

Is the Australian hospital system adequately prepared for terrorism? The Australian Government's response

The government has undertaken roles in disaster planning and coordination to complement hospital and workforce readiness

Rosenfeld and colleagues (page 567)¹ make many excellent points about individual hospital preparedness for terrorism. However, the article fails to fully contextualise the overarching emergency management arrangements and the considerable work that all levels of government have undertaken to support individual hospitals, area health services, jurisdictions and the nation as a whole.^{2,3} Many of the activities they suggest are already in place in different states. These include chemical, biological and radiological (CBR) training and health student training; media management; and tracking and identification of patients.

The following points expand on some of the areas touched on by Rosenfeld et al.

Disaster planning

Hospitals have disaster plans in place that complement broader jurisdictional and national disaster plans. Some of these broader plans include the Commonwealth Government Disaster Response Plan,² guidelines for the treatment and management of smallpox and anthrax,⁴ the Mass Casualty Transport Review, the Mental Health Disaster Response Plan,⁵ the National Response Plan for Mass Casualty Incidents Involving Australians Overseas,⁶ and the National Burns Plan (AusBurnPLAN).⁷ AusBurnPLAN, in particular, can activate national assistance to an affected jurisdiction by moving medical teams in and redistributing patients to other hospitals to ensure that the most appropriate care is delivered.

The National Medicines Stockpile⁸ was established in 2002 to provide specialised pharmaceuticals and equipment in response to terrorist acts or other health emergencies. In addition, states and territories can call on their own embedded stocks. The National Medicines Stockpile includes stocks of antidotes, antibiotics, personal protective equipment, ventilators and negative pressure units. Contingency plans have been developed to deploy these assets to an affected jurisdiction if a chemical, biological or radiation incident occurs.

Another important asset in disaster planning is the planned National Trauma Centre at Royal Darwin Hospital (RDH), initiated in response to the first of the Bali bombings, in 2002.⁹ RDH responded effectively and appropriately to both the 2002 and 2005 Bali terrorist attacks, but the establishment of the National Trauma Centre at RDH with two specialised chairs (a Chair of Emergency Preparedness and Response at the Northern Territory Clinical School and a Chair of Trauma and Critical Care at the Menzies School of Health Research) will further enhance the overall response capability of Australia.

Hospital readiness

Rosenfeld and colleagues believe that, currently, most Australian hospitals would not be able to “cope” with more than 10–24

seriously injured patients. It is not clear how this number was determined. A review of over 100 terrorist bombings with improvised explosive devices since 1996¹⁰ showed that most of the live casualties had relatively minor injuries, with less than 15% having injury severity scores over 15. Tragically, in major terrorist events, many people die at the time of the incident, as was the case after the September 11 attacks in the United States — but 48 hours after the tragedy only 18 patients remained in hospital. Another review of 13 major terrorist attacks¹¹ found that only 9%–22% of survivors were critically injured (injury severity score > 15). Most of the casualties received relatively minor injuries.

We agree that the “walking wounded” can be inappropriately “up-triaged” and/or self-present to key trauma centres, leading to a potential loss of focus on severely injured patients who need resuscitation and life-saving surgery. Hospitals must have contingency plans to corral less-injured patients in advance of the arrival of ambulances bringing the more severely injured. In New South Wales, for example, disaster plans factor these issues in by ensuring that the more severely injured patients are directed to trauma centres by helicopter and ambulance and the less injured are corralled or transferred by bus to smaller hospitals.

Testing health system response capability

No plan is effective unless tested periodically by practice drills. There have been extensive exercises at a jurisdictional and national level for a number of disaster scenarios that test hospital systems.

Exercise “Supreme Truth”, held at the Royal Adelaide Hospital in 2003, practised and evaluated the response of a major public hospital to a mass casualty incident involving a CBR agent.¹² Among its outcomes were improvements to the SA Major Incident Plan, the facilities for managing CBR events, and the interface with emergency services.

National Counter Terrorism Committee exercises have been led by the Australian Government. Of particular importance is Exercise “Explorer”, held in 2004, in which a terrorist bombing scenario in Sydney's central business district was formally tested at a purpose-built site at Holsworthy.¹³ Over 250 patients were formally triaged and treated by ambulance personnel and health teams at the site. The disposition of patients to appropriate trauma centres was successful.

As part of the same exercise, the AusBurnPLAN arrangements were tested.⁷ Severe burn patients were identified for transfer to other states, and medical-team support was provided in a coordinated fashion to NSW.

Hospitals were also tested recently in “Mercury '05”, a national multi-jurisdictional counter terrorism exercise with a focus on mass casualties. Mercury '05 demonstrated how emergency management arrangements can be activated in a disaster during the surge phase (the first 12 hours after a disaster) to enhance

overall capacity when operating within a nationally coordinated framework.

More exercises are planned for 2006 that will yield valuable lessons for hospitals. In addition, “table-top” exercises, such as the Emergo Train system,¹⁴ appropriately test hospitals’ ability to manage a sudden surge in casualties and ensure that the most critically injured patients receive timely resuscitation and life-saving surgery.

Coordination

Response to a disaster requires coordination between a range of professionals and across jurisdictions. The Australian Health Disaster Management Policy Committee (AHDMP) has the ability to support health-system “surge” response, both locally and nationally. This cross-jurisdictional group was established by the Australian Health Ministers’ Advisory Council in February 2003. It is charged with identifying Australia’s level of preparedness to respond to the consequences of a terrorist attack or a naturally occurring disaster and to coordinate a national response in the event of mass casualties or outbreak of disease.

The AHDMP has now coordinated planning and response in relation to avian influenza, the Indian Ocean tsunami and the recent Bali bombings, and has conducted debriefing following the Madrid and London bombings. It has also undertaken a number of audits of Australia’s emergency response capability and will use the results of those audits and ongoing monitoring to identify and address gaps.

Workforce

Senior clinicians in hospitals must accept emergency management principles as part of their core business. Emergency response training at the local hospital level can be factored into the functioning of all hospital training programs, and should be regarded as no different from training in resuscitation or other clinical management issues. All hospitals should undertake disaster preparedness drills at least twice a year.

It is incumbent on all clinicians to add emergency preparedness to their range of clinical skills and to be aware of the disaster plans within their institution.

The AHDMP has also made workforce disaster preparedness a priority and will shortly review the Department of Health and Ageing and Emergency Management Australia’s National Disaster Medicine course and undertake a national stocktake of health emergency management courses. There is also evidence of growing interest in biosecurity and disaster-response training and education from other quarters. For example, a recent review of the Public Health Education and Research Program has recommended that capacity and expertise in this area be developed and made more widely available through a variety of universities.¹⁵

Conclusion

Disaster management calls on the skills of many professionals and many areas of government. Steps taken over recent years, including the establishment of the AHDMP, have enhanced cooperation and coordination between sectors. There is a need

for continuous improvement and for testing improvement initiatives through ongoing exercise programs.

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