

EUROPEAN ATLAS OF NATURAL RADIATION

EUROPEAN ATLAS OF NATURAL RADIATION

How to obtain the Atlas

You may download the full Atlas:

<https://ec.europa.eu/jrc/en/publication/european-atlas-natural-radiation-4/>



For more information <https://remon.jrc.ec.europa.eu/>



© European Union, 2020

Do you know what natural ionising radiation is?

Where can you find natural sources of radiation?

What are the levels of natural sources of radiation in Europe?

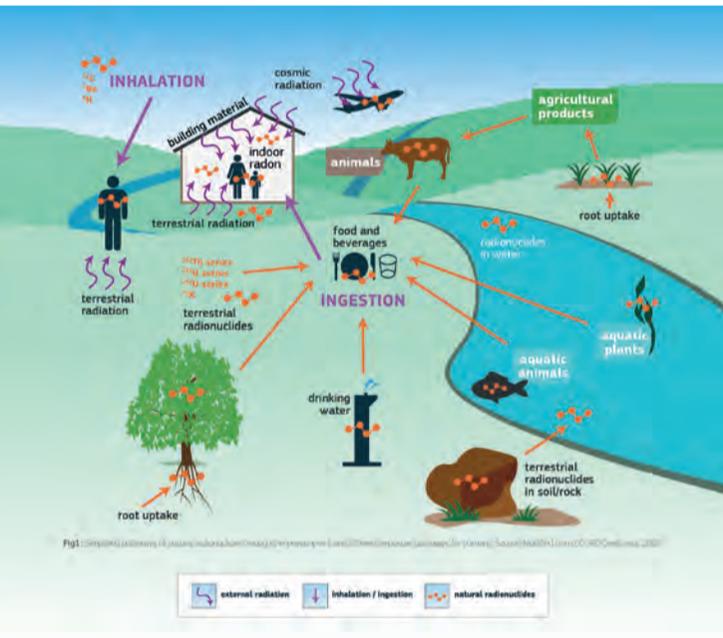
Do you know the pathways of ionising radiation?

Info about the Atlas

Intended as an encyclopaedia on natural radioactivity, the **European Atlas of Natural Radiation** explains its different sources, i.e. cosmic and terrestrial radiation, and describes the current state-of-the art of knowledge by means of ample text, graphics and maps.

It has turned into a comprehensive compilation of contributions and reviews received from **100 experts** in various fields: they come from **60 institutions** such as universities, research centres, national and European authorities, and international organizations

In the first place, this Atlas aims to provide **reference values and generate harmonised data for the scientific community and national competent authorities**. At the same time, it offers an opportunity to the interested members of the public to become familiar with the radioactive part of its natural environment.



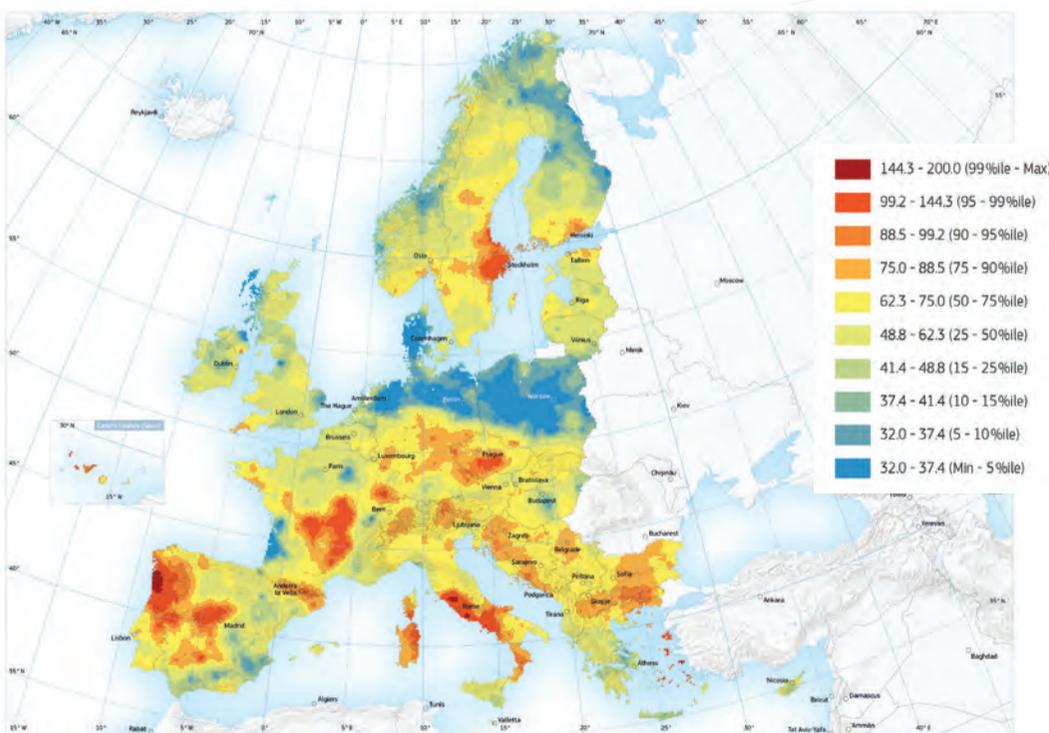
Natural radionuclides, both terrestrial and cosmogenic, migrate in the environment through different pathways: air, water, rock, soil and the food chain. **Radionuclides may then enter the human body through ingestion and inhalation giving**, so called, internal exposure. External exposure is due to cosmic radiation and radiation from terrestrial radionuclides present in soil, rocks and building materials.

European terrestrial gamma dose rate map (nGy/h)

The map shows the dose rate, in nGy/h, that a person would receive from terrestrial radiation, if she/he spends all the reference time in a location outdoor in which the soil has fixed U, Th and K concentrations.

Source: EANR, EC-JRC, 2019.

To refer to this the **European Atlas of Natural Radiation**, please cite as follows: *European Commission, Joint Research Centre – Cinelli, G., De Cort, M. & Tollefsen, T. (Eds.): European Atlas of Natural Radiation, Publication Office of the European Union, Luxembourg, 2019. ISBN 978-92-76-08259-0, doi:10.2760/520053, Catalogue number KJ-02-19-425-EN-C, EUR 19425 EN. Printed by Bietlot in Belgium 2019 – 190 pp. – 30.1 × 42.4 cm.*



The European Commission's science and knowledge service
Joint Research Centre

EU Science Hub: ec.europa.eu/jrc/ @EU_ScienceHub EU Science Hub
EU Science Hub - Joint Research Centre EU Science, Research and Innovation

