

2025 Veterinary Advisory #7

New World Screwworm Information for Veterinarians

- New World screwworm (NWS) larvae feed on living tissue of warm-blooded mammals, including humans, causing severe tissue damage, secondary bacterial infections and, rarely, death.
 - Myiasis due to fly larvae endemic to the US such as the sheep ked, horse bot fly, rodent bot fly, and warble fly differ from NWS in that they feed on necrotic tissue rather than living tissue.
- NWS was eliminated from the US in 1966. An ongoing outbreak spans Panama to southern Mexico, with recent northward spread posing a threat of reintroduction. NWS remains endemic in South America, Cuba, Haiti, and the Dominican Republic.
- Four human travel-associated cases have been reported in the US since 2017; the most recent was a Maryland resident with travel to the outbreak area in 2025.
- At this time, the risk to pets and wildlife in NYC is low. Veterinarians should consider NWS in animals with myiasis and recent travel to endemic or outbreak regions.
- Report suspected cases to the NYC Health Department (347-396-2600), the [APHIS Area Veterinarian](#), and the [State Animal Health Official](#).

Please share with your colleagues in Veterinary Medicine and your staff.

September 30, 2025

Dear Colleagues,

This advisory provides information on New World screwworm (NWS) (*Cochliomyia hominivorax*). Myiasis is a parasitic infestation in which larvae (maggots) develop in the tissue of warm-blooded animals, including humans. Myiasis due to NWS is particularly damaging as larvae feed on living tissue. Adult female NWS flies can deposit hundreds of eggs in open wounds or mucous membranes. After hatching, the larvae burrow into the wound and feed on living tissue, causing extensive tissue damage, pain, debilitation, secondary infections, and, rarely, death.

Background

NWS was eradicated in the US in 1966 through mass sterile fly release. A brief reintroduction occurred among Key deer in the Florida Keys between 2016 and 2017. Prior to recognition of the Florida outbreak, several dogs with myiasis consistent with [NWS infestation](#) were identified by local veterinarians. NWS has remained endemic in South America, Cuba, Haiti, and the Dominican Republic.

Since 2017, four human travel-associated cases have been reported in the US, all returning from endemic areas, including South America, Cuba, Haiti, and the Dominican Republic. Recent media coverage described a human NWS case in a Maryland resident who had traveled to a country affected by a growing NWS outbreak in Central America and Mexico.

Resurgence in Central America and Mexico

A resurgence of NWS is responsible for an outbreak across Central America since 2023. Tens of thousands of animals and dozens of human cases have been reported as flies have spread northward across the countries of **Panama, Costa Rica, Nicaragua, Honduras, Guatemala, El Salvador, Belize and southern Mexico**. Control efforts rely on the same methods historically used to eliminate NWS including the [release of sterile male flies](#). The [USDA has suspended the importation](#) of most live cattle, horses, and bison through southern border ports of entry, and requires dogs to be free of NWS upon inspection within five days prior to entry to the US.

Guidance for Veterinarians

Myiasis causing flies endemic to the US, including the sheep ked, horse bot fly, rodent bot fly, and warble flies, produce larvae which feed on necrotic tissue. Myiasis can be classified as obligate, where larvae require a living host, and facultative, where larvae can develop in either live or dead hosts or in organic matter.^{1,2} With cutaneous manifestations, furuncular myiasis appears as a skin nodule or a small number of skin nodules that contain a single larva.³ Wound myiasis occurs when there is large larval infestation of an open wound or mucous membrane. Morphologic diagnosis of larvae is critical to correctly identify species causing infestation.

At this time, the risk of NWS to NYC pets and animals is low. Veterinarians should consider NWS in animals with myiasis and recent travel to an endemic or outbreak areas. NWS infestations can have hundreds of larvae and may occur in open wounds or mucous membrane tissue in body orifices including the ears, eyes, nose, mouth, vagina, and rectum.

Treatment should include physical removal of all larvae, debridement of necrotic tissue, wound care, pain management, and possible use of an antiparasitic. Orbital myiasis may require extensive debridement and sometimes enucleation. Any suspected NWS larvae should be put in sterile, sealed containers with 70% alcohol with enough volume to submerge. All larvae should be accounted for and NEVER discarded in the trash. Larvae will be used to confirm a diagnosis, and proper disposal will prevent the establishment of NWS in the local environment (see Appendix).

If you suspect NWS:

- Immediately contact the NYC Health Department at 347-396-2600.
- Notify Federal and State officials:
 - Report the case to the [USDA-APHIS Area Veterinarian](#) and [State Animal Health Official](#)
 - Follow additional instructions in the [USDA-APHIS SOP for Possible Detections of New World Screwworm in Animals](#)

1. Pezzi M, et al. Cutaneous myiasis in cats and dogs: Cases, predisposing conditions and risk factors. Vet Med Sci. 2021 Mar;7(2):378-384. doi: 10.1002/vms3.370. Epub 2020 Dec 18. PMID: 33336900; PMCID: PMC8025654.
2. Merck Veterinary Manual, 2022. Dipterans that Produce Myiasis in Animals
<https://www.merckvetmanual.com/integumentary-system/flies/dipterans-that-produce-myiasis-in-animals>
3. McGraw TA, et al. Cutaneous myiasis. J Am Acad Dermatol. 2008 Jun;58(6):907-26; quiz 927-9. doi: 10.1016/j.jaad.2008.03.014. PMID: 18485982.

Additional resources:

- [New World Screwworm | American Veterinary Medical Association](#)
- [New World Screwworm: Be Aware and Prepare \(Information for Veterinarians\) | USDA-APHIS](#)
- [New World Screwworm | USDA-APHIS](#)
- [Myiasis – Distinguishing NWS from Cuterebra \(Botflies\) | Utah Department of Agriculture and Food](#)
- [Cochliomyia hominivorax | Companion Animal Parasite Council](#)

As always, we appreciate your continued collaboration with our efforts to monitor public health issues in New York City.

Sincerely,

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Zoonotic and Vector-borne Disease

Bureau of Communicable Disease

ZIVDU@health.nyc.gov

347-396-2600

Visit our webpage for information and resources for veterinarians: [Zoonotic and Vector-borne Diseases: Information for Providers](#)

If you do not receive these alerts via email and would like to be added to the distribution list, email zivdu@health.nyc.gov

Report animal diseases to the NYC Health Department:

- Online through a [secure web-based reporting platform](#)
- Call 347-396-2600
- Fax the [Animal Disease Case Report form](#) to 347-396-2753

Report upon suspicion: Anthrax, brucellosis, glanders, influenza (novel with pandemic potential), mpox, plague, Q fever, SARS, tularemia

For rabies, call the Animal Bite Unit at 646-364-1799 to report suspect rabid animals or for assistance with pets exposed to rabies.

Report upon laboratory diagnosis: Arboviral encephalitides, carbapenem-resistant organism (CRO), leptospirosis, psittacosis, Rocky Mountain spotted fever, salmonellosis, tuberculosis

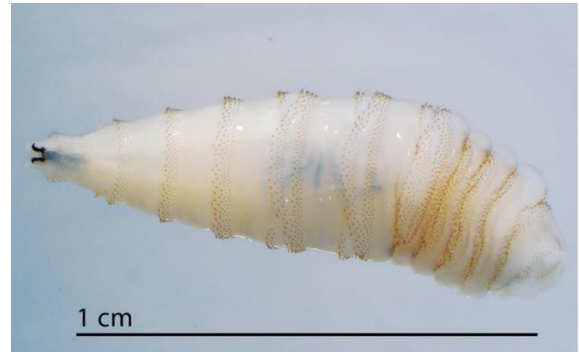
Report within 24 hours any outbreak or suspected outbreak of any disease, condition, or syndrome, of known or unknown etiology, which may pose a danger to public health.

Appendix



Image courtesy of Mark Fox, CDC

Figure 1. New World screwworm larvae are smaller than bot fly larvae.



Ventral view showing mandibles. Image courtesy of Mark Fox, CDC

Figure 2. NWS larvae are usually 6.5-17 mm long, muscidiform (tapering anteriorly and truncate posteriorly) in shape, with encircling bands of short 1-2 and 3 pointed spines on each body segment.



Figure 3. NWS adult flies are about the size of a common housefly, or slightly larger. The fly has orange eyes, metallic blue or green body, and three dark longitudinal stripes down the back.
Image courtesy of Denise Bonilla, U.S. Department of Agriculture