

Screwworm Outbreak Response

Dr. Kyle Schumacher, June 12, 2026 at 18:02

Introduction to New World Screwworm (NWS)

- New World Screwworm (**Cochliomyia hominivorax**) larvae are unique because they "feed on healthy, living tissue of warm-blooded animals," causing extensive damage, pain, secondary bacterial infections, and death within 7-14 days if untreated.
- The disease has significant implications for the "One Health Initiative," affecting pets, livestock (cattle are the #1 host, dogs #2), wildlife, and humans, but "It is not contagious from animal to animal or animal to human. Every individual has to have their own point of contact with an adult female screwworm fly in order to be infested."
- Adult flies are similar in size to common house flies, with a blue-green body, three black stripes, and orange eyes; definitive identification requires a trained parasitologist.
- The female fly lives about 21 days, mates only once, and lays 200-300 eggs around a wound; eggs hatch in 10-12 hours, and larvae burrow through tissue for 7-14 days before pupating in soil.

Recent Cases and Surveillance

- New World Screwworm is classified as a "reportable disease" and a "foreign animal disease," which had previously been eradicated from the 1960s.
- The initial U.S. case was identified in a three-week-old calf in Zavala County, Texas, earlier this month, followed by additional confirmed cases in Texas on June 5th, 7th, 8th, 9th, and 11th and ongoing.
- The first New Mexico case was identified on June 8th in a dog from the Hobbs area (Lee County), diagnosed by a veterinarian in Andrews, Texas, with the dog's travel history to Mexico believed to be the source.
- The USDA provides an interactive map documenting New World Screwworm cases, updated in real-time and broken down by date and species.

Clinical Signs and Risk Factors

- Affected animals exhibit discomfort, pain, irritation, depression, poor appetite, isolation, and head shaking, with wounds rapidly increasing in diameter and depth, emitting a foul odor, and potentially having blood-tinged discharge.
- Fly strike is characterized by "white egg packets in a shingle like pattern around the wound and then the larvae that are deep within the wound."
- Animals with any type of wound are at the highest risk, as the blowfly is attracted to wound scents and secretions, with wounds resulting from various injuries including cuts, barbed wire, castration, dehorning, and tick bites.
- New World Screwworm can also lay eggs on mucous membranes (eyes, nose, mouth) and the umbilical cords of neonates, not exclusively on open wounds.

Treatment and Safety Protocols

- Treatment involves manual removal of eggs and larvae, comprehensive wound care (antibiotics, antiseptics), and pain management.
- All collected larvae should be submitted to the state regulatory veterinarian, rather than being discarded, and ongoing re-examination of the animal and monitoring of the premises are essential.
- Personal protective equipment (PPE) for humans is highly recommended, including gloves at a minimum, and covering any open wounds or protecting mucous membranes when treating affected animals.

Authorized Medications and Usage Guidelines

- The FDA has granted conditional and emergency approval for a limited number of drugs, emphasizing the critical need to adhere strictly to treatment protocols.
- Nexgard, Nexgard Plus, and Nexgard Combo have received emergency use authorization for dogs and cats; these systemic medications kill larvae upon ingestion but do not prevent flies from landing or laying eggs, making daily examination crucial.
- Dectamax (Doramectin), an injectable ivermectin-type cattle dewormer, has emergency

use authorization for horses over one year of age for prevention in high-risk scenarios (e.g., noted wounds, post-castration), not for active infestations, but this is an off-label use with significant risks, including clostridial myositis.

- Capstar (Nitenpyram), an over-the-counter medication for dogs and cats, has emergency approval as a fast-acting medication (24-48 hours in the system) requiring a two-dose oral protocol (six hours apart), but it does not provide prolonged protection and must be combined with pain control, antibiotics, and manual larval removal.

Prevention Strategies

- Daily inspection of animals for wounds and prompt veterinary care are crucial, along with implementing good herd health measures, including isolating and inspecting new arrivals, and checking mucous membranes.
- For dogs and cats, keeping them indoors as much as possible, monitoring healing wounds, and using only species-approved products are recommended, while considering delaying elective large animal procedures like castration and dehorning until after fly season.
- Reducing insect burden involves eliminating attractants like feces, manure, smelly garbage, compost, and standing water, utilizing fly traps, predator wasps, and fans in barns, crates, and doorways, and limiting outdoor activity during dawn and dusk.
- Regular grooming is a proactive step, as long hair can hide wounds and trap moisture, increasing susceptibility to infections, and for pets' faces, caution is advised with topical insecticides due to potential toxicity- please consult your veterinarian prior to use of any topical treatments.

Regulatory Response and Movement Restrictions

- Confirmed cases trigger "full epidemiological investigations" and active sampling of herd mates and housemates, with a "20 kilometer quarantine zone" established around confirmed cases.
- Surveillance includes trapping and monitoring adult flies, and releasing sterilized flies as part of the eradication strategy.
- Import/export regulations are changing rapidly; USDA APHIS initially halted all animal

exports to Mexico, including pet dogs, and travel with pet dogs to Mexico is currently discouraged due to strict inspection requirements for re-entry.

- Interstate restrictions are anticipated for livestock and potentially pet dogs, with some states already restricting animals from Texas.

Dispelling Common Myths

- Not all maggots are screwworm; other fly species can cause infestations, and multiple species can coexist in a wound.
- Screwworm is zoonotic but "not going to spread from animals to people or from person to person"; individual contact with the female fly is required.
- Culling is not currently being employed for production medicine; treated and recovered animals can re-enter the food supply.
- Widespread epidemics from single infected animals crossing borders are "not likely to happen" due to surveillance temperature variations within the US may also help to limit spread.

Screwworm Discussion with Dr. Kyle Schumacher Q&A on next page:

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1. **Mosquitoes and New World Screwworm**: Mosquitoes are not involved in the life cycle of the New World screwworm.
2. **Precautions for Urban/Suburban Pet Owners**: Urban and suburban pet owners should inspect their animals daily and take measures to limit insect load in barns, yards, kennels etc.
3. **Barn Sports Precautions**: Individuals involved in barn sports should inspect their animals daily and deal with any wounds promptly. Using fans in barns can help deter insect activity.
4. **Interceptor Plus**: While Milbemegin-the active ingredient is in some medications that have conditional approval, Interceptor Plus itself is not on the list. It may provide some protection, but it's best to stick with approved medications.
5. **Bathing and Yard Cleanliness**: Regular bathing is fine, but keeping the yard clean and limiting insect burden is more important.
6. **Nexgard Products**: Nexgard does not repel the screwworm fly; it kills the larvae after ingestion, so daily inspections are still necessary.
7. **Size of Screwworm Flies**: Screwworm flies are similar in size to house flies, ranging from about a quarter to half an inch. They have blue/green stripes with orange eyes.
8. **Infected Pets**: If a pet is infected with screwworm, treatment will involve working with a veterinarian to eliminate the infestation and promptly reporting.
9. **Precautions for Recent Texas Visitors**: Individuals who have recently been in Texas should continue to inspect their pets for wounds and seek prompt veterinary attention if needed.
10. **Keeping Flies Away from Pets**: Limiting outdoor time during high insect activity, using fans, and inspecting pets daily are recommended.
11. **City Precautions for Fly Control**: There is no specific information on city measures for fly control; individual responsibility is emphasized.
12. **Grooming Pets**: Regular grooming is encouraged to prevent moisture buildup and potential skin issues. This also will help with insect control as they may not be interested in being near your animal.