

ARD-33

2019

Burning of Residential Trash

Health & Environmental Risks and Proper Disposal

What is Trash?

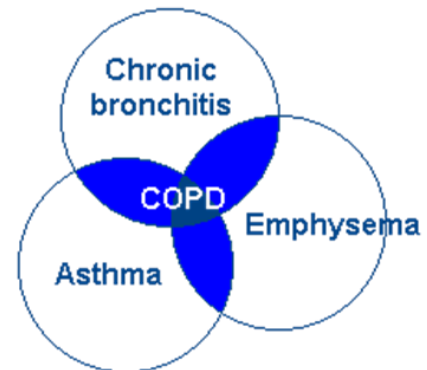
“Trash” or “domestic waste” includes paper, plastic, garbage and other non-reusable or recyclable materials generated in the home or business.

In New Hampshire, it is illegal to burn trash in an open fire, or in a fireplace, woodstove, chiminea, burn barrel or other device. When trash is burned, particulate matter, acid gases, heavy metals, carbon monoxide, dioxins and other harmful compounds are released to the air putting you, your family, the public and the environment at risk. In New Hampshire, we have local transfer stations that accept and properly dispose of almost all residential waste materials.

What are the health and environmental risks of burning trash?

Here are some of health risks and environmental impacts that result from the burning of waste materials.

- The smoke from burning is composed of tiny microscopic particles (particulate matter), which, if inhaled, can reach deep into the lungs and remain there for months or even years. Breathing particulates increases the chances of respiratory infection, can trigger asthma attacks, and causes other problems such as coughing, wheezing, chest pain and shortness of breath.
- One of the most harmful pollutants released during burning of trash is dioxin. Dioxin is a known carcinogen and is associated with birth defects. Dioxin can be inhaled directly, or deposited on soil, water and crops where it becomes part of the food chain.
- Burning trash can release hexachlorobenzene (HCB) to the environment. This compound is a highly persistent toxin that degrades slowly in the air. As a result, it can travel long distances in the atmosphere. It can accumulate in fish, marine animals, birds, lichens and animals that feed on fish and lichens. HCB is a probable human carcinogen, and based on animal studies, long-term, low-level exposures to HCB can damage a developing fetus, lead to kidney and liver damage, and cause fatigue and skin irritation.
- Formaldehyde is released when glued pressed wood products, paints, coatings, siding, urea-formaldehyde foam and fiberglass insulation are burned. Exposure to formaldehyde can result in watery eyes, a burning sensation in the eyes and throat, nausea, difficulty in breathing (i.e.,



coughing, chest tightness, wheezing), and skin rashes. Prolonged exposure to formaldehyde may cause cancer.

- Burning of plastics, or polyvinyl chloride (PVCs), can produce hydrogen chloride gas, or hydrochloric acid, which can cause fluid buildup in the lungs and possible ulceration of the respiratory tract.
- Carbon monoxide is generated from the incomplete combustion of trash. Carbon monoxide is a colorless, odorless gas that prevents oxygen from being absorbed by the blood and lungs. It is especially dangerous when breathed by young children with immature lungs, the elderly, and people with chronic heart conditions or lung diseases.

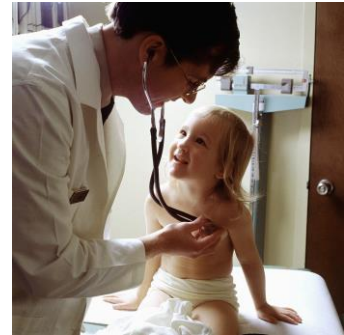
What should homeowners do with household trash?



New Hampshire communities are required to provide access to solid waste management facilities for their residents. Some municipalities provide curbside pickup, and most have transfer stations and recycling facilities. Call your local town office if you have any questions about where residents can take their trash for proper management. Your town may also have a list of solid waste haulers that can provide pickup for a fee. Homeowners are strongly encouraged to properly recycle glass, plastics, aluminum, newspaper, cardboard, used motor oil and other recyclable

materials as much as possible.

Composting appropriate wastes, such as fruit and vegetable peelings and coffee grounds, and using leaves and grass clippings for mulch, are good alternatives to open burning of waste. Composting produces valuable soil fertilizer through the natural process of decomposition. Compost piles are simple to begin and maintain, and take up relatively little space. Finished compost can improve soil texture, increase the ability of the soil to absorb air and water, suppress weed growth, decrease erosion and reduce the need to apply commercial soil additives.



For more information on open burning, contact the New Hampshire Department of Environmental Services, Air Resources Division, at 271-1370.