Control and Prevention (CDC) Website at: https://www.cdc.gov/ticks/
- APHC Fact Sheet No. 18-092-0919, *How to Check Yourself for Ticks and How to Remove an Attached Tick*, https://phc.amedd.army.mil/Pages/Library.aspx
- DoD Insect Repellent System: https://phc.amedd.army.mil/PHC%20Resource%20Library/DoD_Insect_Repellent_System_FS_18-009-1218.pdf