

Before you light that match: **THINK OF THE CHILDREN**



Children absorb up to six times the dose of combustion products as an adult receives by breathing the same air.
New Scientist 11/8/88

Children's bodies are more susceptible to damage from the mercury, lead, cadmium and other heavy metals found in the smoke of trash fires.



Be a good neighbor



Protect our health

Produced by concerned citizens with endorsements from Blue Cross Blue Shield; Earth Citizens News; Vermont Chapter of the American Lung Association; Vermont Chapter of the Sierra Club; Vermont Rural Fire Protection Task Force; Vermont State Labor Council, AFL-CIO.

HEALTH EFFECTS FROM BURNING TRASH

When we burn trash in burn barrels or woodstoves or dispose of construction and commercial waste in burn piles or small incinerators, we create airborne contaminated soot particles. These toxic particles can enter your body through your eyes, through the protective mucous in your nose, or through capillaries in your lungs.

Although annoyed by the smell, a healthy person may not suffer any immediately noticeable reactions from such a fire other than a burning feeling in the eyes. This is caused by chlorine, nitrogen or sulfuric gases reacting with water and forming irritating acids.

Even if you, as a healthy adult, do not suffer immediate effects, the damage to your health is more serious the longer you are exposed to the smoke. The effects may include damage to your lungs, nervous system, kidneys, and liver. Chronic diseases like emphysema and most cancers can take 20 years to develop and can be caused by low exposures to smoke and toxins which originally created no obvious damage. Over half of cancer cases are caused by exposure over time to toxins which we eat, breathe or touch. (Gamlin & Price, "Bonfires and Brimstone," New Scientist, 11/8/88, p.51)

Children, however, can be at much greater risk. They absorb up to six times more of the combustion products than an adult receives by breathing the same air. (Waldbott, G., Health Effects of Environmental Pollutants, 1973, p.252). Children's bodies are more susceptible to damage from the mercury, lead, cadmium and other heavy metals found in the smoke of trash fires because their immune systems are not fully developed.

Acids and other chemicals emitted by trash fires can cause severe bronchioconstriction in asthmatics and can increase the breathing difficulty of those with emphysema. The irritation of the lungs - combined with carbon monoxide and hydrogen cyanide which reduce the amount of oxygen available to the heart and lungs - can be dangerous for elderly people and those with heart disease. (Waldbott, p.193)

There are other serious dangers. Today's trash contains materials which produce very toxic products when burned (such as PVC plastics, polyurethanes, polystyrenes). Normally these poisons are diluted by the air so that only irritating or chronic health effects are noticed. Under certain conditions (such as when there is bad weather, when the layout of the land encourages toxins to settle rather than disperse, when you are in close proximity to the burning, and when the burning items produce a high level of toxins), the bad health effects can be much more acute, and even lethal.

Damage done from interior fires makes the point painfully clear. It only takes five ounces of burning PVC to give off enough hydrogen chloride gas to kill the occupants in an average size bedroom in ten minutes. (Not Man Apart, Nov. 1982, report of results, Univ. Pittsburgh)

The story continues. According to the EPA, only half the health risks associated with trash burning come from direct inhalation. The other half occurs when incinerated particles are deposited on soils, crops and gardens and then ingested.

**PLEASE
DON'T
BURN
TRASH**

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Today's trash is different from yesterday's! Burning synthetic materials is a toxic threat to our health.