The three basic ways to reduce your exposure to

RADIATION

Decrease the amount of time you spend near the source of radiation.

Increase your distance from a radiation source.

Increase the shielding between you and the radiation source.

Shielding is anything that creates a barrier between people and the radiation source. Being inside a building or a vehicle can provide shielding from some kinds of radiation.

For more information, call

Aloha United Way

2 1 1

health.hawaii.gov
or
www.cdc.gov

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CAUTION

RADIATION

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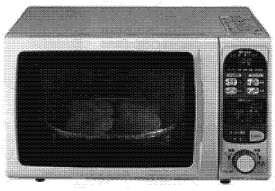
Hawaii State Department of Health
health.hawaii.gov
For more information or referral
Call 2-1-1

What is radiation?



Radiation is a form of energy. It comes from natural sources like the sun and uranium in the soil, and also from man-made sources such as x-ray machines, televisions, and microwave ovens.

How are people exposed to radiation?

People are exposed to small amounts of radiation every day, both from naturally occurring sources and man-made sources. Radiation exposure is measured in "rem" units. Scientists estimate that the average person in the United States receives a dose of about one-third of a rem per year.

A radiation emergency could expose people to small or large doses of radiation, depending on the situation.

- Using explosives to scatter radioactive materials ("dirty bomb") could cause serious injuries from the explosion. It would probably NOT have enough radioactive material to cause serious radiation sickness among large numbers of people. However, depending on the dose, people who were exposed to radiation could have a greater risk of developing cancer later in life.

- Exploding a small nuclear device could result in many deaths and extensive property damage. Large numbers of people could also be contaminated by radioactive material and have symptoms of acute radiation syndrome (nausea, vomiting, diarrhea, reddened skin within minutes to days after exposure). Radioactive fallout could extend over a large area, contaminating the region and potentially increasing people's risk of developing cancer over time.

- Bombing or destroying a nuclear facility could cause a large amount of radioactive material to be released. People who received a large dose might develop acute radiation syndrome. The surrounding area could also be exposed or contaminated.

What are the health effects of radiation exposure?

Radiation can affect the body in a number of ways depending on:

- The amount of radiation absorbed by the body (the dose)
- The type of radiation
- The route of exposure
- The length of time a person is exposed to radiation

Exposure to very large doses of radiation may cause death within a few days or months. Exposure to lower doses of radiation may lead to an increased risk of developing cancer or other adverse health effects many years in the future.

How can I protect myself from radiation?

The three basic ways to reduce your exposure:

- Decrease the amount of time you spend near the source of radiation.
- Increase your distance from a radiation source.
- Increase the shielding between you and the radiation source.

Shielding is anything that creates a barrier between people and the radiation source. Being inside a building or a vehicle can provide shielding from some kinds of radiation.

How can I protect myself during a radiation emergency?

The most appropriate action will depend on the situation. After a release of radioactive materials, local authorities will monitor the levels of radiation and determine what protective actions to take. Tune to the local emergency response network or news station for information and instructions. If a radiation emergency involves the release of large amounts of radioactive materials, you may be advised to "shelter in place," which means to stay indoors where you are; or you may be advised to move to another location.

Should I take potassium iodide during a radiation emergency?

Potassium iodide (KI) should only be taken in a radiation emergency that involves the release of radioactive iodine, such as an accident at a nuclear power plant or the explosion of a nuclear bomb. A "dirty bomb" most likely will not contain radioactive iodine. KI taken within three to four hours after exposure to radioactive iodine may prevent injury or disease of the thyroid. It does not prevent injuries or disease to other organs or tissues of the body.