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PUBLIC HEALTH ADVISORY

To: Health Care Providers and Veterinarians

From: Dr. Puthiery Va, Maine CDC Director

Subject: Resurgence of New World Screwworm in the Americas

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Resurgence of New World Screwworm in the Americas

Please review this information from the U.S. CDC on the resurgence of New World Screwworm (NWS) in the Americas. It outlines key actions that clinicians can take to recognize, treat, and report cases of NWS myiasis. As of September 17, 2025, there are no confirmed cases of locally-acquired NWS myiasis in Maine or elsewhere in the United States. One state has reported an imported case in a returning traveler. Clinicians should consider NWS in the differential for cases of myiasis in a person who has traveled to an area where the NWS fly is endemic.

The NWS fly (*Cochliomyia hominivorax*) is not present in Maine. The risk of myiasis caused by local infection in Maine is very low. Any patients in Maine with suspected NWS myiasis should be **reported immediately** to the Maine CDC by phone at 1-800-821-5821 under the unusual illness of infectious cause condition in the notifiable rules.

Testing for NWS myiasis is not available through the usual commercial laboratories. The Maine CDC can help coordinate specimen collection, diagnosis, and consultation with the U.S CDC on all suspected cases. Samples from **suspected human cases** should be sent to the Health and Environmental Testing Laboratory (HETL). A completed HETL <u>Requisition Form</u> is required with all samples.

Veterinarians with **suspected animal cases** should report their suspicion **immediately** to the Maine Department of Agriculture, Conservation & Forestry at 207-287-3701 or USDA Veterinary Services at 1-866-536-7593 for assistance in specimen submission.

For more information, visit www.cdc.gov/new-world-screwworm and refer to the resources below.

Summary

The U.S. Centers for Disease Control and Prevention (U.S. CDC) is sharing health care guidance and resources on New World Screwworm (NWS) myiasis to prepare for the potential spread of the parasite in the United States. There is a <u>current outbreak of NWS in Central America and Mexico</u> affecting both animals and humans. The fly that causes NWS myiasis has been steadily moving northwards from South America since 2023. Currently, the northernmost cases of NWS myiasis are located in southern Mexico. As of September 2, 2025, over 720 NWS cases in humans and 6 human deaths have been reported in the outbreak region. U.S. CDC is hosting an upcoming webinar to discuss NWS with clinicians, public health professionals, and community health workers. To register, visit https://tinyurl.com/ECHONWS. Clinicians can refer to the U.S. CDC clinical recommendations document for more information.

Background

The NWS fly (*Cochliomyia hominivorax*) lays its eggs in open wounds or in other body cavities with mucus membranes, such as the nose, ears, eyes, or mouth. The eggs develop into parasitic larvae (maggots) that burrow into and feed on living flesh. The larvae are very destructive, causing extensive tissue damage, and infestations can be fatal. NWS primarily affects livestock, but the parasitic larvae can infest any warm-blooded animals, including humans. NWS flies were previously present in the United States and caused hundreds of millions of dollars in losses for the livestock industry annually. Starting in the 1950s, the United States Department of Agriculture (USDA) led a successful campaign, lasting several decades, to eradicate the flies from the United States, Mexico, and Central America.

U.S. CDC is collaborating with federal partners including USDA, state and local health departments, and tribal organizations to prepare for the potential arrival of NWS in the United States and to discuss strategies to re-eradicate NWS flies from Mexico and Central America. Currently, there is no immediate risk of infestation to people in the United States; however, travel-related cases have happened in the past and will continue to be a risk during the outbreak.

Recommendations for Clinicians

- Consider NWS in the differential for cases of myiasis in a person who has traveled to Mexico, Central America, or countries where the parasite is endemic
- Symptoms of NWS myiasis
 - Visible larvae or egg masses in a wound or body orifice with destruction of healthy tissue.
 - o Painful wounds, sensation of movement inside the wound, foul odor, bloody discharge, swelling.
 - o Patients may develop secondary bacterial infections or sepsis from NWS infestation.
- Treatment of suspect NWS cases
 - o Remove and kill **ALL** visible larvae and eggs in patients with suspected NWS infestation. Extraction of larvae may require surgical removal.
 - o Larvae and eggs should be killed by placing them into a leak-proof container with 70% ethanol (70% isopropyl or 5-10% formalin are acceptable alternatives). The volume of liquid in the container should be enough to fully submerge the larvae. Do not dispose of extracted larvae or eggs in the trash or on the ground.
 - o Re-examine treated lesions after 24 48 hours to confirm no live larvae remain.
- Specimen collection and diagnosis
 - o For preservation, submerge larvae and eggs in a leak-proof container with 70% ethanol. Acceptable alternatives include 70% (or greater) isopropanol or 5% 10% formalin.
 - Submit at least 10 larvae in different stages of life, if possible, for clinical diagnosis and confirmation at U.S. CDC.

- Diagnosis of NWS myiasis can only be obtained by identifying the larvae. Diagnosis is available through U.S. CDC's Diagnostic Parasitology Laboratory and is free of charge. To submit specimens for diagnosis, contact the Maine CDC. The Maine CDC will work with clinicians, the state laboratory, and U.S. CDC to arrange diagnosis.
- Disposal of larvae and eggs
 - o Submerge the remaining larvae and eggs in alcohol in a leak-proof container and place the container into a zip-top plastic bag and seal it.
 - o The sealed zip top bag can be safely thrown away in the trash.
 - Failure to kill and properly dispose of all larvae or eggs may result in the new introduction and spread of NWS flies in the local environment.
- Reporting of suspect NWS cases
 - o Report suspect cases in humans **immediately** to the Maine CDC at 800-821-5821.
 - Report suspect cases in animals **immediately** to the Maine Department of Agriculture, Conservation & Forestry at 207-287-3701 or to USDA Veterinary Services at 1-866-536-7593.
- For patients traveling to areas where NWS is present, advise patients to:
 - o Clean and cover all wounds, no matter how small or the location on the body or scalp.
 - Wear loose-fitting, long-sleeved shirts and pants to limit exposed skin and use <u>the</u> Environmental Protection Agency-registered insect repellants.
 - o Encourage patients, if possible, to avoid spending time where livestock are located or housed in rural areas.
 - o Avoid sleeping outdoors, especially during the day.
 - o Protect sleeping quarters with screens or bed nets.
- Individuals at increased risk for NWS:
 - o May have an open wound, a weakened immune system, or a medical condition that can cause bleeding or open sores, or
 - o Sleep outdoors, especially during the day, or
 - o May have a medical condition that renders them unable to swat away flies.

Additional Resources

Overview of NWS – U.S. CDC

- About New World Screwworm Myiasis | Myiasis | U.S. CDC
- Clinical Overview of New World Screwworm Myiasis | Myiasis | U.S. CDC
- Acerca de la miasis por el gusano barrenador del Nuevo Mundo | Myiasis | U.S. CDC
- <u>Información clínica sobre la miasis por el gusano barrenador del Nuevo Mundo | Myiasis | U.S.</u> CDC
- Laboratory Diagnosis of New World Screwworm bench aid

USDA

- New World Screwworm USDA
- New World Screwworm: What You Need to Know (English and Spanish)
- New World Screwworm Story Map
- Screwworm: An International Threat to Human and Animal Health

Insect bite prevention

- Preventing Mosquito Bites | Mosquitoes | U.S. CDC
- Preventing Mosquito Bites While Traveling | Mosquitoes | U.S. CDC
- About Permethrin-Treated Clothing and Gear | Mosquitoes | U.S. CDC
- How to Prevent Mosquito and Tick Bites | Vector-Borne Diseases | U.S. CDC
- EPA-registered insect repellent