

# Reactor leak halts Canada isotope work for 3 months

May 28 2009

---

A Canadian nuclear reactor that produced about a third of the world's supply of medical isotopes has halted operation for three months due to a heavy water leak, authorities said.

The reactor produced isotopes, which are radioactive substances used to help doctors diagnose and treat diseases by entering directly into affected cells in the body, rather than by external radiation.

"Based on our preliminary findings to date, we now believe that the NRU (National Research Universal) reactor will be out of service for at least three months," said senior vice president Bill Pilkington of Atomic Energy of Canada Ltd (AECL).

"Sophisticated diagnostic procedures are required to determine the exact nature and extent of the repairs before returning the NRU reactor safely to service," he said.

The Chalk River reactor, located about 200 kilometers west of Ottawa, produces between 30 and 40 percent of the world's supply of medical isotopes used mainly in the diagnosis and treatment of cancer, heart disease and bone ailments.

As concerns mounted over an isotope shortage while the Canadian reactor undergoes repairs, Canada appealed for other isotope producers to step in to help.

"I continue to lead productive discussions with my counterparts in other isotope-producing countries that have some ability to assist with this supply issue," said Minister of Natural Resources Lisa Raitt.

"These countries all have different constraints and capacity that we are working through, but we will continue using all resources available to us to manage this shortfall."

The reactor, about 50 years old, stopped operations on Monday when the leak was discovered.

The AECL said the location of the [heavy water](#) leak was at the base of "the reactor vessel in a location where there is corrosion on the outside wall of the vessel" and that more tests were underway.

In 2007 the [reactor](#) was forced to halt work in order to undergo repairs, resulting in a temporary shortage of isotopes.

*(c) 2009 AFP*

Citation: Reactor leak halts Canada isotope work for 3 months (2009, May 28) retrieved 20 April 2024 from <https://medicalxpress.com/news/2009-05-reactor-leak-halts-canada-isotope.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.