# What Can I Do To Reduce My Exposure to Soil in my Yard?



In order to be exposed to chemicals in soil, you # need to come into direct contact with soil that is contaminated and the chemicals need to get into your body. There are 2 main ways you could be exposed to chemicals in soil in your # yard:

- # ingestion; putting items into your mouth that have soil on them such as fingers, food, toys
- # breathing in soil dust

Two more ways that exposure to soil could occur are through touching the soil or eating food grown in contaminated soil. However, these are **not** likely to be major ways of exposure for you because the chemicals we have found in soil are not easily absorbed through the skin and do not accumulate a great deal in plants or vegetables.

# If contamination has been found in the soil in your yard, there are some things you can do to reduce your contact with soil in your yard.

- # Discourage children from playing in bare soil if possible, and make sure they wash their hands after playing outside, especially before eating.
- # Bare soil areas underneath play equipment can be covered with mulch

or clean topsoil.

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Wash toys before bringing them into the house, or leave them outside.

Clean up dirt that is tracked into the house. Use a wet mop whenever you can since sweeping or vacuuming can stir up dust into the air.

Pets can bring dirt inside on their paws or fur. Try to keep pets clean.

# Consider using raised beds for gardening.

For More Information **EPA** Call toll free at 888-372-7341 & ask for: Gilberto ATito<sup>®</sup> Irizarry **On-scene Coordinator** (ext. 8-1255) Angela Bonarrigo, Community Relations (ext. 8-1034) **CT Department of Environmental Protection** Shannon Windisch, Project Manager (860) 424-3546 **CT** Department of Public Health Meg Harvey Epidemiologist (860) 509-7748 **Quinnipiack Valley Health District** Leslie Balch, Health Director (203) 248-4528 Town of Hamden Mayor Carl Amento or Curt Leng Director, Governmental Operations (203) 287-2650



# What are the chemicals that EPA is sampling for?

EPA is analyzing soil samples for a wide variety of chemicals. There are three main chemicals that EPA has found at elevated levels in some yards. These chemicals are Lead, Arsenic, and PAH=s (Polycyclic Aromatic Hydrocarbons).

#### Lead:

Lead is a naturally occurring metal in the environment. However, most of the high levels of lead found in the environment come from human activities. Lead has many uses, most importantly in the production of batteries. Because of health concerns, lead in gasoline, paints and ceramic products among others, has been dramatically reduced in recent years.

Exposure to lead is more dangerous for young children or unborn children who can be exposed to lead through their mothers. The nervous system is the most sensitive to lead exposure, particularly in children. Lead can affect a child-s mental and physical growth. Children exposed to lead in the womb may be born prematurely, have lower birth weights and have slower mental development. Exposure to high levels of lead can affect the brain and kidneys of adults and children. Lead has not been shown to cause cancer in people.

#### Arsenic:

Arsenic is found in nature at low levels. The major uses of arsenic are as wood preservatives and agricultural pesticides. Arsenic is very widely distributed in the environment and everyone is exposed to low levels. Long-term exposure to arsenic can increase the risk of skin, bladder, kidney, liver and lung cancer. Exposure to arsenic can also lead to skin effects such as irritation and skin darkening.

### PAHs:

PAH-s are a group of over 100 different chemicals that are formed during the incomplete burning of coal, oil and gas, garbage, or other organic materials like tobacco or charbroiled meat. Studies in animals have shown that PAHs can affect the skin, blood, immune system and the ability to reproduce. These affects have not been reported in people. Some people who had long-term exposures to high levels of PAHs developed skin and lung cancer. Studies have shown that some PAHs caused cancer in animals.

For more information on these chemicals, visit the website for the Agency for Toxic Substances and Disease Registry (ATSDR) website. At <u>http://atsdr1.cdc.gov</u>

## What happens next?

hummm.

Describe how some properties will be addressed by EPA this summer, that others will be referred to QVHD to work with the owners to address problems and others will be addressed under DEP=s master