

New World Screwworm Myiasis

What You Need to Know

[New World screwworm \(NWS\) myiasis](#) is typically a disease of animals, especially livestock, but can also affect wildlife, pets, and people. Mexico and countries in Central America are reporting cases of NWS in both animals and people. You may be at an increased risk for NWS infestation if you are in areas where the flies are present, particularly in areas near infested livestock or other infested animals. Infestation means that maggots are present in or on the body.

Signs & Symptoms

The screwworm flies are attracted to and lay their eggs on and in open wounds. They can also lay eggs in your ears, nose, eyes, or mouth. Wounds as small as a tick bite may attract female flies to feed and lay eggs.

Symptoms can include

- Feeling maggots (larvae) moving within a skin wound or sore, ears, nose, eyes, or mouth.
- Seeing maggots around or in open sores.
- Painful skin wounds or sores.
- A foul-smelling odor from the site of the infestation.
- Unexplained skin wounds or sores that do not heal or worsen within a few days.
- Bleeding from open sores.

Bacteria can also infect wounds where New World screwworm maggots are present and may cause fever or chills.

Risk Factors

You may be at an increased risk for NWS if you are in areas where the flies are present and

- Have an open wound, from a scratch or cut, from an insect bite, or from a recent surgery.
- Have a weakened immune system, for example from HIV, cancer treatment, or medications that weaken your immune system.
- Have a medical condition that can cause bleeding or open sores, for example, skin or sinus cancer.
- Sleep outdoors, especially during the day.

Prevention

Prevention is key to protecting yourself from NWS in areas where NWS flies are present.

- Keep open wounds clean and covered, no matter how small or location on the body.
- Prevent insect bites, especially when visiting areas where NWS flies are present and spending time outdoors.
- Wear loose-fitting, long-sleeved shirts and pants, and socks and hats to limit areas where you could get bitten.
- Use an [EPA-registered insect repellent](#).
- Treat clothing and gear with products containing 0.5% permethrin.
- Sleep indoors (if the room has windows, the windows should be screened). If you are outside, sleep under a bed net or inside a screened tent.



How it Spreads

New World screwworm infestations begin when a female fly lays eggs on open wounds or other parts of the body in live, warm-blooded animals or humans. The smell of a wound or an opening such as the nose, mouth, or eyes, umbilical cord of a newborn animal, or genitals, will attract the female flies. Wounds as small as a tick bite may attract a female fly to feed and lay her eggs. One female can lay 200 – 300 eggs at a time and may lay up to 3,000 eggs during her 10- to 30-day lifespan.

Eggs hatch into maggots that burrow into the wound to feed on the living flesh. After feeding, maggots drop to the ground, burrow into the soil, and emerge as adult screwworm flies.




Treatment

- If you see or feel maggots in or on a wound or other area of your body, seek medical care immediately.
- Your healthcare provider will need to remove each maggot, sometimes surgically.
- Do not try to remove any maggots or egg masses yourself. Do not throw any in the trash or outside as this could result in NWS spreading in your area.
- If maggots or eggs do fall out of the wound, place them in a leak-proof container with rubbing alcohol. If you do save the maggots and eggs in a container, bring them with you to your healthcare provider.
- To safely dispose of the maggots, place them in a leak-proof container with rubbing alcohol and place the container into a sealable, zip top plastic bag. Seal the bag with the container inside and throw the sealed bag in the trash.

NWS in Animals

If you see maggots on an animal, contact your veterinarian. Visit [USDA’s website](#) for more information about NWS in animals.

NWS Images

		
New World screwworm maggot (left) next to a nickel, for size comparison. <i>Image courtesy of Mark Fox, Centers for Disease Control and Prevention.</i>	The New World screwworm flies have orange eyes, a metallic blue or green body, and three darker-shaded stripes along their backs. <i>Image courtesy of Denise Bonilla, U.S. Department of Agriculture.</i>	New World screwworm infestation in in a patient’s leg. <i>Image courtesy of Dr Isaac Bogoch, Toronto General Hospital.</i>