



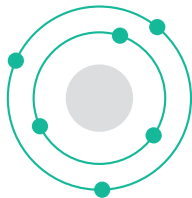
## KEY FACTS ABOUT

# Isotopes in Canada

**Nuclear technology saves lives** through use of radioisotopes for screening, diagnosis and therapy of various medical conditions.



The Canadian Nuclear Safety Commission licenses the use and **production of over 250 radioisotopes** in Canada.



In industrial radiography, nuclear substances are used for the **non-destructive examination** and testing of new materials. Radiation from the substances passes through the material and allows defects in welds or constituency to be recorded on film or a digital imager.

In Canada, **48%** of the radiation in our lifetimes comes from medical procedures.

**Canadian scientists** were the pioneers in a number of nuclear applications.

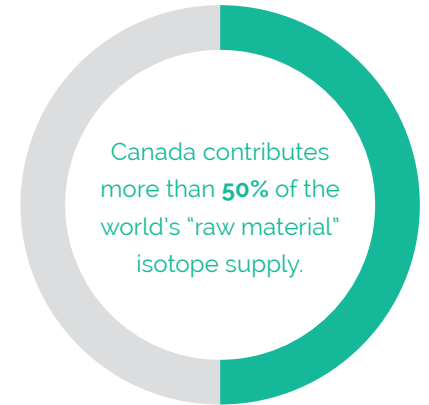


In 1951, the world's first cancer treatment with radiation took place in **London, Ontario**. This marked an important milestone for both the fight against cancer and Canada's emergence as a leader in the field of nuclear power.

Irradiation technology is increasingly being used to preserve food – spices, grains, fruit, vegetables and meat. It avoids the use of potentially harmful chemical fumigants and insecticides.



Doctors use isotopes in nuclear imaging **30,000 times every week** to quickly and accurately diagnose illness.



**1.5 million** nuclear diagnostic scans are performed each year in Canada.

**15,000** therapeutic doses are administered each year in Canada.



The global business of medical isotopes is **\$4 billion**, projecting to grow by up to 5% every year.



Radioisotopes are also used to preserve seeds and food products, and breed disease-resistant plants.