

# A look back at the London transport bombings



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In honour of the fourth anniversary of this event, **JL Smither** considers some of the lessons learned from the London train and bus bombings, drawn from the London Assembly's *Report of the July 7 Committee* and available on Lessons Learned Information Sharing

**O**N THE MORNING OF JULY 7, 2005, four suicide bombers detonated four explosive devices on three underground commuter trains and a bus in central London. The attacks resulted in 52 deaths and 700 injuries, but would have been much worse without the brave efforts of emergency responders.

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■ **Installing digital radio systems with underground reception capabilities**

Immediately after the blasts, several organisations responded to the Underground explosions between Liverpool Street and Aldgate stations, Edgware Road and Paddington stations, and King's Cross and Russell Square stations. These organisations, including the London Ambulance Service (LAS), the London Fire Brigade, the Metropolitan Police Service and the British Transport Police (BTP), initially received conflicting reports about the nature and locations of the explosions. Once they were able to determine the locations of the blasts, the agencies and their incident commanders deployed responders into the tunnels to assess the extent of the damage. Unfortunately, when they entered the Underground tunnels, most responders' radios stopped working, which cut off communication with incident commanders above ground.

Although BTP had radios that were equipped to work underground, the explosion in one tunnel damaged the underground cables and caused these radios to malfunction as well. After several hours, workers were able to install a temporary cable to allow the radios to work. To overcome the problem in the short-term, responders and commanders relied on assigned runners to personally deliver messages between the incident site and the above-ground command.

These runners faced a long and difficult journey each time they entered the tunnels, which were filled with smoke, debris, and evacuating train passengers. Naturally, this caused delays in requests for

ambulances, supplies and equipment.

As a result, London's emergency response organisations and transport services began installing a digital radio system for underground radio communication. This system should enable response agencies with TETRA-based digital radios to communicate between the surface and underground. In addition, response organisations have considered the effectiveness of a back-up system with Personal Role Radios, which are portable and do not require expert installation.

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■ **Improving communication with citizens trapped after a major incident**

Passengers on the attacked trains also experienced severe and frightening communication difficulties. The explosions damaged the trains' communication and internal emergency lighting systems, leaving passengers in the dark without instruction as to what was going on or what to do next. They did not know the severity of the incident or if anyone was sending help. Because the train drivers could not immediately communicate with the other cars, passengers could not receive evacuation instructions. Some passengers were afraid to open the automatic train doors because of the electrical current on the tracks; those that tried often found them impossible to move. The panic heightened as passengers saw smoke from the explosion sites. Although responders were able to eventually get to the trapped passengers and evacuate them from the area, some waited over 25 minutes before receiving official evacuation instructions.

After this event, the London Assembly recommended that Transport for London, London's transportation service agency, begin updating its train communication systems to enable communication after a major incident. Emergency plans should include provisions specifically for communicating with people directly affected by a major incident.

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■ **Alerting hospitals in close proximity to a mass casualty incident**

Immediately following the four explosions, the National Health Service (NHS) followed its established policy by formally notifying hospitals on the official receiving hospitals list, maintained by the LAS. After notification, all receiving hospitals are expected to be equipped for receiving casualties and to provide a medical incident officer and mobile medical/nursing teams. Great Ormond Street Hospital (GOSH), a specialist children's hospital without an emergency department, is not on the receiving hospitals list and was not notified of the incident, despite being located near Russell Square station. In fact, the GOSH staff members did not find out about the train bombing until paramedics rushed to the hospital to request equipment and assistance. The GOSH clinical staff quickly established a field hospital where they could assist emergency responders and treat injured victims. To overcome communication problems, GOSH employed medical students to act as runners between the station and the hospital.

Although the GOSH staff members responded quickly to the event, they would have been more prepared if they had received notification and response guidance from the NHS. Now the NHS has developed plans to ensure that all hospitals in the vicinity of an incident are immediately notified, even if they are not on the LAS's official receiving hospitals list.

Although the events of July 7, 2005, were tragic, London's emergency response agencies have gleaned lessons from the response so they will be even better prepared in the future.

**AUTHOR**

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