



WHO/OMS

WHO's Involvement in the Chernobyl Accident: Past and Present



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Chernobyl unit 4 after accident



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Consequences of the accident

- . 28 fire-fighters and staff at the reactor site killed and > 560 heavily exposed to radiation
- . > 400,000 clean-up workers exposed to radiation
- . > 270,000 living in areas of Belarus, Russia and Ukraine contaminated by radioactivity
- . > 116,000 people evacuated from heavily contaminated to safe areas
- . Stress from the accident and upheaval to lives causing psychological problems in many families
- . Many children exposed to radio-iodine (>2000 thyroid cancers in children)
- . Human and ecological disaster

Chronology of WHO actions

April 26, 1986	Chernobyl accident occurs
May 6, 1986	WHO/EURO convenes leading experts from 11 countries to assess possible consequences of accident
May 10, 1986	DG/WHO informs World Health Assembly of actions taken
June 1986	WHO meeting estimates doses to populations outside USSR
May 1987	WHO meeting to develop approaches for follow-up studies
Nov 1987	WHO meeting to analyse responses to the accident
June 1989	WHO experts visit affected areas in Belarus and Ukraine
Oct 1989	USSR asks IAEA for assistance >4 years after accident
Feb 1990	USSR asks WHO for assistance
1991-98	WHO develops and implements IPHECA (International Programme on the Health Effects of the Chernobyl Accident) following agreement with Soviet Govt in May 1991



WHO IPHECA Program: **International Project on Health Effects of** WHO/OMS **the Chernobyl Accident**

Donors:

Japan, Slovakia, Switzerland, Czech Republic

Major components of IPHECA Program:

- . Medical equipment and supplies (\$16m)**
- . Training of specialists abroad (200)**
- . Meetings for protocol development and follow-up**
- . Scientific journal subscriptions and literature**
- . Assistance with health monitoring and data collection**
- . Support of scientific studies and publication of results**
- . Co-ordination of project**

WHO IPHECA Program

1991-95 first stage projects

Assist national health authorities:

- improve diagnosis, treatment and health care (270,000 people monitored for leukaemia, 55,000 children monitored for thyroid cancer)
- establish national registries (80,000 records related to health status) for the conduct of epidemiological studies
- examine 2,200 children exposed *in utero* for brain function

1995-98 second stage projects

Epidemiological and medical monitoring of clean-up workers, improve early diagnosis and treatment of childhood thyroid cancer, and reconstruction of doses received from accident

WHO Projects after 1998



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- . **Medical relief for children affected by the Chernobyl accident through telemedicine (with Sasakawa Memorial Health Foundation in Japan and Ministry of Health in Belarus). \$1Million**
- . **Thyroid tissue, nucleic acid and data banks (With EC, SMHF, NCI (USA), Russia, Belarus and Ukraine). \$700,000**
- . **Ultrasound screening of 100,000 children and adults in Russia for early diagnosis of thyroid diseases (with UN/OCHA). \$120,000**
- . **Diagnosis and treatment of thyroid carcinoma, leukaemia and lymphomas in children and teenagers (With UNDP Office in Kiev and UN/OCHA). \$320,000**
- . **Individual dosimetry study in Zaborie, Russia, (With Institute of Radiation Protection, Paris). \$36,000**

WHO Lessons from Chernobyl (1)



WHO needed to have a better emergency medical response to radiation accidents:

WHO created the Radiation Emergency Response and Assistance Network (REMPAN); a network of collaborating centres and liaison institutions with medical specialists that can provide emergency medical assistance anywhere in the world that there is a serious radiation accident.

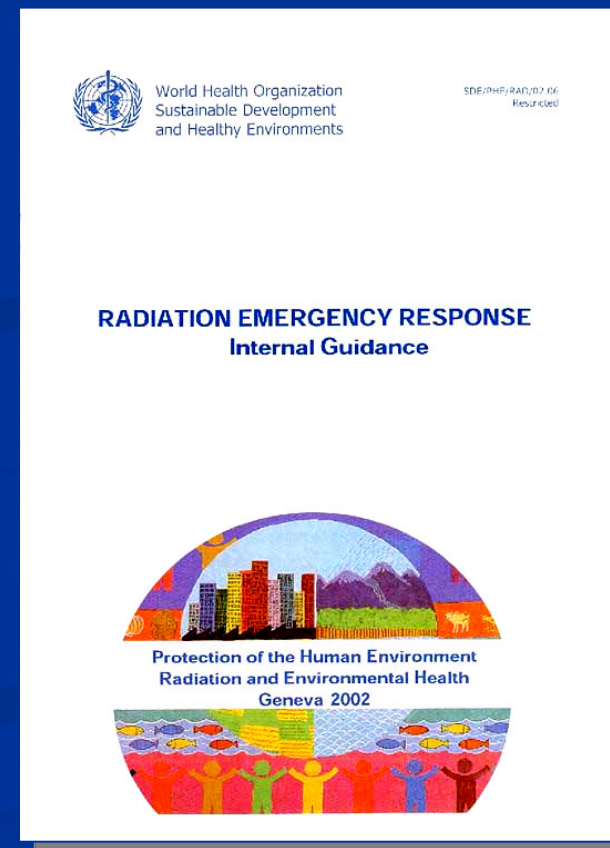
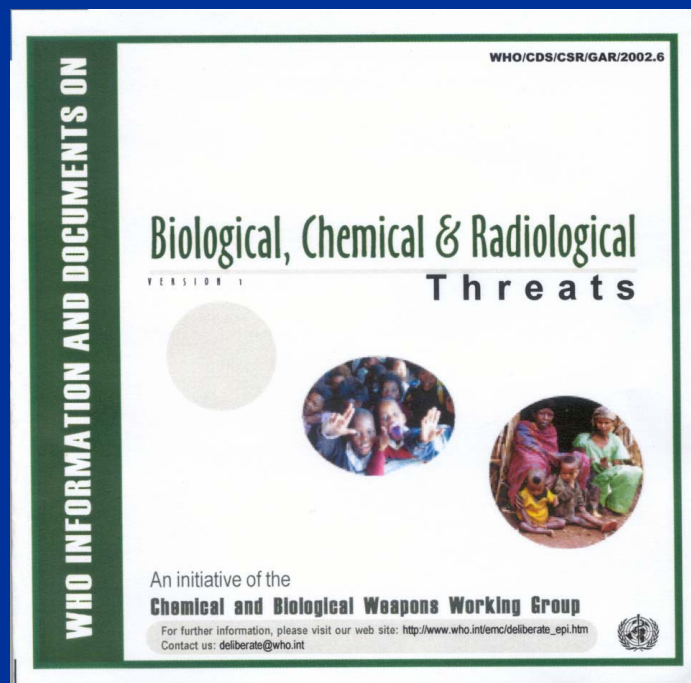
WHO Lessons from Chernobyl (2)



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WHO needed a clear internal mechanism for emergency response and a centralised facility for 24-hour response to radiation, biological and chemical emergencies

WHO Global Alert and Response Unit



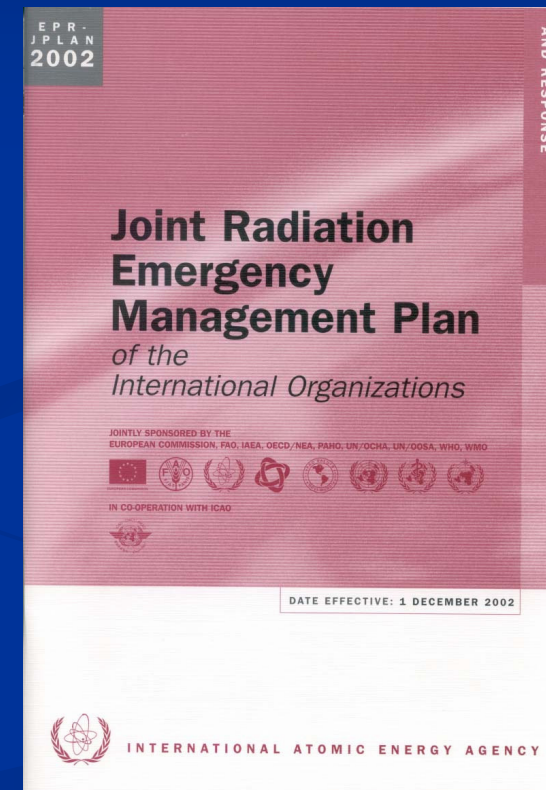
WHO Lessons from Chernobyl (3)



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Public health measures need to be in place at UN Agency and country level:

- IAEA in collaboration with WHO and its UN partners has established an interagency committee and identified clear responsibilities of each agency for when the next accident occurs
- IAEA and WHO are working with countries to develop the infrastructure and operational requirement for good public health response to radiation accidents



WHO Lessons from Chernobyl (4)

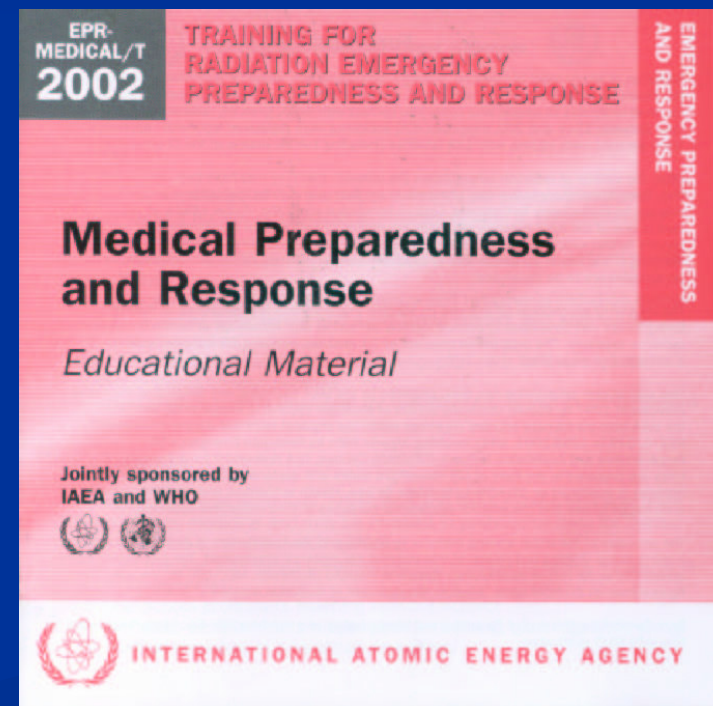


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Medical treatment of radiation exposed victims needs improving; Physicians normally do not see patients with radiation injuries

WHO in collaboration with the IAEA has established training courses for physicians for recognition, diagnosis and treatment of radiation injuries

Conducted regularly at regional and country level. Internet training courses are now being proposed through the use of telemedicine



UN Chernobyl Forum Initiative



- . Feb 2002 UN report “Human Consequences of the Chernobyl Nuclear Accident - A Strategy for Recovery”**
- . Planning and strategy meetings in New York, Geneva, Vienna**
- . June 2003 Launch of International Chernobyl Forum by UN OCHA, WHO, UNDP, with the Secretariat at the IAEA**
- . Dec 2003 Fifty-eighth session of UN General Assembly, Agenda item 40 (c) Approved “....strengthening of international cooperation and co-ordination of efforts to study, mitigate and minimize the consequences of the Chernobyl disaster”**



UN Chernobyl Forum Initiative

WHO involvement

WHO responsible for identifying health effects and promoting research through its'

- ongoing inventory of health effects research**
- series of experts meetings on research of the Chernobyl health effects -- over 2003-2004**
- reports on assessment of health impact of the accident and recommendations for Governments**

WHO provides representation on key administrative and scientific committees

International Chernobyl Research and Information Network (ICRIN)



WHO is participating with UN OCHA, UNDP, IAEA, Red Cross and other international and national NGO's and agencies in ICRIN (launched in 2003 with support of the Swiss Government)

Objectives:

- . Provide information to people and communities, in their own language, summarizing known health and environmental consequences of the Chernobyl accident and what information is still needed**
- . Respond to requests for information by people or communities affected by the accident**
- . Empower people to get on with their lives instead of living in fear about what the consequences of their radiation exposure might be to themselves or their children.**

More info at: www.chernobyl.info