are updated, the next versions may include a greater guide to recovery issues.

Keywords: international; pandemic; planning; preparedness; recovery

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# Region-Specific Guidance for the European Rural Population Regarding Avian Influenza

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The continuing outbreaks of avian influenza in poultry and the rising number of human cases in Southeast Asia have created concerns among veterinary and public health authorities. Experts continue to worry about the possibility of H5N1 mutating to a pandemic virus. The World Health Association (WHO) advises on continuing surveillance and preparedness against this emerging threat. The rural population is a priority group for raising awareness, as they play a key role in preventing and controlling outbreaks of avian influenza.

The project European Content for Public Health Awareness of Rural Population on Avian Influenza Prevention (ECORAIP), funded by the European Commission, aimed at region-specific guidance for the rural population for their protection from AI. The project consortium consists of five public health institutions from Cyprus, Germany, Greece, Italy, and Poland.

The project staff reviewed the literature regarding human cases of avian influenza, constructed a list of rural life characteristics that increase the risk of human infection, and explored the existing differences of rural life in the three European regions (Central-North, East, South). The ECO-RAIP staff also assembled a library of avian influenza campaigns in the EU and compiled a report of best practices for this purpose. Based on the opinion of veterinary, communication, and public health experts and by assessing a number of socio-economic indicators, 10 prioritized characteristics were developed for each region, and a model was created for the rural population.

The guidance created with the assistance of health educators and communicators follows the general presentation of "DO", "DON'T", and "WHY" in a user-friendly format. The model was created in English and translated into four languages. It was piloted in European communities in each EU region in order to assess its effectiveness. The model, along with the pilot testing results, will be presented at the Congress. Keywords: avian influenza; Europe; guidance; public health; rural populations

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## An Outcomes-Based Approach for Planning Healthcare Service Delivery during a Pandemic

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Introduction: The goal of pandemic influenza planning is the maintenance of essential healthcare services during the crisis, but defining "essential" has been incomplete in the literature and planning processes. Effective healthcare delivery during increased demand, especially with diminishing and/or threatened resources as expected in the pandemic scenario, may require rationalizing services for a period of time. A systematic approach for a comprehensive reduction in regular acute care services during a pandemic to focus resources on the most urgent population health needs has been performed.

Methods: An outcomes-based classification scheme of 14 potential outcomes categories was developed, and focus-group tested. Based on expert opinions, health conditions seen in the health region's three acute care centers, were assigned to one of the outcomes categories. Clinical expertise rank ordered the priority of the outcomes categories. Resources utilized for treating conditions were determined, forecasting which resources may be available if care for some conditions is diverted.

Results: Health conditions, as defined by the International Classification of Diagnoses (ICD)-10, can be assigned into outcomes categories. The outcomes categories and approach provided an equitable framework for comparing conditions across all health specialties. Rank ordering the outcomes categories provides a hierarchy for assigning priority care during pandemic-engendered resource shortages. Conclusions: A systematic, outcomes-based process defining a hierarchy of conditions to receive focused care delivery, employing, if necessary, equitably diverted professional resources, has been developed. The tool can be used to plan prioritized care delivery to support best population health outcomes in a pandemic scenario.

Keywords: essential healthcare services; outcomes-based; pandemic; planning; population health; prioritized care

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#### Poster Presentations—Pandemics

# (F43) National-Level Organizational Model for Coping with an Epidemic Outbreak

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Fear affects understanding of new diseases and obstructs the decision-making process. Preparedness requires the construction of an organizational model for coping with an epidemic that will enable full coordination and cooperation between various professional elements within the healthcare system and with the public, in order to reduce the anxiety level and mitigate panic during a state of uncertainty. The purpose of this research was to construct an organizational model for coping with an outbreak of an epidemic on a national level. Research instruments included a closed questionnaire examining the views and perceptions of the public, experts, and professionals on the topic of epidemic, before, during, and after the outbreak. The research population included the general public-801 people forming a representative sample of the population of Israel; 45 are professional decision-makers.

A total of 82% of the study population believed that fear of an epidemic causes people to panic. Seventy-two percent of the study population agreed to be quarantined and obey instructions. Ninety-three percent of decision-makers agree that it is necessary to find a way to achieve voluntary isolation. A total of 93% of the study population thought that media presence and reports increase the public's anxiety and that epidemic information should be conveyed to the public by the Ministry of Health. All of the decisionmakers agree to a national-level preparedness plan.

Keywords: epidemic; national-level organizational model; outbreak; pandemics; preparedness Prehosp Disast Med 2008;24(2):s65-s66

# (F44) Kenyan Traditional Circumcision a Protective Measure Against Spread of HIV/AIDS

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Background: Kenyans provide high-profile control of the spread HIV and AIDS through their traditional circumcision rites. The protective effect of circumcision on HIV incidence in rural, low-risk men circumcised predominantly by traditional circumcisers in Kenya was studied.

Methods: A total of 1,378 men were evaluated. Baseline socio-demographic and behavioral HIV risk characteristics were compared between 270 uncircumcised and 1,108 circumcised men.

Results: Of the men included in this study, 80.4% were circumcised, and 73.9% were circumcised by traditional circumcisers. Circumcision was associated with tribal affiliation, high school education, fewer marriages, and smaller age difference between spouses.

Conclusions: Circumcision by traditional circumcisers offers protection from HIV infection in adult men in rural Kenya. Keywords: AIDS; circumcision; HIV; pandemic; protective

measures

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### (F45) Hepatitis B Infection among Drug Users: Findings from Kathmandu

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Background: Drug addicts admitted to rehabilitation centers in Kathmandu were studied. The aim of the study was to review the records and analyze the laboratory reports of >2 years (2004-2006). The main objective of the study was to study the epidemiological factors in relation to Hepatitis B infection among the drug users.

Methods: Data collected from the laboratory were analyzed by experts and healthcare providers. A total of 600 drug addicts were involved in the study.

Results: Among the total 600 drug addicts, 11% were injection drug users (IDUs), 70% of the IDUs shared needles, 15% were multiple drug users, and 18% had a history of exposure to commercial sex workers (CSWs). Among the total drug addicts, 5.6% were Hepatitis B-positive, which was determined by their HBsAg status. Hepatitis B status was positive among 15% IDUs, 4.9% of multiple drug users, 6.7% of needle sharers, and 14% of the addicts exposed to commercial sex. A model was constructed to understand the association between HBsAg status as a dependent variable and various forms of drug use and addiction as independent variables. Injection drug users were at >9 times and exposure to CSWs at five times higher risk to develop hepatitis B infection.

Conclusions: The factors that influence the HBsAg status of the drug addicts are multiple behavior factors. While designing interventions among the drug addicts, various behavior factors should be considered.

Keywords: commercial sex workers; hazards; Hepatitis B; infection; injection drug users; Nepal Prehosp Disast Med 2009;24(2):s66

## (F46) It's Not a Question of If but When and How Bad: Stage 6, Pandemic H5N1: Increased and Sustained Transmission in the General Population—A Clear and Present Danger

Michael E. Donnellan

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The global healthcare community is unprepared for the inevitable pandemic caused by infectious agents such as the H5N1 virus. Unified Incident Command Systems and surge capacity triage algorithms fail to focus on ventilator allocation and rationing that will occur during such an event. Triage supervisors will decide who lives and who dies by applying aggressive assessments and clinical decisions.

In an effort to formulate an effective triage system for a pandemic event, actively networking with federal, state, community, and global disaster response specialists, reviewing evidence-based data on mass-casualty incidents and attending international conferences on disaster medicine will be essential. It should incorporate existing and modified triage algorithms and operational plans.

Multiple disaster triage algorithms require significant modifications and must be standardized to address avian influezna, mass-casualty incidents. Existing Unified Incident Command Systems remain dangerously flawed and unable to provide the required disciplined and unified command necessary to address or support effective ventilator triage.

Many patients, including children, may require ventilatory support within 48 hours of this event. This will require the restructuring of existing triage algorithms to include a primary focus on ventilator rationing, rapid and determined quality-of-life assessments, and extensive and sophisticated triage training.

Keywords: health care; mass-casualty incident; pandemic;

population; triage Prehosp Disast Med 2009;24(2):s66

## (F47) Emergency Department Preparedness for Detection of an Infectious Disease Outbreak Ghee Hian Lim

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Singapore is a global travel hub with thousands of visitors passing through its borders every day. The emergency