

13/13**100.0%**

The following is not considered an ionizing source of radiation.

1/1

Alpha

Beta

Kappa

Gamma

Sources that emit beta particles are best shielded by lead.

1/1

True

False

The two greatest sources of background radiation exposure for the average person in the United States are:

1/1

Cosmic Radiation and Internal Emitters

Radon/Thoron and Medical

Medical and Consumer Products

Internal Emitters and Consumer Products

The NRC places a high priority on security. Which of the following are requirements you have agreed to in order to keep radioactive material secure on the Purdue University campus?

1/1

Secure the laboratory when unoccupied

Secure the radioactive material (RAM) when laboratory security is not feasible

Account for RAM through material inventory records

All of the above

A co-worker is performing an experiment with a sealed source. She faints and falls to the floor, dropping the source, which cracks and release solid bits of material, some of which sprinkle on her. Your first action should be to: **1/1**

Immediately attend to the injured coworker and contact medical personnel.

Call REM and wait for instructions.

Survey the area before attempting to enter the spill zone.

Sealed source labs are expected to perform routine radiation surveys with a meter.

1/1

True

False

You are performing an experiment using Co-60, and are standing 1 meter away from the source and the exposure rate is 1 mR/hour. If your lab partner is standing 2 meters away from the source, what would you expect the exposure rate to be at their location? **1/1**

0.5 mR/hour

0.25 mR/hour

0.75 mR/hour

0.625 mR/hour

None of the above.

Methods that can be used in a laboratory to keep personnel exposure rates to As Low As Reasonably Achievable (ALARA) include: **1/1**

Reduce the time spent near the radioactive material.

Increase the distance away from the radioactive material (e.g. use tongs to handle sources).

Use proper shielding around the radioactive material.

All of the above.

If you suspect a sealed source has been compromised (where material may escape) a survey should be performed to determine if there is any contamination present, on areas where contamination is most likely to occur (e.g. hands, feet, hood, bench top, floor).

1/1

True

False

A woman working in your lab, who also works with sealed sources, has discovered that she is pregnant. She must declare her pregnancy to the Radiation Safety Officer, which would restrict the dose to the fetus.

1/1

True

False

When wearing your dosimetry, your whole body dosimeter should be worn between the neck and waist, on the front of your body.

1/1

True

False

If there is a major accident involving mCi amounts or greater of a radioactive material which happens after 5 pm, you should contact Purdue University Police Department at 49-48221.

1/1

True

False

You must comply with the rules and regulations regarding sealed sources as established by:

1/1

The United States Nuclear Regulatory Commission (USNRC)

The Purdue University Radiation Safety Committee and Radiation Safety Officer

The Purdue University Radiation Safety Manual

All of the above