### (A287) Who Regional Office for Europe - Health Systems Crisis Preparedness Assessment Tool

C.P. Bayer, G. Rockenschaub

Country Emergency Preparedness Programme, Copenhagen, Denmark

WHO Regional Office for Europe - Health Systems Crisis Preparedness Assessment Tool Bayer CP, Rockenschaub G.

Objectives: Health crises are often unpredictable and may occur at any place or time. Communities are particularly vulnerable when local and national systems, specifically health systems, are unable to cope with the consequences of a crisis, usually because they are overwhelmed by a sudden increase in demand or because the institutions that underpin them are fragile and cannot deliver what is required. The World Health Organization (WHO) Europe Health System Crisis Preparedness Assessment Tool aims to provide guidance to ministries of health and other relevant authorities on evaluation and strengthening of their health system's capacities for crisis management.

Methods: Based on an all hazard approach, an assessment tool was developed which comprises essential attributes considered vital for countries to meet the challenges of future health crises. The foundation of the tool derived from expert consultation workshops and pilot testing in eight countries in the WHO European Region.

Results: The tool lists essential attributes with respective indicators crucial for evaluating and identifying gaps in health system crisis preparedness. The assessment tool is structured according to the six building blocks of the WHO health system framework and is complemented by a user manual, allowing countries to apply a self–assessment approach. The tool is intended for use by ministries of health or other relevant institutions.

**Conclusions:** The tool may help determine the current status of health system crisis preparedness and facilitate the development of a prioritized plan of action that addresses any gaps identified. When used regularly the tool will help monitor progress.

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### (A288) World Health Organization Regional Office for Europe All-Hazard Hospital Emergency Preparedness Checklist

B. Sorensen, <sup>1</sup> C.P. Bayer, <sup>2</sup> R. Zane, <sup>1</sup> B. Wante, <sup>1</sup>

G. Rockenschaub<sup>2</sup>

- 1. Emergency Medicine, Boston, United States of America
- 2. Country Emergency Preparedness Programme, Copenhagen, Denmark

Objectives: Hospitals play a critical role in communities to provide essential medical care during all types of disaster. Depending on their scope and nature, disasters can lead to rapidly increasing service demand that can overwhelm the functional capacity and safety of hospitals and the health care system at large. The World Health Organization (WHO) Regional Office for Europe All-Hazard Hospital Emergency Preparedness Checklist aims to assist hospital administrators and disaster managers in preparing health facilities to respond effectively to the most likely disaster scenarios.

Methods: A checklist tool was developed that comprises current hospital-based emergency management principles and

techniques, and integrates applications specific to hospital preparedness needs in the WHO European Region.

**Results:** A list of recommended actions within critical service categories is provided in a step-wise, all-hazard form for rapid implementation by hospital administrators and disaster managers in response to the most likely types of disaster.

Conclusions: The principles and recommendations provided in this tool may be used by hospitals at any level of emergency preparedness. The checklist is not intended to replace standards and protocols already defined in hospital emergency management plans. Rather, it provides recommendations to enhance existing plans in concert with national guidelines.

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### (A289) Developing Damage Assessment Methodology with Community Participation — Case Study of the 2010 Leh Flash Flood

A. Kumar, S. Gupta

Jamsetji Tata Centre for Disaster Management, Mumbai, India

The frequency of catastrophic events has increased considerably in recent times. As a result, impacts of such catastrophes have multiplied exponentially. It is the responsibility of the government to revive and reconstruct the communities and economies affected by disasters. Domestic institutions should be resilient enough to absorb the shocks and mitigate the impacts. Too often, damage assessments rely on quantification in terms of monetary valuations of damage. This approach has created various distortions in valuation. Damage evaluation in developed countries is higher because of the monetary value of infrastructure and housing. On the contrary, in a poor, informal settlement, the value of the damage is less, but the impact is huge from a human development perspective. The government follows a standard procedure for items and means of assistance for initiating post-disaster recovery and response. All affected families are entitled to compensation based on the damage done to life and property, irrespective of socioeconomic conditions. All items are listed beforehand, with their monetary values ascertained respectively. This paper examines Leh (Ladakh, India), which was struck by heavy flash flood in the month August 2010. It explores the methodology adopted for damage assessment in 42 affected villages of Leh. This case study demonstrates the inherent drawbacks of the standard procedure and methodology in assessing post-disaster damage and needs assessments, and analyzes the role of community participation in household and community damage assessment. The paper presents recommendations for a flexible and accommodating approach for conducting damage assessments on a contextual basis.

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# (A290) Coordinated Hospital Disaster Response: A Detailed Assessment of Leadership

E. Downey, <sup>1</sup> K. Andress<sup>2</sup>

- Department of Environmental Sciences, New Orleans, United States of America
- 2. Shreveport, United States of America

**Introduction:** The Hospital Preparedness Program, prompted by the 9/11 terrorist attacks, emphasizes the value of developing

coordinated response capabilities by community leaders. Immediately following Hurricanes Katrina and Rita, this study examined the hospital emergency preparedness coordinators' leadership style and applied leadership theory to Louisiana planners as an integral part of a complex National Response Framework. This regionally coordinated system remains in place today and has been tested a minimum of 15 times in hurricane activations and state-wide exercises and drills.

Methods: Three hospital groups participated: (1) regional coordinators representing nine geographic areas; (2) coordinators at acute care facilities; and (3) coordinators at non-acute care facilities. A total of 744 study participants represented over 150 hospitals. The Multifactor Leadership Questionnaire (Bass, 1995) assessed three dimensions of leadership style and the Emergency Preparedness Indicator assessed planning priorities, performance ratings, demographic variables of gender, education, and Healthcare Performance Partners (HPP) planning experience and disaster declarations.

Results: Transformational leadership was highest among all three groups and included characteristic of: idealized influence, idealized behaviors, inspirational motivation, intellectual stimulation, and individual consideration. Transactional leadership was highest (but still lower than transformational) among the non-acute care group and included characteristics of: contingent reward and management by exception (both active and passive). Gender and education were not significant predictors of leadership style but positive associations of time spent on emergency preparedness activities were found.

Conclusions: Previous studies reported the relationship of transformational leadership style to cohesion scores of 2.1. This study expands those results by further detailing leadership styles to the hospital emergency preparedness coordinator. It builds on a standardized approach to assess coordinator leadership style and effectiveness measures.

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## (A291) Medico-Physiological Support to Rescuers of Emercom of Russia at Accomplishing their Professional Activity

S. Aleksanin, V. Rybnikov

Education and Research, Saint-Petersburg, Russian Federation

Extreme professional working conditions of EMERCOM rescuers have a harmful effect to their health leading to high rate of digestive, respiratory, musculoskeletal and cardiovascular diseases. The morbidity frequency of these diseases at rescuers is higher, beyond all doubts, than at male population of the corresponding age, and it is connected with total years of occupational work and its intensity. This fact shows the necessity of establishing the system of medico-physiological support to rescuers of EMERCOM of Russia which must be seen as a significant part of their social protection and rehabilitation and must include six main components, i.e. consideration of conditions and character of activity in everyday and emergency situations; complex evaluation and monitoring of their health state; medical support during rescue work in emergency situations; psychological support; information and

analytical maintenance of longstanding monitoring; development of hospital base and specialized medical assistance. An important component of the system of medico-physiological support to rescuers of EMERCOM of Russia is information and analytical maintenance of longstanding monitoring of professional load, health state and medico-social protection of the rescuers of EMERCOM of Russia. It was implemented by creating a Medical register of EMERCOM of Russia. We developed concepts, principals and organization methodical ground of multilevel system of medico-physiological support to rescuers of EMERCOM of Russia regarding their work in conditions of emergency situations. On the basis of professional work load studies, hygienic evaluation of work hardness and intensity, analysis of rescue work of State fire fighting services divisions of EMERCOM of Russia there were detected main stress factors, physiological and hygienic distinctive features of work.

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## (A292) Disaster Assessment and Gathering Medical Intelligence Following a Major Public Health or Complex Humanitarian Emergency

M. Reilly

School Of Health Sciences and Practice, New York, United States of America

Introduction: Immediately following a major public health emergency or complex humanitarian emergency such as the South East Asian Tsunami in 2004, the Haitian Earthquake in 2010 or Hurricane Katrina in 2005, there is a critical need to rapidly and as accurately as possible gather information not limited to morbidity and mortality, but necessary to assess the stability and existence of a public health or medical infrastructure, logistic supply chain, condition of food, water and shelter for victims and rescue workers, and particularly the security and stability of the region following the incident. With this information, only then can an effective humanitarian response be planned and executed that meets the actual versus perceived needs of an affected population.

Methods: Specific disaster risk assessment and medical intelligence techniques will be presented that are currently used by a variety of relief organizations. Specific topics of discussion include: Disaster epidemiology; Indicators of health in populations; Systems of surveillance; Impact of weather and climate; Displaced populations and refugee health; Tactical and combat medical intelligence; Zoonotic diseases; Agricultural trends and food security; Public health and health system infrastructure assessment; and Personal and physical security concerns.

Conclusions: Utilizing case reports, best-practices and lessons learned from numerous international humanitarian responses, this session will guide participants though the performance of a rapid disaster assessment and the gathering of critical medical intelligence to determine the kinds and types of resources needed in an affected area. And the process of utilizing limited information to plan humanitarian relief efforts.

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