



New World Screwworm

Disease Name: New world screwworm

Type: New World screwworm (NWS) infestation is caused by NWS fly larvae (*Cochliomyia hominivorax*). These maggots consume living tissue or flesh of warm-blooded animals (including horses) by burrowing into and tearing tissue by hooks on the larva.

Transmission: The screwworm fly lays eggs in open wounds. Eggs are creamy white found at the edges of the wound. Larvae invade the wound and subsequently develop into adult flies which transmit the parasite to new wounds. Screwworms can be transmitted to people.

Frequency: Currently NWS is not present in the United States and is considered to be a foreign animal disease. Suspected cases must be reported to state and federal animal health officials. This parasite is common in tropical and subtropical regions in Central and South America. The parasite was identified in Mexico in late 2024.

Incubation Period: Screwworm larvae emerge from the eggs in 12 to 24 hours. After about 7 days of feeding, larvae drop to the ground, burrow into the ground and pupate. The adult screwworm fly emerges from the soil after at least 7 days.

Carrier Status: Horses can be carriers and spread the disease if they have open wounds or mucous membrane injuries that become infested.

Shedding Period: Continuous shedding of larvae into adult flies until treated.

Latency: Minimal latency period; symptoms appear soon after infestation.

Severity: The infestation can be severe and potentially fatal if untreated.

Clinical Signs:

- Open wound
- Evidence of pain
- Irritation
- Head shaking
- Presence of maggots in wounds
- Foul odor

Diagnosis: Visual inspection of wounds with identification of maggots. There are other flies that can be associated with wounds; for official identification, the larvae should be sent to a specialist. **Federal and state animal health officials must be notified immediately if a case of NWS is suspected. It is their responsibility to complete the investigation and establish the appropriate diagnostic testing, treatment and biosecurity protocols.**

Treatment: Animals infested with NWS should be treated according to the recommendations of their veterinarian and state and federal animal health officials. Typically, cleaning of wound and surgical removal of maggots is needed with subsequent treatment with approved topical and systemic insecticides. Larvae removed from the wound must be destroyed as directed by federal or state animal



health officials and not allowed to enter into the environment. Systemic administration of antibiotics is recommended if the wound becomes infected. Treatment of the environment may also be necessary.

Prognosis: Good with prompt treatment; poor if untreated.

Prevention: Regular inspection of wounds, use of insect repellents and maintaining clean environments. Anyone suspecting a screwworm infection should contact their state veterinarian immediately.

Biosecurity: Quarantine of infected animals, proper wound care and treatment, and monitoring for signs of infestation. Humans are at risk if traveling in endemic areas, are around livestock and have an open wound. <https://www.cddc.gov/myiasis/about-new-world-screwworm-myiasis/index.html>