

GYPSY MOTH FAQ'S

Why is Hiawatha planning an aerial spray?

HFN is facing a gypsy moth population rise that is affecting the tree canopy. Elevated levels of gypsy moth have caused severe defoliation of trees in certain areas. This has led to potential negative impacts on the overall health of many trees. Aerial spraying has proven in the past to be very effective in lowering gypsy moth populations. Although the aerial spray won't eradicate all traces of the insect, it will naturally lower populations to a more manageable level.

What type of pesticide is being used?

HFN will be using a product that contains *Bacillus thuringiensis* subspecies *kurstaki* (Btk). The product is registered under the trade name Foray® 48B. Btk is a naturally occurring bacteria found in soil. Btk is not a chemical. Btk was successfully used by the City of Toronto in 2007, 2008, 2013 and 2017 to control gypsy moth populations.

What organisms does Btk pesticide affect?

Btk only works against organisms that go from egg to larvae to pupae to moth (lepidopterans). Btk does not affect adult moths and butterflies, including the monarch butterfly, as it is not in the caterpillar stage and feeding on plant material at this time of the year. Btk does not affect other insects, honeybees, fish, birds, or mammals. There is also no impact on animals or pets if they are exposed to or ingest Btk.

What is the formulation of the Btk product?

The registered name of the pesticide that will be used by the City is Foray® 48B Biological Insecticide Aqueous Suspension. It is registered under the Pest Control Products Act (PCP # 24977). It is comprised of 3% Btk bacteria, 75% water and 22% food grade inerts. The term 'food grade inerts' refers to a special blend of additives that give the formulation protection against ultraviolet light and help make it stick to foliage. They do not pose any health risks. Btk remains effective for approximately one to four days before it breaks down in the presence of sunlight.

Is Btk safe?

Btk is an effective pesticide that has been shown to successfully manage many lepidopteran species such as gypsy moth. It has been extensively studied by Health Canada and the US Environmental Protection Agency (EPA). Research shows that Btk poses minimal risk to human health when used as directed.

The public is unlikely to experience any symptoms and no special precautions are necessary. Btk aerial spraying is also not expected to have adverse effects on vulnerable populations including children with asthma, people with weakened immune systems, pregnant women or the elderly. However, infrequently there may be some residents who are more sensitive and may experience skin, eye or respiratory irritation.

Aerial application of Btk has not shown to have any negative environmental effects. Once applied, Btk biodegrades quickly, (approximately 1 to 4 days), through exposure to sunlight and other micro-organisms.

What personal precautions can be taken in preparation for aerial spraying?

Members of the public are unlikely to experience any health effects, and no special precautions are necessary or required. Individuals who have concerns should take reasonable precautions to avoid exposure during an application period of the program.

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While no special precautions need to be taken, the following measures may be considered by residents living in treatment areas:

- Whenever possible, remain indoors for 30 minutes after spraying to allow for the droplets to deposit onto the tree leaves.
- Bringing laundry, toys and pets indoors before spraying begins.
- Practice good personal and food hygiene (e.g., hand washing after outdoor activities, especially after gardening; leaving outdoor shoes at the door; washing all fruits and vegetables before eating or cooking).
- Covering lawn furniture, outdoor tables, pools, BBQs, play equipment and sandboxes and/or rinsing them off with water after spraying is finished.
- Minimize opening and closing windows and doors during the spraying.
- Shutting off the heating/cooling vents or selecting the recirculate setting.
- Contacting your family physician if you are concerned that a personal medical condition may be aggravated by the spraying.

Is there a certain season or window of time the spray has to happen within?

The best time to first apply Btk is mid-May when caterpillars are small, hungry and feeding. The seasonal spray window is set for May 16th to June 15th, 2022. On the day of the sprays, the helicopters will begin spraying just before sunrise (5 A.M.) and will take approximately 2.5 hours to complete. Applications can occur any day of the week, including weekends. Once the leaves are a certain size, the caterpillars have reached almost 90% emergence and the caterpillars begin feeding, the spray window can be narrowed. Once it is determined that those factors are met, the weather conditions then need to be monitored.

What type of aircraft will conduct the spray?

For this program, two helicopters with spray systems will fly approximately 15 metres above the treetops. It is anticipated to take 2 days to complete one application and there will be a total of two spray applications.

Will spraying become an annual thing?

We are confident this year's spray will be enough to bring the gypsy moth population back down below a tolerable threshold to prevent severe canopy damage from occurring. Spraying this spring is the best approach for the health of the trees, our environment, and residents.

PREPARING FOR THE SPRAY

How will I know when the spray is happening?

48 hours in advance of the spray, HFN will inform residents of the specific areas of the flight path, treatment plan, and any other relevant information.

- A flyer will be delivered to announce the approximate spray window.
- Social media will be used to update the public on current spray operations.

Should I cover items in my backyard?

It is recommended to cover things you don't want sprayed like patio furniture, outdoor tables, play equipment and sandboxes or you can simply rinse them off with water after spraying is finished. The spray does not damage paints or finishes on automobiles, houses, boats or trailers. If it is left to harden, the spray can be removed with water but may require more effort. The sooner it is washed off, the easier it is to remove.

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Can my pool remain open?

If possible, cover pools during the spray period. After the spraying has been conducted and the pool cover has been removed, consider testing the water to ensure chemistry balance in water chemistry prior to swimming in the pool. If the pool has not been covered during the spray, test the water to ensure chemistry balance in the water chemistry prior to swimming.

AFTER THE SPRAY

Can I use my BBQ?

If possible, prior to the spraying, close and cover your BBQ or bring it into a covered area. BBQs left open or uncovered should be rinsed with water prior to use. If left to harden, it may require more effort to remove.

Is it safe to go swimming in my pool after the spray?

Btk biodegrades quickly through exposure to sunlight. If possible, cover pools during the spray period. After the spraying has been conducted and pool cover has been removed, consider testing the water to ensure chemistry balance in water prior to swimming in the pool. If the pool has not been covered during the spray, test the water for chemistry balance prior to swimming.

Can my dog be outside when the spray occurs? Is it harmful to pets?

Individuals who live in the treatment areas should bring pets indoors before spraying begins. This will reduce pets bringing Btk indoors; However, Btk is not considered a risk to pets or animals.