Exposure

ATSDR is the Agency for Toxic Substances and Disease Registry. We are a federal health agency in Atlanta, Georgia. ATSDR gives people information about harmful chemicals in their environment and tells people how to protect themselves from being “exposed,” or coming into contact with chemicals.

What is exposure?

“Exposure” means that you have come into contact with a chemical, and it has gotten into your body.

How can an exposure happen?

For a chemical exposure to happen, there has to be a place where the chemical comes from. This place is called a source. A source could be a landfill, pond, creek, incinerator, tank, drum, or factory. There are many different sources of chemicals.

You could come into contact with a chemical at its source. Or, the chemical could move from its source to a place where you could come into contact with it.

Chemicals can move through air, water, and soil. They can also be on plants or animals, and get into the foods you eat. The chemical has to get into your body to make you sick, or to have an affect on your health.

But if you are not exposed to a chemical, it won’t make you sick.
If you are exposed to a chemical, will you get sick?

This depends on a lot of factors about the exposure.

- It depends on the way the chemical got into your body.
- It also depends on how much of the chemical got into your body. Sometimes, a small amount of a chemical could make you sick. Other times, you would have to be exposed to a large amount of the chemical to get sick.

Factors that play a part in whether you will get sick from a chemical exposure are:

- the type of chemical;
- the amount (how much of a chemical you were exposed to);
- the duration (how long the exposure was); and
- the frequency (how many times you were exposed).

Also, people respond to chemicals in different ways. Some people may be exposed to a chemical, but may not get sick.

Other people may be more sensitive to a chemical, and get sick from an exposure. (For example, children can be more sensitive to chemicals and may get sick more easily than adults.)

And some sicknesses would be caused only if you were exposed to a chemical for a long time.

But if you are not exposed to a chemical, it won’t make you sick.