Radon dose calculator

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Models such as the ERICA Tool and RESRAD-BIOTA do not consider dose rates to wildlife from Rn-222 and short-lived daughter products (Po-218, At-218, Pb-214 and Bi-214).

Vives i Batlle et al. (2008;2012) developed an approach to estimate dose rates from Rn-222 and short-lived daughter products using an allometric method to scale parameters for the respiratory system and consequently wholebody of wild animals.The resultant spreadsheet model has been made freely available from this website.

The radon dose calculator was initially developed funding from the England and Wales Environment Agency.

DOWNLOAD RADON DOSE CALCULATOR

Please look at the READ ME tab before using the model and cite your usage of it appropriately in any publications.

Use the Ask a question page if you have any queries about the calculator.

References

J Vives i Batlle, SR Jones, D Copplestone. 2008. *Dosimetric approach for biota exposure to inhaled radon daughters*. Environment Agency: Bristol. ISBN: 978-1-84432-940-3. Available from: http://publications.environment-agency.gov.uk/pdf/SCHO0908BOPA-e-e.pdf

J Vives i Batlle, D Copplestone, SR Jones. 2012. *Allometric methodology for the assessment of radon exposures to wildlife*. Sci Tot Environ., 427-428, 50-59. http://dx.doi.org/10.1016/j.scitotenv.2012.03.088

An example of the application of the Radon dose calculator can be found in:

NA Beresford, CL Barnett, J Vives i Batlle, ED Potter, Z-F Ibrahimi, TS Barlow, C Schieb, DG Jones, D Copplestone. 2012. *Exposure of burrowing mammals to ^{222}Rn*. Sci Tot Environ., 431, 252-261. http://dx.doi.org/10.1016/j.scitotenv.2012.05.023