

Hemlock Woolly Adelgid (HWA) - FAQs

What is Hemlock Woolly Adelgid (HWA)?

HWA is an invasive, aphid-like insect that can kill up to 95% of hemlock trees in a forest.

- First detected in Nova Scotia in 2017, HWA feeds on water and nutrients found in hemlock twigs.
- The presence of white, cottony masses on twigs at the base of needles is a key indicator of infestation.
- HWA has spread rapidly from west to east and is now established in Shelburne, Yarmouth, Digby, Annapolis, Queens, Kings, Lunenburg, Halifax, and Hants counties.
- Rapid decline and mortality of hemlocks have already been observed in western Nova Scotia.
- The loss of hemlocks will have significant ecological and cultural impacts.
- Hemlocks store between 15-21 million tons of carbon in Nova Scotia, playing a crucial role in mitigating climate change.

How can HWA be controlled?

- Early detection and treatment are critical to saving hemlock trees.
- Chemical treatment of individual trees is currently the only effective control method.
- Research on biological control agents, such as insect predators, shows promise for long-term management.

What chemical treatments are available to control HWA?

Systemic insecticides, which move through the tree's vascular tissues, are applied via stem injections or basal bark spraying.

- Four insecticides are approved for use in Canada by Health Canada's Pest Management Regulatory Agency: IMA-Jet, Xytect 2F, TreeAzin, and Starkle 20SG.
- IMA-Jet and TreeAzin are injected directly into the tree using specialized equipment.
- Xytect 2F and Starkle 20SG are applied to the lower bark using backpack sprayers.
- IMA-Jet and Xytect 2F take 6-12 months to take effect but provide 4-7 years of protection.
- TreeAzin and Starkle 20SG take effect within a month but offer only 1-2 years of protection.
- These pesticides require a provincial pesticide applicator's certificate for application.

What safety measures are in place for treatment applications?

- All treatments will be conducted by or under the supervision of qualified pesticide applicators.
- Mixing and loading of pesticides will occur at least 30 meters from watercourses within a containment berm.
- Basal bark applications will be applied at least 7 meters from watercourses and only under suitable weather conditions.
- Stem injections will be performed for trees within 7m of watercourses.
- All pesticides will be applied according to label instructions and stored safely when not in use.
- Treatment areas will be posted 20 days prior to application.
- Areas will be marked with signs and barricaded with caution tape during treatment.
- Treated areas will be restricted for 24 hours post-application, as per pesticide label instructions.

Will these chemicals impact the environment or human health?

- All chemicals have been evaluated by Health Canada and are safe when used according to label directions.
- Chemical treatment is a temporary but necessary measure until biological control solutions become available.

What is the Town of Truro's plan for HWA?

The Town of Truro is implementing an early intervention strategy to preserve its hemlock population.

- Prophylactic treatment program for long-term hemlock health.
- Application of IMA-Jet and/or TreeAzin via tree injection.
- Application of Xytect 2F and/or Starkle 20SG via basal bark spraying.
- Enhanced monitoring and surveying in Victoria Park and across the Town of Truro.
- Continued research on HWA, chemical treatments, and biological controls.

How can you help stop the spread of HWA?

- Avoid infested areas between April and July when possible.
- Do not move firewood, branches, or outdoor equipment between forests.
- Wear clean clothing when visiting different forests and wash clothes after visiting infested areas.
- Avoid parking near or under hemlock trees.
- Place bird feeders away from hemlocks.
- Educate yourself about HWA and report suspected sightings to the Town of Truro.

For more information, visit www.nshemlock.ca.