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New World Screwworm: What the Meat Industry Needs to Know



(Updated September 2025)

New World Screwworm (NWS), *Cochliomyia hominivorax*, is a parasitic fly whose larvae (maggots) can cause myiasis, an infestation of living tissue in warm-blooded animals.

Key Takeaway: NWS is a serious foreign animal disease threat, but the U.S. has safeguards in place to detect, report, and prevent it from entering the food supply. All animals and carcasses are inspected by FSIS personnel; those affected by NWS may still be suitable for processing, if they pass all food safety regulatory requirements.

Infestation occurs when female NWS flies are attracted to the odor of an open wound, even one as small as a tick bite, or to natural openings such as the eyes, nose, the umbilicus of a newborn, or the genitalia of any warm-blooded animal. Females lay eggs around the wound or opening. Although each female mates only once in her lifetime, she can lay thousands of eggs. Upon hatching, the larvae (maggots) feed exclusively on living tissue “burrowing” deep into an infested animal. If left untreated, the wound will continue to grow as more larvae hatch and create a myiasis that can be fatal.

Detection in the United States of NWS is considered a foreign animal disease and must be immediately reported to State Animal Health Officials and the United States Department of Agriculture Animal and Plant Health Inspection Service (USDA – APHIS) Area Veterinarian-in-Charge (AVIC). APHIS will report state level positive detections of NWS to the World Organization for Animal Health (WOAH) and trading partners. A positive case of NWS should only affect the trade of live animals. However, detection may also lead to disruptions in intrastate and interstate market channels. For example, if NWS is found in a state, neighboring states may halt animal movements from the affected state until appropriate surveillance and treatments are conducted to ensure animal movements wouldn’t inadvertently move the pest.

Quarantine of animals infested with NWS will occur on the premises on which the animal originates. Control areas around the operation will also be established and fly traps will be deployed for surveillance to determine the extent of pest’s spread. APHIS will release quarantines on affected animals when appropriate.

Harvest facility surveillance for NWS will be conducted by USDA – Food Safety Inspection Service (FSIS) inspectors/veterinarians as they examine all animals during ante-mortem inspection. Animals presented for slaughter must pass ante-mortem inspection as required by **9 CFR § 309.1(a)**, and carcasses must pass post-mortem inspection as required by **9 CFR § 310.1(a)**. **FSIS directive 6000.1** provides FSIS inspectors instructions for reporting and coordinating with APHIS when a foreign animal disease such as NWS is suspected. While slaughter establishment operations should be able to continue, if APHIS confirms a



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positive case of NWS within the U.S., establishments should prepare for an animal stop movement, which may be dependent on the site of detection. However, the primary concern will remain focused towards the animal's point of origin.

Affected animals and carcasses will be handled on a case-by-case basis, with outcomes depending on the extent of infestation and the presence of any pathological changes. Situations may range from the detection of larvae on the animal's body without tissue damage to infestations involving single or multiple wounds or natural openings. FSIS will determine animals eligible for slaughter and carcass disposition based on food safety regulatory requirements. Partial condemnation of affected tissues is anticipated. Carcasses that are affected with localized lesions may be passed by FSIS for human food after the removal and condemnation of the affected portions (**9 CFR § 311.25**). Full carcass condemnation is not expected unless parasites are distributed in such a manner that their removal is impractical, or the infestation is excessive. An affected carcass may also exhibit other conditions that require condemnation or trimming as described in **9 CFR § 311**.

Food safety is of the utmost importance. Animals treated for NWS are not eligible for slaughter until all drug withdrawal periods have elapsed. FSIS will condemn carcasses under **9 CFR § 311.39** if any residues are present. Products not approved or otherwise authorized for food-producing animals should not be used. All animals presented for slaughter that are affected by NWS at federally inspected facilities will be inspected by FSIS personnel to ensure all food safety regulations are met. FSIS personnel apply routine inspection procedures as outlined in the FSIS directives listed below when animals presented for slaughter are known to be affected by NWS to determine wholesomeness.

- **FSIS directive 6100.1:** Outlines how inspectors examine live animals before slaughter to determine fitness for human food.
- **FSIS directive 6100.2:** Covers inspection of carcasses and parts after slaughter to verify wholesomeness and identify conditions requiring condemnation.
- **FSIS directive 6100.6:** Provides carcass inspection procedures and disposition standards, including guidance relevant to lesions and parasites.

The impact of NWS infestation on the U.S. could cost millions of dollars to the livestock and wildlife industries. Additionally, the welfare of infested animals is significantly compromised due to the damage caused by NWS myiasis.

Eradication of NWS from the U.S. was previously done using the sterile fly technique (STI) in 1966 and in 2017 to neutralize a small outbreak in the Florida Keys. This technique sterilizes pupae with radiation creating sterile male flies. These sterilized male flies are released into affected environments to mate with female NWS and disrupt the breeding cycle. Female NWS flies only mate once in their lifetime, whereas male NWS flies will mate repeatedly. The eggs produced from the mating with sterile male NWS flies are not viable and will not develop.

USDA closed the U.S. – Mexico border to imports of live cattle, horses, and bison in July 2025 and has indicated the border will remain closed until the outbreak in Mexico is appropriately controlled to prevent the reintroduction of NWS into the U.S. Additionally, the U.S. has restricted countries with confirmed outbreaks on the imports of horses, ruminants, swine, and dogs unless the animals are inspected and treated for NWS.