

## Oral Presentations—Mass Gatherings

### Preparing for and Responding to Public Health Issues at a Major Mass Gathering: What Happened at World Youth Day 2008?

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**Introduction:** World Youth Day 2008 (WYD'08) was a gathering of >400,000 young people, (110,000 from overseas), held during several days in the winter in Sydney, Australia. Pilgrims were accommodated in simple dormitory-style accommodation. Public health-related preparations and outcomes during WYD'08 will be presented to assist future event planners.

**Methods:** The New South Wales (NSW) Health's planning documents, situation reports (from coordinating agencies and public health field teams), and post-event debriefing reports were analyzed.

#### Results:

**Preparedness**—Public health planning involved multiple agencies and focused on establishing surveillance systems and response plans for incidents of public health significance, including communicable disease control and environmental safety. A secondary public health workforce was recruited and trained, and field equipment procured.

**Pre-Event Activities**—International and event-specific surveillance data and pre-event gatherings were monitored for communicable disease risks and outbreaks were investigated.

**Event Response**—Most WYD'08 health presentations to on-site medical units were due to infectious diseases (51.8–31.3% influenza, 20.5% gastroenteritis), followed by injury (24.1%). Drug and alcohol effects, sexual-health related conditions, and hypothermia were rare. Emergency department and health call center data similarly showed the majority of participant presentations were due to infectious disease. Field team response to outbreaks involved considerable resource commitment.

Venue environmental health issues included trip/fall hazards and sewerage system breakdowns.

**Conclusions:** In WYD'08, influenza and gastroenteritis were the major public health concerns. Hypothermia risk may have been averted by unseasonably mild, dry weather. Health and event planners for mass gatherings should conduct a risk assessment that includes seasonality and duration of the event, and ensure their workforce is trained and ready to respond to infectious disease outbreaks.

**Keywords:** mass gathering; planning; preparedness; public health; surveillance; World Youth Day 2008

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### Guidelines for Disaster Management to Prevent Mass-Psychogenic Illness

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Incidents involving people experiencing sudden, often group-wide, health complaints with an unknown cause seem to be more common in recent years in the Netherlands. A quick response and adequate decision making by all authorities involved is expected. However, knowledge on the early recognition of signs of a possible mass-psychogenic illness-related incident among rescue workers and disaster managers is low.

During an expert meeting organized by GHOR Nederland in November 2008, incidents when people experienced health complaints of an unknown cause were discussed. The characteristics of 15 incidents defined as "cause unknown" in the Netherlands between 2006 and 2008 were summarized according to date, location, type of incident, level of coordination of incident, number of casualties, and cause. Similarities between these incidents include: "odd smell"; stressful situation or activities, rumors, mutual provocation, disturbances in social relations, and the existence of a social relationship within the group of casualties (e.g., school children).

Early recognition of the underlying toxic or (partly) psychological cause is important. Generally, health complaints were atypical and hard to relate to specific exposure factors or a sensible time frame.

Excessive involvement authorities and media at the scene might intensify a possible onset of mass psychogenic illness (MPI). However, knowledge on the early recognition of signs of a possibly MPI related incident among rescue workers and disaster managers is low.

**Keywords:** chemical, biological, radiological, nuclear, or explosive; disaster management; guidelines; mass-psychogenic illness

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### Evaluating the Influential Factors in Mass-Gathering Casualty Presentations—World Youth Day, Sydney, Australia 2008

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**Introduction:** The aims of this project were: to establish a database of patient presentations and mass gathering event profiles across all events during the four days of World Youth Day (WYD); and to analyze WYD quantitative data and compare findings across the WYD events and with existing predictive modeling data to provide a more sophisticated understanding of the key factors that affect patient presentations at mass gatherings.

**Methods:** The de-identified sample data were obtained from Casualty Report Forms for participants who presented to a St. John Ambulance Australia first aid post, medical center, or mobile team. The research team collated information on