

Internal Dose Assessments: Uncertainty Studies and Update of Ideas Guidelines and Databases Within CONRAD Project

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The work of Task Group 5.1 (uncertainty studies and revision of IDEAS guidelines) and Task Group 5.5 (update of IDEAS databases) of the CONRAD project is described. Scattering factor (SF) values (i.e. measurement uncertainties) have been calculated for different radionuclides and types of monitoring data using real data contained in the IDEAS Internal Contamination Database. Based upon this work and other published values, default SF values are suggested. Uncertainty studies have been carried out using both a Bayesian approach as well as a frequentist (classical) approach. The IDEAS guidelines have been revised in areas relating to the evaluation of an effective AMAD, guidance is given on evaluating wound cases with the NCRP wound model and suggestions made on the number and type of measurements required for dose assessment.

USTUR-0465A-17