

## **RADIATION FACT SHEET**

### **What is radiation?**

Radiation is a form of energy that is present all around us.

### **How you can be exposed to radiation?**

You are exposed to small amounts of radiation every day, both from natural and man-made sources. The natural sources are elements in the soil or cosmic rays from the sun. Some man-made sources include electronic and medical equipment. Internal contamination refers to radioactive material that is taken into the body through breathing, eating, or drinking. Exposure occurs when radiation energy penetrates the body. For example, when a person has an x-ray, he or she is exposed to radiation.

### **What are the immediate symptoms?**

A large dose of radiation can result in acute radiation syndrome (ARS). People exposed to radiation will get ARS only if the:

- Radiation dose was high and the person's entire body received the dose in a short period of time, usually within minutes.
- Radiation was able to reach the internal organs

The symptoms of ARS are nausea, vomiting, and diarrhea. These symptoms will start within minutes to days after the exposure, will last for minutes up to several days, and may come and go. Some skin damage can also show, such as swelling, itching, and redness of the skin. There can also be hair loss.

### **What are the long-term health effects from radiation?**

Radiation can affect the body in various ways and the adverse health effects may not be apparent until years later. The adverse health effects depends on the amount of radiation absorbed by the body, the type of radiation, the route of exposure, and the length of time a person was exposed.

### **How you can protect yourself during a radiation emergency?**

If there is a release, the local authorities will monitor the levels of radiation and determine what protective actions to take. Listen to the radio or television for more information and instructions. You may be advised to “*shelter in place*”, which means to stay in your home or office. If you are advised to “*shelter in place*”, you should do the following: close and lock all doors and windows, turn off fans, air conditioners, and forced-air heating units that bring in fresh air, close fireplace dampers, bring pets inside, move to an inner room and keep your radio tuned to a local news network. If advised to evacuate, leave the area as quickly as possible. Take your pets only if you are using your own vehicle and going to a

place you know will accept animals. Some *emergency vehicles and shelters may not accept animals*.

**If you have an injury or become ill, call 911 for medical attention right away. Do not drive yourself to the hospital as you may become very ill on your way.**

**Where you can get more information on radiation?**

[www.bt.cdc.gov](http://www.bt.cdc.gov)

[www.dshs.state.tx.us](http://www.dshs.state.tx.us)

**Source of information**

Centers for Disease Control and Prevention (CDC)