

BIOLOGICAL DOSIMETRY SERVICE FOR IONIZING RADIATION ACCIDENTAL EXPOSURE ASSESSMENT

Innovations and Benefits - Reconstruction of ionizing radiation absorbed dose for the identification of overexposed subjects by use of cytogenetic methods. Practical support for the early screening of subjects accidentally contaminated who require immediate care.

Uses - Assessment of accidental overexposure to ionizing radiation (radiological emergencies by occupational exposure or nuclear accidents) through biological dosimetry techniques. Long-term retrospective dose assessment.

Past and Present Activities - Biological Dosimetry Service at ENEA, a national reference center for ionizing radiation retrospective dose assessment until 2000. Participation to International cooperation Projects for the study of populations accidentally exposed to ionizing radiation due to nuclear disasters (Chernobyl, Southern Urals, Kazakhstan). Participation to the European project "RENEB" (Realizing the European Network of Biodosimetry) for the creation of a European Biological Dosimetry network to be activated in case of large scale radiological emergencies. Participation to the WHO International Biological Dosimetry network "BioDoseNet". Collaboration activities are underway within the European Group of Radiation Dosimetry EURADOS, involving more than 50 European institutions.

