## Radiological Safety



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## **Radiation Emergencies**

Radiation emergencies are rare and uncomfortable to think about. There are several basic measures that can be taken to increase the safety of people in such circumstances. The following information comes from CDC.

## Basics:

In a radiation emergency, the most basic thing is to get inside a building and take shelter for at least 24 hours. This reduces radiation exposure.

Radiation exposure: This refers to exposure of the body to penetrating radiation from an external source.

Radioactive contamination: This refers to when radioactive material is released in the environment and contaminates air, water, surfaces, people, and animals.

Internal contamination: This occurs when an individual swallows or breathes in radioactive materials. Alternatively, radiation materials can enter the body through open wounds or absorbed in the skin.

External contamination: Radioactive material, in the form of dust, liquid, or powder can come in contact with the skin, hair, or clothing. These people are at risk of internal contamination.

Self decontamination: The first thing to do is to remove outer layer of clothing. This removes 90% of radioactive material. Put the clothing in a sealable bag or container.

Second, it is important to wash yourself preferably a warm shower, but a damp clean cloth/towel material can do. No hotwater, scratching, or irritating the skin. Also no hair conditioner which causes radioactive material to stick to hair.