

# **CHERNOBYL HUMANITARIAN ASSISTANCE AND REHABILITATION PROGRAMME**

26 September 1996

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*situation report no. 02*

*period covered: 1 February - 15 September 1996*

*The Federation will shortly be seeking further funding for this programme, in order to expand screening of children for thyroid gland cancer and increase psycho-social support for populations living in contaminated areas. Screening by the Mobile Diagnostic Laboratories of the programme has contributed to identifying a huge increase in this cancer among children, directly attributable to the Chernobyl nuclear accident. If detected in time, most cases can be effectively treated.*

## ***The context***

Red Cross assistance to populations affected by the Chernobyl nuclear accident began shortly after 26th April 1986, when the explosion of the fourth reactor at the Chernobyl Nuclear Power Plant (CNPP) in Ukraine spread radionuclides around the world and deposited radioactive particles on large areas of northern Ukraine, southern and eastern Belarus and western Russia. Initially, it provided assistance to people who were relocated from the towns and villages around the reactor itself. Today, 10 years on, the Red Cross is still helping to alleviate the suffering of those who live on land contaminated by the world's worst civil nuclear disaster -- by providing medical screening in remote areas, in some cases for the first time since the disaster.

In 1990, the Soviet Alliance of Red Cross and Red Crescent Societies appealed to the International Federation for assistance. The initial programme aimed at providing information to the local population through the testing of background and surface contamination. In 1992 the present programme commenced, with the placement of six Mobile Diagnostic Laboratories (MDLs) in six contaminated Oblasts -- two each in Ukraine, Belarus and Western Russia.

The MDLs carry a Whole Body Monitor that examines internal irradiation caused by the consumption of contaminated food; ultrasound equipment to examine the thyroid gland and internal organs; and blood and urine analysers. In addition dosimeters and food monitors provide information on background and surface contamination, as well as on contamination of food supplies. A booklet entitled "*Radiation and Nutrition*" is distributed which gives advice on how to reduce contamination from food. The MDLs are staffed by up to eight people each who spend ten months a year in rural communities providing medical examinations and referrals for further consultations or treatment.

The Red Cross programme is unique in that it takes the service to the population -- particularly in remote areas. It provides instant medical information and referrals, and it is available to both adults and children.

In today's deteriorating economy communities are increasingly reverting to their traditional eating habits and in particular to consuming so-called "gifts of the forest" -- berries, mushrooms and wild boar -- all of which can be contaminated by Caesium 137. Although there is to date no scientific proof that the internal irradiation resulting from this diet causes health problems, in certain areas the MDLs find a direct correlation between tests on food which show results higher than the standard norms, and results from the Whole Body Monitor where people register an internal dose of Caesium 137.

### **Thyroid gland cancer**

There is, however, one illness which is directly related to the Chernobyl Accident: the tremendous increase in thyroid gland cancer among children. The accident released the short lived isotope, Iodine 131, in huge quantities. This isotope collects in the thyroid gland within minutes, and even faster in these regions depleted of stable iodine. Although an immediate intake of stable iodine will prevent damage, official secrecy and a lack of reaction by the local authorities meant that this course of treatment/prevention was not made available to the population. An intake of radioactive iodine seriously affects those whose organism is still growing and this is now reflected in the increase of thyroid gland cancers in children between 9 and 13-14 years old, who were exposed to the isotope in 1986.

## ***Latest events***

Since the start of the programme in 1992, over 200,000 people have been screened by the six MDLs and in the last three years milk powder and multivitamins have been distributed, through the educational system, to children living in contaminated areas. In 1995, over 300,000 children benefited from this clean food and vitaminisation. In 1996, over 30 tons of milk powder and 7 million multivitamin and micro-nutrients tablets will be distributed to children living in rural areas in the six Oblasts.

In the first six months of 1996, almost 33,000 adults and children were screened - over half of whom were defined as ill. Compared to the same period in 1995, the incidence of illness has risen from 48.8% to 58%. Many people have been diagnosed with more than one illness. A total of 6,918 people - or almost a quarter of those seen - were referred for further consultation or treatment during the six month period.

Although many of the illnesses can be attributed to poor diet resulting from the deteriorating economy, and the decline in health care in the three countries, the one pathology directly related to the Chernobyl accident is thyroid gland cancer. Although the number of tumours detected is minimal the sharp increase (more than one hundred times in some areas) is extremely alarming. The number of cases of nodular goitre - behind which may lie the hidden diagnosis of cancer and all of which must be referred by the MDL staff for further examination and treatment -- is also increasing. If detected early, thyroid gland cancer can be effectively treated in more than ninety per cent of cases.

Following evaluations of the programme undertaken independently by both the Federation and ECHO, a Plan of Action was drawn up making recommendations for the future of the programme. These recommendations include an expansion of the screening of the thyroid gland in children, using new lighter vehicles which, without the Whole Body Monitor, will be more cost effective; a continuation of the provision of clean food (milk powder), vitamins and micro-nutrients; and the development of a psycho-social programme to assist communities cope with the every-day stress of living on contaminated land.

In August 1996 this Plan of Action was accepted by the International Chernobyl Co-ordination Committee which is comprised of representatives of the Belarus, Ukrainian and Russian Red Cross Societies and the Federation. In addition the Committee made a commitment to increase the National Societies' contributions to the support of the Programme during the next five years.

The experience gained by the staff of the Laboratories will be invaluable in the event of any future nuclear accident and the plan of action provides for keeping the "old" MDLs in working order. There are many nuclear reactors in the CIS similar to those of the CNPP and frequent press reports of low contamination accidents.

## *Outstanding needs*

The Federation is now preparing to revise the appeal issued in the Emergency Appeal 1996, in order to cover the costs of introducing the new Plan of Action. Funds will be needed to purchase six new Mobile Diagnostic Laboratories - light vehicles capable of carrying both staff and medical equipment. The medical equipment will consist of ultra sound scanners, and blood and urine analysers. In addition, during the transition period the old MDLs will continue to work until replaced in order to provide continuity of service.

The revised appeal will also include funding for staff costs during the first year of operation and for the assessment and pilot project of the psycho-social programme.

## *Conclusion*

In 1996, two positive evaluations of the Red Cross Chernobyl Programme stressed the importance of maintaining and increasing screening, particularly of children living in highly contaminated areas. This is also supported by scientific studies presented at international conferences (European Union, Minsk; International Atomic Energy Agency, Vienna), showing that thyroid gland cancer is directly related to the Chernobyl accident.

Although many organisations undertake scientific research on the effects of the Chernobyl accident, the Red Cross programme and its humanitarian role is the only one to help the vulnerable and provide immediate assistance.

The Red Cross has gained a huge amount of experience over the last four and a half years and won respect among the population by providing reliable and accurate information. The present low response from donors to the 1996 Appeal is threatening the continuation of the programme and its reorientation (including the handover). We hope donors will give special attention to the forthcoming revised appeal and urge them to begin preparing to support the Federation's continuing efforts to address the long-term needs created by this first major tragedy of the modern technological world.

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