

## Disaster Medicine and the Flinders Graduate Entry Medical Program

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In 1996, a one-week rural exposure for all students in their second year for the graduate entry medical course was created and implemented. The students were taken to a rural location in groups of 25 to 30 for a week at a time. This allowed three rural disaster exercises per year to be organized in conjunction with the state authorities and local disaster stakeholders. One of the components of this week focused on disaster medicine. There was a collaborative networking venture between the coordinator and the community stakeholders, and a scenario written. This either was a field exercise or a discussion exercise. The students were given roles as victims or assistants to the ambulance officers. The students were briefed about disaster medicine prior to the event.

The learning objectives were:

1. To gain insight from a victim's perspective;
2. To experience time perspectives, resource limitations, extrication, stabilization, communication, transportation, and subsequent management;
3. To learn about the collaboration between the agencies involved;
4. To gain an appreciation of the value of EMST skills and retrieval services; and
5. To be involved in a debriefing after the event and inquire as to why certain decisions were made during the event.

Positives that have stemmed from the project not only are medical educative, but also community, as the author also has evaluated the disasters and advocated for resources where deficiencies were exposed. This project also has become a yearly catalyst to involve multi agencies in a large-scale exercise along the lines of prevention, preparedness, response, and recovery.

**Keywords:** collaboration; disaster medicine; deficiencies; exercises; resources; stakeholders; students

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## Medical Response to Biological Terrorist Incidents

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The threat of biological warfare is realistic. In World War I and World War II, biological weapons were researched, produced, and used. After the world wars, research into biological agents continued. Now many countries, including some developing countries, have the ability to research and produce biological agents.

The use of biological agents by terrorists has caused new problems. The methods used by terrorist organizations are not easy to discover, and may spread easily. In addition, terrorists may falsely claim that they have exposed people to biological agents, so the epidemic prevention worker must pay more attention to detection of such agents.

In a terrorist incident involving a biological agent, prevention of an epidemic is a high priority. Government

departments should pay more attention to disease prevention following biological attacks. In particular, the epidemic prevention department must have the ability to determine quickly the kind of biological agents used and to put forward prevention and treatment measures.

**Keywords:** agents; biological; effects; prevention; terror; terrorist; weapons  
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## Using Computer Simulation to Estimate the Need of Ambulances at a Disaster

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This study created and evaluated a computer model to simulate the transportation of patients to available hospitals following a disaster in an urban area.

A more accurate estimate of the number of ambulances needed at disasters could increase the efficiency of the disaster planning. Effective dispatching of ambulances will not only prevent vehicles from being withdrawn unnecessarily from their "normal" duties, but also help to ensure that disaster sites are not overcrowded with emergency workers, leading to the impeding of each other's effectiveness.

With a computer simulation model, "what-if" analyses were performed to predict the consequences of various scenarios, and the number of ambulances needed was estimated for accuracy as opposed to using a conventional stochastic formula.

This study created a model to simulate the transportation of patients to available hospitals following a disaster in an urban area. Applying the advanced dynamic simulation software combined with a geographic information system, the number of ambulances needed was estimated accurately and with flexibility.

Emergency medical service response personnel will find our computer simulation models a useful supplement to their disaster planning and critical response.

**Keywords:** disaster; computer modeling; patient transport  
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## Experiences of Threats and Violence in Swedish Ambulance Service

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**Introduction:** Ambulance personnel often meet people in a crisis situation that requires a readiness to act, and which takes for granted a broad knowledge in caring, together with an ability to size up the circumstances in each separate incident. The afflicted individual's first contact with a medic in an emergency situation very often is ambulance personnel. This first meeting can involve incidents that may radically change the existing state of things for the ill or injured and maybe even for near relatives. Sometimes these situations can lead to threats and acts of violence aimed at the ambulance staff. The aim of this study was to describe how ambulance personnel perceive, are subjected to, and are influenced by, threats and violence in their day-to-day work.

**Methods:** The empirical study was descriptive and consisted of a questionnaire with 13 questions. The questionnaire