

Environmental Hazards at Hamden Middle School:



Questions and Answers For Students

What's Going On?

March 2001
Vol. 1, No. 1

The Hamden Middle School site was used as a landfill. Industrial waste and garbage was placed there in the 1930s and 1940s. During the 1950s, the town bought the land and built the Middle School on the landfill site. Last year, the school system had soil samples taken as part of the planning for a school addition. These samples contained lead and other chemicals that were part of the landfill. More sampling was done, and other chemicals were found. The Connecticut Departments of Environmental Protection (CT DEP) and Public Health (CT DPH) and the Quinnipiack Valley Health District became involved to make sure people will not be exposed. Other testing has been done to make sure there are no other ways students and staff could be exposed to hazards outside and inside the school building. The building and grounds are safe for everyone to learn and work in.



Inside this issue:

Background	1
What Was Found	1
What is Exposure?	2
What are PAHs?	3
What is Methane?	3
What Has Been Done?	3
More Protections	4
Tools For Schools?	4

What Hazards Were Found at the School?

- 4 PAHs (Polycyclic Aromatic Hydrocarbons) in the soil outside
- 4 Low levels of lead in some of the soil
- 4 Methane gas under the boiler room
- 4 Very low levels of PAHs in the air of the auditorium

CT Department of Public Health

Joxel J. Garcia, MD, MBA, Commissioner
John G. Rowland, Governor



Quinnipiack Valley Health District

Leslie A. Balch, MPH, RN, Director



Some Background on Exposure:

Before you can have a good understanding about the environmental hazards at the school, you need to understand exposure. Exposure means that you have come in contact with a chemical. For exposures to chemicals to happen, there has to be a source, like a landfill or a factory. Chemicals then can get into air, water and soil. **The chemical has to move from the source to a point where you can come into direct contact with it.**

How Can You Be Exposed?

There are three ways a chemical could get into your body:

- ⇒ Breathing It in Air (inhalation)
- ⇒ Eating or Drinking (Ingestion)
- ⇒ Touching It (Dermal Exposure)



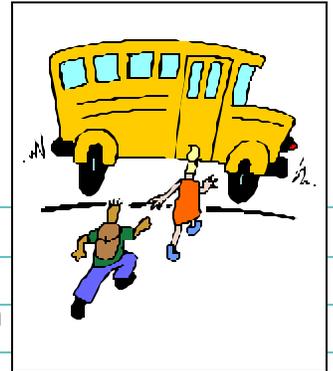
If You Are Exposed, Will You Get Sick?

This depends on several things about the exposure:

- ⇒ The **type** of chemical: how toxic?
- ⇒ The **amount**: how much were you exposed to?
- ⇒ The **duration**: how long were you exposed?
- ⇒ The **frequency**: how many times were you exposed?

What Are PAHs?

PAHs (Polycyclic Aromatic Hydrocarbons) are a group of chemicals formed when things like wood, trash, oil or food are burned. The PAHs at the school probably came from burning of garbage at the site. PAHs are found everywhere—in char grilled food, cigarette smoke, bus and car fumes. At very high levels, exposure to PAHs may cause health problems such as skin problems and certain kinds of cancer. Everyone should know that the levels found on the school grounds and the auditorium were not anywhere near high enough to cause health problems.



What Is Methane?



Methane is a flammable, colorless, tasteless and odorless gas. Decomposing (rotting) materials waste often produces methane. Methane is not toxic to the body. If methane is found at high levels inside a building, it is a concern because a spark or fire could cause it to explode. Methane was only found in the soil underneath the building. No methane has been found in the building. Therefore, the methane found does not mean there is an explosion risk at the school.

What Has Been Done To Protect The Students and Staff?

- A special liner and clean soil cover were placed over the school grounds, including the front lawn, side lawns, and the area behind the auditorium. This will prevent anyone from contacting PAHs in the soil.
- The inside of the school was thoroughly cleaned. This included:
 - All air ducts vacuumed
 - Everything wiped down, washed
 - New air filters to keep the air clean
- A methane alarm has been installed in the boiler room. The monitor has an alarm that will sound way before methane levels become dangerous. The Hamden Fire Department inspects the school for the presence of methane every Monday morning to make sure that no methane has seeped into the building over the weekend.

What Else Will Be Done To Protect Our Health?

4 The CT DEP will be checking regularly on the soil cover at the school.

4 The methane monitor in the boiler room will be regularly checked by the Hamden Fire Department.

4 The fire department will inspect the Middle School every Monday morning using a gas monitor to make sure the school is safe.

4 A special “Tools for Schools” Indoor Air Committee has been formed and trained for the schools—see below.

What is “Tools for Schools”?

The Indoor Air Quality (IAQ) Tools for Schools Program was designed by the U.S. Environmental Protection Agency (EPA). The program helps schools fix indoor air problems in the school. A committee of administrators, teachers, maintenance staff, parents, (and maybe students!) works together to make sure there is good air quality in the school. You will be hearing more about the Tools for Schools Program in the Middle School soon.



If you have further questions about the Middle School situation, please ask your teacher or Ms. Norwood.