

# Potassium Iodide (KI)

February 2003

## Fact Sheet #21

Division of Environmental Health  
Office of Radiation Protection



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### WHAT IS POTASSIUM IODIDE AND HOW DOES IT WORK?

Potassium Iodide, commonly called by its chemical abbreviation, KI, is a non-prescription pharmaceutical drug intended to protect the thyroid gland from exposure to radioactive iodine.

When iodine is ingested or inhaled, it readily deposits in the thyroid gland. KI, if taken prior to or immediately following an exposure to radioactive iodine will saturate the thyroid with stable, non-radioactive iodine so that the radioactive iodine does not deposit in the thyroid and is expelled from the body.

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### FACTS ABOUT KI

- ◆ KI will not protect the user from inhalation or ingestion of other radioactive materials released to the environment from a nuclear power plant emergency.
- ◆ KI is not an “anti-radiation pill.” It will not protect the user from exposure to external radiation. This includes external exposure to the thyroid.
- ◆ There may be side affects to taking KI. Persons allergic to shellfish could potentially be allergic to KI also. Please check with your physician before purchasing KI.
- ◆ Parents need to be very careful of overdosing children by giving adult doses.

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### HOW MUCH KI SHOULD I TAKE?

The US Food and Drug Administration (FDA) has set recommended dosages for individuals based on age. These are:

less than 1 month old.....	16 mg
1 month to 3 years .....	32 mg
3 to 18 years .....	65 mg
over 18 years or 150 lbs .....	130 mg

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## WASHINGTON STATE EMERGENCY PREPAREDNESS FOR THE COLUMBIA GENERATING STATION

The Columbia Generating Station is the State's only operating commercial nuclear power plant. It is located in southeastern Washington north of the city of Richland. (The Hanford Nuclear Reservation is not a source for radioiodines). The Columbia Generating Station is a 1,150 megawatt boiling water reactor owned and operated by Energy Northwest. The plant produces about 10 percent of this region's electricity.

Approximately 6,000 residents in Benton and Franklin counties live within 10 miles of the power plant.

State emergency planners work closely with Benton and Franklin county officials and Energy Northwest to ensure the protection of public health and safety in the event of an emergency at the Columbia Generating Station.

State, local, and utility emergency planners agree that evacuation of residents within 10 miles of the Columbia Generating Station is the most effective method of preventing potential exposure to a radioactive materials release. The public within the 10-mile Emergency Planning Zone (EPZ) are evacuated to an assistance center outside the 10-mile EPZ for protection against possible exposure to the release. Federal, state, and local emergency response organizations participate in frequent training exercises to ensure a coordinated response effort. The Federal Emergency Management Agency evaluates the effectiveness of this response on a biennial basis.

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## WASHINGTON STATE POTASSIUM IODIDE POLICY SUMMARY

Washington State Department of Health, along with Benton County Emergency Services, Franklin Emergency Management, and Benton-Franklin County Health District, does not recommend stockpiling or pre distributing of Potassium Iodide as an effective means of protecting the public during an emergency at Columbia Generating Station. These agencies strongly encourage the public residing within the 10-mile EPZ to evacuate at the appropriate times listed in the public information calendar mailed each autumn and report to one of the area's three Assistance Centers. It is the policy of the state and county agencies to evacuate the public prior to any exposure from a release due to an emergency at Columbia Generating Station.

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### Additional Information:

Washington State Department of Health  
Office of Radiation Protection  
7171 Cleanwater Lane, Building 5  
P.O. Box 47827  
Olympia, Washington 98504-7827  
(360) 236-3300  
<http://www.doh.wa.gov/ehp/rp/>

Franklin County Emergency Management  
502 Boeing Street  
Pasco, Washington 99301  
(509) 545-3546  
[www.franklinem.org](http://www.franklinem.org)

Benton County Emergency Services  
651 Truman Ave.  
Richland, Washington 99352  
(509) 628-2600