

SAFETY MEETING TOPIC

This form shall be completed and kept on file

Job Name _____ Location _____ Job No. _____

Meeting Leader _____ Title _____

Date Held _____ Place _____ Time _____

Subject of Meeting _____ ROUTE OF ENTRY _____

The National Institute of Occupational Safety and Health has identified over eighty five thousand hazardous chemicals. A hazardous chemical has been defined as any substance that presents a health or physical hazard. This training addresses health hazards.

Chemical health hazards are toxins, carcinogens, teratogens, mutagens, corrosives, irritants and sensitizers. Warnings found on labels and in Material Safety Data Sheets (MSDS) identify these hazards.

You can be exposed to harmful chemicals through breathing, eating and skin or eye contact. The way a chemical enters your body is called the route of entry. Even substances that are not listed as hazardous can have harmful effects. The effect often depends on the route of entry and the quantity absorbed by the body.

For example, water is not a toxic substance. It is needed to sustain life. You can drink a pitcher of water with no harmful effects. If the same pitcher of water is inhaled into your lungs, it could be fatal. Caution should be used when handling all substances.

INHALATION

Breathing or inhaling chemicals is the easiest route for chemicals to enter the body. Do not depend on your sense of smell. Many chemicals have no odor or may even smell good. Some chemicals can cause damage before their odor can be detected. When constantly exposed to the odor your sense of smell can be lost. You become accustomed to the odor.

SKIN

The skin acts as a protective surface for our body. The outer layer of skin is made up of dead cells. Harmful chemicals contacting the skin account for most occupational injuries. There are four reactions that can occur when a chemical contacts the skin.

1. The skin can perform its job effectively. Many substances will not have a harmful effect on the skin.
2. Some chemicals only react with the upper surface of the skin. Minor irritation occurs.
3. Some chemicals may pass deeper into the skin. The chemicals combine with and break down the tissue below the surface of the skin.
4. Certain chemicals pass directly through the skin and into your blood. These chemicals can now affect any part of your body.

Many factors can affect how the chemicals are absorbed through the skin and the amount of hazardous exposure. The area of the skin that contacts the chemical, temperature, and sweating influence the rate of absorption. Cuts and irritations allow chemicals to pass easily into the body. Do not allow injured areas of the skin to contact chemicals.

INGESTION

Ingestion is exposure to chemicals by swallowing. Although this is not common in the work place, it can be deadly. Chemicals may pass from the hands to food or cigarettes and into the mouth. Even small amounts of certain chemicals may have a harmful effect. Other chemicals may stay with the body. Repeated exposure through ingestion allows the chemical to reach high levels in the body. Individuals who chew tobacco and gum in the work place may also ingest harmful chemicals that are in the air as gases and vapors.