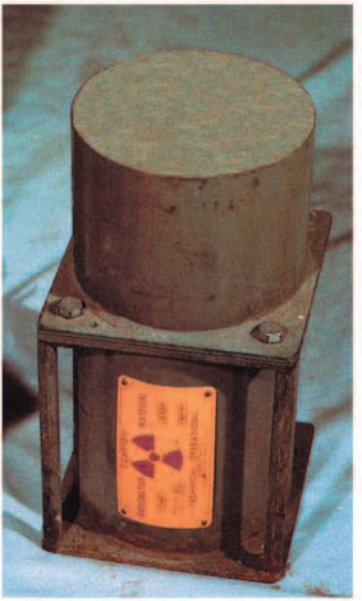
RADIOACTIVE SOURCES:
What are they and are they dangerous?

Never touch a radioactive source

Radioactive sources are components of important tools that the military and professionals in medicine and industry use. These tools use a contained source of radiation called a radioactive source. It is extremely important that trained and licensed owners of radioactive sources control them and store them properly in their special containers, called shields. If radioactive sources are abandoned, lost, stolen, or damaged, they can be very dangerous to your health. Sources outside of their protective shields can severely burn people who touch or handle them. Persons who think they have encountered a radioactive source should leave the area and report the presence of the suspected radioactive source to local authorities.

Summary

Because you can be seriously harmed or even killed by high levels of radiation, you must stay away from radioactive sources. If you find a source, report it immediately to local authorities. They will know what to do. Even if you have handled the source, a doctor can help you. But if no one tells authorities about the source, many people can be hurt.



An industrial radioactive source shield

What are radiation, radioactive sources, and shields?

Sunlight is one kind of *radiation* that you can see. This pamphlet is about other kinds of radiation, like x-rays, that you cannot see. These other kinds of radiation can be very dangerous. A "material that gives off radiation" is called *"radioactive."* A radioactive source is usually a radioactive material sealed inside a strong metal shell. Radioactive sources usually look like a solid piece of metal, sometimes on a wire.

People store radioactive sources in special metal containers called *shields* that stop radiation from getting out.

Components of a radioactive source

Close to actual size

What do source shields look like?

Properly contained in their protective shields, radioactive sources carry the universal radiation warning label.

Unfortunately, when control over these tools has been lost, sources may become separated from their shields and radiation warning labels.

Radiation warning label

What can happen to sources?

In the past, people have discovered radioactive sources in abandoned buildings, recycling centers, industrial sites, motor vehicles, and former military bases and training sites. Sometimes these sources are outside of their protective shields, making them especially dangerous. If a radioactive

A radioactive source shield with warnings . . .

. . . and the radioactive source it contains.

source is damaged or broken, and the radioactive material inside has spilled, it is even more dangerous. Wind could blow spilled material away and people could breathe it in or get it on their skin, or it could get into their food or water.

What do I do if I find a source?

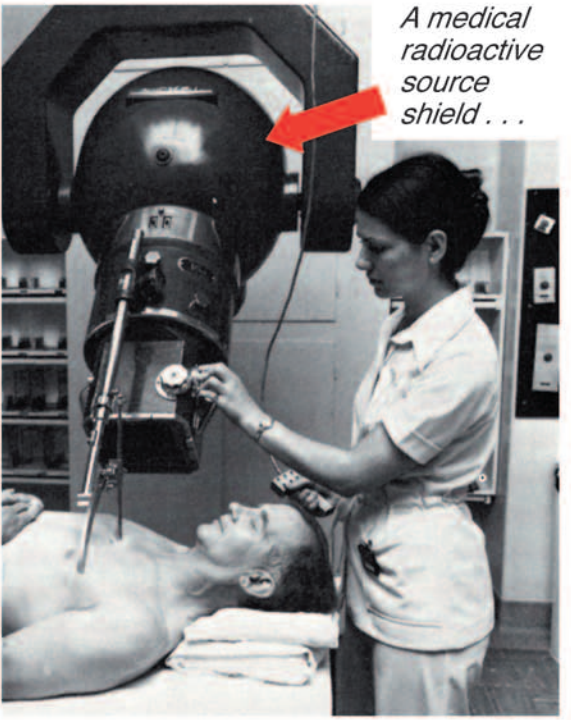
If you find any suspected radioactive source, you and anyone with you should leave the area immediately and report your findings to local authorities. Do not touch or move the source. Let the proper authorities handle it safely. Tell the authorities how you found it, how close you were to it, and how long you stayed near it. This information will help them determine if there was any danger to you and if you need medical attention.

Dangers of radiation

Radiation is not visible to us but is a part of normal life. We receive low levels of radiation - both natural and man-made - every day. While low levels of radiation won't harm you, high levels of radiation from improperly stored radioactive sources can severely burn people who touch or handle them. High levels of radiation are particularly dangerous because we don't know the radiation is there, and visible injuries may take days to develop. Other effects of high levels of radiation include general weakness, dehydration, nausea, and vomiting. High levels of radiation from unshielded sources can cause cancer, affect your ability to have children, or even kill you.

A radiation burn

A proper use of radiation in medicine



A medical radioactive source shield . . .

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. . . and the radioactive source it contains.

If you believe you or someone you know may have discovered or handled a radioactive source, you should contact your local authorities

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