

## **PLAYING IT SAFE . . . RADIATION SAFETY AT UT**

We are constantly exposed to low levels of radiation from cosmic rays and radioactive material in the earth. Radiowaves, microwaves, visible light, U.V. light, x-rays and gamma rays are all forms of radiation. You should be familiar with radiation safety procedures when working at UT.

The medical and research areas use radiation in different forms. We need only focus particular concern on the higher energy gamma rays and x-rays.

These rays can be damaging at high levels but there is less risk from the lower level radiation found at UT. It is a myth that you become nauseous or sick around radiation sources.

In the Departments of Radiology and Radiation Therapy, never enter rooms when the warning lights are on. These two departments contain radiation generating machines.

When around a portable x-ray machine, follow the directions of the radiological technologist. Portable x-ray machines only emit radiation when activated by a licensed technologist.

When in the Nuclear Medicine Department, follow the directions of the nuclear medicine technologist.

Ask permission before entering any unfamiliar area posted with a "Caution - Radioactive Materials" sign.

In hospital Medical/Surgical areas 4C and 4D, patients may be undergoing radiation treatment. These patients are sources of radiation and caution must be used near them. Read and obey all instructions posted on the patient's door or contact the nurses station.

In the research areas, many laboratories use radioactive substances. Avoid any areas marked "Radioactive Materials", for example, sinks, hoods, refrigerators, and waste containers.

Packages containing radioactive materials are received at UT. These packages are labeled according to the amount of radiation. Packages with a White I diamond label are emitting little to no radiation. Packages with a Yellow II or III diamond label are emitting more radiation than packages with a White I diamond label. Do not hold them close to the body; transport by cart. If a package is damaged contact Radiation Safety immediately.

Occupational radiation workers may receive a significant amount of radiation. They wear monitors to measure the actual amount of radiation received. Please be aware that radiation cannot be detected by the five senses.

Most personnel at UT are non-occupational workers and seldom are in contact with radiation. Their exposure is minimal.

UT maintains a policy called ALARA to keep all exposure As Low As Reasonably Achievable.

The three basic rules to reduce radiation exposure are:

**Minimize Time -- Maximize Distance -- Use Shielding**

The best means of protection is to use good common sense.

For any questions or concerns, call the Radiation Safety Office, Extension 4301.