

***Dosimetric and biomedical studies
conducted in Cuba of children from
areas of the former USSR
affected by the
radiological consequences of the
Chernobyl accident***



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DOSIMETRIC AND BIOMEDICAL STUDIES CONDUCTED IN CUBA
OF CHILDREN FROM AREAS OF THE FORMER USSR
AFFECTED BY THE RADIOLOGICAL CONSEQUENCES OF THE
CHERNOBYL ACCIDENT

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FOREWORD

As a result of the accident at Chernobyl nuclear power plant in April 1986, large areas of Belarus, the Russian Federation and Ukraine were contaminated by radioactive fallout. The unprecedented environmental consequences gave rise to widespread concern and debate about possible effects on the health of people in the affected territories.

At the end of the 1980s, social organizations of the USSR requested co-operation from the world's scientific community in providing medical care for people from the areas affected by the accident. In March 1990 the Government of Cuba, in response to this appeal, initiated a comprehensive medical care programme to treat children from these areas. Dosimetric and biomedical studies were conducted by Cuban scientists, including: measurement of body content of caesium-137; estimation of internal, external, thyroid and total doses; and investigation of general health and of haematological, biochemical and cytogenetic indicators.

Several conferences have been convened by the international scientific community to discuss the findings of various projects that have focused on the Chernobyl accident and its aftermath. As part of these international efforts, the Cuban Ministry of Science, Technology and Environment, through its Centre for Radiation Protection and Hygiene, and with the co-operation of the IAEA, organized a Seminar on Cuban Studies of Children from Areas Affected by the Chernobyl Accident. At the Seminar, which was held on 14–17 November 1995 in Havana, Cuban experts presented information obtained from the dosimetric and biomedical investigations of children under the comprehensive medical care programme.

At the request of the IAEA, an international panel of experts attended the Seminar to conduct an independent peer review of the Cuban study, in particular the results of the dosimetric evaluation of the children. The panel of experts discussed with the Cuban authors the information presented at the Seminar and made a number of recommendations, in particular in relation to methods of estimation of doses. The present TECDOC includes the final Cuban report on the study, as revised and clarified in the light of the panel's recommendations. The panel of experts also prepared a statement of the peer review's main conclusions and recommendations, which is presented in this TECDOC before the Cuban report.

In April 1996, the IAEA held a Conference on One Decade after Chernobyl: Summing up the Consequences of the Accident. Two major objectives of the Conference were to agree on proven scientific facts and to clarify interpretations and prognoses in order to dispel confusion. The conclusions of several international and national projects, including the dosimetric and biomedical studies conducted in Cuba, were reported, documented and discussed at this gathering and integrated into a broad international consensus.

It is expected that the information presented here will contribute to an accurate evaluation of the health effects of the Chernobyl accident, and thereby help to consolidate knowledge and broaden understanding of the consequences of the accident, and permit the countries affected by them to develop well informed and balanced policies for their alleviation.

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