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Iowa Pork Industry Center

New World Screwworm (NWS): What Swine Producers Need to Know

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Important: New World Screwworm has not been identified in any commercial U.S. swine herds. The information presented is for educational purposes.

What is New World Screwworm?

New World Screwworm (NWS) is a parasitic fly whose larvae (maggots) feed on **living tissue**. Unlike common maggots that feed on dead tissue or in decomposing organic matter, NWS larvae burrow into healthy flesh, causing severe pain, tissue damage, secondary infections, and potentially death if left untreated. NWS can affect livestock, wildlife, pets, and people.

NWS is not a food safety concern, and animals should be processed in accordance with USDA Food Safety Inspection Service (FSIS) or state regulations. Pigs previously infested with NWS that have been treated, are fully healed, and have met drug withdrawal times are safe to be harvested and enter the human food chain.

Now that a case has been diagnosed in cattle in Texas, State and Federal officials will direct the response in terms of the initial case and any quarantines and import restrictions following the strategies and actions outlined in the NWS Response Playbook.[1]

For more detailed information about NWS, review the Swine Health Information Center (SHIC) NWS factsheet on the SHIC website (swinehealth.org/fact-sheets) or access screwworm resources from the USDA on the FSIS website (screwworm.gov).

Why Should Swine Producers Be Concerned?

Even small wounds can attract NWS flies. Female flies lay eggs around wounds, and larvae hatch within hours and begin feeding on living tissue.

Common risk areas in swine:

- Piglet processing wounds
  - Castration
  - Tail docking
  - Ear notching or tagging
  - Needle teeth clipping
  - Tattooing
- Injection sites
- Newborn piglet umbilical cords
- Fighting injuries and skin abrasions
- Shoulder sores
- Cuts from equipment, flooring, feeders, or waterers
- Tick or lice bites
- Farrowing-related wounds in sows

Signs of a Possible NWS Infestation

Watch for:

- Wounds that get worse instead of healing with a foul odor
- Visible maggots in wounds
- Excessive licking, biting, or rubbing of affected area
- Head shaking or irritation
- Reduced appetite or depression
- Unexpected death in severe cases

Important: Adult flies are rarely seen. Producers are much more likely to detect larvae in wounds.

The Life Cycle of New World Screwworm

The life cycle of NWS can be as short as 21 days (Figure 1).[2] Following copulation, an adult female fly will search for a susceptible host. The fly will lay eggs around open wounds, in orifices, or in mucous membranes with sores. The eggs hatch within 12 to 24 hours and begin feeding on the living flesh. The larvae grow in size over 5 to 7 days before falling off the host. Mature larvae will bury into the ground to pupate for 6 to 8 days, before emerging as an adult fly.

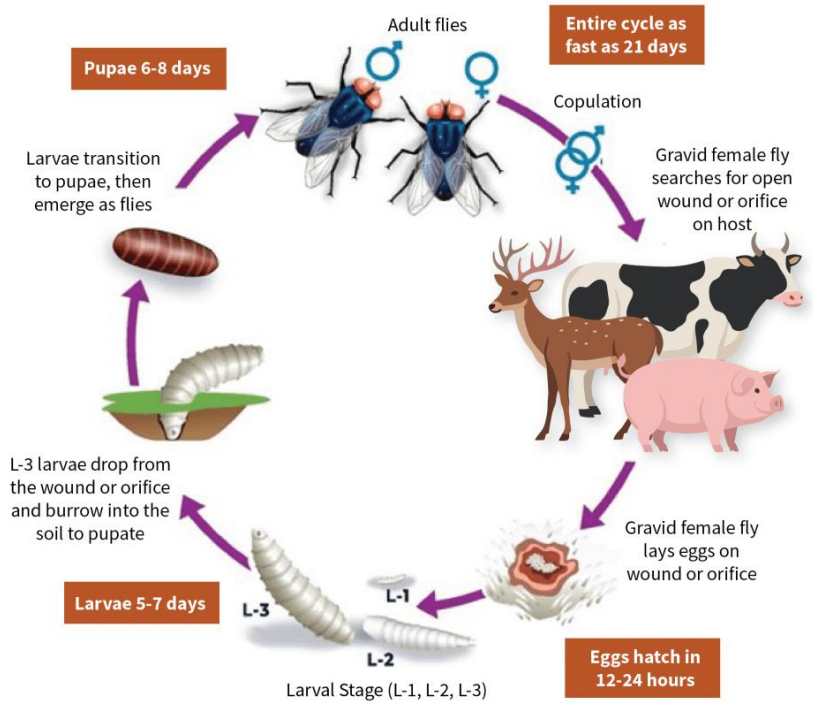

Figure 1: Life cycle of NWS (Source: USDA APHIS) [3]

Prevention: Your Best Defense

Reduce Wounds and Practice Good Wound Care

- Inspect and maintain facilities to eliminate sharp edges and broken equipment.
- Minimize fighting and injuries through proper stocking density and management.
- Use techniques that seal wounds when possible (such as heated tail-docking equipment).
- Treat wounds promptly and monitor healing closely by daily inspection.
- Work with your veterinarian on approved wound-care protocols and fly-control products.

Inspect Animals Daily

- Check all pigs regularly for wounds and signs of infestation.
- Pay special attention to:
    - Newborn piglets
    - Recently processed piglets
    - Freshly injected animals
    - Recently farrowed sows
    - Animals recovering from injuries, especially animals with open wounds

Strengthen Biosecurity

- Maintain a clear line of separation between domestic pigs and wildlife.
- Closely inspect pigs returning from exhibitions, sales, or transportation routes through affected areas.

Housing Considerations

Outdoor Operations

Higher risk because:

- Greater exposure to flies
- More opportunities for injuries
- More locations where larvae can develop

Indoor Operations

Lower risk—but **not risk-free**:

- Warm, humid barns can support NWS development.
- Larvae can pupate in cracks, crevices, feed buildup, manure accumulations, and sheltered areas.

Remember: Traditional manure-based fly control programs do NOT control NWS because screwworm larvae develop in living tissue—not manure.

What To Do If You Suspect NWS

Immediately:

1. Contact your herd veterinarian.
2. Report the case to state animal health officials.
3. Isolate affected animals.
4. Do NOT move suspect animals off the farm.

Early detection and rapid reporting are critical to preventing spread and protecting the U.S. swine industry.

Key Takeaways

- NWS larvae feed on **living tissue** and can cause severe damage or death.
- Any wound—even a small injection site—can attract NWS flies.
- Daily observation of pigs and prompt wound treatment are essential.
- Newborn piglets and recently farrowed sows require extra attention.
- Indoor barns are not immune to NWS.
- Traditional manure fly-control programs are ineffective against NWS.
- Suspect cases should be reported immediately to your veterinarian and animal health officials.
- Prevention, early detection, and rapid response are the best tools to protect your herd and operation.

References

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2. Swine Health Information Center. New World Screwworm: Considerations for Swine. January 30, 2026. https://www.swinehealth.org/wp-content/uploads/2026/01/SHIC-Fact-Sheet-NWS-Considerations-for-Swine-1-2026.pdf
3. USDA APHIS. New World Screwworm Prevention for Animals. June 4, 2026. https://www.aphis.usda.gov/livestock-poultry-disease/cattle/ticks/screwworm