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 decision-makers agree to a national-level preparedness plan.

Keywords: epidemic; national-level organizational model; outbreak; pandemics; preparedness
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(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
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(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

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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
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(F47) Emergency Department Preparedness for Detection of an Infectious Disease Outbreak

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

department of Tan Tock Seng Hospital was at the forefront of the severe acute respiratory syndrome (SARS) outbreak in 2003. The systemic approach for coping with an infectious disease outbreak the department might encounter will be discussed.

Early Detection: Patients presenting with similar patterns of disease are monitored so epidemiologic studies can be perfomed to identify common presentations.

An updated screening form was devised so that patients and their visitors are screened for symptoms like fever, travel history, employment, and social history that may have an implication on the spread of diseases.

Screening: Information is gathered from varied sources like the news media, the World Health Organization Websites, the (US) Centers for Disease Control and Prevention, and the medical and non-medical media to stay abreast on latest outbreaks so that screening mechanisms are updated constantly.

Contact Tracing: The screening mechanism also tracks patients and their companions.

This hospital has experienced the threat of the avian influenza outbreak in Asia, and also experienced, first-hand, dengue, malaria, and chikugunya disease outbreaks. The mechanisms of early detection and constantly updated screening mechanisms have allowed staff to stay abreast of these disease outbreaks.

Infectious disease outbreaks are constantly evolving issues facing the healthcare institutions.

Keywords: detection; emergency department; infectious disease; oubreak; preparedness; surveillance
Prehosp Disast Med 2009;24(2):s66–s67

(F48) Improving Pandemic Response Strategies—Lessons from Responding to Multiple Seasonal Influenza Outbreaks at World Youth Day 2008

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Introduction: Key strategies in Australia's plans for containing a future influenza pandemic are rapid case finding and contact follow-up, use of anti-viral agents to treat cases, and providing post-exposure prophylaxis to contacts, isolating/quarantining cases and contacts, and establishing influenza clinics. Managing outbreaks in discrete groups e.g., schools, has not been prominent in planning. At World Youth Day 2008 (WYD'08), held in Sydney Australia, more than 30 outbreaks of influenza were detected by routine and event-specific surveillance systems. They provided an opportunity to explore the implications of elements of these plans. When responding to outbreaks, we followed protocols derived from the above strategies. In addition, we established cluster-specific, temporary influenza clinics.

Methods: We analyzed situation reports generated by state and regional public health agencies during the response and post-event debriefing reports also were used.

Results: During WYD'08, we identified the following challenges likely to be magnified during a pandemic:

1. Detecting and responding to site-specific "clusters" of illness, including establishing temporary, multi-disciplinary influenza clinics;
2. Establishing appropriate clinical case definitions ("traditional" influenza case definition of fever with cough/fatigue proved to be insensitive);
3. Maintaining adequate staffing for the operation;
4. Providing disease control information and equipment to cases and contacts; and
5. Maintaining situational awareness for numerous concurrent outbreaks.

Conclusions: Containing the spread of a pandemic may be enhanced by cluster-specific activities, including temporary, site-specific, multi-disciplinary influenza clinics. Information management systems with capacity for recording several clusters of disease in real time are imperative. Although the responses not always are identical, lessons learned from responding to large seasonal influenza outbreaks can assist in pandemic planning.

Keywords: capacity building; communicable disease; influenza; mass gatherings; medical students; pandemic; public health; recent events; World Youth Day
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(F49) Nowcasting of Pandemic Outbreaks: Integration of Syndrome Detection with Real-Time Assessment of Disease Control Strategies

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Introduction: Each method used for detecting and forecasting infectious disease outbreaks has its specific benefits and shortcomings.[1] The aim of this study was to examine the general architecture of a test bed for development and formative assessments of integrated nowcasting systems in the area of infectious disease epidemiology.

Methods: A nominal group method was used for eliciting system requirements and design specifications from an international expert panel (n = 9). The experts provided the first round of individual comments to the study co-coordinator, who composed these into a case study assessment document. The data analysis proceeded in cycles in which each expert individually reviewed the requirements document, followed by discussions at telephone conferences (n = 12). Finally, the design specification was manifested as an implementation of a prototype test bed.

Results: Central requirements on the test bed included that it should allow representation of data quality and timeliness, permit evaluation of inductive syndrome detection and hypothetico-deductive population caseload analyses, and support explicit fact and hypothesis management. The resulting test bed is designed for use in an iterative procedure for knowledge-based nowcasting system development. The system comprises modules for access to surveillance data for experiments, scenario definition support, experi-