

### Mandate

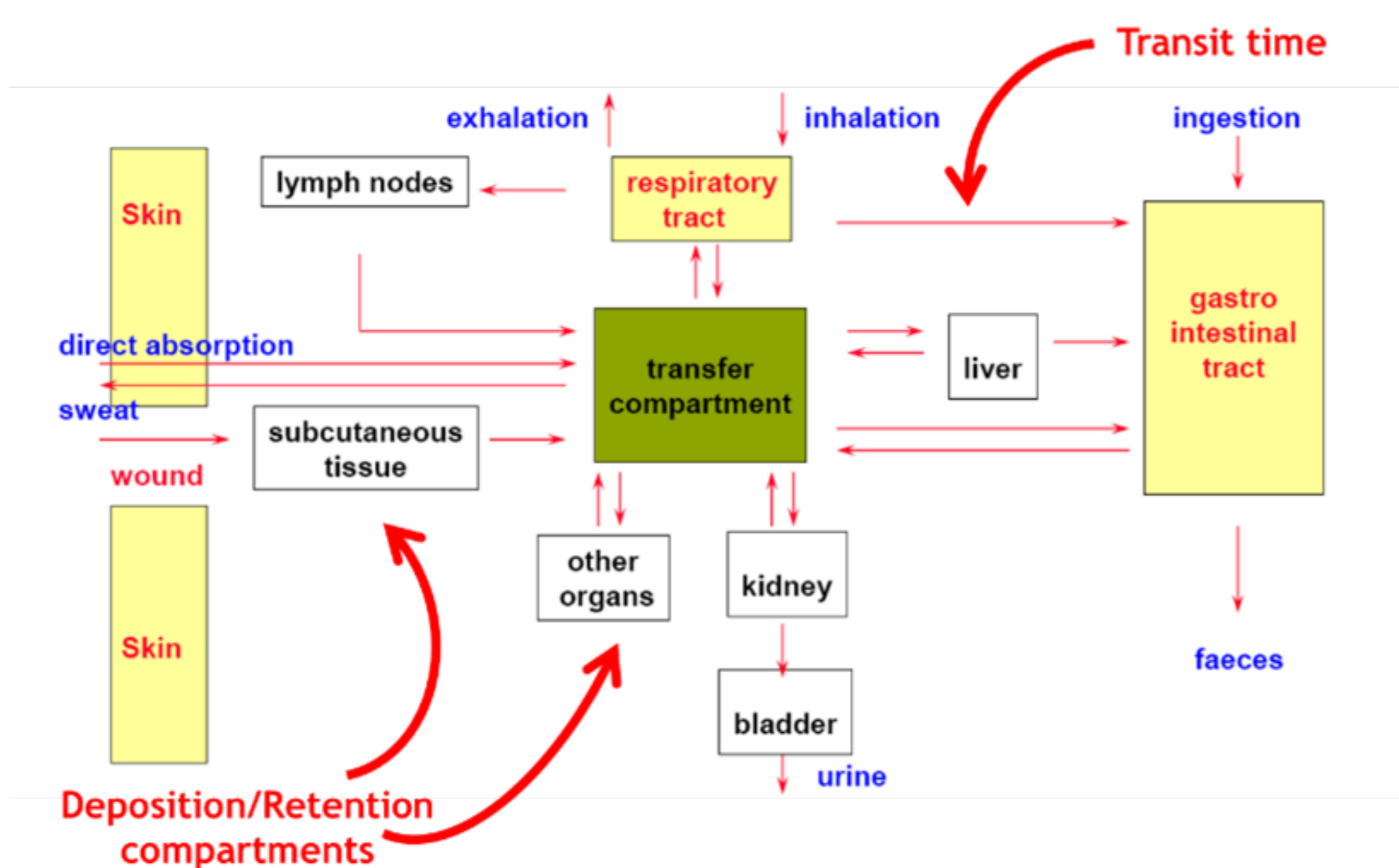
The objectives of this TG are to provide internal dose coefficients for the workers and members of the public. The deliverables are report series replacing the ICRP 30 and ICRP 56 series, and Publications 54 and 78 on individual monitoring.

### Achievements

The work initiated these last few years was dedicated to the revision of the biokinetic models following inhalation and ingestion of different chemical forms of elements and their radioisotopes by workers. Revisions have also been made on many models for the systemic biokinetics of radionuclides absorbed to blood, making them more physiologically realistic representations of uptake and retention in organs and tissues and of excretion. These new biokinetic models were recently published in five volumes of the Occupational Intakes of Radionuclides OIR report series, together with new dose coefficients and data for the interpretation of bioassay measurements.

OIR Part 1 provides description on control of occupational exposures, biokinetic and dosimetric models, monitoring methods, monitoring programs and retrospective dose assessment. OIR Parts 2 to 5 published from 2016 to 2022, provide data on about every individual element from the periodic table and their radioisotopes, including biokinetic data, biokinetic models, dose coefficients and retention functions.

### Genetic Biokinetic Model



### Members

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- Michael R. Bailey, United Kingdom
- Volodymyr Berkovskyy, RPI / NRCRM, Ukraine
- Luiz Bertelli, Los Alamos National Laboratory, USA
- Eric Blanchardon, IRSN, France
- Estelle Davesne, CEA, France
- Augusto Giussani, Federal Office for Radiation Protection (BfS), Germany
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- Derek Jokisch, Francis Marion University, USA
- Stephanie Lamart, IRSN, France
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- Maria Antonia Lopez, CIEMAT, Spain
- Dietmar Nosske, Germany
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- Caleigh Samuels, USA
- Tracy Smith, UKHSA, UK Health Security Agency, United Kingdom
- Camille Pacher (Technical Secretary), Canada

### On-going Work

In parallel to the efforts made for the provision of dose coefficients for the workers, the TG is currently revising the biokinetic and dosimetric models for the members of the public. The TG is currently adapting the models developed in the workers series to take into account specific chemical forms from the environment and different age groups. Similarly to the OIR Series, the TG will produce dose coefficients for an easy calculation of dose after intake at different age, including nursing infant, embryo and foetus. Data and models are going to be published in the report series: "Dose coefficients for intakes of radionuclides by members of the public", with the first report to be published at the beginning of 2024.

### For The Workers

**New OIR Series: 5 volumes from 2015 to 2022**  
ICRP Publications 130, 134, 137, 141, 151

- Coefficients and bioassay functions for about 1200 isotopes
- Inhalation, ingestion and injection
- Different chemical forms
- Particule size from 0,001  $\mu\text{m}$  to 20  $\mu\text{m}$
- Production of the app data viewer

