

Preparing Haematology and Blood Transfusion lab for a Major incident

Lorry Phelan MBE

Site Manager Blood Sciences

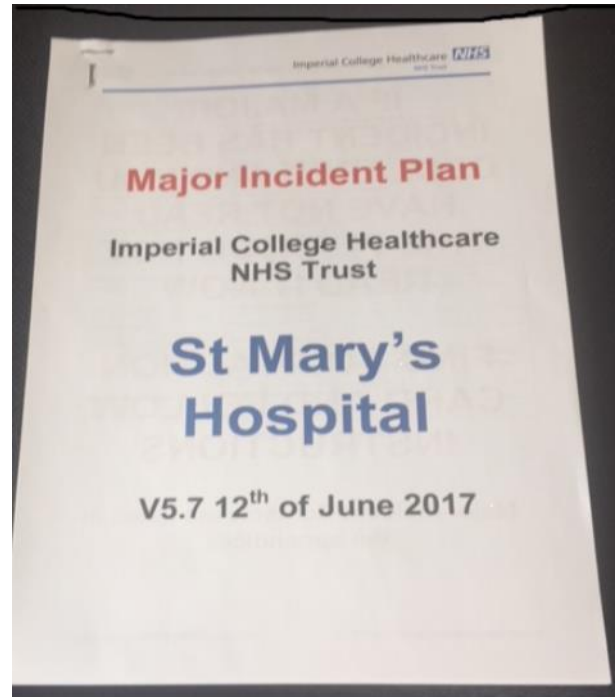
- **Definition of a major incident:**

A major incident or emergency is any event that cannot be managed within routine service arrangements. It requires the implementation of special procedures and involves one or more of the emergency services, the NHS or a local authority.

Date	Incident	Killed	Injured
8th March 1973	Bombing	1	200
17th July 1974	House of parliament bombing	0	11
Jul-74	Tower of London bombing	1	42
5th Sept 1975	London Hilton bomb	2	63
30th March 1979	Car bomb @ Palace of Westminster	1	0
20th July 1982	Hyde park & Regents park bombings	11 soldiers and 7 horses	>50
7th Feb 1991	Downing street mortar attack	0	2
18th Feb 1991	Victoria station-bomb	1	38
28th Feb 1992	London bridge bomb	0	29
10th oct 1992	Paddington police station bomb	0	1
17th Dec 1992	John Lewis oxford st bomb	0	4
27th Feb 1993	Camden Town bombing	0	18
24th April 1993	Bishopsgate bombing	1	30
9th Feb 1996	London Docklands bomb	2	0
18th Feb 1996	Aldwych bus station bomb	1	50
17th To 30th April 1999	Nail bombings over 3 weekends	3	139
5th Oct 1999	Paddington rail disaster	31	500
7th July 2005	7/7 bombings (tube/bus)	52	700

2010 MAJOR TRAUMA CENTRE OPENS AT SMH			
		Killed	Injured
2017			
22nd March	Westminster bridge -vehicle attack and stabbings	6	50
3rd June	London bridge & Borough Market vehicle attack and stabbings	8	48
14th June	Grenfell Tower fire		>70
19th June	Finsbury park - Vehicle attack outside mosque	1	10
15th Sept	Parsons Green tube station bomb	0	29

- St Mary's Hospital Major incident plan.



- **THERE WILL BE NO TIME TO READ THE DOCUMENT FOR THE FIRST TIME DURING A MAJOR INCIDENT OR REFER TO IT.**
- **STAFF SHOULD REFER TO THEIR RELEVANT ACTION CARDS AND FOLLOW THE INSTRUCTIONS WITHIN THE CARDS.**

MAJOR INCIDENT ACTION CARD

Blood Transfusion

STANDBY

MAJOR INCIDENT ACTION CARD

Blood Transfusion

STANDBY

- **Contact A&E on ext. 21974 or 21815 to assess scale of incident.**
- **Increase RBC Stock levels by 20% through OBOS.**
Confirm order with NHSBT via phone
- **Confirm the BMS on Back up is on their way in.**
- **Issue A&E blood to BT2:** -See Green A&E Folder
 - 20 x O Positive K- RBC Units.
 - 10 x O Negative K- RBC Units.

Keep Units in BT2 until MI is Declared.

MAJOR INCIDENT ACTION CARD
Blood Transfusion
DECLARED - BMS 1 (XM Bench)

MAJOR INCIDENT ACTION CARD

Blood Transfusion DECLARED - BMS 1 (XM Bench)

- **Contact A&E on ext. 21974 or 21815 to assess scale of incident.**
 - Do we need specific components?
 - Are most of the patients adults or children?
 - Are there lots of Bleeding patients?
 - Does our current stock reflect these needs?
- **OBOS Order:**
 - Increase RBC Stock levels by 50%.
 - Increase platelet and FFP stock to cover assessment of MI.
- **Call NHSBT on 0845 850 0911 to inform them of SMH status in MI.**
- **Take RBC's down to A&E Fridge: 20 O Positive K- Units & 10 O Negative K- Units**
 - TRANS Units from BT2 to MAE
 - Scan units into A&E fridge within 30mins of being TRANS'd.
- **Thaw a total of 12 Group A FFP (Note: MB Treated FFP if high number of Paeds)**

**Carries Bleep
1611**

Confirm order with NHSBT via phone

Contact the duty SpR or Consultant Haematologist if they have NOT contacted you within 20 min of MI alert!

MAJOR INCIDENT ACTION CARD

Blood Transfusion

DECLARED - BMS 2 (Grouping Bench)

MAJOR INCIDENT ACTION CARD

Blood Transfusion

DECLARED - BMS 2 (Grouping Bench)

- **Prepare rapid grouping tubes**
(Ensuring QC is completed)
- **IH1000**
 - Top up reagents and consumables.
 - Ensure QC's have been run and are valid.
- **Return RBC & platelets from issue room** where possible.
- **Clear outstanding work in BT and Haematology.**

MAJOR INCIDENT ACTION CARD

Blood Transfusion Processing Samples

- **Booking In:**

- Telepath main menu, select: 6 MI Major Incident
- Option 4 PREQ Patient Request Entry
- Option 2 Patient/Specimen screen
 - Hospital Number: This the MI number
 - Forename: SMHMI (For all patients)
 - Surname: SMHA[NUMBER]
 - Gender: As stated on form
 - DOB: Date of MI

**DOB NOT
needed on
samples
received in a
MAJOR
INCIDNET**

See reverse for Example Patient

- **Book ALL samples in for a DGS and EG**

- Run the DGS Urgently on the IH100
- Conduct EG when sample has been ejected from IH100

Example Patient:

MI Number: 20010668

First Name: SMHMI

Surname: SMHAONESEVEN

DOB: 22.03.17

Sex: M

The First Name is the same for all MI patients

The Numbers in the Surname will not be consecutive

This letter shows if the patient is an Adult (A) or a Paediatric (P)

The DOB for all patients should be the date of the MI

All patients who attend A&E during a Declared Major Incident will be booked in as a MI patient.

MAJOR INCIDENT ACTION CARD

Blood Transfusion

DECLARED - Issuing Blood Products

MAJOR INCIDENT ACTION CARD

Blood Transfusion

Issuing Blood Products

- **1st Use Blood from A&E Fridge**
- **Group specific components can be issued:**
 - When the EG is confirmed by the IH1000

Group specific blood can be issued on a single sample in a Major Incident!

- **Label Verification** checks **MUST** be completed on all blood products issued to individual patients **BEFORE** they leave the lab .
- If Transfusion Practitioners are available they will help liaise between clinical areas and Lab.
- If a porter is needed to transport blood to/from A&E contact the **Sister in Charge on bleep 1070.**

MAJOR INCIDENT ACTION CARD

Haematology Consultant or SpR Initial Response

MAJOR INCIDENT ACTION CARD

Haematology Consultant or SpR Initial Response

- **Duties Performed Off Site by Phone:**

- Contact ED Resus to confirm numbers expected.
- Call Lab using direct number. Check Red Cells, Plasma & Platelets and advise increasing dependant on incident.

Be prepared to come on site for a declared MI.

- **Main Duties:**

- Co-ordinate between Lab, A&E and Theatres.
- Liaise with Site/Lab Manager or most Senior member of staff regarding staff availability.
- Go to Silver Command for briefing with or without Manager.

- **Go to Haem/BT Laboratory** Update them of incident & estimated numbers and casualties already received.

- **Go to A&E:** Assess and co-ordinate the need for transfusion directly.

- **Regularly review casualties in A&E and Theatres** to assess & co-ordinate the need for transfusion.

MAJOR INCIDENT ACTION CARD

Haematology Consultant or SpR

- **Check with the Sister in Charge** if a runner is available to transport blood products and urgent samples between A&E and BT Lab.
- If Transfusion Practitioner is available attempt to make contact via bleep 5626 or ext. 21949.
- **Stand Down:**
 - Inform BT Lab when transfusion support is no longer required.
 - Inform Haem Lab when MI is stood down.
 - Ensure unused units in A&E Fridge are returned to stock
(Leaving 6 O Positive and 6 O Negative Units)

MAJOR INCIDENT ACTION CARD
Haematology BMS

MAJOR INCIDENT ACTION CARD

Haematology BMS

- See if help is needed in Blood Transfusion.
- Ascertain if Site/Lab Manager and Duty Manager have been informed.
- Book in and authorise outstanding work.
- Ensure analysers are stocked and QC's are valid.
- All abnormal results are to be phone to A&E using ext. 21815 quoting both MI number and Surname to confirm the patient.
- Results can be seen by Clinical Staff on Sunquest ICE.

MAJOR INCIDENT ACTION CARD

Haematology Booking In Samples

- Log into Sunquest
 - Select Order Entry
 - Book in the sample/s:
 - Hospital Number: This the MI number
 - Forename: SMHMI (For all patients)
 - Surname: SMHA[NUMBER]
 - Gender: As stated on form
 - DOB: Date of MI
- See reverse for Example Patient**
- Stick CID labels onto samples and Accession Numbers onto the request Form. Keep all MI request Forms to one side.

Treat all MI samples are URGENT

Example Patient:

MI Number: 20010668

First Name: SMHMI

Surname: SMHAONESEVEN

DOB: 22.03.17

Sex: M

The First Name is the same for all MI patients

The Numbers in the Surname will not be consecutive

This letter shows if the patient is an Adult (A) or a Paediatric (P)

The DOB for all patients should be the date of the MI

All patients who attend A&E during a Declared Major Incident will be booked in as a MI patient.

MAJOR INCIDENT ACTION CARD

Bronze Command

**This is the role of the most senior member of staff on site.
(Site Manager – Lab Manager – Consultant – Band 7 BMS etc.)**

Main Duties:

- **Notify as many of the Haem/BT staff as appropriate for the major incident.**
- **Liaise with Consultant Haematologist.**
- **Ensure appropriate cover in all sections of the Laboratory**

MAJOR INCIDENT ACTION CARD

Bronze Command

This is the role of the most senior member of staff on site.

- **Liaise with duty Consultant Haematologist**, assessing the need for extra staff.
- Escalate to Divisional Manager
- **Call in appropriate number of staff** to attend or delegate this to the next person in command.
Please remind staff to bring their ID badges with them if called.
- **Report to Silver Command Station** (Site Operations Offices) situated behind to the right of reception of Ground Floor QEQM.

MAJOR INCIDENT ACTION CARD

Bronze Command

This is the role of the most senior member of staff on site.

- **Once Lab is Stood Down**, check requirements for any additional staff to stay to help with back log of work.
- **Sending staff home** - If MI is OOH it may be necessary to keep staff on until day shift and send them home early. This will help if day staff are finding it difficult to travel to work.
- **Check with Chemistry** to determine if additional resources are required.

MAJOR INCIDENT ACTION CARD

Nerve Agent Protocol

Nerve Agent Antidotes Stored by NHSBT

MAJOR INCIDENT ACTION CARD

Nerve Agent Protocol

Nerve Agent Antidotes Stored by NHSBT

- **Pralidoxime Mesylate (P2S)**
 - Used for organophosphate poisoning
- **Obodoxime**
 - A second-line antidote for organophosphate poisoning if casualties do not respond to P2S
 - Used from the outset if nerve agent is known to be GA (Tabun)
- **Dicobalt Edetate**
 - Used for the treatment of cyanide poisoning
- **Botulinum Antitoxin**

**Nerve Agent
Antidotes Arrive in
Pods**

MAJOR INCIDENT ACTION CARD

Nerve Agent Protocol

Part 1

- **London Ambulance Service (LAS)** request antidotes directly from **NBS** using a national phone number.

If A&E are unable to contact the LAS please provide them with the Chemical Incidents Hotline: 0844 892 055

- **NBS will call BT Laboratory** to inform them of pods being sent under “blue light” conditions
- **Call the Sister in Charge on bleep 1070**
 - Inform them of incoming pods
 - Request an escort for the NBS driver on arrival to BT.

MAJOR INCIDENT ACTION CARD

Nerve Agent Protocol Part 2

- **Receive and sign** for pods in Blood Transfusion.
- **Send the escort and NBS driver A&E** with pods.
- **Inform A&E on ext. 21974 or Sister in Charge on bleep 1070** that pods have arrived and on their way to A&E.
- **Contact Consultant Haematologist** to seek advice as to whether more BMS staff should be called in.

MAJOR INCIDENT ACTION CARD

Nerve Agent Protocol Part 2

- **Receive and sign** for pods in Blood Transfusion.
- **Send the escort and NBS driver A&E** with pods.
- **Inform A&E on ext. 21974 or Sister in Charge on bleep 1070** that pods have arrived and on their way to A&E.
- **Contact Consultant Haematologist** to seek advice as to whether more BMS staff should be called in.

Don't panic keep calm

I would like to thank Bianca Beard Senior BMS who created all the laminated action cards.

Any questions?