

UNIVERSITY HOSPITALS BIRMINGHAM NHS FOUNDATION TRUST
BOARD OF DIRECTORS
THURSDAY 25 APRIL 2019

Title:	UPDATE ON EMERGENCY PREPAREDNESS
Responsible Director:	David Burbridge, Director of Corporate Affairs
Contact:	Lynn Hyatt, Head of Emergency Preparedness and Resilience(Queen Elizabeth hospital) Kellie Jervis, Head of Emergency Preparedness & Business Continuity (Heartlands, Good Hope, Solihull hospitals, Birmingham Chest Clinic, Community Service and Satellite sites)

Purpose:	To present the six monthly update to Board of Directors on progress with Emergency Preparedness.
Confidentiality Level & Reason:	N/A
Annual Plan Ref:	Aim 1: Always put the needs and care of patients first.
Key Issues Summary:	As a category 1 responder, University Hospitals Birmingham (UHB) has a statutory duty to ensure that it can respond to emergency situations and continue to provide essential services at times of operational pressure or in the event of an internal emergency. This paper provides an update on the progress with emergency preparedness and associated major incident and business continuity plans
Recommendations:	The Board of Directors is asked to accept this update on Emergency Preparedness, and agree to receive another update in 6 months' time.

Approved by:	David Burbridge	Date:	April 25 th 2019
---------------------	-----------------	--------------	-----------------------------

UNIVERSITY HOSPITALS BIRMINGHAM NHS FOUNDATION TRUST

BOARD OF DIRECTORS

THURSDAY 25 APRIL 2019

UPDATE ON EMERGENCY PREPAREDNESS

PRESENTED BY THE DIRECTOR OF CORPORATE AFFAIRS

1. Introduction

As a category 1 responder, the Trust has a statutory duty under the Civil Contingencies Act 2004 to ensure that it has adequate arrangements in place to ensure it can respond to an emergency, support emergency response partners and continue to provide essential services to the public at times of operational pressure in the event of an internal emergency and as is reasonably practicable in the event of an external emergency.

2. Executive Summary

- 2.1. This paper builds on the report presented to the Board of Directors in October 2018 and reports on the progress made over the last 6 months to provide assurance that the Trust is fulfilling its statutory duties, and can demonstrate resilience in relation to emergency planning and preparedness.
- 2.2. All existing emergency plans will be aligned across the Trust but some will have to remain site specific e.g. the Major Incident plans, Prison Plan, etc. The remaining emergency plans will be aligned where possible over the coming 12 months.

3. Emergency Preparedness Policy

The Emergency Preparedness Policy is available on the Trust intranet and acts as a framework to support the plans & procedures which outline practical steps to ensure an appropriate & proportionate response by the Trust. This policy has been approved at the Policy Review Group.

4. Major Incident plan and testing

4.1. Major Incident Plan

Extensive training and awareness of the Major Incident and supporting plans remains ongoing throughout the Trust.

4.1.1. Queen Elizabeth Hospital

On the Queen Elizabeth (QE) site the plan is complemented by a video which is available on the Trust Intranet that shows how to set up the Tactical Command and Control centre. Further video footage has been

produced which demonstrates other significant roles within the plan and is also available on the Trust Intranet.

The QEHB Major Incident/mass casualty plan was revised in August 2018 and has incorporated lessons learned from recent events such as the terrorist events in both London and Manchester, and the various table top exercises held.

As the Trust now consists of 4 acute hospital sites a Strategic Command centre has been set up in the Institute for Translational Medicine (ITM) building. The purpose of the Strategic Command centre is to coordinate the response across the Trust and liaise with regional and national bodies.

4.1.2. Heartlands (BHH), Good Hope (GHH) & Solihull (Sol) Hospitals

The BHH Trauma Unit & Mass Casualties Plan and GHH & Sol Local Emergency Hospital (LEH) plans have been reviewed and are currently awaiting final amendments following two large workshops. These plans will go to the relevant Emergency Planning Group for sign off in June 2019.

An ongoing work programme ensures all emergency & associated supporting plans are reviewed and ratified on an annual basis. Once ratified all plans are uploaded and available to all staff on the Emergency Planning Sharepoint site.

The associated Moodle training packages have been updated to reflect the new Trust response structure and went live March 2019.

A total of 1,092 staff have received face to face training over 106 sessions between April 2018 & March 2019 with 446 Moodle completions.

4.2. Major Incident Testing

There is a requirement under the Civil Contingencies Act to exercise the Major Incident plan every 6 months for communication call out only, yearly as a table top exercise and every 3 years as a live exercise.

4.3. Call out Testing

The Trust has a statutory duty under the Civil Contingencies Act 2004 to carry out a communication call out test every 6 months.

4.3.1. QEHB

At the QE site a test was carried out on 5th February 2019 at 19.30 hours. The test was carried out across 6 departments involving a call being made to 66 staff.

Results

Department/area	No staff called	Positive response	% staff responded	No. able to attend in 30 minutes
HR team 3	10	6	60%	1
Medical Engineering	13	4	30.7%	3
Radiology	25	12	48%	9
Switchboard	3	2	66.6%	1
Ward clerk	7	2	28.5%	2
Facilities	8	3	37.5%	0
Total	66	29	44%	16

These departments were all data cleansed following the exercise and amendments made as necessary.

On the 24th October 2018 a live CBRN (Chemical, Biological, Radiological and Nuclear) was taking place outside the Emergency Department. During the exercise a false Major Incident call out was made via the ENERA automated call out system. This resulted in 876 members of staff being contacted by the automated call out system.

Although this call out was made in error, it proved an insightful opportunity to test a system which would not normally be tested to such an extreme length, and, although this call out was unplanned, the hospital staff have been able to learn some very valuable lessons from it.

The issues that resulted from this call out are identified below and actions to resolve the issues where possible.

Issues	Resulting issues	Actions	Lead
Automated call out sent in error	876 members of staff were called unnecessarily and some staff were making their way in to the hospital from home.	Consultants in ED and Clinical site managers informed they cannot declare a Major Incident. Laminated notice put in switchboard to inform WMAS can only declare a Major Incident Switchboard staff taught how to stop the call out when it has been done in error.	Dave Hornsby Sarah Carmalt Lynn Hyatt/Sam Long
Mass bleep giving out sensitive information	The message that there had been an explosion at the University was heard by a large number of people and	Switchboard staff told in the event of a Major Incident being activated they should only	Lynn Hyatt/Sam Long Roy Mason-

	<p>caused unnecessary upset to staff who had children attending the university.</p> <p>The Police were in attendance on Critical Care and were aware of the message that was sent out over the bleep system. They then informed their Commander that there was a terrorist incident at the University. Counter terrorism unit were informed.</p>	declare a Major Incident but not to give any further information	Williams
Automated call out activated x3 and message unclear	<p>5,000 units costing £800 had to be purchased from the company as the system used approximately 4,800 units.</p> <p>Switchboard activated a second call out as they believed the 1st call out had not worked.</p> <p>Staff could not make out the message clearly</p>	<p>Rapid Reach to provide free alert that will inform switchboard when the call has been activated.</p> <p>Emergency planning team to meet with company rep to sort out messages.</p> <p>Messages now changed to completely</p>	Lynn Hyatt/Sam Long
Phones and television not working in Major Incident room	<p>Staff who attended the room said they were unable to get the phones and the television working.</p> <p>The Emergency planning team checked these on the day and all were in working order</p>	Clear laminated instructions re setting up the phones and the television placed in Control centre managers box.	
Too many members of staff attended the Major Incident room	<p>About 50 staff attended the Major Incident room, a lot of which should not have attended. They also did not appear to know what to do</p> <p>No-one attended the library where they should have attended.</p>	Emergency planning team to provide training to staff on roles and responsibilities, setting up the room and generally what staff should do in the event of a Major Incident being called. Date organised for December 12 th providing 3 sessions. Further dates to be provided in the new year	Lynn Hyatt/Sam Long

The result of the call out was that, of the 876 staff contacted, 442 responded that they could attend the hospital providing a positive response of 50% of staff.

4.3.2. BHH

An exercise on 12th December 2018 tested the Major Incident automated cascade and went ahead as planned at 12.00 hrs with a call

to the emergency phone line. The automated cascade campaign commenced at 12.03 hrs and was completed at 13.15 hrs.

This cascade has 301 individuals/depts. and a total of 609 calls were made to contact all 301 staff/areas. 249 staff/depts (83%) were contacted 160 (53%) of which responded to the message. 52 staff/depts (17%) were unable to be contacted.

All key roles expected to respond were all successfully contacted and responded appropriately.

4.3.3. GHH 13th March 2019

This exercise tested the Major Incident out of hour's automated cascade and went ahead as planned at 07.30 hrs with a call to the emergency phone line. The automated cascade campaign commenced at 07.34 hrs and was completed at 08.05 hrs.

This cascade has 136 individuals/depts. and a total of 287 calls were made to contact all 136 staff/areas. 105 staff/depts (77%) were contacted 75 (71%) of which responded to the message. 31 staff/depts (23%) were unable to be contacted.

All key roles expected to respond were all successfully contacted and responded appropriately.

4.3.4. Sol

The call out cascade for Sol was tested during the live exercise in July 2018.

4.4. Table Top Exercises

4.4.1. QEHB

At QE there have been no table top exercises held over the winter months. 5 table top exercises are due to take place in the months of April and May and will be reported in the next board report.

4.4.2. BHH, GHH & Sol

In January 2019, two cross site multi-disciplinary workshops were held at BHH to support the response from Theatre, Emergency Department & Critical Care. These were held during the theatre maintenance fortnight to ensure maximum theatre staff attendance. This training was supported by Trust wide presenters and incorporated a mass casualty table top exercise.

4.5. Live Exercises

4.5.1. A CBRN exercise was held at the QE on 24th October 2018. This live exercise involved 17 Medical students acting as volunteer 'casualties' who attended the Emergency Department with a suspicious presentation and were then decontaminated. The exercise an unannounced exercise, which was videoed, and will be used in future training. A number of errors were made during this exercise which will also inform future training. The main errors were:

- Reception staff came out of the department to register the

patients but had no protective equipment on so in effect they were then contaminated.

- The 1st patient to present at the reception was sent to the minor's area where she was sat next to other patients in the area therefore potentially contaminating other patients.
- Security were not informed therefore did not set up the cordon around the area and resulted in members of the public and staff walking through the contaminated area.

A further live CBRN exercise will be undertaken in June 2019 and will be reported in the next board report.

4.6. Preparing for Chemical, Biological, Radiation and Nuclear Emergencies (CBRN)

4.6.1. QEHB

Training for a CBRN incident at the QE continues to take place in the Emergency Department on a rolling monthly basis when staff are available.

The QE site specific CBRN plan has been reviewed and is available on the Intranet.

4.6.2. BHH, GHH & Sol

CBRN incident training is undertaken as part of the annual Emergency Department (ED) & Minor Injuries Unit (MIU) training days. This includes PRPS, Ram Gene, Initial Operational Response (IOR) & assembly of the decontamination shelter. 253 ED & MIU staff attended 35 training sessions.

Four bespoke training sessions were held at GHH for Emergency Department reception staff – 17 staff trained. A number of other sessions have been booked for BHH & Sol during April & May 2019.

Eight bespoke training sessions for the Estates Teams have been delivered as they have a key role in the CBRN response. 53 staff attended this training.

4.6.3. Birmingham Chest Clinic, Off Site Renal Units & Community Services

As part of the National IOR programme, all NHS facilities need to be able to respond to a self-presenting contaminated patient. Therefore, 9 training sessions have been delivered to 102 staff training them in the use of the IOR kit boxes we have located within the community buildings.

5. Business Continuity Planning

The Business Continuity plan is available on the Trust intranet as a supporting document to the Emergency Preparedness policy. Training and awareness sessions are continuing to be held across QEHB.

5.1. Risk Assessments and Business continuity operational plans

5.1.1. QEHB

The risk assessments and the accompanying operational plans are now available across QEHB to all staff on the Sharepoint system with more areas identifying risks to their service and formulating operational plans to mitigate such risks. The Emergency Planning team attend sessions to provide direction on developing and reviewing these plans.

The business continuity plans continue to be revised and updated following lessons learnt from both live and table top exercises.

5.1.2. BHH, GHH, Sol, Birmingham Chest Clinic, off site Renal Units & Community Services

The 2018 BCM & Lockdown project continued to be the biggest annual project. The project included a new Adverse Weather BCM template for all clinical wards/departments to complete. This was linked to the Critical Function section of the local BCM plan and includes a predetermined action plan in the event of an adverse weather event.

Division/Area	Review Completion	Ratification
Division 1	100%	100%
Division 2	97% (100% 2017)	100%
Division 3	97% (80% 2017)	100%
Division 4	93% (90% 2017)	100%
Division 5	94% (91% 2017)	100%
Non-clinical areas	71% (61% 2017)	

Total completion figure for 2018 BCM & Lockdown was 97% which was up on the 2017 review of 85% completion.

The Adverse Weather review figures are as follows:

Division	Completion
Division 1	93%
Division 2	94%
Division 3	84%
Division 4	39%
Division 5	97%
Community	29%
Total	78%

An annual audit of the BCM & Lockdown folders was undertaken in November 2018.

From the audit results, each area was given a RAG rating and a full

report is currently being written by the EPT which will be shared with the divisional leads. The RAG rating was based on the following:

- **RED** – Staff not aware, BCM & lockdown not in folder or out of date and other information missing
- **AMBER** – Staff aware of the plans, Adverse Weather BCP or one document missing
- **GREEN** – Staff aware of the plans, All documentation up to date and correct
- **PURPLE** – EPT not able to gain access to either the ward/department or the BCM folder

The table below details the overall position compared to the audit undertaken in 2017.

Div	2018 Audit Results					2017 Audit Results				
	Red	Amber	Green	Purple	Total	Red	Amber	Green	Purple	Total
1	6	9	11	3	29	9	11	5	0	25
2	5	6	17	1	29	20	3	5	0	28
3	7	6	22	1	36	13	6	16	1	36
4	9	5	11	1	26	13	9	3	0	25
5	9	5	15	3	32	8	4	15	1	28
Total	36 (24%)	31 (20%)	76 (50%)	9 (6%)	152	63 (44.5%)	33 (23%)	44 (31%)	2 (1.5%)	142

5.2. Table top exercises

All Major Incident exercises now include an element of Business continuity.

5.3. Live incidents

There have been 4 significant incidents during the last 6 months.

5.3.1. QEHB

1st October 2018 Radiation incident

A patient who attended Nuclear medicine was thought to have discarded the Iodine radiation capsules that she had been given on the floor in the department. This resulted in the capsules being trod on and the contents being walked through the department and as far as the external Atrium doors.

The incident was reported and involved a huge number of patients being contacted who had attended the department over a 48 hour period. The patients were given advice and the offer to decontaminate the shoes that they were wearing on the day. Although this was offered none of the patients felt that they needed to take up this offer and were satisfied with the advice they had been given.

11th November 2018 Loss of servers to the Wolfson building

At 03.55 hours one of four cooling units failed in the Wolfson building which resulted in the development of smoke which then triggered the fire

suppression service. As a result of this the Fire brigade was called and over a short period of time the other 3 cooling units failed. All IT services were lost throughout the hospital.

This incident lasted until 10.23 hours when the servers were able to be restored.

A RCA was undertaken where it was reported that the incident had been caused by a faulty cooling unit which was then replaced.

8th April 2019 power disruption

The hospital experienced a short power cut at 16.10 hours due to a fault that Western Power was working on.

Following this, the issues experienced on site were:

- Loss of 2 out of 4 Cardiac Catheter labs – these were all up and running by the following morning
- Loss of all CT scanners – these were all up and running within a few hours
- Loss of MRI scanners – 2 were back up and running within 3 hours. The remaining scanners were not up and running until the following day as Siemens had to be called in to rectify the fault.
- Loss of lighting to the 7th floor
- Loss of Nurse call buzzers across some of the wards on each level
- All lifts in the QEHB required resetting

A formal debrief will be taking place in the next 2 weeks.

5.3.2. GHH

On the 31st January 2019, Tactical Command was put in place at GHH after a generator for Ward Block 1 failed to start on a pre-planned maintenance test. This was identified via a warning on the panel and the maintenance test was cancelled by the Estates Team and a plan of action was put in to place to find & correct the fault.

As power could not be maintained to Ward Block 1 in the event of a power failure across the GHH site, a backup generator was bought on to site to ensure power supply could be maintained in the event of a power loss.

A debrief was held and a report was produced.

6. Additional Emergency Plans

There are other plans available which form part of the Trust's wider emergency planning processes. In light of the merger of Hospitals in April 2018 the emergency planning teams continue to work towards aligning the plans to ensure cohesion and co-ordination across the Trust.

7. EU exit operational readiness

Following on from the board report that was submitted at the December Trust board meeting, work remains ongoing to prepare for a 'No deal' exit from the EU. There still remains uncertainty within Parliament around an agreed deal for the UK to exit the EU.

The Department of Health and Social Care (DHSC) commenced daily SITREP reporting in March 2019 using NHS Digital Service reporting mechanism. This was ceased with immediate effect on the 11th April 2019 following agreement by the EU to delay the UK exit up until 31st October 2019.

The EU exit working group will meet as planned on the 18th April 2019 to agree the ongoing Trust approach.

8. Staff Awareness

- 8.1. In order to ensure staff are kept informed of either a major incident, internal incidents, lockdowns or cyber-attacks taking place, a system of Desk Alerts has been introduced which will be visible across all QE site PCs. The alert will take over the whole PC screen and will have an audible beeping sound attached. This alert can then be acknowledged and closed.
- 8.2. An ongoing update will run across computer screens until the incident is stood down.
- 8.3. The Major incident Desk Alert will be managed by Communications team under the direction of the Incident Commander. Internal incidents and lockdown alerts will be instigated, and managed by the Clinical Site Team, and any Cyberattack desk alerts will be managed by IT.
- 8.4. Before the desk alerts were launched, a communications briefing was available for all staff.
- 8.5. To ensure that all staff have an awareness of the Trust's emergency planning arrangements & procedures the generic Emergency Planning Awareness Moodle package has been updated for 2019 and went live in March 2019. All staff are encouraged to complete this 15 minute package.

9. Conclusion and Recommendations

- 9.1. The Trust has maintained its statutory obligations under the Civil Contingencies Act 2004 and is currently fully compliant with NHS England Core Standards. The Emergency Planning annual work programme will continue to be developed to ensure ongoing compliance.
- 9.2. The Board of Directors is asked to accept this update on Emergency Preparedness, and agree to receive another update in 6 months' time.

David Burbridge
Director of Corporate Affairs

April 2019

