

dangerous processes. As a tool for risk analysis and management in the framework of disaster mitigation, Disaster Scenarios (DISC) together with a special DIMAK scale for measurement of any disaster are being developed in the KamCENDR since 1988. The DISC is created on base on: a) especially ordered GIS; b) matrix equations for estimation of damage that depend on multifactorial danger impact, damage formatting factors, worth and vulnerability of urbanization, daytime and season of the disaster; c) Methods of Expert-Logistic Estimation and System Analysis (MELESA).

Three levels of DISC are carried out: DISC-1, direct damage; DISC-2, multi-disaster; DISC-3, lifelines, survival and emergency readiness level.

The DIMAK-Scale is based on the fatalities (K) and on the losses (S), and uses as the principal integrated parameters: $F = K + 3S$, measured by "fates," or $L = S + 3K$ measured by "loss." "One fate" and "one loss" are adopted units of any disaster. It allows to assess and to compare the happened and predicted disasters. In the framework of DIMAK, the clear-cut definition of accident, disaster, catastrophe, scales, and comparative levels of disaster, etc. are developed and presented. The use of DIMAK for measuring various disasters is demonstrated in the special tables. The step-by-step DISC technique, application, and the losses estimation methodology are described. The corresponding software "ONEGA" also is applied.

045. Assessing the Impact of Flooding on the Delivery of Hospital Services in the Southeastern United States

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This study evaluates the impact of flooding on the delivery of hospital services during and following the summer 1994 floods in the Southeastern United States. Areas of concentration include the impact of the floods on continuation of patient care services, the extent of damage experienced, the levels of disaster planning conducted, and the readiness for disaster. Special emphasis was given to disaster planning and problems encountered in the area of information systems and data recovery.

A six-page mail survey was conducted of disaster preparation and the appropriateness of disaster planning in the 111 hospitals located in the 75 counties declared a "Federal Disaster Area." Thirty-nine surveys were returned (35.1% response rate), with the greatest level of response from Georgia (52%), the state most affected. Only 6% reported flooding within property lines. However, 21% reported structural damage and 26% said the flooding affected patient care access and care delivery. Three-fourths stated they had defined and planned for internal disasters. In retrospect, most (73%) felt their facility disaster plan was adequate for this situation, yet rated their community plan less adequate (63%). Seventeen percent had no community disaster plan. Medical information systems recovery plans were present only in 53% of the facilities.

This study describes current hospital disaster planning effectiveness in one region of the U.S. and makes recommendations for future research.

109. The Role of the Medical Advisor at HQ North

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This presentation will outline the contingency planning, assets, and logistics relating to the total defense concept in Norway. This involves the responses to crisis, disaster times of tension, and war. Additionally, personnel also are involved with humanitarian support of other countries, e.g., Bosnia. Reference will be made to the relationship between the national military-civil resources and additional augmentation available on an international scale. The presenter will draw on his 25 years of service and experience in this field, coupled with the recent completion of an MSC in Civil Emergency Management.

018. Continuous Training Program to Face Aircraft Accidents in the Ministro Pistarini Airport

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Objectives: To describe the continuous training program in disaster medicine carried out by Province of Buenos Aires Emergency Direction, Ezeiza Zonal Hospital, Airport Medical Department, Pistarini Medical Division, and the Operations Office both dependent on the Argentine Air Force.

Program Description: All the topics were presented in both the Airport and the Ezeiza Zonal Hospital. We tried to obtain the results that in case of an aircraft accident, the staff would be able to:

- a) Identify the correct sequence of priorities in disaster situations;
- b) Outline specific team role in different operative situations; and
- c) Demonstrate and perform suitable skills used in disaster management.

Since 1988 and following ICAO recommendations, 236 persons of the airport and hospital staff were trained during three years in six courses, each four months long. The second combined exercise in response to a hypothetical air crash within the boundaries of the airport was held June 1994. Meanwhile, two real events tested the organization: 1) August 1993, a Viasa DC-10 aircraft went off the runway during the landing operation; and 2) A British Airways jumbo jet aircraft flying with 260