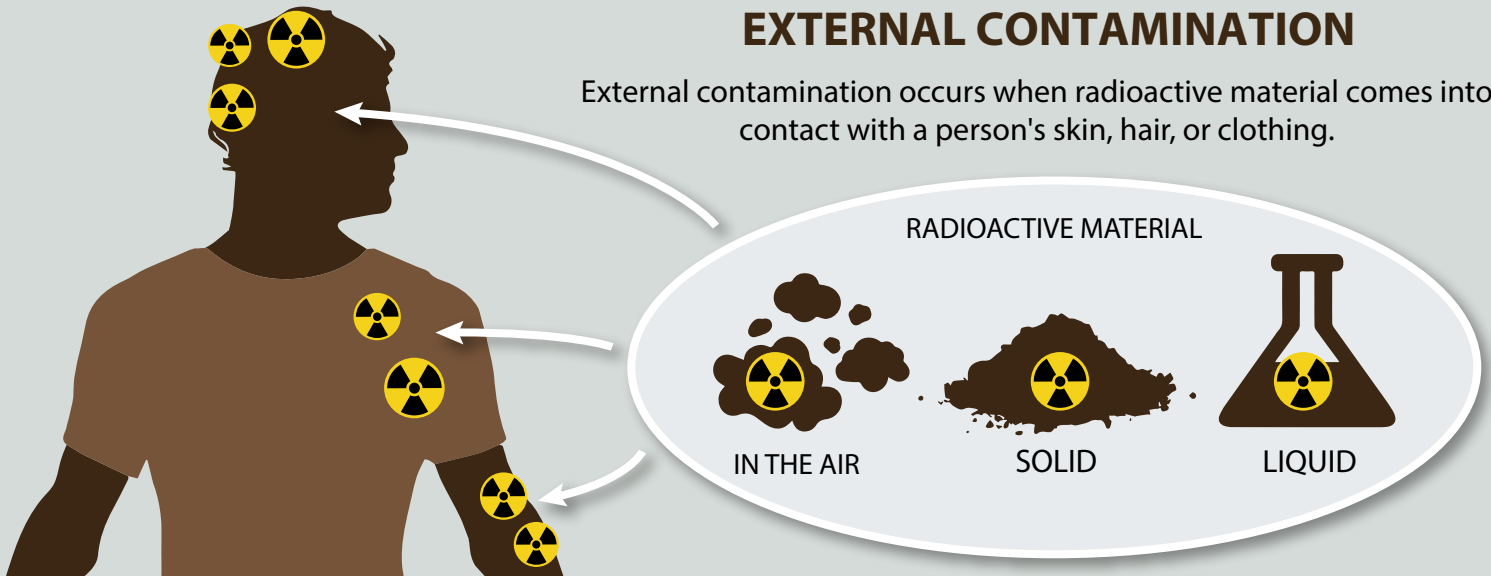


RADIATION CONTAMINATION VERSUS EXPOSURE

EXTERNAL CONTAMINATION

External contamination occurs when radioactive material comes into contact with a person's skin, hair, or clothing.

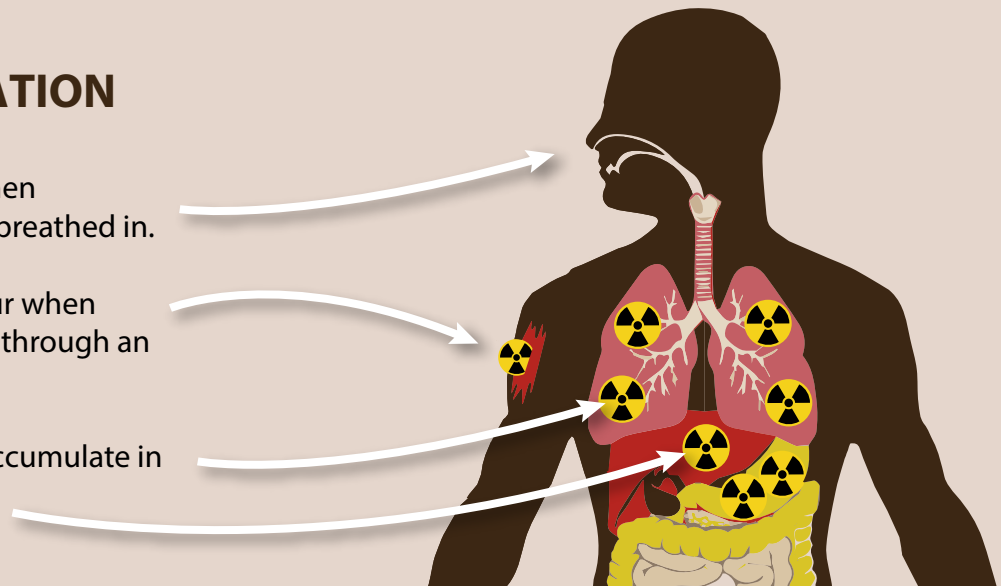


INTERNAL CONTAMINATION

Internal contamination can occur when radioactive material is swallowed or breathed in.

Internal contamination can also occur when radioactive material enters the body through an open wound.

Different radioactive materials can accumulate in different body organs.

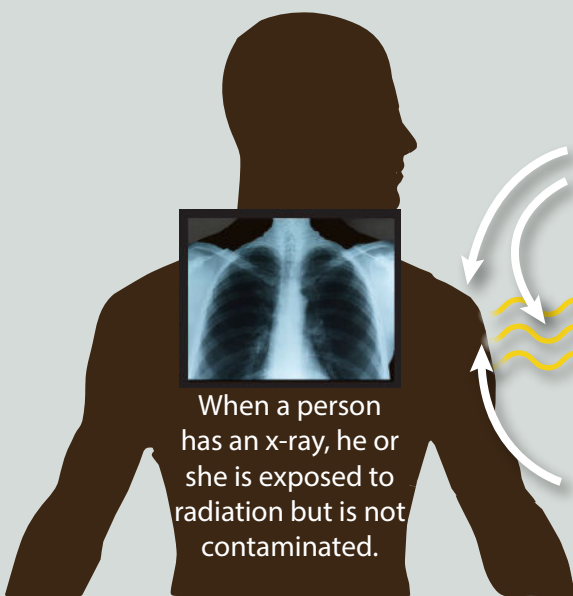


RADIATION EXPOSURE

Ionizing radiation is a flow of particles (alpha particles, beta particles and neutrons) or electromagnetic waves of a certain frequency and wavelength.

A person exposed to radiation is not contaminated with radioactive material.

For a person to be contaminated, radioactive material must be on or inside of his or her body.



When a person has an x-ray, he or she is exposed to radiation but is not contaminated.

Ionizing radiation affects structure of atoms, molecules and cells. It also affects tissues and organs which may cause serious health problems.

Prepared by the Fire and Rescue Department under the Ministry of the Interior of the Republic of Lithuania and Radiation Protection Center on the basis of information from U.S. Department of Health and Human Services Centers for Disease Control and Prevention