erage will only be determined through population-based surveys, and success can only be measured by good quality surveillance. However, this campaign does suggest that implementing an extended age range measles vaccination campaign on a nationwide scale during a complex emergency is possible.

Keywords: children; complex emergencies; measles; polio; surveys, populationbased; surveillance; vaccination

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Modern Organization of the Work of a Tuberculosis Field Hospital for Rendering Assistance in Refugee Settlements

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In the world, practical experience of the work of tuberculosis (TB) field hospitals in emergencies is absent, and the development of main organizational regulations on rendering TB assistance is very important. In the Ingushetia Republic, the All-Russian Centre for Disaster Medicine (ARCDM), "Zaschita," established a 100-bed TB field hospital for early detection and prevention of TB in refugee settlements in accordance with WHO requirements. Its purpose was to treat patients in specialized TB institutions and to provide temporary hospitalization of seriously ill patients awaiting transport to medical institutions. A special TB team worked in the refugee settlements on early detection and prevention. A mobile fluorography unit was used and TB mycobacteria expectoration was collected from suspicious TB patients.

More than 12,000 patients were examined. Among them, according to complex examination, more than 1,500 different TB forms were revealed. By the structure of clinical TB forms the following was revealed: hematogenic disseminated TB in 23% of cases; infiltrative TB - 31%; fibrocavernous - 13%; extrapulmonary - 5%. Treatment was carried out with the complex agent Myrin-P or more than four tuberculosis agents. Drug resistance to TB mycobacterium was noticed in 5% to 7% of cases; to overcome it mycobutin was used.

An analysis of tuberculosis assistance in refugee settlements showed the possibility of using field hospitals and the necessity of integration with TB institutions of other regions.

Keywords: All-Russian Centre for Disaster Medicine; ARCDM; refugee settlements; TB; tuberculosis

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Intervention in Measles Epidemics

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Introduction: Measles epidemics are dreaded, especially in developing countries where the disease has a far more serious course, and where the case fatality rate (CFR) is estimated at 3-4%. Even though a vaccination coverage of more than 70% has been achieved, the death toll is estimated to be 800,000–900,000 children yearly.

Methods: During an 18-month stay in the Yemen Arab Republic as Chief Medical Officer at Norwegian Save the Children's Mother and Child Clinic, four rural areas reported ongoing measles epidemics. A team of four members went to the remote and poorly accessible villages to vaccinate the healthy children in the surrounding villages, and to treat the sick.

Results: Approximately 3,000 children were vaccinated during these vaccination campaigns. Nearly none of the children had been vaccinated before. In one village, most of the children were sick, and during two days, 70 children were treated for pneumonia.

Conclusion: The most common cause of measles mortality is pneumonia, but few studies have documented higher mortality in children with malnutrition. Serious complications like precipitating kwashiorkor, deafness, and blindness are frequent. The observation that survival was increased and blindness reduced when giving vitamin A, resulted in the routine administration of vitamin A in the Expanded Programme of Immunisation (EPI+).

The Global Alert Response Network (GOARN), initiated by WHO in 2000, registers and monitors epidemics worldwide. The Network also provides interventions when indicated. Acute interventions with treatment of sick children and vaccination in surrounding villages, if accessible, is needed to reduce mortality and serious complications in measles epidemics.

Keywords: children; epidemics; Global Alert Response Network (GOARN); measles; pneumonia; response; vaccinations Prehosp Disast Med 2002;17(s2):s5.

The Confluence of HIV/AIDS and Tuberculosis in the Philippines: A Disaster Waiting to Happen

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The interaction of AIDS and tuberculosis (TB) is a matter of great concern for many developing countries such as the Philippines. Tuberculosis kills some 25,000 Filipinos each year. The Philippine Department of Health reports that 67.3% of Filipinos are infected with the disease. The World Health Organization has determined that the Philippines is one of the 10 countries in the world that has not been able to control the infection.

While the Philippines continue to record a low and slow HIV/AIDS prevalence rate with a total of 1,967 individuals said to be infected, most of the opportunistic infections that have been treated are infected with tuberculosis. At the San Lazaro Hospital (SLH), one of the facilities in which patients with AIDS are housed, 76.5% of the admitted patients also have TB. The UNAIDS, in its 2001 Report, claimed that incidence of TB has been growing steadily, and HIV infection is believed to be the culprit. This study was conducted to determine the ill-effects of the confluence of TB and HIV in the quality of life of people living with HIV/AIDS.

It sought to address the following objectives: (1) How has education and information dissemination among patients confined at the SLH changed their behaviour both to reduce the risk of being infected with or transmitting HIV and/or TB; and (2) Determine the level of patient compliance to Directly Observed Treatment Short Course (DOTS) for the management of TB.

Results: Sustained and continuing education on the perils of both AIDS and TB infections showed marked improvements in the lifestyle of the participants included in the survey. For instance, condoms were used by 74.4% of those who engaged in sexual intercourse during the last six months included in the study. Moreover, records of the hospital indicated that compliance to DOTS was at 83.5%. Conclusions: It is important that focused prevention activities and strong surveillance are keys to keeping the diseases of AIDS and TB under control and for preventing the need for costly intervention schemes. Otherwise, the combination of these two infections potentially can cause more problems to the country that it can handle.

Keywords: AIDS; behaviors; education; epidemic; HIV; interaction; prevention; tuberculosis; TB

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Task Force Session: Disaster Planning

Chair: Dr. Per Kulling
Director, Department of Emergency and Disaster Planning,
National Board of Health and Welfare, Stockholm, Sweden; Co-Chair, Wadem Task Force on Disaster Planning

New National Planning System in Crisis and Disaster Management in Sweden

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National Planning: Sweden has adopted a "Total Defence" strategy, which means that it places a high value in preparing for severe peacetime emergencies as well as for war. The Swedish Total Defence system consists of Military Defence, Civilian Defence, as well as Peacetime Emergency Preparedness. Planning within the Civilian Defence takes place in six co-ordination areas to which resources are allocated. The Swedish Emergency Management Agency is responsible for the overall co-ordination of the civilian planning system, and strives to ensure that an integrated approach is achieved and developed further.

Medical and Social Care: The National Board of Health and Welfare takes part in two of the co-ordination areas mentioned above. The National Board of Health and Welfare is a national authority under the Government. The main activities of the National Board of Health and Welfare regarding planning for crisis and disaster are: the establishment of national guidelines and supervision of standards in emergency and disaster medicine, social welfare, public health and prevention of infectious diseases; introduction of new principles, standards and equipment; and provision of financial support. The National Board of Health and Welfare receives a total budget for 2003 of approximately 160 million SEK, corresponding to approximately 18 million US\$, for its activities within the civilian defence.

Keywords: budget; coordination; disaster, funding; guidelines; planning; responsibilities; standards; Swedish National Board of Health and Welfare; Swedish Total Defence System

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Preparation of City Healthcare System for Response to an Earthquake — A Model

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Historically, Israel has experienced many earthquakes, some of them strong enough to cause large-scale disasters. The Syrian-African fault along the Jordan and Dead Sea Valleys was the center of most of the quakes in the region, and is still active. Future events of large magnitude are expected. The last major earthquake in Israel occurred in July 1927; more than 3,000 people were killed and some 1,000 homes were destroyed. The severe earthquake events in Turkey and Greece in 1999, caused the Israeli Government to recognize the need for preparation; until then almost nothing had been done to increase preparedness.

Survival is related directly to the length of time from the occurrence of the quake until extrication from under the rubble. Of all surviving casualties extricated, 85–95% were pulled from the rubble within 24 hours of the precipitating event. What has been learned from most of the past earthquakes is that only the local community can deal quickly and effectively with the rescue effort. States and communities should develop their own ability to reduce vulnerability when preparing for disasters.

This study suggests a model for the preparation of a city healthcare system for response to an earthquake. The study offers a five-stage model: (1) Preparation and prevention; (2) Immediate response; (3) First response; (4) Complement response; and (5) Rehabilitation. The boundary between them is determined by the damage degree, pace, and force of response. A simulation of the model was run on the new city of "Modein", Israel.

Keywords: damage; earthquakes; extrication; Israel; model; preparedness; response

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Disaster Prevention and Relief in Shanghai

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Urban disaster causes great damage to people's lives and properties. So it is important to prevent loss from taking place and rescue potential casualties. Disaster risks and response in Shanghai include the following:

Types and status of urban disasters:

- 1. Typhoon
- 2. Rainstorm
- 3. Tornado
- 4. Heavy fog
- 5. High temperature
- 6. Geology
- 7. Traffic accident
- 8. Fire accident
- 9. Occupational accident