

Sazykina and Kryshev, Radiation effects in wild terrestrial vertebrates JER 88

Sazykina, T.G , Kryshev I.I. 2006.

Radiation effects in wild terrestrial vertebrates - the EPIC collection.

Journal of Environmental Radioactivity, 88 (2006) 11-48

The paper presents data on radiation effects in populations of wild vertebrate animals inhabiting contaminated terrestrial ecosystems. The data were extracted from the database "Radiation effects on biota", compiled within the framework of the EC Project EPIC (2000-2003). The data collection, based on publications in Russian, demonstrates radiation effects in the areas characterized with high levels of radionuclides (Kyshtym radioactive trace; "spots" of enhanced natural radioactivity in the Komi region of Russia; territories contaminated from the Chernobyl fallout). The data covers a wide range of exposures from acute accidental irradiation to lifetime exposures at relatively low dose rates. Radiation effects include mortality, changes in reproduction, decrease of health, ecological effects, cytogenetic effects, adaptation to radiation, and others. Peculiarities of radiation effects caused by different radionuclides are described, also the severity of effects as they appear in different organisms (e.g. mice, frogs, birds, etc.).

<http://dx.doi.org/10.1016/j.jenvrad.2005.12.009>