HERDHEALTH

What to Know: New World Screwworm (NWS)

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Overview - What is NWS Infection?

New World screwworm (NWS) infection is a parasitic infestation caused by the larvae (maggots) of ***Cochliomyia hominivorax***.

- Affects all warm-blooded animals including livestock, pets, wildlife and rarely people.
- Adult flies lay eggs in open wounds, and the larvae feed on **living tissue** as they develop. In contrast, maggots from blow flies commonly found in the U.S. feed **only on dead or dying tissue**, not healthy living tissue.
- Although NWS flies can rarely lay eggs on people, animals infected with NWS do not pose a direct human health risk.
- Properly inspected and processed meat does not pose a food safety threat.

Current Status and Economic Impact

Current Status

- NWS has been **eradicated from North American beef herds since the 1960s.**
- Since 2023, the Animal and Plant Health Inspection Service has confirmed an **unprecedented rise in NWS cases in Panama.**
- Due to cattle movement and natural fly migration, NWS has been found in northern Mexico near the Texas border.
- As of December 2025, no confirmed U.S. detections have been reported.

Economic Impact

NWS infestation can cause:

- Historically, more than **$100 million annually** in U.S. livestock industry losses during the 20th century
- A severe U.S. outbreak today could result in **multimillion dollar losses** due to:
  - Mortality and morbidity
  - Trade restrictions
  - Costly eradication measures

Identifying NWS and Recognizing Signs

How NWS Spreads

NWS spreads primarily through:

- Movement of adult flies (including potentially by **hurricanes or tropical storms**). Adult NWS flies can travel up to 10 miles.
- Movement of infested animals including wildlife. Fly eggs and larvae can be transported by animals and people traveling from infested areas.

Clinical Signs

Common indicators of NWS infestation include:

- Open wounds or exposed flesh **containing maggots**
  - Examples: Castration sites, dehorning wounds, umbilical area, ear tag punctures and any trauma site
- Wounds that **fail to heal** or worsen within days
- Restlessness, irritation, or **head shaking**
- **Foul odor** from necrotic tissue
- **Tissue necrosis** as larvae feed

Prevention

Treatment of NWS can be difficult, and eradication is very costly, so prevention of infestations is essential.

Preventative steps include:

- Regularly inspect livestock and pets for cuts, wounds, scabs and tick infestations.
- Closely monitor the umbilicus of newborn livestock, vulva of females and prepuce of males.
- Use insect repellant and wound dressings to prevent fly strike.
- Report any unusual wildlife or bird deaths to the Louisiana Department of Wildlife and Fisheries.
- Pay close attention to nasal passages and eyes for signs of larvae (maggot) infestation.
- Seek veterinary advice for immediate treatment of open wounds, including dehorning and castration sites and preventive use of topical and systemic insecticides.
- Review biosecurity plans with the farm or ranch veterinarian.

What to Do if You Suspect NWS

1. **Immediately report** any unusual or non-healing wounds to a veterinarian.
2. Follow your veterinarian's guidance for treatment and wound care:
   - Thoroughly clean the affected area.
   - Remove all visible larvae.
   - Apply appropriate antiseptics to prevent secondary infections.

Response Strategies for NWS Control

The U.S. Department of Agriculture's New World Screwworm (NWS) Emergency Response Playbook outlines key activities that guide federal, state, tribal and local animal health officials through all phases of an NWS outbreak — from early detection to full eradication. The strategy focuses on protecting uninfested animals and preventing NWS establishment.

For more information, visit www.screwworm.gov

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