

Disaster Prevention and Relief in Shanghai

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Urban disaster causes great damage to lives and property. So it is important to prevent it from taking place and to rescue casualties if it occurs. The authors describe urban disasters of Shanghai:

I. Main 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
10. Chemical accident
11. Disasters resulting from municipal facilities

II. Main characteristics of urban disasters

1. Variety
2. Complexity
3. Human factor
4. Enlargement

III. Main rescue troops of Shanghai

The special rescue teams of the municipal civil defense command

The special rescue units of districts

The diving rescue units at the levels of city and district

The building and rescue unit of Shanghai Construction

Group

The municipal rescue work station for nuclear and chemical accidents

The municipal center for disease prevention and control

The municipal monitoring office of environmental protection

The municipal hospital for occupational diseases

The municipal station for chemical hazards protection

The municipal center for gas emergency

The special rescue teams of the armed forces

The municipal emergency telecommunications unit

The emergency telecommunications unit of the municipal civil defense command

The municipal first aid medical center

IV. Organization and procedure of rescue work

Keywords: disaster, disaster response, urban disaster response

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Nuclear Reactor Emergencies: Iodine Prophylaxis. Is Community Pre-Distribution of Stable Iodine Tablets Always the Answer?

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Objective: To evaluate the efficacy of iodine prophylaxis during a nuclear reactor emergency, and debate the role of community pre-distribution of stable iodine tablets.

Method: Literature review and risk analysis of a specific site in Sydney, Australia.

Background: A low-power, medical research (HIFAR)

reactor (10MW) is sited in Sydney's south. The possibility of an emergency at the reactor is a source of significant community concern. Considerable debate has occurred about the need for pre-distribution of stable iodine tablets to the local community. This paper reviews the literature with regards to the need for stable iodine prophylaxis in the event of a nuclear emergency, and specifically reviews the circumstances around the HIFAR reactor in Sydney.

Results: (1) In the event of the release of ionizing radiation containing iodine radionucleotides, early stable iodine administration is important to reduce the risk of thyroid carcinoma, particularly in children and in pregnant women. (2) The efficacy of iodine administration to adults over 40 years of age is not certain. (3) The World Health Organization currently recommends iodine administration at 10mGy for children under 12 years and for pregnant women, and 100mGy for adults. (4) The profile of the HIFAR reactor demonstrates a very low risk of significant radiation release, even in the event of a terrorist attack. (5) Levels of radiation released in a worst-case scenario may require interventions in a small number of children and pregnant women, but the area likely to be affected is small. Adults in the community will not require intervention.

Conclusions: (1) Emergency plans should undertake specific risk assessments in regard to specific sites. (2) Developing emergency plans assuming all reactors are similar to Chernobyl is not appropriate; (3) In regard to the HIFAR reactor at Lucas Heights in Sydney, limited proactive evacuation and iodine administration at an evacuation center would seem more appropriate than pre-distribution and sheltering in place.

Keywords: children; evacuation; iodine, administration; nucleotides; plans; pregnancy; prophylaxis; radiation; reactor, nuclear; risk; terrorist
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Emergency Medical Education and Training Center

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Introduction: In the past several years, there has been an increasing interest in Emergency Medicine (EM) throughout the world. There has been institutional and private support from the United States and Europe to help develop EM throughout the rest of the world. Even though several countries have begun developing their own EM training programs and have had EM become a medical specialty, there have been no discussions on how to develop or partake in developing EM as a specialty. The steps involved in developing EM in China and the development of the Emergency Medical Education and Training Center (EMETC) will be described.

Methods: Officials from the Ministry of Public Health in China, Chaoyang Hospital, and the Center for International Emergency Medicine and Refugee Studies at Johns Hopkins University met in 2000-2001 to develop the EMETC that will be based in Beijing, China. The goal of EMETC is to develop emergency medicine as a specialty, and is the central training site for China. The EMETC