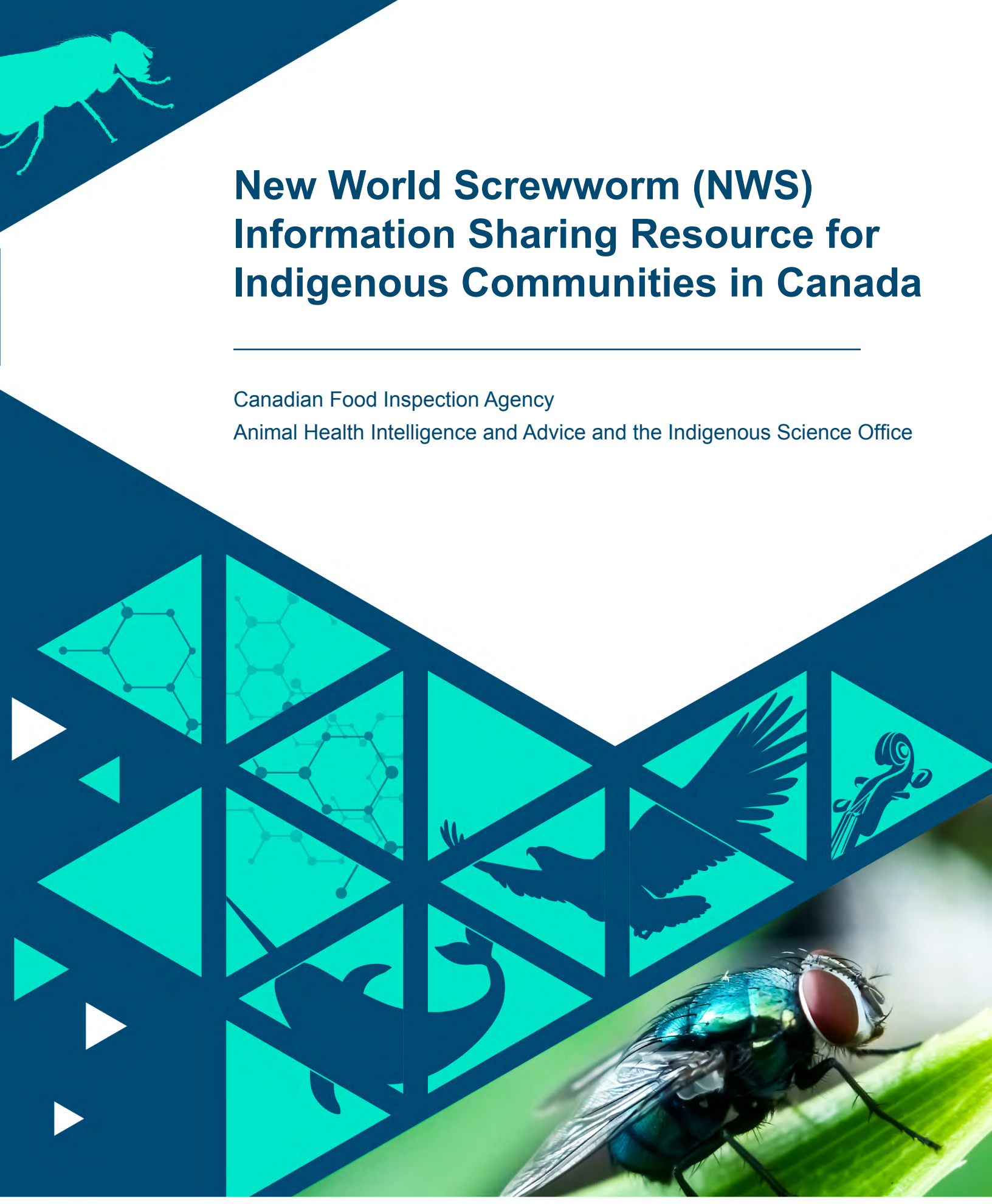
New World Screwworm (NWS) Information Sharing Resource for Indigenous Communities in Canada

Canadian Food Inspection Agency
Animal Health Intelligence and Advice and the Indigenous Science Office



Canadian Food Inspection Agency | Agence canadienne d'inspection des aliments

Canada

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1. Understanding New World Screwworm (NWS)

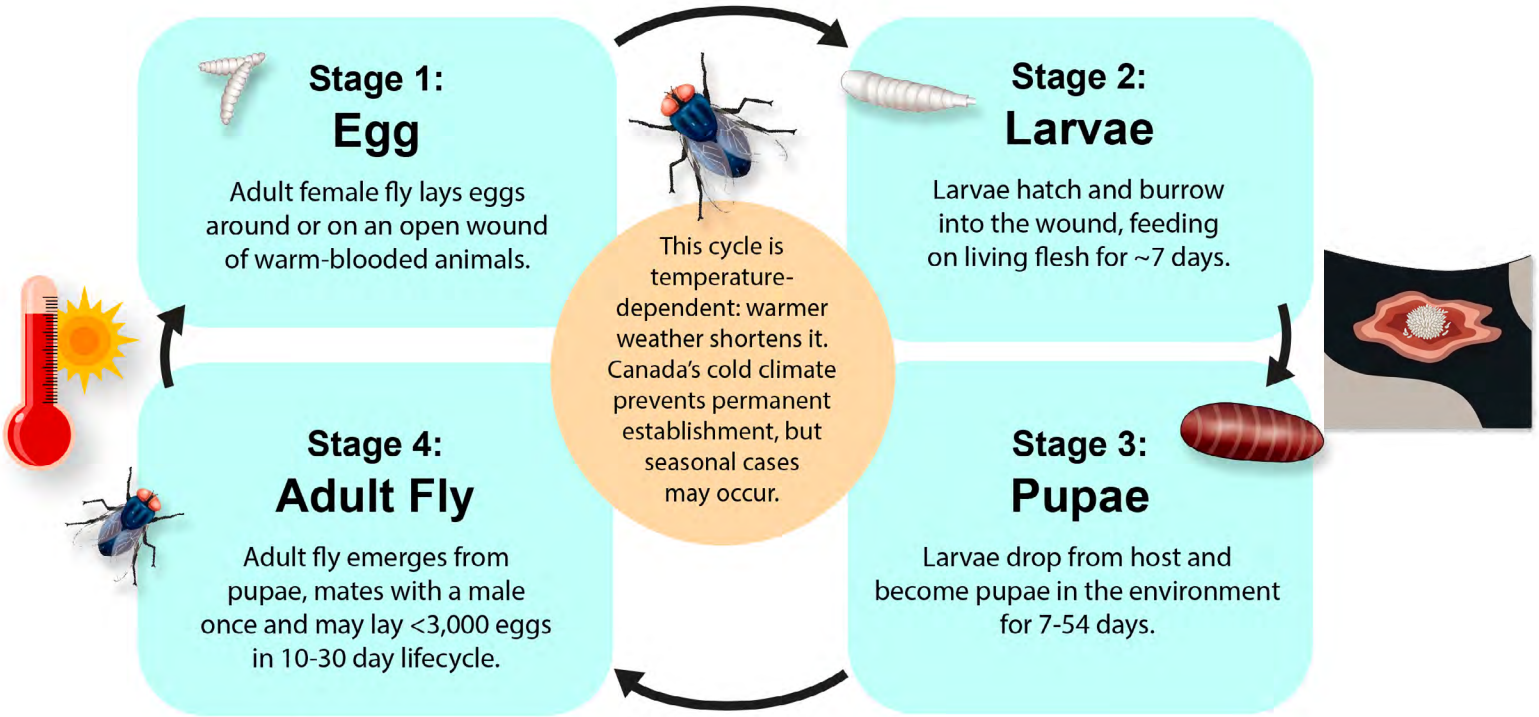
New World Screwworm (NWS) is a parasitic fly whose larvae feed on living tissue. The fly lays eggs in wounds (including small cuts) and natural openings of the body such as the nostrils, eyes, and umbilicus; infestations can cause serious injury or death if untreated. It affects livestock (such as cattle sheep and horses, pets, wildlife (including moose, deer, and caribou), and in rare cases, people. Deer bucks and bull elk are particularly susceptible to infestation during the rut due to wounds sustained from fighting, damage to velvet and later in the fall when antlers are shed.

NWS is not currently present in Canada. Internationally, while the distribution of NWS can change, it has historically been widespread across South America (except Chile) and is also present in Central America, including Mexico, where there have been widespread impacts, particularly in cattle, horses, and dogs. As of July 2026, animal cases were approaching 200,000, while human cases exceeded 2000. In the United States, NWS has been rare and previously eradicated, but as of June 2026, new cases have been detected in Texas and New Mexico. Visit the Canadian Food Inspection Agency website for the latest updated information. https://inspection.canada.ca/en/animal-health/terrestrial-animals/diseases/immediately-notifiable/screwworm

NWS is not a food **safety** concern, this pest is a concern because it can spread quickly and impact food **security**. Country foods, livestock, wildlife, and cultural practices (especially in remote and northern communities in Canada) can all be impacted.

NWS Life Cycle

A female NWS fly mates once and lays 100–350 eggs on wounds or natural openings. Eggs hatch within 10–12 hours, and larvae feed on living tissue. After 5–7 days, larvae leave the wound and pupate in soil before emerging as adult flies.



Text credit: Canadian Animal Health Surveillance System

The lifecycle typically takes 18–24 days in warm climates, and survival depends on warm conditions. NWS cannot persist when soil temperatures remain below 8 °C, **meaning it is not expected to survive Canadian winters**. The pest will not permanently establish in Canada, however seasonal presence during the warmer months in certain areas of the country could occur.

2. Movement and Risk of Introduction

NWS spreads primarily through the movement of infested animals; on rare occasions the hide of a freshly skinned infested animal may contain eggs and larvae, however larvae and eggs would not survive long in this circumstance. The most likely pathway into Canada is through human-assisted movement of animals from affected regions. Spread of NWS by natural fly movement is considered very unlikely due to limited flight distance.

Canada had existing import restrictions on livestock from affected countries and implemented new controls on animals from affected U.S. areas, including Texas.

Working Together to Reduce Risk:

- Supporting awareness of risks related to animal movement
- Following measures that help prevent introduction
- Working collaboratively with CFIA and other federal partners

Community Guidance:

- Be mindful when animals move between regions
- Stay informed about outbreaks elsewhere
- Share knowledge within the community

3. Identification, Surveillance, and Community Preparedness

Early identification and community awareness are key to preventing the spread of NWS if introduced. Monitoring can be supported through land-based observation by hunters, trappers, Elders, and Indigenous Guardians.

Identifying Possible NWS Infestation

Possible signs include:

- Larvae in wounds or natural openings (nose, ears, eyes, genital areas, umbilical sites)
- Egg masses near wounds
- Wounds with fluid discharge and a strong odor
- Wounds that get larger over time
- Animals biting, licking, or reacting to wounds
- Behavioural signs of irritation or pain

Where to Look:

- Head and neck (eyes, ears, nostrils, mouth)
- Body and skin folds
- Sensitive areas (tail, teats, genitalia)
- Limbs, hooves, and between toes
- Recent wounds or healing sites



Photo credit: U.S. Department of Agriculture (USDA)

NOTE: Maggots from other fly species are quite common. Confirmation of NWS requires examination of larvae/flies at a laboratory.

Community Preparedness:

- Report concerns early
- Share information among land users
- Develop local preparedness plans

4. Disease Response Actions – CFIA

Rapid identification, confirmation, and coordinated action are key components of CFIA's response to NWS. Multiple partners play a role, including federal and provincial governments, Indigenous communities, veterinarians, producers, and organizations such as Animal Health Canada. Public health authorities support responses involving people, while provinces, territories, and Environment and Climate Change Canada contribute to wildlife-related responses.

CFIA's approach focuses on controlling and treating infestations, rather than ordering the destruction of animals. When detected early, animals can often be successfully treated.

CFIA Response Actions

Official confirmation of NWS is performed by CFIA through examination of adult flies, larvae and other life stages at federal laboratories. If an animal is suspected to be infested, CFIA may take the following steps:

- Implement movement controls by quarantining affected animals at their home location
- Arrange veterinary examination, sample collection, and laboratory diagnosis
- Conduct investigations to understand how exposure may have occurred
- Maintain movement controls until diagnosis is confirmed and treatment is effective
- Request monitoring of other animals on-site for signs of infestation or wounds
- Implement fly control and environmental measures as needed

Treatment Measures

Animals confirmed with NWS must receive effective treatment. Continuing to collaborate with Government of Canada veterinary care after confirmation of NWS is strongly encouraged to eradicate infestations from your community or territory. Treatment may include:

- Removal and proper disposal of all larvae and eggs from infested animals
- Cleaning and disinfecting the wound
- Ongoing wound care, including medications for infection and pain
- Use of medical treatments to kill larvae
- Application of topical treatments may be considered, where appropriate

Follow-up care includes:

- Veterinary re-inspection after 24 hours to confirm no larvae remain
- Continued removal of any remaining larvae if needed
- Possible additional treatment if infestation persists
- Release from movement controls once the animal is confirmed free of NWS
- Preventative treatment for other at-risk animals on-site

If there are questions about NWS affecting humans, please seek medical care and connect with local health authorities.

Working Together

Response efforts involve collaboration between communities, CFIA, veterinarians, and Indigenous partners to:

- Share information quickly
- Support animal care and monitoring
- Protect animal health and community well-being

5. Hunting, Harvesting, and Traditional Practices

NWS infestations are not a food safety concern, however, secondary infections from bacteria can be serious. During harvesting, animals should be checked for unusual wounds or larvae. Animals showing possible infestation should be examined to determine if secondary bacterial infections have occurred. Meat from animals with minor focal infestations can be consumed if the infestation/tissue damage is removed and no secondary whole-body (bloodborne) bacterial infection is present. Safe handling includes avoiding contact with infested tissue and taking care when processing meat and hides.

Community Guidance:

- Include inspection steps during harvesting
- Maintain safe food preparation practices
- Share observations locally

6. Indigenous Knowledge, Partnerships, and Shared Stewardship

Indigenous knowledge plays an important role in the early detection and prevention of New World Screwworm (NWS). The CFIA recognizes Indigenous peoples across Canada have long-standing relationships with the land, animals, and ecosystems and hold detailed knowledge of animal behaviour, seasonal patterns, and environmental changes. This knowledge supports the early recognition of unusual conditions, including changes in animal health, behaviour, or the presence of pests.

Land users such as hunters, trappers, Elders, and Indigenous Guardians are often among the first to observe animals in natural settings. Their ongoing presence on the land allows for early identification of wounds, infestations, or shifts in wildlife health that may not be immediately visible through formal monitoring systems alone. Combining Indigenous knowledge with veterinary science and inspection systems strengthens overall surveillance, improves understanding of local conditions, and supports faster, more effective responses.

Partnership and collaboration with Indigenous Nations are essential to protecting animal health, food systems, and cultural practices. This approach aligns with the Government of Canada's broader commitments, including:

- **Section 35 of the Constitution Act, 1982**, which recognizes and affirms Aboriginal and treaty rights, including rights connected to harvesting, land use, and traditional practices
- The **United Nations Declaration on the Rights of Indigenous Peoples Act (UNDA)**, which supports the implementation of Indigenous rights, including participation in decision-making and the use of traditional knowledge
- The **Truth and Reconciliation Commission (TRC)** Calls to Action, which call for respectful relationships, inclusion of Indigenous knowledge, and improved collaboration in health, environment, and governance
- The **10 Principles Respecting the Government of Canada's Relationship with Indigenous Peoples**, which emphasize recognition of rights, partnership, cooperation, and the importance of Indigenous self-determination

In the context of NWS preparedness and response, these commitments support:

- The meaningful inclusion of Indigenous knowledge in monitoring, prevention, and decision-making
- Respect for Indigenous governance, laws, and community protocols
- Co-development of approaches that reflect local priorities and realities
- Open, two-way communication and information sharing

Working together in this way helps ensure that responses to NWS are not only effective, but also respectful of Indigenous knowledge systems, rights, and relationships with the land.

7. Reporting and Contact Information

Anyone who suspects New World Screwworm is encouraged to report it to their own veterinarian, a veterinarian with their provincial ministry of agriculture (for livestock infestations), provincial wildlife ministry or Environment and Climate Change Canada (for infestations in wildlife) or the CFIA for follow-up. Samples will be collected and submitted to the CFIA; CFIA will confirm or rule out the infestation at a federal laboratory. Sharing concerns with local leadership supports a more coordinated response.

If you simply wish to contact CFIA directly, please use the following contact information:

CFIA Regional Indigenous Liaisons

Atlantic Region – Danielle Martin
Danielle.Martin@inspection.gc.ca

Quebec Region – Iaskenia Sioui
Iaskenia.Sioui@inspection.gc.ca

Ontario Region – Jennifer Ambrogio
Jennifer.Ambrogio@inspection.gc.ca

West Region – Lindsay Happyjack
Lindsay.happyjack@inspection.gc.ca

CFIA's NWS Email - NWS-MCH@inspection.gc.ca