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## Florida Kidney Disaster Coalition

### ALL-HAZARDS EDUCATIONAL SERIES:

## RADIOLOGICAL EMERGENCIES

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**Everyone is exposed to radiation daily from natural sources**, including the Sun and the Earth. Small traces of radiation are present in food and water. Radiation also is released from man-made sources such as X-ray machines, television sets, and microwave ovens. Radiation has a cumulative effect. The longer a person is exposed to radiation, the greater the effect. A high exposure to radiation can cause serious illness or death.

**The potential danger from an accident at a nuclear power plant is exposure to radiation.** This exposure could come from the release of radioactive material from the plant into the environment, usually characterized by a plume (cloud-like formation) of radioactive gases and particles. The major hazards to people in the vicinity of the plume are radiation exposure to the body from the cloud and particles deposited on the ground, inhalation of radioactive materials, and ingestion of radioactive materials.

**Florida is home to five commercial nuclear reactors** (nuclear power plants) located at three sites. Two additional reactors are located in Alabama near the State line

- Crystal River Nuclear Power Plant (Northwest of Crystal River)
- St. Lucie Nuclear Power Plant (SE of FT. Pierce)
- Turkey Point Nuclear Power Plant (South of Miami)
- Farley Nuclear Power Plant (Southeast of Dothan, Alabama)

There are two emergency planning zones surrounding each nuclear power plant. One zone covers an area within a 10-mile radius of the plant, where it is possible that people could be harmed by direct radiation exposure. The second zone covers a broader area, usually up to a 50-mile radius from the plant, where radioactive materials could contaminate water supplies, food crops, and livestock.

**Radioactive materials are also shipped on highways, railways, and waterways.** The U.S. Department of Transportation has laws that regulate these shipments. All hazardous and radiological materials are marked with placards that identify the type of material and its potential dangers. This is an example of a radiological placard.

Approximately three million packages containing radioactive material are transported annually within the U.S. Due to the effectiveness of transportation safety regulations; no known deaths or serious injuries have resulted to transportation workers, emergency response personnel, or the general public from the radioactive nature of these materials. **You should give life saving first aid to injured victims of a traffic accident involving radiological materials without delay out of concern for radiation exposure**



For more information, visit the Florida Division of Emergency Management's site on Radiological Emergencies:

<http://www.floridadisaster.org/bpr/EMTOOLS/Nuclear/rep.htm>