

NEW WORLD SCREWORM FACTS

Cattle Producer's Quick Guide to NWS

What is New World Screwworm?

- New World Screwworm (NWS) is a devastating pest of livestock and other mammals. Screwworms are a fly larvae, or maggots, that burrow into the flesh of living animals causing serious, and even deadly, damage to the animal.
- For USDA updates, visit: www.aphis.usda.gov/livestock-poultry-disease/cattle/ticks/screwworm

Why are we worried about New World Screwworm today?

NWS is endemic in Cuba, Haiti, the Dominican Republic and countries in South America, with cases spreading north to Costa Rica, Nicaragua, Honduras, Guatemala, Belize, El Salvador and Mexico.¹

- Although the United States Department of Agriculture (USDA) eradicated NWS from the United States in 1966 using sterile insect technique, there is a constant risk of re-introduction into the United States.¹
- Since 2006, the United States and Panama have maintained a barrier zone in eastern Panama.²
 - This barrier zone prevents NWS from moving north from South America to screwworm-free areas in Central and North America.²
- In 2023, APHIS confirmed an unprecedented number of NWS cases in Panama.²
 - Since then, cases have been detected in every Central American country and Mexico.²
- NWS can threaten the livelihood of livestock producers.²
 - It can cause millions of dollars' worth of production losses and economic damage.²
 - Screwworm also pose a threat to humans in infested areas.²
- During the 20th century, the presence of NWS cost the U.S. livestock industry more than \$100 million annually.³

- Another incursion into the United States could cost millions of dollars from livestock losses, trade embargoes and eradication work.⁴
- Pets, livestock, wildlife and even humans may suffer and die from screwworm myiasis.⁴

What to look for?

- Look for the following signs in livestock or any warm-blooded animals²:
 - Irritated behavior
 - Head shaking
 - The smell of decay
 - Presence of maggots in a wound (see images on next page)
- Egg masses may be around or in the wound; larvae may be visible by the third day of infestation.⁴
- Because they feed on live flesh, NWS maggots may burrow deep into wounds or openings, while other species of maggots may appear around the outer surface of the wound.⁴
- Screwworm infestations are very painful. Animals may become depressed, stop eating and separate themselves from other animals or people.⁴

NEW WORLD SCREWORM FACTS

Cattle Producer's Quick Guide to NWS

What do I do if I suspect an animal has New World Screwworm?

- Immediately report any suspicious wounds, maggots or infestations to a local accredited veterinarian, your State Animal Health Official or USDA

(www.aphis.usda.gov/contact/animal-health).⁴



What if there's an infestation in my area?

- In areas where NWS is found, measures should be implemented to prevent animal wounds and avoid NWS myiasis.⁵
 - For example, to the extent possible, eliminate or delay performing wounding procedures such as dehorning, branding, shearing, ear notching, tail docking and castration.⁵
 - Untreated umbilical cords of newborn animals and foot lesions are commonly infested sites. Immediately treat all wounds with approved insecticides; it may also be prudent to follow up with precautionary spraying of animals with insecticide before transport.⁵

Could a New World Screwworm infestation lead to quarantines or stop movement orders?

- According to the USDA NWS Disease Response Strategy, quarantines and movement controls will be a primary strategy of NWS response efforts.⁵
- USDA may impose a federal area quarantine and restrict interstate commerce from the infested states, asking the states (or adjoining countries) to provide resources to maintain and enforce the quarantine.⁵
 - State quarantines may be placed on individual infested animals or premises with infested animals.⁵
 - Of most importance is the control of livestock movement within and out of an infested area, using a system that requires inspection for wounds and myiasis. This may include permit requests for permitted movement.⁵
- All decisions in regard to quarantine and movement control will be based on science-based assessments of the current extent of NWS infestation, risk of spread and the interaction of other factors, such as seasonal climate and weather conditions.⁵

References:

1. <https://www.aphis.usda.gov/livestock-poultry-disease/cattle/ticks/screwworm>
2. <https://www.aphis.usda.gov/sites/default/files/pest-alert-new-world-screwworm.pdf>
3. Novy, J.E. 1991. Screwworm control and eradication in the Southern United States of America. *Special Issue of World Animal Review FAO*, pp. 18-27. <https://www.fao.org/4/u4220t/u4220T0a.htm>. Accessed 4/22/25.
4. <https://www.aphis.usda.gov/sites/default/files/bro-new-world-screwworm.pdf>
5. https://www.aphis.usda.gov/sites/default/files/nws_myiasis_disease_strategy.pdf

Image pg. 1: <https://www.aphis.usda.gov/livestock-poultry-disease/cattle/ticks/screwworm>

Images pg. 2: <https://www.aphis.usda.gov/sites/default/files/bro-new-world-screwworm.pdf>



Funded by the Beef Checkoff