

HODNOTENIE RADÓNOVÉHO RIZIKA DOZIMETRICKÝM PRÍSTUPOM

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ABSTRACT

Böhm R. & Holý K.: **The assessment of radon risk by dosimetric approach**

Exposure to radon and radon decay products in some residential areas and at workplaces constitutes one of the greatest risk from natural sources of ionizing radiation. The compartmental model published in ICRP Publication 66 (HRTM) has been used for modeling of the clearance, absorption into the blood, radon products decays and particle deposition. Energy deposition in the tissue and in the air gap was calculated by the Bethe-Bloch equation. In this work different thicknesses of mucus in case of non-smokers and smokers has been considered, and doses, factor quality and effective doses has been calculated.

Key words: lung cancer, radon, smoking, risk, factor quality, dose