



Public Health  
England



EXERCISE MILO

# Disability and Decontamination

Experiences from mass casualty exercise in the UK  
involving people with disabilities

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# Exercise Aim

To evaluate preparedness of health services in London for a large casualty incident involving disabled groups centred at a large international disabled sporting event.





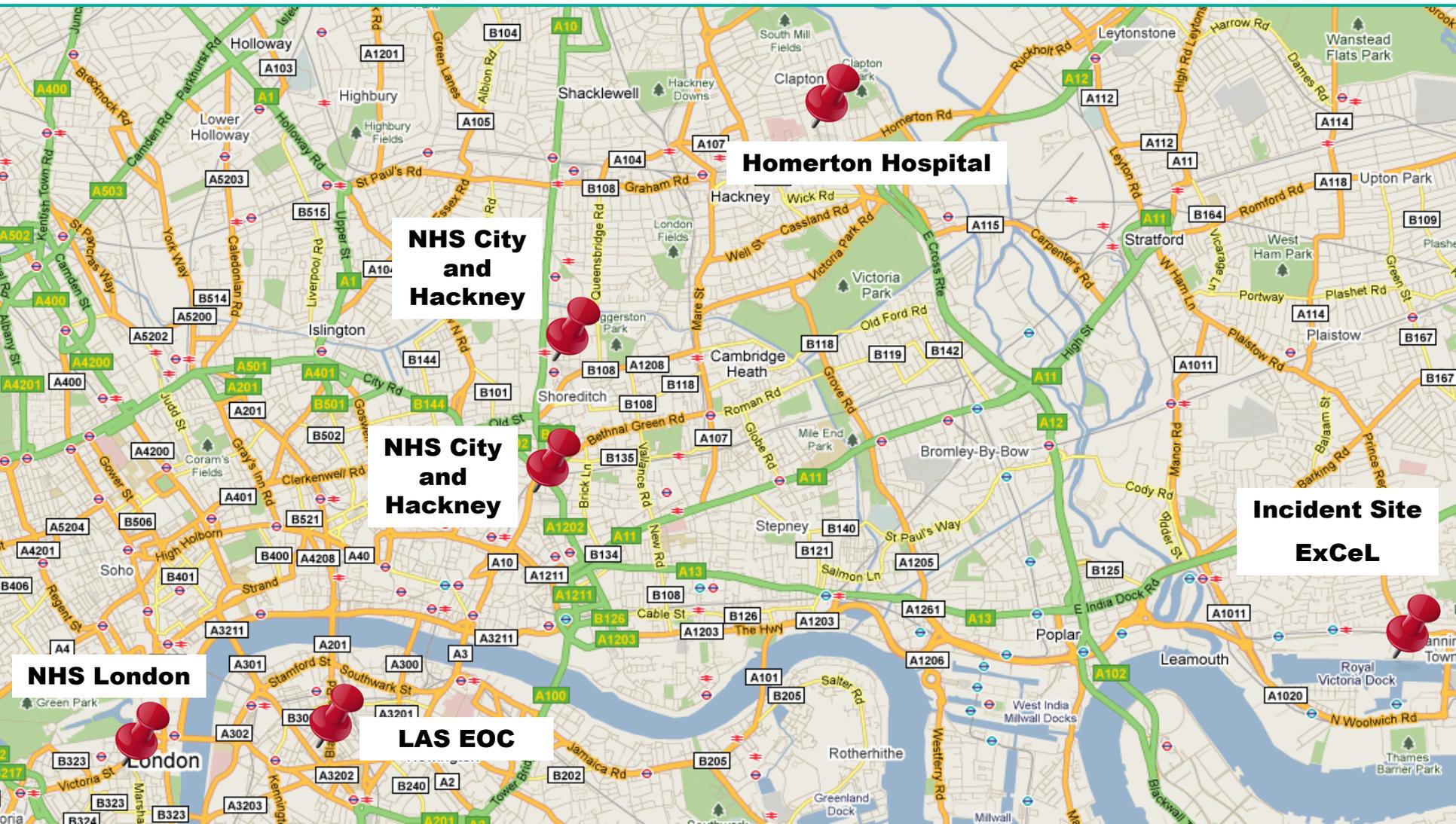
# Objectives

- Response of local health services to an incident involving large numbers of disabled groups
- NHS resources and capacity necessary to manage an incident involving disabled groups.
- Medical interventions required at the incident site
- Communications processes to warn and inform the public in the immediate aftermath



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# Exercise Milo sites





# Incident Site





# Scale of Exercise

- 5 locations – ExCeL, Homerton Hospital, NHS City and Hackney, London Ambulance Service, NHS London
- Casualties – 96 volunteers (planned for 113)
- Participants – 188 (Incident site), 200 (Homerton)
- Staff – 212 from 19 organisations
- Broadcast media – BBC, PA, print media
- 5am start (for casualty preparation)
- First 45 minutes of play pre-scripted



# Casualty volunteers

- Aged 18-60
- Total 96 = 37 disabled and 59 able-bodied
- 113 required but 17 no-shows
- Mental health disabilities excluded – issues of capacity and consent
- Unique ID number – labelled casualty and prostheses, timing chip

Category	Number
Blind or visually impaired	3
Deaf	2
Amputee	29
Wheelchair user	3
Other disability	0
Able-bodied	59
<b>Total</b>	<b>96</b>





# Casualties and scripts

- 70 scripted casualties
- Contain medical history
- Hourly observations
- Unique to volunteer
- Extra details given at hospital

<p><b>PATIENT</b></p> <p>#PELVIS TRIAGE SIEVE</p> <p>Walking: NO Airway: YES Respiratory Rate: 16 Pulse: 160</p> <p>TRIAGE SORT GCS: 12 Respiratory rate: 34 Systolic BP: 70</p> <hr/> <p>RETURN THIS CARD TO STAFF AFTER EXERCISE</p>	<p><b>Patient History</b></p> <p><b>Allergies</b> None Known</p> <p><b>Medication</b> Nil</p> <p><b>PMHx</b> Nil</p> <hr/> <p>RETURN THIS CARD TO STAFF AFTER EXERCISE</p>	<p><b>PATIENT</b></p> <p>#PELVIS ONE HOUR ON</p> <p>TRIAGE SORT</p> <p>GCS: 12 Respiratory rate: 34 Systolic BP: 70</p> <hr/> <p>RETURN THIS CARD TO STAFF AFTER EXERCISE</p> <p><b>1</b></p>
<p><b>PATIENT</b></p> <p>#PELVIS TWO HOURS ON</p> <p>TRIAGE SORT</p> <p>GCS: 12 Respiratory rate: 34 Systolic BP: 70</p> <hr/> <p>RETURN THIS CARD TO STAFF AFTER EXERCISE</p> <p><b>2</b></p>	<p><b>PATIENT</b></p> <p>#PELVIS THREE HOURS ON</p> <p>TRIAGE SORT</p> <p>GCS: 12 Respiratory rate: 32 Systolic BP: 70</p> <hr/> <p>RETURN THIS CARD TO STAFF AFTER EXERCISE</p> <p><b>3</b></p>	<p><b>PATIENT</b></p> <p>#PELVIS FOUR HOURS ON</p> <p>TRIAGE SORT</p> <p>GCS: 12 Respiratory rate: 32 Systolic BP: 70</p> <hr/> <p>RETURN THIS CARD TO STAFF AFTER EXERCISE</p> <p><b>4</b></p>



# Evaluation

- Feedback questionnaires, debriefing sessions
- Discussion groups: feedback directly from casualties
- Timing and tracking: chips and mats
- Showering performance: a fluorescent tag and UV-illuminated photography
- Comprehensive – need robust evaluation strategy, and involve from beginning of project





# Incident site – key events

- General communication with casualties at all stages of MD1 showering process was poor
- Clinical decontamination times outside planning assumptions
- Leg amputees (P3) not decontaminated by end of exercise
- No further clinical assessment of casualties after assembly at MD1





## Incident site activity





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# Homerton Hospital – key events

- Self-presenting casualties – decontamination set up
- Lockdown of hospital
- ED remained open to the public during exercise
- Realism and scope - casualty volunteers ended up in theatre on the operating table





## Homerton Hospital activity

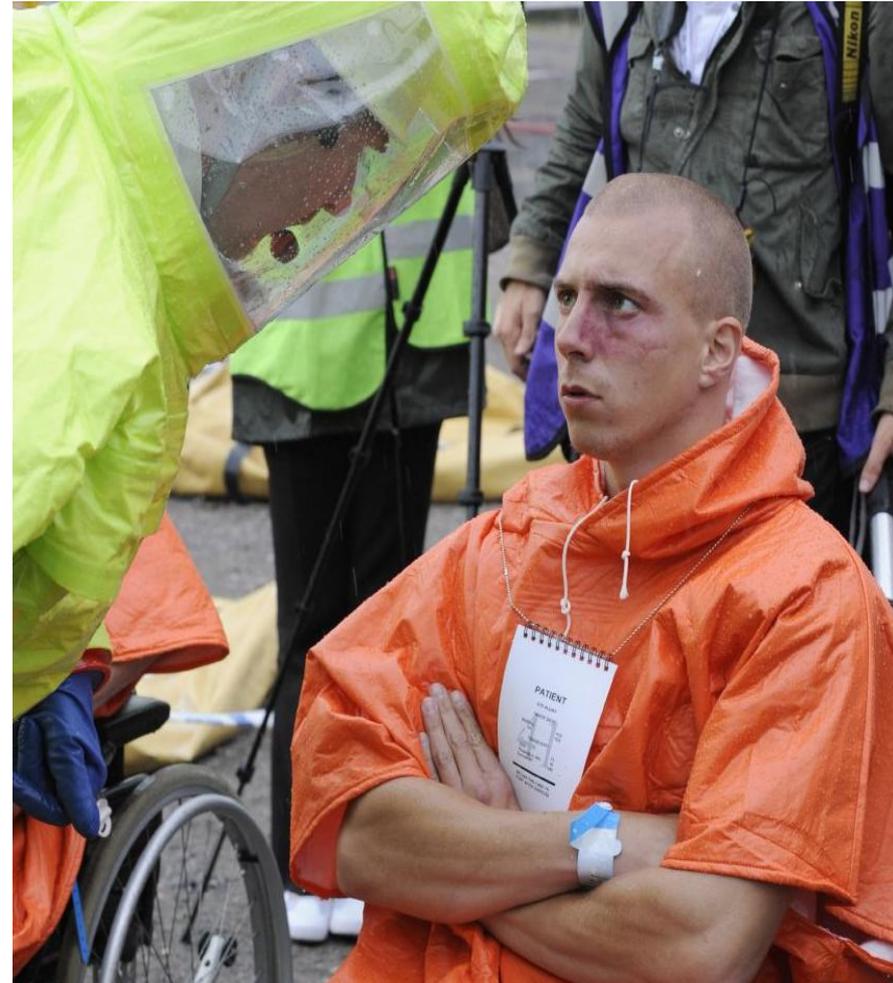




# Key recommendations

## Decontamination processes

- Role and scope of FRS and ambulance staff in MD1 re casualty assessment, assistance, contact
- Review of showering times and planning assumptions to reflect realistic washing times
- Communication of instructions for showering in MD1 – written, visual, pictorial aids





# Key recommendations

## Hot Zone Working

- Provision of respiratory protection to casualties in hot zone, particularly those unable to self-extricate
- Safety practices for hospital staff coming into contact with potentially contaminated casualties





# Key recommendations

## Casualty Challenges

- Guidance for decontamination of prosthetic limbs and other essential mobility aids
- Review triage systems to consider implications for disabled and non-mobile P3 casualties





# Implications, Challenges

- Apply to other vulnerable groups – babies, toddlers, elderly
- Practicalities of exercising disabled – special requirements but don't be put off by this – makes rest of your planning better, and ultimately your decontamination plans
- Future trials – volunteers – age, sex, ethnicity, ability





# Thank You

