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""3.3 Evidence of Variation in Radiation Sensitivity and Susceptibility to Effects of Principal Concern""""3.3.1 Evidence of Genetic Variation in Radiation Sensitivity from Cellular and Molecular Research""; ""3.3.2 Evidence for Variation in Radiation Sensitivity from Animal Studies""; ""3.3.3 Evidence of Variation in Radiation Sensitivity from Human Studies""; ""3.3.4 Genetic Sources of Variation in Cancer Susceptibility""; ""3.3.5 Impact of Genetic Variation on Radiation Risk""; ""3.3.6 Congenital Sources of Variation in Cancer Susceptibility""
""3.3.7 Special Considerations for Astronauts""""3.3.8 Key Issues""; ""4. Predicting Cancer Risks from Previous Radiation or Chemotherapy Treatments""; ""4.1 Introduction""; ""4.2 Second Cancers After Radiation Therapy""; ""4.2.1 Carcinogenic Effects of Radiation""; ""4.2.2 Factors Affecting Risk of Second Malignancy""; ""4.3 Risk of Radiation-Induced Malignancies""; ""4.3.1 Radiation-Induced Leukemia""; ""4.3.2 Radiation-Induced Solid Tumors""; ""4.4 Characteristics of Medical Radiation Exposures""; ""4.4.1 Radiation Dose""; ""4.4.2 Radiation Treatment Planning and Delivery""
""4.5 Interactions Between Chemotherapy and Radiation: Impact on Cancer Risk""

Sommario/riassunto

This Report was prepared to evaluate the potential impact of individual genetic susceptibility and previous radiation exposures on radiation associated health risks for astronauts during their lifetimes following space missions. The Report also evaluates whether either of these factors needs to be included in the radiation protection program for astronauts.
