

Subject: Radiation common sense

Most nuclear reactors are designed to shut down automatically above a given level of earthquake. Hopefully the quakes will increase gradiently enough near PS that most will be shut down automatically and the rest will be shut down manually.

For those cases of radiation leakage whether due to radiation dump site leakage, nuclear reactor damage, missile silo damage, or nuclear missile accidental launching, or war because of a starving country, .... some common sense basic information will need to understand such as:

3 ft of dirt between you and the fallout will reduce the radiation by a factor of .0002. For 9" thick wall of concrete use a factor of .007-.09 Use air and water filtration as fine as you can get, 2 micron or less is preferred. Test regularly for radiation before use. Most common radiation measurement devices to use are dosimeter, and Geiger counter. Can be picked up on the surplus market.

Radiation fallout depends on wind patterns and generally does the same thing as volcanic activity. It falls out down wind (usually east) from the source. Normally it takes about two weeks for a fallout cloud to go around the planet carried by prevailing easterly winds. Safest places are the equator and the north and south poles which receive .001 the amount of fall out that latitude 45 degree receives.

The air in the northern hemisphere seldom migrates to the southern hemisphere so that if all the nuclear accidents occurs in the northern hemisphere then only a small percentage will make it to the southern hemisphere and vice versa. During PS time anything goes, fallout resulting from high winds and rain will probably mix into wide surrounding areas along with the above described fallout patterns.

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How long to stay out of harms way: There is an exponential decay of activity for fallout after a nuclear reaction, typical one gets.

7 Hr. .1 of initial radiation

2 days .01 of initial radiation

2 weeks .001 of initial radiation

3 months .0001 of initial radiation

Typically staying underground for 2 weeks is enough.

Note: If no nuclear reaction, then decay is much longer. Will need to make your own tests over time to determine. May need to move out of the area if decay is too slow.

Food and water from fallout areas should always be suspect and be test for radiation before ingestion. If the body is deficient in calcium, or any trace minerals, then taking in food or water that has fallout in it could become part of the body. What's worse than being exposed to radiation, is getting a small particle of mater that is radioactive in the body. Growing food on fallout radioactive soil is not a good idea.

Radioactive effects on the body accumulate and sum up over time. It is important to minimize any exposure. The vitamin "niacin" (flushing type) in gradient amount from 100-3000mg added to other common vitamins can be used to help run out radiation sickness. Anti-oxidants (C, A, zinc, pycnocenol, etc.) in large dosages could be used to assist with body cell repair due to ionizing radiation.

This is getting a little too long so I will cut it off saying.....

As a start one should have on hand a "maximum radiation dosage table for the body"

Knowledge of how to use measuring devices.

At least one rechargeable dosimeter for each person.

One or more Geiger counters.

Air and water filters.

Write up on symptoms and treatments for radiation sickness.

Description of types of radiation and there penetration amounts.

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The above is a quick summary of some notes I made during the cold war years.  
More could be written if anyone thinks it is needed.

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