

*For more information...*

**Telephone:**

- The Indiana State Department of Health,  
1-317-233-1325
- The Centers for Disease Control and Prevention,  
Atlanta, Georgia, toll free  
1-800-311-3435

**Internet:**

- Indiana State Department of Health  
<http://statehealth.in.gov/bioterrorism>
- Centers for Disease Control and Prevention  
<http://www.cdc.gov/bt/radioactivity>

Indiana State Department of Health  
2 North Meridian Street  
Indianapolis, IN 46204

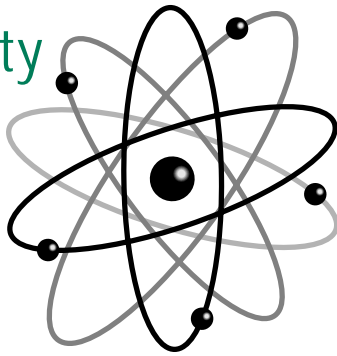


Indiana State  
Department of Health



*Prepared by the Indiana State Department of Health  
from information provided by the  
Centers for Disease Control and Prevention*

# Radioactivity is a form of energy



## Some occurs naturally.

- cosmic rays from the sun
- radon gas from the earth's crust

## Some is made and used by man.

- X-rays
- nuclear power

## There are four kinds.

- alpha
- beta
- gamma
- neutron

# Too much can affect your health

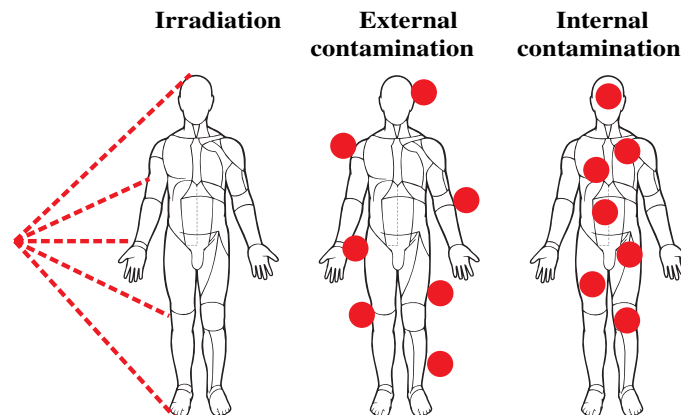
## The risk depends on

- the total amount received;
- the length of time over which it is received;
- the type.
  - gamma and neutron radiation have more energy

## The effects can come from

- radiation penetrating the body;
- radioactive materials getting on the body;
- radioactive materials getting into the body.

## The health risks depend on how much radiation the body absorbs.



# Protection comes from...

## Time

- The less time a person is exposed to radioactive materials, the less radiation they receive.

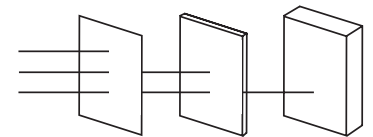


## Distance



- Radiation decreases the farther you get from the source.
- Alpha radiation travels only a few inches in air, beta a few feet.
- Gamma and neutron radiation can travel many yards.

## Shielding



- Alpha radiation can be stopped by a sheet of paper.
- Beta radiation can be stopped by aluminum foil or clothing.
- Concrete and lead are used to stop gamma radiation.