**Results:** Thirty university students were assigned to participate in the development and application of a bioterrorism EMP over the course of one semester during an elective pharmacotherapy course entitled "Advanced Topics in Infectious Disease and Pulmonary Pharmacotherapy". The bioterrorism EMP project encompassed outcomes of patient and population-based care, systems management, disease prevention, promotion of public health, and the development of public health policy. Innovative elements of the bioterrorism EMP project included: (1) semester-long written, oral, and practical participation and assessment; (2) comprehensive and topical educational content; and (3) systematic, peer-reviewed, team-building efforts. The students also gained valuable experience as pharmacy-based volunteers in the largest university-based mock dispensing clinic exercise performed to date. The class developed a nearly 100-page referenced practical EMP that was applied successfully and assessed during a formal tabletop botulism outbreak exercise. While some students expressed frustration working in large, unstructured, leader-dominated groups, teaching evaluations (and informal comments) indicated a high rate of satisfaction with this educational method.
**Conclusion:** Motivated university students can develop and apply a bioterrorism EMP as a group project. Meeting of project objectives may be facilitated by awareness and reinforcement of class and group expectations, smaller and more structured groups, and frequent progress evaluations by instructors and peers.
**Keywords:** bioterrorism; dispensing clinic; education; emergency management plan; public health; tabletop exercise
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## Hospital Emergency Response to a Community Chemical Spill

*Randy Casteel*

Hamilton Medical Center, Hamilton Health Care System, Dalton, Georgia USA

**Introduction:** Despite continuous efforts to plan for events involving weapons of mass destruction and ongoing testing of hospital incident command systems (ICS), hospital emergency preparedness for chemical emergencies still may be lacking.
**Objective:** This presentation describes the hospital emergency response to a community chemical spill at Hamilton Medical Center in Dalton, Georgia on 12 April 2004.
**Methods:** Descriptive information was obtained from observations and hospital records of the event.
Results: At 21:15 hours (h) on 12 April 2004, local emergency medical services (EMS) notified the hospital that five patients were *en route* to the hospital in a police car. The hospital ICS was activated, and hospital personnel began preparing for the arriving victims. Because the hospital's decontamination equipment and supplies could not be located, a makeshift decontamination area was improvised with four blankets hung between intravenous poles and a water hose attached to an outside spout. Only hospital personnel dressed in splash gowns and respiratory masks performed decontamination.

Communication by hospital radio was unreliable, due to the constant chatter and dead zones not discovered during previous testing. The hospital ICS communicated using cell phones and runners. Communication with on-scene ICS never was established and no one could be located who could identify the chemical agent responsible. At 02:30 h, a call came in identifying the chemical as allyl alcohol and recommending that the best decontamination method was to rinse patients with copious water. The hospital ultimately decontaminated 154 patients, including 14 police officers and six EMS workers who continued working in the hot zone without protective clothing or respirators. No deaths occurred.
**Conclusion:** Numerous lessons were learned from the hospital emergency response to this event, which will be applied to future hospital emergency preparedness.
**Keywords:** allyl alcohol; chemical spill; decontamination; emergency medical services; hospital; incident command system
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## Estimating Surge Capacity for Mass-Casualty Incidents

*Debi Drake; Chris Dent*

Saint Alphonsus Regional Medical Center, Boise, Idaho USA

**Introduction:** As emergency departments (EDs) address the need to generate surge capacity for a sudden influx of patients in a mass-casualty incident (MCI), guidelines are needed to determine minimum staffing levels and the types and numbers of equipment and supplies needed.
**Objective:** This presentation describes the development of minimum guidelines for EDs to manage a large influx of patients effectively in the first several hours after a MCI.
**Methods:** Descriptive information was obtained from observations and records associated with this project.
**Results:** The following sources of information were analyzed in the development of the minimum guidelines: (1) American College of Surgeons recommendations regarding the ED care of major trauma (blunt and penetrating injuries, burns); (2) United States' Center for Disease Control information on the most common injuries in mass trauma; (3) standard triage categories of red, yellow, and green; and (4) a survey of 250 rural and urban hospitals that found that an influx of twice the ED bed volume would be considered an MCI at each facility. A spreadsheet was developed to calculate immediate minimum staffing, equipment, and supply needs for an influx of twice the number of ED beds. This surge capacity estimation tool addresses only the needs of the MCI and not the needs of normal patient volume. In addition, this tool does not address decontamination or isolation needs.
**Conclusion:** This surge capacity estimation tool is a useful resource when preparing for an MCI.
**Keywords:** emergency department; estimation tool; hospital; mass-casualty incident; needs; surge capacity
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