USDA Animal and Plant Health Inspection Service
U.S. DEPARTMENT OF AGRICULTURE

New World Screwworm (NWS) Response

Phases and Types of an Outbreak

April 8, 2026

Please note: This information may be revised as the situation develops.

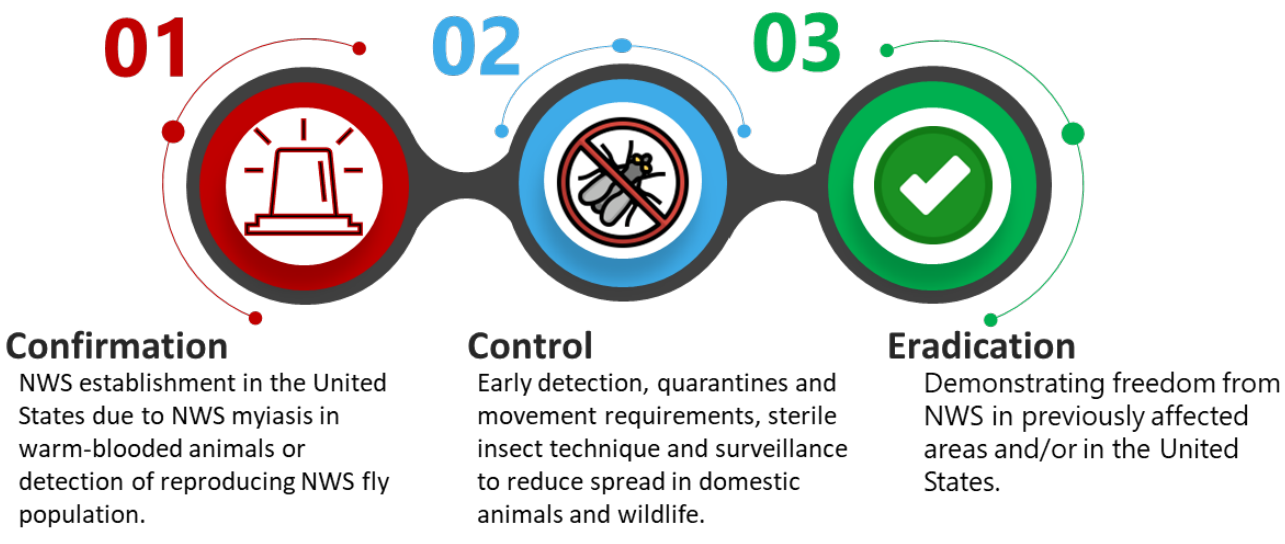
Background Information

This document describes the phases and types of a New World screwworm (NWS) outbreak response and explains how response activities evolve as the outbreak expands. The scope and intensity of operational needs change significantly as affected areas increase from a single localized site to multi-county or multi-state events. Additional policy and guidance documents are located here. NWS-specific materials can be found on the NWS FAD PReP site.

Outbreak Phases

Prior to any NWS detection, preparedness activities are essential to ensure rapid implementation of critical actions during a response. Preparedness includes establishing surveillance systems, training personnel, coordinating with Federal, State, Territorial, Tribal response partners, outlining movement-control frameworks, and confirming availability of the sterile fly supply and other required resources. Once NWS establishment[1,2] is confirmed, USDA initiates the phases of a response with the goal of eradication (Figure 1).

Figure 1: Phases of an NWS Outbreak Response



[1] A self-sustaining and reproducing NWS population that is present and active in an area. Includes introduction of the pest into the United States that as progressed from an isolated, contained case to a reproducing population. NWS establishment indicates an NWS outbreak.
[2] See NWS Case Definition

1. Confirmation Phase

The confirmation phase begins when NWS larvae in an animal or the NWS wild fly is confirmed at USDA APHIS Veterinary Services' National Veterinary Services Laboratories (NVSL). Confirmation triggers immediate federal and state coordination. Determination of NWS establishment in the United States activates the NWS Response Playbook.

Primary objectives during this phase include:

- Verifying the presence of a reproducing NWS population through epidemiological investigation and/or NWS fly surveillance.
- Conducting animal tracing and animal surveillance.
- Once NWS establishment is determined, USDA APHIS transitions to the control and eradication phases.

2. Control Phase

The control phase focuses on limiting NWS spread from the affected area, protecting non-infested regions, and reducing the density of NWS flies in the established NWS Infested Zone.

Activities during this phase include:

- Coordination with Federal, State, Territory, and Tribal partners **(NWS Response Playbook Key Activity 1)**.
- Establishment of initial NWS Zones and Areas, intensified animal inspections, expanded surveillance, wound management and application of appropriate NWS animal drugs and pesticides, when applicable, and implementation of movement requirements for animals leaving the NWS Infested Zone **(NWS Response Playbook Key Activities 2, 4, 6)**.
- Detecting and managing NWS myiasis in animals **(NWS Response Playbook Key Activity 3)**.
- Sterile fly release operations begin during this phase and are targeted toward preventing outward expansion of the infested area **(NWS Response Playbook Key Activity 5)**.
- Managing resources and information flow **(NWS Response Playbook Key Activities 7 and 8)**.

The scale and complexity of control operations depend on the outbreak type described below.

3. Eradication Phase

The eradication phase aims to eliminate the NWS population from all affected areas. Activities include continued sterile fly releases, sustained and region-wide NWS fly and animal surveillance, animal movement controls, and verification measures to ensure the

pest is no longer present. The eradication phase continues until surveillance demonstrates the absence of NWS and zones can be systematically reduced and released.

OUTBREAK TYPES

The scale and geographic extent of an NWS outbreak directly influence the structure, intensity, and staffing of the response. As the outbreak grows – from a single localized detection to a multi-state event – the response must expand accordingly. This includes implementing the eight key activities of the NWS Response Playbook but prioritizing and implementing an operational shift in response activities, such as changes in NWS fly surveillance coverage, animal movement requirements strategy, use of NWS certified inspectors, resource allocation, and sterile fly deployment strategies. The outbreak type provides a standardized way to describe the situation on the ground and ensures that operational decisions match the size and complexity of the event. Each outbreak type corresponds to a predictable shift in operational needs (Figure 2).

By defining outbreak types and the associated operational shift, USDA APHIS and partners can anticipate resource requirements, assign personnel efficiently, and adjust strategies as the outbreak evolves. This framework supports consistent decision-making, clear communication, and a scalable approach to achieving eradication.

Figure 2: Phases and Types of an NWS Outbreak