



Radiation

Radiation is all around us. It naturally occurs in the environment. It's in the rocks, water, air, plants, food and even exists within our bodies. It also comes from the sun and cosmos. There are also human-made radioactive sources, such as medical scans, x-rays, cancer treatments and nuclear power generation.

Nuclear power generation is one of the most highly regulated industries in the world. Bruce Power goes to great lengths to ensure the radiological safety of its workforce, the public and the environment. These measures are part of its operating licence.

Exposure and dose limits for all nuclear energy workers is closely tracked. There are also dose limits calculated for members of the public living near a nuclear power plant. The dose is determined through extensive third-party studies, as well as the data from constant monitoring of emissions releases to the air and water and monitoring of plants, animals, air and water.

THE MAXIMUM DOSE A MEMBER OF THE PUBLIC CAN RECEIVE FROM LIVING NEAR A POWER PLANT IS 1 MILLISIEVERT (MSV) PER YEAR.



The ACTUAL dose of a person living next to the property line of the Bruce site in 2022 was calculated at .0016 mSv. It equates to eating 16 bananas in one year. (1 banana = 0.0001 mSv)

=
0.0001
MSV

Everyone is exposed to radiation. How much dose individuals get annually varies and depends on a wide variety of factors, such as:



Geological conditions in your area



Your altitude above sea level



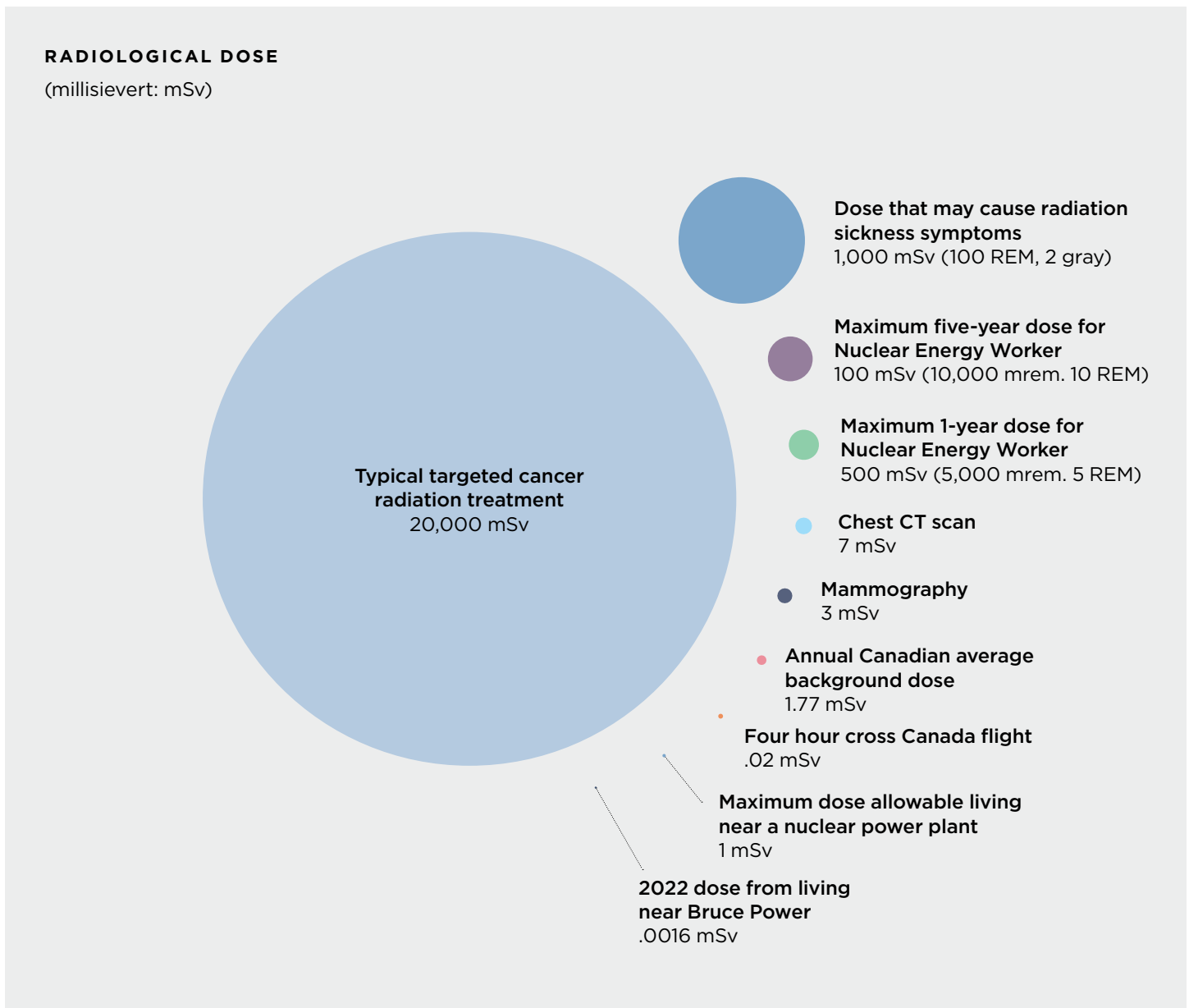
Lifestyle choices (such as how often you fly)



Any radiological medical treatments you may receive

Bruce Power takes its commitment to the environment, the public and its employees very seriously. We have invested hundreds of millions of dollars to upgrade its air filtration and monitoring capability of any radionuclides from the site. The chart below shows comparative dose rates for various activities to help you understand how little additional radiation a person who lives near Bruce Power receives in one year.

This year, Bruce Power has been awarded the Top Innovative Practice (TIP) Award for its Containment Filtered Venting System (CFVS) which is also a post-Fukushima enhancement. A system, The first-of-a-kind system marks an advance in protection and additional layer of defence against a radiological release. The primary goal of the CFVS is to discharge steam, air, and other gases such as hydrogen to the atmosphere to allow the vacuum building to maintain negative pressure. More importantly, removing containment aerosols during venting and with metal screens captures radioactive particles like bonded Cesium and Iodine.



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