

# Safety takes preparation.

In the highly unlikely event of a nuclear accident, a potassium iodide (KI) pill is a key component to keeping you and your family safe. There's no such thing as being too prepared. Being prepared is staying safe.

For more information visit www.preparetobesafe.ca







## What is potassium iodide (KI)?

KI (the chemical name for potassium iodide) is a salt of stable (not radioactive) iodine. It is an essential nutrient needed in small quantities for the thyroid gland to function properly. KI comes in tablet form and can be easily swallowed.

## Why am I receiving this now?

The Canadian Nuclear Safety Commission (CNSC) is the federal agency that monitors the safe operation of nuclear stations. It now requires all homes and businesses within 10 km of a nuclear station to receive a supply of KI pills. Until now, the pills have only been available at pharmacies. The CNSC now requires these be sent to every home and business due to increased safety standards.

### What does it do?

The effectiveness of KI as a specific blocker of thyroid radioiodine uptake is well established. When taken in the recommended dose and at the right time, KI is effective in reducing the risk of thyroid cancer in individuals or populations at risk of inhalation or ingestion of radioiodines. KI fills up the thyroid with non-radioactive iodine and prevents the uptake of the radioactive molecules. KI does not protect against other types of radiation.

## When should I take it?

In the very unlikely event of an emergency that results in the release of radiation to the public, the Chief Medical Officer of Health for Ontario will provide instructions through radio, TV, Internet and other available channels on where, when, how and by whom KI should be taken. It is important to wait for this notification. Do not take the pills unless instructed to do so. You would only need to take the pills for a short period of time, likely 1 - 2 days.

### How much should I take?

#### Pregnant or breastfeeding women

2 tablets (1 single dose only)

#### Adults 18+

2 tablets every 24 hours

#### Children 3 - 18

1 tablet every 24 hours

#### Children 1 month - 3 years

½ tablet daily crushed in food or fluids

#### Children under 1 month

1/4 tablet dissolved in fluids (1 single dose only)

If necessary, and for younger children, tablets can

be crushed in food or dissolved in fluids.

## What is included in my KI pill package?

The package will include 20 KI pills, enough for five adults or 10 children, or any combination for two days. This would be more than enough time for the duration of any exposure in an unlikely nuclear event. The package will also contain a booklet of information on KI pills and usage. If you require more than 20 tablets, there will be instructions on how to order more.

## Are there any side effects?

The risk of side effects from taking a dose of KI is extremely low for all age groups who have normal thyroid function. The overall benefit during a nuclear emergency outweighs the risks of side effects. There is an increased risk of side effects for people with thyroid disorders i.e., auto-immune thyroiditis, Graves' disease, iodine deficiency and nodular goiter. These disorders are more common in adults and the elderly, and are rare in children. Rare side effects in other parts of the body, such as gastrointestinal effects or hypersensitivity reaction, may occur but are generally mild.

People who are sensitive to iodine, have an existing or previous thyroid disorder, or have any other concerns, should consult their doctor or nurse practitioner prior to taking KI.

# How will I be notified in the event of a nuclear emergency?

Sirens, radio, television, Internet, automated telephone call and social media.

## What do I do?

- Go inside and turn on your radio or television for instructions
- 2. Listen to the media reports
- 3. Follow instructions provided by government officials
- 4. Follow instructions for evacuation, sheltering in place, taking KI pills, reporting to a reception centre for monitoring

# Wouldn't a nuclear accident take place too quickly to react?

No. In the very unlikely event of a radioactive release, it would take many hours and days to unfold. There would be plenty of time to evacuate, take shelter or take KI pills.

## Where can I find out more?

If you have any questions or concerns, please visit www.preparetobesafe.ca. If you want to know more about this KI distribution program in Durham Region, please call 1-888-777-9613; in Toronto you may call 311.

For more information, you can also contact Telehealth Ontario at 1-866-797-0000.