New World Screwworm

Last Modified:

New World Screwworm (NWS, *Cochliomyia hominivorax*) is a devastating pest. When NWS fly larvae (maggots) burrow into the flesh of a living animal, they cause serious, often deadly damage. NWS can infest livestock, pets, wildlife, occasionally birds, and in rare cases, people.

While endemic in Cuba, Haiti, the Dominican Republic, and countries in South America, **NWS is not currently present in the United States.** Using sterile

insect technique, we eradicated NWS from the United States in 1966 and successfully eliminated a small outbreak from the Florida Keys in 2017. USDA and Panama's Ministry of Agriculture Development (MIDA) jointly manage and fund the only NWS sterile fly production facility currently in operation in North America through the Commission for the Eradication and Prevention of Screwworm (COPEG).

Stop Screwworm: Unified Government Response To Protect the United States

In recent years, NWS has moved northward through Central America and Mexico. USDA is leading a national, One Health response to keep NWS out of the United States. Our whole-of-government effort is crucial to protect the U.S. livestock

What To Look For

The name screwworm refers to the maggots' feeding behavior as they burrow (screw) into the wound, feeding as they go like a screw being driven into wood. Maggots cause extensive damage by tearing at the hosts' tissue with sharp mouth hooks. The wound can become larger and deepen as more maggots hatch and feed

on living tissue. As a result, NWS can cause serious, often deadly damage to the animal.

Adult screwworm flies are about the size of a common housefly (or slightly larger). They have orange eyes, a metallic blue or green body, and three dark stripes along their backs.

Report mammals and birds with the following signs:

- Irritated behavior
- Head shaking
- The smell of decay
- Presence of fly larvae (maggots) in wounds

Learn More

Browse NWS Photo Gallery
View NWS Life Cycle
Download NWS Informational Products
Watch Video: Webinar for Animal Industry

How To Prevent This Disease

Protecting the United States From New World Screwworm

The best way to keep screwworms out of the United States is to prevent their introduction. New World screwworm (NWS) can infest warmblooded animals, including livestock, pets, wildlife, people, and even birds.

Some steps you can take to prevent infestation:

- Watch for signs of NWS in pets and livestock.
- Make sure pets traveling internationally are inspected for screwworm.
- Handle livestock carefully and inspect pens and equipment for sharp objects that can cause wounds.
- Treat the umbilical cords of newborn animals and all wounds immediately with an approved insecticide.

- Protect pets and livestock from other wound-causing parasites such as ticks.

In the event of an NWS detection in the United States, APHIS will recommend additional measures to prevent spread, including:

- Inspect your vehicle for screwworm flies when leaving an NWS-infested area.
- Postpone or avoid procedures that create wounds such as dehorning, branding, shearing, ear notching, tail docking, and castration if you are in an NWS-infested area.

If you think you have found a screwworm, report it immediately to your State animal health official and APHIS office. This will allow APHIS and partner agencies to respond quickly and remove the screwworms before a population becomes established.

Traveling with a dog? View U.S. entry requirements

How It Is Treated

Eradicating NWS is only possible through sterile insect technique (237.54 KB). With this method, sterile male flies are released into an area where a known population has become established. The sterile male flies mate with wild female NWS flies, which then lay unfertilized eggs. Because female NWS flies mate just once in their lifespan, the NWS population progressively reduces and ultimately dies out.

Animals infested with NWS should be treated according to their veterinarian's recommendations.

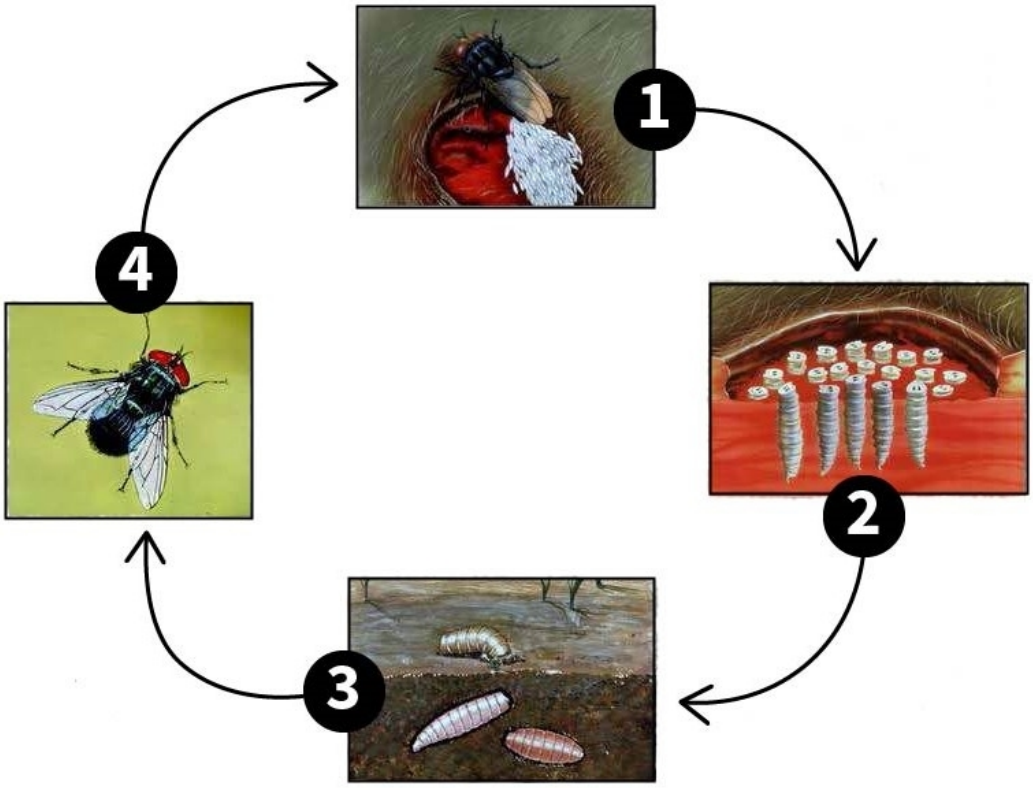
FDA provides information to support veterinarians with the identification of FDA-regulated products to prevent and/or treat NWS myiasis. This includes FDA-approved animal drugs labeled for indications other than NWS myasis that may be effective in preventing or treating NWS myasis.

There are pesticides to potentially use against NWS. View list.

People who suspect they are infested with NWS should seek immediate medical treatment following the Centers for Disease Control and Prevention (CDC) guidelines . For information on how screwworms affect people or to report human disease, visit CDC at About New World Screwworm Myiasis and Clinical Overview of New World

Screwworm Myiasis.

NWS Life Cycle



1. The adult screwworm fly is attracted to the smell of an open wound and lays her eggs on the edges of it.
2. Within a few hours, the eggs hatch into larvae, which burrow into the wound to feed. This worsens the wound and attracts more flies, which lay more eggs.
3. The larvae feed for about 1 week and then fall off and burrow into the ground to pupate.
4. After at least 7 days, an adult fly emerges.

NWS Informational Products

Product	Type	Other Versions

The Facts About New World Screwworm (276.74 KB)	Factsheet	Not applicable
New World Screwworm: What You Need To Know (480.91 KB)	Brochure	Fillable PDF (high-res) (4.03 MB) Fillable PDF (press-ready) (4.1 MB)
Gusano barrenador del Nuevo Mundo: Lo que necesita saber (423.97 KB)	Brochure	Fillable PDF (high-res) (4.07 MB) Fillable PDF (press-ready) (4.66 MB)
Pest Alert: New World Screwworm (234.59 KB)	Factsheet	Spanish (225.62 KB)
Screwworm: An International Threat to Human and Animal Health (958.86 KB)	Poster	Not applicable
New World Screwworm (874.64 KB)	Pest ID card	Not applicable
New World Screwworm: A Threat to Wildlife (Information for Hunters) (559.97 KB)	Factsheet	Spanish (1010.51 KB)
Look Out for New World Screwworm (305.91 KB)	Poster (for livestock markets)	Press-ready PDF (565.54 KB)

Report Signs of Animal Disease

Producers or owners who suspect an animal disease should contact their veterinarian to evaluate the animal or herd. Find an accredited veterinarian.

Animal health professionals (veterinarians; diagnostic laboratories; public health, zoo, or wildlife personnel; and others) report diagnosed or suspected cases of nationally listed reportable animal diseases to APHIS Area Veterinarians in Charge and to the State animal health official as applicable under State reporting regulations.

Controlling New World Screwworm

Expand All

Guidance for Veterinarians and Animal Health Officials

Standard Operating Procedure for Possible Detections of NWS in Animals
National Veterinary Accreditation Program NWS Training Module
NWS: Be Aware and Prepare

(PDF, 626.46 KB)

Factsheet for Veterinarians

New World Screwworm: Veterinary Considerations for Dogs and Cats that Travel Internationally

(PDF, 383.55 KB)

Factsheet for Veterinarians

Foreign Animal Disease Investigation Guide: New World Screwworm
New World Screwworm: Information for Veterinarians (FDA)

Information to help veterinarians identify FDA-approved animal drugs labeled for indications other than NWS myiasis that may be effective in preventing or treating NWS myiasis.

Webinar for Veterinarians and Animal Health Regulatory Officials

This recorded event covers the NWS' life cycle and damage it causes; how to detect and report suspected cases; and USDA’s response plans, should there be a detection in the United States.

Emergency Response Information for Cooperators

Emergency Management: New World Screwworm

Find tools and resources to prepare for and respond to an NWS outbreak.

History of NWS Eradication in the United States

Browse our informational materials on the history of NWS eradication in the United States.

Title	Type	Description
NWS Historical Economic Impact	Ready Reference Guide	Summarizes historical economic impact estimates of NWS in the United States, costs associated with NWS infestation, and the potential economic impact of NWS in 2024
NWS Maps and Timelines (776.15 KB)	Ready Reference Guide	Overview of NWS eradication programs by start date, duration, and more, with quick-reference maps and visual timelines
New World Screwworm	Story Map	Visual narrative that summarizes basics about NWS, eradication, past outbreaks, and more
NWS Investigations in the United States From 2016–2017	Video	Time-lapse map of U.S. investigations for NWS
NWS Investigations in Florida From 2016–2017	Video	Time-lapse map that gives an overview of the Florida NWS response
2016 Investigation into Introduction of NWS into Florida Keys	Report	Topics covered include background on the 2016 investigation, epidemiology of the outbreak, and known pathways for introduction
APHIS Veterinary Services Response to the 2016–2017 Outbreak of NWS in Florida (2.9 MB)	Report	Overview of the 2016–2017 outbreak of NWS in Florida, focusing on the development of the outbreak and the structure and activities of APHIS' response
Cooperative Screwworm Eradication Program Environmental Assessment, August 2017 (572.14 KB)	Report	Environmental Assessment for Screwworm activities

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