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Nota di contenuto	""Preface""; ""Contents""; ""Executive Summary""; ""Purpose and Rationale""; ""Goals""; ""Synopsis of this Report""; ""Synopsis of this Reporta€?s Conclusions and Recommendations""; ""Conclusions""; ""Recommendations""; ""1. Introduction""; ""1.1 Historic Overview""; ""1.1.1 Radioiodine Production and Use in the Study of Thyroid Physiology""; ""1.1.2 Use of Radioiodine in Medical Treatment""; ""1.1.3 Radiation Effects on the Thyroid Observed in Patients""; ""1.1.4 Radioiodine in the Environment""; ""1.2 Overview of this Report""; ""1.2.1 Thyroid and Parathyroid Glands"" ""1.2.2 Radiation Dosimetry and Dose Reconstruction""""""1.2.3 Radiation Effects""; ""1.2.4 Radiation Risk for Thyroid Neoplasms""; ""1.2.5 Screening for Thyroid Disease Following Radiation Exposure""; ""1.2.6 Conclusions and Recommendations""; ""1.2.7 Appendices""; ""2. Thyroid and Parathyroid Glands""; ""2.1 Anatomy and Physiology""; ""2.1.1 Anatomy""; ""2.1.2 Physiology""; ""2.2 Diseases of the Thyroid and Parathyroid Glands""; ""2.2.1 Benign Thyroid Nodules""; ""2.2.2 Thyroid Cancer""; ""2.2.3 Functional Diseases""; ""2.3 Medical Uses of Radiation"" ""2.3.1 External Beam Radiation Therapy Exposures of the Thyroid""""""2.3.2 Diagnostic Use of Radioactive Tracers in the Thyroid""; ""2.3.3 Radioactive Iodine Therapy""; ""2.3.4 Thyroid Dose from Radioactive

Iodine""; ""2.4 Thyroid Genomics""; ""2.4.1 DNA Damage and Cellular Response""; ""2.4.2 Molecular Biology Techniques""; ""3. Radiation Dosimetry and Dose Reconstruction""; ""3.1 Specification of Dose in Principle and in Practice""; ""3.1.1 Specification of Dose: Ideal""; ""3.1.2 Specification of Dose: Practical""; ""3.2 External Dose""; ""3.2.1 Medical External Radiation Exposure""
""3.2.2 External Radiation Exposure Associated with the Atomic Bombings of Hiroshima and Nagasaki""""3.3 Internal Dose""; ""3.3.1 Radioisotopes of Iodine""; ""3.3.2 Age-Dependent Thyroid Absorbed Doses from Radioisotopes of Iodine""; ""3.3.3 Environmental Dispersion of Radioiodine""; ""3.3.4 Potassium Iodide Blockade of Radioiodine Uptake in the Thyroid""; ""3.3.5 Limitations of the Radiobiological Significance of Iodine-129""; ""3.3.6 Spatial and Temporal Inhomogeneities in Intrathyroidal Radioiodine Distribution and Absorbed Dose""
""3.3.7 Dose Assessment of Major Environmental Releases of Radioiodines""""3.4 Radiation Dosimetry in Specific Epidemiological Studies of Radiogenic Thyroid Disease""; ""4. Radiation Effects""; ""4.1 Animal Data""; ""4.1.1 Experiments with Rodents""; ""4.1.2 Experiments in Larger Animals""; ""4.1.3 Experiments to Determine Relative Biological Effectiveness""; ""4.2 Types of Epidemiologic Studies""; ""4.2.1 Cohort Studies""; ""4.2.2 Case-Control Studies""; ""4.2.3 Clinical Screening Studies""; ""4.2.4 Ecological (Aggregate) Studies""
""4.3 Methodological Issues Regarding Studies of Radiation and Thyroid Tumors""