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## Maine Health Alert Network (HAN) System

### PUBLIC HEALTH ADVISORY

**To:** All HAN Recipients  
**From:** Siiri Bennett, State Epidemiologist, Maine CDC  
Allison Kanoti, State Entomologist, Maine Forest Service  
**Subject:** Health Risks from Browntail Moths  
**Date / Time:** Wednesday, May 29, 2019 at 4:00pm  
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#### Abstract:

**Background:** The browntail moth is an invasive species of both forest and human health concern. Maine and Massachusetts are the only states in the U.S. experiencing problems with this moth. The tiny, microscopic hairs found on browntail moth caterpillars, shed skins, and cocoons can cause a skin reaction.

**Symptoms:** Most individuals affected by the hairs develop a localized rash similar to poison ivy that will last for a few hours up to several days. In more sensitive individuals, the rash can be severe and last for weeks. Dislodged hairs can become airborne and cause trouble breathing. Respiratory distress from inhaling the hairs can be serious. The rash and difficulty breathing result from both a chemical reaction to a toxin in the hairs and a physical irritation as the barbed hairs become embedded in the skin and airways.

**Seasonality:** Caterpillars are active from April to late June/early July. Hairs blow around in the air, fall onto leaves and brush in the fall and spring, and can be stirred up during mowing, raking, sweeping, and other activities. Hairs can remain toxic for 1-3 years in the environment but lose their toxicity over time.

Providers should be aware of the risk of browntail moth rashes, and the general public should know what they can do to help reduce exposure to the browntail moth caterpillar hairs.

## Health Risks from Browntail Moths

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Browntail moth caterpillars are easy to identify. They are dark brown in color with white stripes along the sides and two red-orange dots on the back.

**Browntail moth caterpillar (left) & cocoons (right):**



Photos courtesy of the Maine Forest Service

**Maine summary:** The Maine Forest Service surveys indicate that populations of browntail moths are high or very high in parts of **Alna, Arrowsic, Auburn, Bath, Boothbay, Boothbay Harbor, Bowdoin, Bowdoinham, Bremen, Bristol, Brooks, Brunswick, Burnham, Chelsea, Cumberland, Damariscotta, Deer Isle, Dresden, Eddington, Edgecomb, Falmouth, Farmingdale, Freeport, Gardiner, Georgetown, Hallowell, Harpswell, Jackson, Jefferson, Liberty, Litchfield, Monmouth, Montville, Morrill, Newcastle, Nobleboro, North Yarmouth, Perkins Twp, Phippsburg, Pittston, Richmond, Sabattus, Searsmont, South Bristol, Southport, Stonington, Swan Island, Topsham, Troy, Turner, Unity, Waldoboro, Wales, West Bath, West Gardiner, Westport Island, Whitefield, Winthrop, Wiscasset, and Yarmouth.** Other towns may be similarly affected or may have populations approaching high levels. People may experience impacts even in areas with low or undetected populations of browntail moths. In interviews conducted as part of a defoliation prediction study by Maine Forest Service, people reported having experienced a rash attributed to the caterpillar in places with very low populations of browntail moth.

Browntail moth control may be occurring in some areas, but the risk to the public remains high in affected areas due to the persistent nature of the hairs.

**Information for providers:**

- Be aware of the risk of browntail moth rashes, particularly in areas with known populations.
- There is no specific treatment for dermatitis due to browntail moths; treatment is focused on relieving symptoms and eliminating ongoing exposure.
- The toxin is extremely stable and can remain a hazard for long time.

**Recommendations to reduce exposure:**

- Avoid places heavily infested by caterpillars.
- Take a cool shower and change clothes after any activity that might involve contact with browntail moth hairs.
- Dry laundry inside during June and July to avoid having the hair become impregnated in clothing.
- Wear a respirator, goggles, and coveralls tightly closed at the neck, wrists and ankles when performing activities that stir up caterpillar hairs such as mowing, raking, weed whacking, and removing pupal webbing from eaves and boats.
  - Perform these tasks on damp days or wet down material with a hose to help keep the hairs from becoming airborne.

**For more information:**

- Contact 211 Maine for answers to frequently asked questions on browntail moths:
  - Dial 211 (or 1-866-811-5695)
  - Text your zip code to 898-211
  - Email [info@211maine.org](mailto:info@211maine.org)
- Maine CDC Browntail Moth Webpage:  
[www.maine.gov/dhhs/mecdc/infectious-disease/epi/vector-borne/browntail-moth/index.shtml](http://www.maine.gov/dhhs/mecdc/infectious-disease/epi/vector-borne/browntail-moth/index.shtml)
- Maine Forest Service Browntail Moth Webpage:  
[www.maine.gov/dacf/mfs/forest\\_health/invasive\\_threats/browntail\\_moth\\_info.htm](http://www.maine.gov/dacf/mfs/forest_health/invasive_threats/browntail_moth_info.htm)



## Browntail Moth Exposure Risk 2019

### Disclaimer: Survey is not complete.

Ratings based on current knowledge of defoliation, winter web surveys and other observations at the township level. Some townships are rated based on surrounding conditions versus surveys. Conditions within each township are variable.

**Normal:** Be aware of the risk of browntail moth exposure. Moths have been found in light traps in all corners of the state. Areas rich in host trees, especially apples and other fruit trees and oaks, are more likely to have populations.

**Alert:** Town is near locations with detections of browntail moth. Survey has not been conducted or has not revealed established populations.

**Trace:** A small number of webs were found.

**Low:** Webs were frequently encountered, or patches of trees with webs were found.

**Moderate:** Defoliation was mapped and/or continuous stretches of overwintering webs were found.

**High:** Defoliation was mapped and/or continuous stretches of high populations of winter webs were found.

**NOTE:** destruction of winter webs within reach should be considered in all areas, but will be especially fruitful in areas with trace to low populations, or for detections in the normal or alert areas.

For More Information:  
[www.maine.gov/forestpests#btm](http://www.maine.gov/forestpests#btm)



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