

OAK RIDGE NATIONAL LABORATORY

MANAGED BY UT-BATTELLE FOR THE DEPARTMENT OF ENERGY

UNLESS AUTHORIZED IT IS MANDATORY THAT ALL VISITORS GO DIRECTLY TO THE VISITORS CENTER

Welcome to Oak Ridge National Laboratory. We are glad to have you as our guest. In order to make your visit a safe one, we must make sure that all guests register in the Visitors Center and receive additional information about radiological safety and escort policies before they are allowed access to the laboratory's campus and facilities.

To reach the Visitors Center,

- Turn at the sign marked "Main Entrance"
- Follow the signs and green arrows to the Visitors Center parking lot

DO NOT ENTER ANY OTHER STREETS OR PARKING AREAS UNTIL YOU REACH THE VISITORS CENTER

Please read the following before proceeding to the Visitors Center.

How are radioactive materials and areas identified?

Any area that is managed in order to protect individuals from exposure to radiation and/or radioactive materials is posted as a "Controlled Area." Reading this abbreviated brochure allows you to drive through the Controlled Area using the designated route. Full unescorted access to ORNL requires you to complete your training at the Visitors Center.

What is radiation?

Radiation is energy in the form of electromagnetic waves or energetic particles. Radiation can be produced by the decay of an unstable atom or by the acceleration of charged particles. Materials that contain atoms with unstable nuclei are called **radioactive**. Radiation is measured in a unit called a millirem (mrem).

What are the risks associated with radiation?

Although it is true that radiation can cause biological damage, it is important to keep the risks in perspective.

The developing embryo/fetus is more sensitive to ionizing radiation than adults. For this reason, DOE more strictly limits the amount of occupational dose allowed to declared pregnant workers.

Group	Average annual dose (mrem)
Cigarette smokers	1300
Living in Colorado	100
Airline flight crew	800
Nuclear power plant worker	560
Medical personnel	70
Limit for a visitor to a DOE site	100



Radiological hazards are identified by one or more of the following:

- (1) Signs, tags, or labels with the standard radiation symbol colored magenta or black on a yellow background
- (2) Rope, tape, chain, or other identifying barrier (yellow and magenta)
- (3) Any sign or tag reading "CAUTION RADIOACTIVE MATERIAL"



Remember, untrained visitors are **NOT** allowed to enter any of these posted areas without continuous escort by a qualified Radiological Worker, and then only when necessary.

What responsibilities does a visitor have concerning radiological safety?

Oak Ridge National Laboratory is firmly committed to and responsible for maintaining occupational exposures **As Low As Reasonably Achievable (ALARA)**. The ALARA concept is an integral part of all site activities. Visitors have a responsibility to help maintain exposures to radiation and radioactive materials ALARA. Some of the visitors' responsibilities are listed below.

1. Obey all signs and postings.
2. Comply with all radiological and safety rules.
3. Do not enter Radiological Areas unless escorted and wearing a dosimeter, and then only if necessary.
4. Be alert for unusual radiological situations, and report such situations to your host immediately.

IF YOU HAVE ANY QUESTIONS, OUR STAFF AT THE VISITORS CENTER WILL BE GLAD TO ASSIST YOU.