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Lung Cancer Development -- Genetic and Chromosomal Alterations in Lung Cancer -- CELLS FROM WHICH LUNG CANCERS DEVELOP. TYPES AND INCIDENCE OF LUNG CANCER IN URANIUM MINERS -- DISCUSSION -- REFERENCES -- 9 The Committee's Dosimetric Model for Radon and Thoron Progeny -- INTRODUCTION -- DOSIMETRIC ASSUMPTIONS AND MODEL -- CLEARANCE MODEL -- DEPOSITION MODEL -- NASAL AND ORAL FILTRATION -- Definition of Exposure and Reference Breathing Rates -- Contributions of Individual Radon Progeny to the WLM -- Contributions of Individual Thoron Progeny to the WLM -- Reference Breathing Rates -- Exposure-Dose Conversion Coefficients -- Influence of Aerosol Size, Clearance Behavior, and Target Cells -- Influence of Exercise -- Influence of Age and Gender -- Influence of Airway Disease -- REFERENCES -- Index.

Sommario/riassunto

Studies of underground miners have provided a wealth of data about the risk of lung cancer from exposure to radon's progeny elements, but the application of the miner data to the home environment is not straightforward. In Comparative Dosimetry of Radon in Mines and Homes , an expert committee uses a new dosimetric model to extrapolate to the home environment the risk relationships found in the miner studies. Important new scaling factors are developed for applying risk estimates based on miner data to men, women, and children in domestic environments. The book includes discussions of radon dosimetry and the uncertainties concerning other risk factors such as age and smoking habits. The book also contains a thorough technical discussion of the characteristics of radioactive aerosols in domestic environments, the dose of inhaled radon progeny to different age groups, identification of respiratory tract cells at the greatest risk of carcinogenesis, and a complete description of the new lung dose model being developed by the International Commission on Radiological Protection as modified by this committee.