

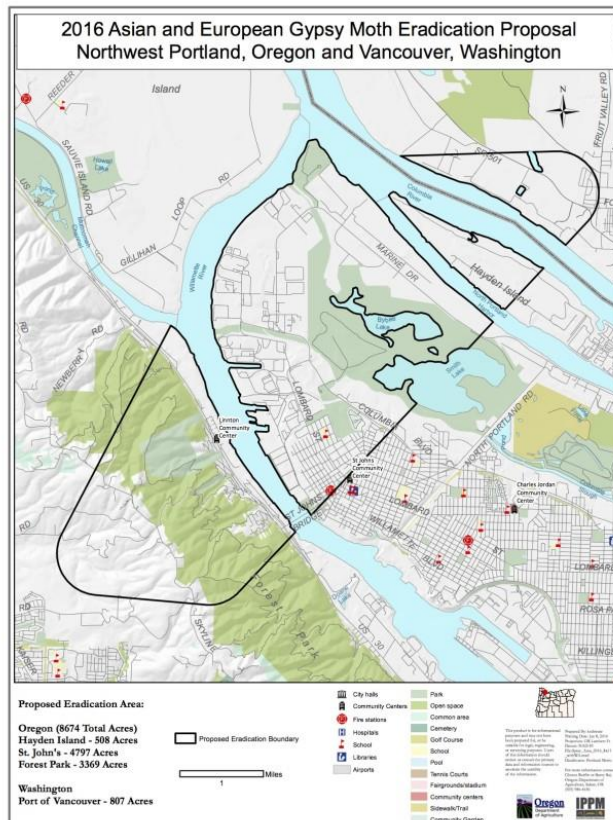


FREQUENTLY ASKED QUESTIONS ABOUT GYPSY MOTH CONTROL ACTIONS AND PUBLIC HEALTH IN OREGON

General Information: On April 16th 2016, the USDA and the Oregon Department of Agriculture plan to carry out an eradication program to eliminate an infestation of gypsy moths in North and Northwest Portland neighborhoods. The plan is to use an organic biological insecticide, Foray 48B, containing *Bacillus thuringiensis kurstaki* (Btk), in separate helicopter applications.

Q: Is my house in the treatment area?

A: This is a current map of the treatment area can for this project. An online map is available at: <http://tinyurl.com/gn9qfw4>



Q What is *Bacillus thuringiensis kurstaki* (Btk)?

A: Btk is a naturally-occurring bacterium found in soil and decaying matter. It has been used as a biological insecticide to control caterpillar pests for over fifty years. Farmers around the world, including producers of organic produce, use Btk. In Oregon, it has been used successfully for area-wide eradication of gypsy moth infestations since 1984.

Q: How does Btk work?

A: Btk is highly specific in that it targets only leaf-eating caterpillars. It is not anticipated to negatively impact adult butterflies, moths, bees, or other beneficial insects. However, it can be lethal to beneficial moth and butterfly caterpillars. Btk does not kill the caterpillar on contact, but instead must be ingested to be effective. Once ingested, proteins produced by Btk damage the caterpillars' digestive systems, causing them to stop feeding and die.

Q: What other ingredients are present in Btk products?

A: Btk is sold in several formulations. Foray 48B is labeled for wide-area public pest control programs. The product contains water, 12.65% Btk bacterium and 87.35% other ingredients that improve the product's storage, spraying, and adhesive properties. All the ingredients are approved by the U.S. Environmental Protection Agency (U.S. EPA) for use on both food and non-food crops. Some of the other ingredients may also be approved for use as additives in food by the U.S. Food and Drug Administration. Foray 48B is approved by the Organic Materials Review Institute for use in certified organic crop production.

Q: Can I continue to eat the food from my garden or fruits collected from my orchard after a Btk application?

A: U.S. EPA has done an evaluation of Btk and determined that it is safe to use on all types of food crops. Btk products that are certified by the Organic Material Review Institute can be used on food crops without restriction. Treated vegetables and fruits may be picked after the spray application is fully dry. Washing fresh fruits and vegetables before consuming them is recommended and is always a good idea.

Q: How long will Btk stay on my trees and lawn?

Btk is degraded by sunlight and exposure. Breakdown occurs within a few days. Btk does not persist in the environment except in soil, where it occurs naturally. Studies have yet to determine how long the other ingredients remain.

Q: What are the potential human health effects associated with aerial application of Foray 48B?

A: Tens of thousands of people in neighborhoods similar to Portland have experienced Btk treatments. People have self-reported a variety of health problems, including stomach aches, nasal congestion, asthma symptoms and headache. However, state and federal agencies have never confirmed any health problems actually caused to residents by the applications. Foray 48B has been shown through scientific studies to have very low acute toxicity. It is possible that some people may be more sensitive to either Btk or the other ingredients in Foray 48B.

Workers that work directly with the Btk formulations sometimes report chapped lips and irritated skin and mucus membranes. The Btk products they work with are likely the cause of these symptoms. Btk products are slightly acidic (Foray 48B's pH is 4.1-4.8, about the same as tomato soup) and prolonged exposure to any acidic solution will irritate skin and sensitive membranes. These symptoms clear up soon after direct contact with the material stops. Additional information on health studies, label requirements, etc., can be found in the Environmental Assessment: (http://egov.oregon.gov/ODA/PLANT/docs/pdf/ippm_gm_ea09.pdf).

IMPORTANT: People who have impaired immune systems, chronic respiratory illness or who are allergic to food additives may want to consult their doctor and/or take extra precautionary measures to avoid exposure.

Q: If I am concerned about the aerial application of Btk, and want to take extra precautions, what can I do?

A: Btk works specifically on caterpillars. However, if individuals wish to minimize their exposure, here are some easy ways to do so:

- Stay indoors and keep doors and windows closed during the aerial application. The label for the Btk pesticide advises that workers observe a 4-hour no-entry period into an area that has been sprayed with Foray 48B. People who have impaired immune systems, chronic respiratory illness or who are allergic to food additives may wish to

observe the precautionary 4+-hour re-entry period specified for agricultural workers before going outside.

- Women who are pregnant and small children should use precaution and stay away from the spray area for a minimum of 4 hours. Wash off all children's toys that were outside during the spray.
- Turn off ventilation systems that bring outdoor air inside during and immediately after the aerial application;
- Avoid direct skin contact with exposed material until after the spray has dried. The Btk settles to the ground in a few minutes, it then takes a little while for it to dry. By 30 minutes after application it will be dry and stuck fast, depending on the weather conditions.
- Cover outdoor furniture or toys/playground equipment
- Foray 48B is very sticky after it dries, so you may wish to spray or hose off outdoor furniture, equipment and toys before use.

Q: I know the experts say it won't affect me, but I'm really concerned. Is there anything else I can do?

A: Yes, there is. If it's important for your peace of mind, you may want to consider leaving the area during the application. This additional step isn't a recommendation from ODA, The City of Portland, health care professionals, Beyond Toxics, or the Northwest District Association, but it is an option. Spraying is scheduled to start before sunrise and finish within 2 hours.

You can sign up to receive text messages or automated phone calls informing you when spraying will occur at:

<http://www.oregoninvasivespeciescouncil.org/sign-up-for-agm-info>

Note: Early morning automated calls could come as early 5:30 AM. All treatments depend on favorable weather and schedule changes and delays are possible.

You can call the ODA information hotline 211 for status updates.

You can follow the ODA on Twitter for updates:

<http://twitter.com/ORagriculture>

Q: What about kids walking or riding bikes to school, or waiting outside for the school bus? Will they be sprayed?

A: Parents may choose to take precautions getting their children to school on days when aerial spray occurs.

Q: I live just outside the treatment boundary. Will my property be affected?

A: Small amounts of Btk may settle outside the treatment boundary within ¼ mile of the application area. If weather conditions are such that drift would be a problem (> 10 mph wind), the treatment will be postponed. Rain and fog could also lead to postponements. Local radio stations will be notified if this happens. You can also call the ODA information hotline for status updates: 211; or 1-800-525-0137 or sign up for automated calls at: <http://www.oregoninvasivespeciescouncil.org/sign-up-for-agm-info>

Q: What should I do if I feel sick after the aerial application of Foray 48B?

A: It is extremely unlikely that the spray will cause any health effects. In controlled studies, the type and frequency of reported health issues have been the same in treated and untreated areas. Note that community health studies have documented a variety of symptoms in residents, but doctors and scientists have not been able to confirm a link.

If you get sick before or after the treatment, you should do what you would normally do when you feel ill.

Health related questions should be directed to:

- 24-hour medical information about Foray 48B: 1-877-315-9819,
- Oregon Poison Control System hotline: 1-800-222-1222,
- 911 emergency services,
- Your physician,
- Questions about timing and details of the Portland treatment should go to ODA at 1-800-525-0137.

This Fact Sheet was prepared by Beyond Toxics and was has not been endorsed by any government agency.

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