



# NUCLEAR INFORMATION AND RESOURCE SERVICE

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## Protective Measures from Radioactivity in North America

These recommendations are for people in North America as of March 17, 2011

The amount of the radioactive release from the Fukushima sites is not known today. Very high radiation levels are reported at the plant site while lower, but still significant readings are reported in nearby towns.

Radiation from the Fukushima accident is expected to begin reaching North America as early as Friday, March 18, 2011. Current weather patterns indicate the initial plume is most likely to arrive in southern California. However, radiation continues to be released at Fukushima and thus will continue to arrive in North America for days to come, and perhaps longer. Eventually, slightly elevated radiation levels are likely to occur throughout North America and much of the world.

**The radiation levels that will come to North America will not be large enough to cause acute symptoms or immediate health effects.** Health concerns are more long-term, and across the total population may contribute to cancer rates and other genetic impacts. It is impossible to say for any one individual what the risk, or hazard is long-term.

At this point, we do not believe it will be necessary—or feasible given the expected duration of elevated radiation levels—to take shelter. Nor is evacuation a feasible strategy, since after arriving on North America's west coast the elevated levels will continue to move to the east. We will post immediately if there is reason to believe that sheltering is necessary.

However, unnecessary exposure to radiation should be avoided when possible. Rain, in particular, can bring radioactive particles to the earth.

### **RAIN:**

If it rains over the next several days, stay out of it if possible. If you get wet, put your clothes in the wash and take a shower.

Leave outerwear and shoes at the door so you don't track water in your home.

Do not collect rainwater for drinking or later garden use during the period of time when active distribution of radioactivity is happening.

### **GASEOUS ELEMENTS:**

A dust mask does little or nothing for you. A respirator such as used for toxic chemicals will help to reduce exposure, however it is very unlikely that exposures in the US to gases from Japan will be concentrated to the point where a gas mask is needed. If you live near a nuclear power plant, you might want to add one to your emergency kit.

Special note: There is a long historical record of the nuclear industry piggy backing “routine” release of radioactivity to the air and water under the “cloak” of a larger nuclear event. Be aware that if you are near a nuclear facility you are at a higher risk of elevated “routine” exposure even if there is no local accident during this time.

## **FOOD + WATER**

If you have access to well water, you likely do not need to worry about radioactivity in your water until the “recharge” period for your water source has passed – and likely the natural filtering of the Earth will reduce the level of radioactivity.

If you have a municipal water supply, ask your municipality to monitor and report the status of the level of radioactivity in the supply. You can offer that this may seem like an unlikely issue, but it is better to provide MORE information to people than less, and you have a right to know.

Food will be impacted directly in terms of contamination from fallout and indirectly from the food chain. Direct impact primarily applies to areas where radioactive fall-out is concentrated. There was a lot of impact on food production across Europe from the Chernobyl accident. As of today, experts do not yet see this level of release in North America. In other words, when it comes to local food, if there is direct contamination, the source is likely the “routine” radioactivity that is released from the facilities that are already in our communities.

The food chain, and international supply of food complicate the issue of radioactive food. Here are some of the type of foods that are most likely to concentrate radioactivity:  
Dairy (milk, and everything made from it), meat, fish, eggs, nuts, seeds, oil. Many processed foods contain hidden oils.

IF there are significant amounts of radioactivity that are distributed from Fukushima it will take some time to enter the food that is in the market place – for instance, the grain in the bread in the store today was grown some months ago.

There is no way to know about the food, but in general, this is a good reason to push for real-time monitoring of where the plumes are traveling and to ask your county officials to collect rain samples and make the results known to local residents so that you can make informed choices.

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