

Session B, Track 2:
Social and Humanitarian Issues Following a
Radiological Accident

Wednesday, September 9, 1998
2:05 a.m. - 4:20 p.m.

Chair: Marcia Carpentier, United States Environmental Protection Agency

Red Cross Programme Responding to Humanitarian Needs in Nuclear Disaster

Dr. Jean-Pierre Revel

Senior Officer, Relief Health Service

INTRODUCTION

Large scale nuclear disasters are fortunately very rare. So far, international humanitarian assistance has been requested in only one case, following the explosion in reactor N 4 at the Chernobyl Nuclear Power Plant (CNPP) in Ukraine on the 26th April 1986. Apart from the immediate and better known emergency effects, the world took some time to discover the extent of the damages on the environment. It took even longer to assess the consequences on affected populations. Cross border effects, large number of population affected spread over three countries and limited information on the long term consequences are only but a few of the constraints faced by humanitarian organisations in the aftermath of that disaster. The International Federation of Red Cross and Red Crescent Societies (hereafter called the "Federation") has developed a unique programme aiming at meeting the humanitarian needs in affected communities. The following is a review of this programme, its background, its activities and the lessons learnt and to be shared with the entire humanitarian community.

DISCUSSION

Historical Background

Immediately after the Chernobyl disaster became known, the Red Cross National Societies (NSs) and the Government authorities of the three affected Soviet Republics of Ukraine, Belarus and Russia were involved in the provision of immediate relief to the affected population. This was carried out under the umbrella of the Alliance of Red Cross and Red Crescent Societies of Soviet Union.

In 1990, following a request for additional international assistance, the Federation sent a needs assessment mission to look at possible humanitarian intervention. The mission reported that a lot of information was missing concerning the levels of radioactivity as well as on the possible health effects on people living in contaminated areas. The first programme was designed which included use of hand held dosimeters distributed to people in villages in the most contaminated areas.

In 1992, the Red Cross Chernobyl Humanitarian Assistance and Rehabilitation Programme (CHARP) second step was launched with the introduction of 6 Mobile Diagnostic Laboratory (MDL) vehicles, two for each affected republic. The aim was to collect information at the community level in the most remote villages and provide immediate feedback to people. Health

status of local populations was checked and levels of radioactivity were measured both in human beings and in the environment. In most cases, results were found to be within acceptable limits set by the governments. In 1994, ultrasonic scan for detection of thyroid gland cancer was added to the programme's activities.

The "New" CHARP

In 1996, following the second evaluation of the programme, it was decided to adapt and reshape CHARP to better meet the needs of affected populations. The following adaptations were recommended:

- a) Measurement of radioactivity was restricted only to gamma radiation in most contaminated areas. Measurements of alpha and beta radiation in the environment were discontinued since four years of experience had not shown dramatic increase in the levels measured. Whole body monitoring to assess the internal accumulated radioactivity in persons was discontinued. It was relying on heavy and expensive equipment and this modification allowed use of lighter vehicles. Monitoring of radioactivity in food items was also discontinued in the MDL's. It remained in a few places only (Red Cross dispensaries) as an extraordinary service. The MDL's health screening by medical doctors as well as blood and urine examinations were also continued. Particular attention was paid to the teenagers and those who were children at the time of the accident.
- b) Prioritised detection of thyroid gland cancer through enhanced capacity in the MDL's: more sophisticated equipment and better trained personnel. The reported increase in the number of this type of cancer in children appeared to be the major health consequence of the disaster (See table for Belarus, next page). The target population was now focused on children and teenagers (as the group most at risk consists of children who were between 0 and 2 years of age at the time of the accident, in 1986) and screen 90,000 people per year, an increase of 50% from 60,000 previously. The health screening is still backed up with a full medical check up and blood and urine laboratory tests.
- c) Distribution of non contaminated food items (milk powder and vitamins plus micronutrients) to specific target groups (children in institutions) continues. For most of these children, this food supplement is the only source of non contaminated animal proteins and vitamins during the winter and part of the spring each year.
- d) The fourth recommendation was to develop a psycho-social rehabilitation programme so as to meet the psychological needs of the affected population. At large, these needs were unmet (and sometimes not even recognised), and required careful attention as they prevent effective rehabilitation from taking place. The development of a pilot project in Belarus took place, centred around the already existing network of Red Cross branches and MDL's. Through dissemination of simple, reliable and understandable information made by specially trained volunteers and personnel, it is expected to reduce the anxiety of the targeted populations.

e) [To increase the sustainability in each national part of the programme was put forward as essential.] It is currently addressed by the National Societies of the three affected republics, now fully independent countries.

Collected data is computerised and shared with relevant authorities in the three countries, mainly Ministries of Health. Even though it may appear to be a sophisticated programme, CHARP is a humanitarian programme, aiming at improving quality of life in affected population, and neither a scientific nor research exercise. Close co-operation with scientific and technical communities as well as establishment of good relationship with International Organisations such as WHO, UN/OCHA, IAEA and UNESCO, are important in order to establish and further develop the programme's credibility.

Achievements

Twelve years after the explosion in CNPP, the need to continue humanitarian assistance is more obvious than ever. Despite that the only major health consequence detected so far is the dramatic increase in the number of thyroid cancer cases, all health consequences remain yet to be fully assessed.

The psychological impact of the disaster overtakes by far the physical consequences. The Federation Programme is one among the very few that addresses those needs. It requires both a careful and long term approach as there are great needs to be met, especially to restore confidence in the affected populations. During its seven years of activity, CHARP has gained credibility and recognition amongst the affected communities and this made the acceptability of the psycho-social rehabilitation pilot project much easier as people trust the Red Cross programme.

The socio-political disturbances that followed the disintegration of the former Soviet Union dramatically increased the negative health impact of the disaster as most health care services became rudimentary, especially in remote areas. It left people in a bad position to deal with any disease or ailment. The level of distrust developed against authorities is such that rehabilitation will take decades. Programmes, such as the Federation one, helps to accelerate the process, demonstrating the possibility for affected communities to regain self confidence and to decide on their future.

CONCLUSION

The effects of technological disasters require careful exploration using new and innovative approaches to detect, identify and manage health consequences. Characteristics such as cross border effects and long term consequences are obvious today. For example, first reports about thyroid gland cancer increase appeared more than 5 years after the disaster and when the most suspected causative agent, radioactive iodine, had completely disappeared from the environment.

International Radiological Post-Emergency Response Issues Conference

For humanitarian organisations, the management of such type of disasters requires development of new skills. Links with both scientific and technical communities have to be established and further developed in order to provide the most appropriate response on the one hand and to re-enforce the organisation's credibility, on the other hand.

The time frame is also different compared with other humanitarian activities. Long term perspective is required and political as well as financial long term commitments are needed so as to ensure adequate response during all the phases of the post-disaster period.

Given the potential for other disasters of the same type, it is critical that humanitarian organisations draw lessons from past experiences and get prepared for both action and advocacy. Since long term humanitarian needs are frequently overlooked in technological disasters and technical and economical aspects are given the priority, it is important that somebody highlights the humanitarian needs during longer periods and what exactly is needed in the affected communities.

**Constructing More Effective, Post-emergency Responses:
the Human Services Component**

Dr. Steven M. Becker

School of Social and Behavioral Sciences,
The University of Alabama at Birmingham

ABSTRACT

Recent studies and an accumulating body of experience have demonstrated that environmental accidents can have both short-term and long-term effects on the social, psychological and psychosocial well-being of people in affected communities. It has, therefore, become evident that there is a need for an expanded and more sophisticated human services component in post-emergency response, several factors, however, are hindering the development of this human services component. First, there is presently a lack of a formal role for human service professionals in most emergency and post-emergency response mechanisms. In coming years it will be important to better integrate human service professionals such as environmental sociologists, community psychologists and social workers into post-emergency planning and response bodies. Second, education and training related to environmental hazards has not yet been included in most human services training programs. While several programs have recently moved to incorporate material on environmental accidents into the curriculum, additional work in this area will need to be undertaken. Third, the exchange of information on human service assistance efforts after environmental emergencies has thus far been spotty. To facilitate systematic improvements in the human service component of post-emergency response, a better means for sharing experience and cumulating knowledge will need to be developed.