

# **Nationwide Environmental Radiation Monitoring Programme in Finland**

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The objective of environmental radioactivity monitoring is to assess the levels of artificial radiation in the environment to which the public is exposed. Another goal is to detect any significant changes in environmental radiation and radioactivity levels. The Euratom Treaty obliges the member states of the European Union to continuously monitor radioactivity levels in air, water, and soil. In Finland, the Radiation and Nuclear Safety Authority (STUK) is responsible for fulfilling the obligations of the Euratom Treaty under the Radiation Act.

The monitoring programme began in the late 1960s in Finland. Today, it includes nearly 260 automatic external dose rate monitoring stations, as well as the monitoring of airborne radioactive substances and radionuclides in deposition at eight stations. It also covers the monitoring of radionuclides in wastewater sludge, surface water, the Baltic Sea, drinking water, milk, and foodstuffs. Depending on the sample type, gamma emitters, Sr-90, and H-3 are analysed. Additionally, whole-body measurements of individuals are conducted in three cities as part of the programme. In addition to continuous monitoring, separate monitoring projects are carried out, such as Radioactivity of the Ashes of Waste Incinerator Plants in Finland and Radioactivity in Forest Mushrooms.

Results from external dose rate monitoring are updated hourly on STUK's website, and other results are published once they are completed. The compiled results of the monitoring programme are presented in an annual report, which is publicly accessible.