



### Hazardous Chemicals- Four Routes of Entry Safety Message

Chemicals exist on virtually every single worksite. Many chemicals used on the job are hazardous to humans depending on how an individual comes into contact with them as well as the amount of the chemical they are exposed to. Employees need to understand the chemicals they are exposed to and the possible routes of entry. There are four ways a chemical or substance can enter the human body. These four routes of exposure include inhalation, absorption, ingestion, and injection.

#### The Four Routes of Entry

(source: [www.ehs.unl.edu](http://www.ehs.unl.edu))

1. Inhalation– Inhalation is the most common route of entry a person comes into contact with a chemical. Once inhaled, chemicals are either exhaled or deposited in the respiratory tract.
2. Absorption– Getting chemicals onto the skin or eyes can result in redness and irritation all the way to severe destruction of tissue or blindness. The eyes are especially sensitive to chemicals.
3. Ingestion– Chemicals that inadvertently get into the mouth and are swallowed do not generally harm the gastrointestinal tract itself unless they are irritating or corrosive.
4. Injection– Though not common, injection of chemicals into the body can occur. A sharp object can be contaminated with a chemical or substance and penetrate the skin.

#### Discussion point

Also, think about your family. If you are not practicing good hygiene, you could be bringing chemicals home with you and exposing family members to them.

***Take preventive measures to clean your clothes and other items that you take home with you.***