







For more information, contact:

Nuclear Information  
Resource Service  
6930 Carroll Ave #340  
Takoma Park, Maryland  
www.nirs.org  
301.270.6477  
nirsnet@nirs.org

## Are Your EMERGENCY RESPONDERS Prepared for a Nuclear Waste Accident?



-  Yucca Mountain is the only site being considered by the Department of Energy (DOE) as a “permanent disposal” site for the United States’ highly radioactive nuclear waste. This spent nuclear fuel and high-level waste is currently located at 77 sites across the country and would have to be transported by truck or rail to Yucca Mountain if that site is approved as a nuclear dump.
-  Nuclear waste would have to travel through 43 states, past the homes of 50 million Americans for 25 years.
-  A person standing one yard away from an unshielded, 10 year old fuel assembly, would receive a lethal dose of radiation (500 rem) in less than three minutes. A thirty-second exposure (100 rem) at the same distance, would significantly increase the risk of cancer or genetic damage.
-  Over time transportation will likely become safer with improvements in technology. In 30-50 years there may be acceptable reasons to transport this waste. At the same time, waiting allows for the natural decay of radioactive elements to lower the radiation and thermal heat content of the waste and inherently make future transportation safer.
-  A study done by the Department of Energy as part of the 1986 Environmental Assessment for the Yucca Mountain repository site, warns that a scenario involving a high speed impact, long duration fire, and fuel oxidation in a rural area would contaminate a 42 square mile area, require 462 days to clean up, and cost \$620 million. A similar accident in an urban setting would be even worse!
-  Data from the Department of Transportation reveals that in the last 15 years, just under 100,000 accidents released some form of hazardous materials in the U.S. and its territories. These releases caused over \$300 million in damages, over 4000 minor injuries, over 350 major injuries, and over a staggering 100 deaths.



## Who Is in Charge?

U.S. Department of Transportation (DOT) regulations cover highway shipments of spent fuel and high-level radioactive waste, including packaging, labeling, marking, and shipping papers. DOT regulations stipulate which routes can be chosen for these dangerous shipments. States and Tribes can select alternate routes, as long as they comply with DOT guidelines.

## Front-Line Volunteers

In many communities the Fire Department would take the lead in investigating an accident to determine whether to call in federal assistance. In more than 80% of the United States, the fire crews are all volunteer. How will they be notified? What is the turnover in these crews?

## Check out the Atomic Atlas!

The Department of Energy Environmental Impact Statement from 2002 gives details on how irradiated fuel would move from reactor sites to Yucca Mt. The State of Nevada has made these projections into digital maps. These are available here:  
<http://www.state.nv.us/nucwaste/trans.htm>

## Are My Emergency Responders Prepared?

If a nuclear waste transportation accident occurs, local, state, and tribal fire and police organizations would be the first to respond. If these “first responders” are not adequately trained or do not have the proper equipment to deal with nuclear materials, the results could be fatal. First responders should have access to radiation detection and protection equipment, as well as decontamination equipment, at the very least. Further, accidents involving release of radioactivity could require hospitals with isolation rooms, local supplies of potassium iodide, and an emergency management plan that includes checking potentially exposed individuals for radiation and treating any cases appropriately.

In order to be ready for a potential accident, first responders’ training should include practice exercises where they run through a simulation of an accident and rehearse all the steps necessary for dealing with vehicles, casks, equipment, and victims.



Emergency Personnel dressing for a practice exercise


## What Can I Do?

- ✉ Write to your Members of Congress and tell them that you do not want high level nuclear waste to travel through your community. You can use the sample post card text below, or write one in your own words. Send your note on a post card depicting a local scene if you can.
- ✉ Host a letter-writing party and have your friends and family write letters or postcards, too.
- ✉ Also, if you belong to a group yourself, put an article in the newsletter, or make an announcement at a meeting.
- ✉ If you are a teacher, have your students make posters or design their own postcards to send to your Representatives.
- ✉ Contact us (see back of flyer) for more flyers or other materials.

## Is There Any Help Available?

The sites where waste is located now are not qualified to keep the waste forever; they are interim storage. Until there is a solid, scientifically sound site and plan based on good principles of democracy and justice, the best help any community has had is all the other impacted communities. When we stand together we have been able to stop many bad ideas!

Together we have also been working for better storage at reactor sites. See "Principles for Safeguarding Nuclear Waste at Reactors" posted here:  
<https://www.nirs.org/radwaste/policy/hossprinciples3232010.pdf>

Dear Rep./Senator _____	
I do not want high level nuclear waste travelling through my hometown!	
The risks of nuclear waste transportation are high, and I am worried that my local emergency responders are not prepared to deal with a nuclear waste accident.	Representative X House of Representatives Washington, DC 20515
Please OPPOSE any legislation that would put nuclear waste on our roads and rails.	OR Senator Y U.S. Senate Washington, DC 20510
Sincerely, Your Name and Complete Address	



DOE workers check for radiation.