

# **PRACTICAL COOPERATION**

**NOTIFICATION**

**INFORMATIONS ON ACCIDENT**

**PREPAREDNESS**

**PLANS FOR DIAGNOSIS**

**INTERVENTION**

**ACTIONS FOR TREATMENT**

**REPARATION**

**FOLLOW-UP OF VICTIMS**

**EDUCATION**

**TRAINING OF STAFFS**

**RESEARCH**

**EXPERIMENTAL AND CLINICAL**

# **CONTRIBUTIONS WORLD HEALTH ORGANIZATION**

## **INTERNATIONAL COOPERATION**

- APPLICATION OF INTERSTATES CONVENTIONS
- ACTIONS WITH IAEA, ILO, FAO . . .

## **PARTICULAR RESPONSABILITY**

- MEDICAL ASPECTS OF RADIATION EMERGENCY OR ACCIDENT
- MEDICAL PREPAREDNESS AND ASSISTANCE

## **ORGANIZATION OF NETWORK**

- NETWORK OF WHO COLLABORATING CENTRES
- PROCEDURE FOR MEDICAL ASSISTANCE

# WHO COLLABORATING CENTRE

## TERMS OF REFERENCE :

**1** TO SERVE AS FOCAL POINTS FOR ADVICE AND POSSIBLE MEDICAL CARE IN CASES OF HUMAN RADIATION INJURIES.

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**2** TO FACILITATE THE PROGRESSIVE ESTABLISHMENT OF A NETWORK OF EQUIPMENT AND SPECIALIZED STAFF IN HUMAN RADIOPATHOLOGY.

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**3** TO ASSIST IN THE ESTABLISHMENT OF MEDICAL EMERGENCY PLANS FOR THE EVENT OF LARGE-SCALE RADIATION ACCIDENTS.

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**4** TO DEVELOP AND CARRY OUT COORDINATED STUDIES ON HUMAN RADIOPATHOLOGY AND EPIDEMIOLOGY STUDIES.

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**5** TO DEVELOP AND CARRY OUT COORDINATED PROGRAMS ON QUANTITATIVE EVALUATION OF THE RADIATION "DETRIMENT";

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**6** TO ASSIST IN THE PREPARATION OF RELEVANT DOCUMENTS AND GUIDELINES.

# **WHO COLLABORATING CENTRE**

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**IN THE CASE OF REAL RADIATION ACCIDENTS,  
INTERVENTION OF THE CIR, WHO COLLABORATING CENTRE :**

- **A TEAM FOR ON-SITE EMERGENCY TREATMENT**
- **A SURVEY TEAM FOR RAPID EXTERNAL RADIATION AND/OR CONTAMINATION SURVEYS WITH APPROPRIATE EQUIPMENT**
- **TRANSPORTATION OF PATIENTS**
- **FACILITIES FOR MEDICAL INVESTIGATION AND TREATMENT**
- **FOLLOW-UP MEDICAL SUPERVISION AND TREATMENT**

## **8. CCMRP - Collaborating Centre for Medical Radiation Pathology (St. Petersburg, Russian Federation, Head - Dr V.E. Komar)**

The CCMRP designated in 1986 is based upon the Central Research Institute for Roentgenology and Radiology, Russian Academy of Medical Sciences.

This Institute has accumulated a 30-year experience in radiation pathology. Its activities in radiation protection include the protection of population and patients, the introduction of new methods for treatment of radiation injuries, medical supervision for late effects, and, if necessary, treatment of persons after radiation accidents. The structure of the Institute is the following:

- Department of Radiological Services Organization
- Patent and Information Division
- Department of Radiological Diagnostics
  - Division for Standardization and Improvement of Radiodiagnosis
  - Division for Radiological Diagnostics of Digestive System Diseases
  - Division for Radiological Diagnostics of Broncho-Pulmonary System Diseases
  - Laboratory of Nuclear Medicine
  - Laboratory of Computer Analysis of Image
- Clinical Radiology Department
  - Proton Neurosurgery Division
  - Solid Tumours Radiotherapy Division
  - Systemic Diseases Radiotherapy Division
  - Gynaecological Radiotherapy Division
  - Laboratory of Pathology
- Department of X-ray Endovascular Endoscopy and Operative Surgery
  - Division of X-ray Endovascular Endoscopy and Operative Surgery
  - Division of X-ray Endovascular and Operative Urology
- Medical Radiobiology Department
  - Laboratory of Radiation Injuries Diagnosis
  - Laboratory of Late Radiation Pathology
  - Laboratory of Cancer Therapy Radiobiology
  - Radiation Pharmacology Laboratory
  - Molecular Radiobiology Laboratory
  - Laboratory of Radiation Genetics
  - Laboratory of Biomathematics
- Medical Biotechnology Department
  - Laboratory of Preparative Biotechnology for Radiation Diagnosis and Therapy
  - Hybridoma Technology Laboratory
- \*Medical Radiation Physics Department

- Dosimetry Services Basic Laboratory
- Radiotherapeutical Technique Division
- Medical Physics Laboratory
- Radionuclide Technology Laboratory

The activities of the CCMRP are concentrated on the development of quantitative approaches in diagnosis, prognosis and treatment of radiation injuries (acute and chronic radiation injury as well as late effects of low doses of radiation).

The CCMRP terms of reference are the following:

### **In General**

- serve as a focal point for advice and medical care in cases of radiation emergencies;
- assist in elaborating plans of medical preparedness for radiation emergencies;
- participate in coordinated studies on human radiopathology and radiation epidemiology;
- support WHO activities in the training of medical personnel for the medical handling of radiation emergencies;
- take part in international meetings, especially organized by WHO on the problems of overexposure and to contribute to producing guidelines in this area;
- collect and evaluate worldwide information on diagnosis and treatment of radiation injuries;
- exchange experience and information as well as to coordinate its activities with other WHO Collaborating Centres in the medical handling of radiation emergencies.

### **In Particular**

Develop quantitative techniques for:

- the most plausible and quick prognosis of radiation injuries;
- assessment of effectiveness of diagnostic and therapeutic measures;
- simulation and interpretation of radiation-induced processes;
- evaluation of public health actions for protection of the population in the case of radiation accidents.

### **In case of radiation accidents**

To provide, if agreed in advance by bilateral regulations:

- an on-site emergency team
- admission of foreign patients for medical investigation and treatment
- follow-up medical supervision and treatment.

During the last two years, one of the main objectives of the Centre was the provision of logistic and administrative support for international cooperation of Russian institutions with organizations abroad interested in Chernobyl studies. Agreements on bilateral and international cooperation have been discussed and plans of actions developed. The exchange of experience on handling of radiation accidents was very successful, especially in the field of organization of environmental monitoring, epidemiological projects, late effects risk assessment, psychological problems in the population of affected areas.

A representative of the Centre took part in the elaboration of the WHO International Programme on the Health Effects of the Chernobyl Accident.

Inside Russia, the most important task of the Centre was cooperation with various research organizations and public health services to collect and disseminate information and participate in various missions, inspections and meetings. The Centre cooperates with the Institute of Biophysics which is the leading institution in the assessment of health risk for the population, treatment of acute radiation injuries, establishment of guidelines and recommendations for medical supervision of workers and the population. The Institute also closely cooperates with the National Radiation Protection Commission, the Institute of Medical Radiology (Obninsk), the Institute of Radiation Hygiene (St Petersburg) and the Institute of the Marine Transport Hygiene (St Petersburg) which is responsible for radiation protection supervision of nuclear ice breakers and nuclear power plants. The system of close cooperation of all the above-mentioned institutions provides the opportunity for establishing interdiscipline projects, intervention and inspection teams and emergency planning activities.

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