

London and South East Haematology and Trauma Group

Major Incident Planning Aide Memoire

This document was devised to assist hospitals in developing their Major Incident (MI) Plan for managing transfusion services in the event of a mass casualty situation. It is based on information supplied from the Transfusion Teams at the four¹ London Major Trauma Centres and builds further on previous efforts of the RTC in MI planning including London bombings debrief and Olympic planning 2012.

Disclaimer

This is not a formal major incident plan. This document is based on what the MTC Transfusion Teams feel should be considered when devising a plan for transfusion services. It should not replace the formal Trust ratified Major Incident Plan for transfusion.

Pre MI Considerations

- Be part of the Trust MI planning and make sure the Transfusion Department has a seat (or is represented) at the local Emergency Planning Committee.
- Ensure emergency blood management plan for blood shortages is part of Trust major incident preparedness.
- Fully tested contingency plans for unexpected outages such as blood track failure, automation failure, LIMS and PAS downtime.
- Check Trust MI plans to ensure accurate reference to Laboratory Action Cards.
- Check Laboratory SOP -
 - Is it still accurate and valid?
 - Does it contain the correct number for NHSBT Hospital Services?
 - Is there an updated call-up list with current laboratory and clinical staff?
 - Availability of documents (paper and electronic) including Action Cards.
 - Mock MI events within the Laboratory.
 - Awareness of how internal telephone systems work including likelihood of system overload, failure, contacting people if mobile network goes down, use of walkie-talkies.

Team Roles and Staffing

- Ensure that local transfusion roles mirror roles in Trust MI plan. Consider if this may require additional staff as there may be transfusion related tasks which are not detailed in Trust MI policy. Requires clearly defined roles for all involved.

¹ Barts Health NHS Trust (Royal London MTC)
Imperial College Healthcare NHS Trust (St Mary's MTC)
Kings College Hospital NHS Trust
St Georges University Hospital Foundation NHS Trust

London and South East Haematology and Trauma Group

- Get staff on the call-up list to sign off so that they understand their roles and responsibilities in the event of a mass casualty incident.
- Interactions with other Pathology provisions (i.e. Blood Sciences) and it should be clearly defined who has final say within the team: clinically and/or operationally (e.g. who has priority when Biomedical Scientist staff are shared).
- All staff are recently GMP trained and up to speed with recall and concessionary issue processes (which may well be required in such an event).
- Consider staffing levels in the short term and long term. Issues include accommodation, site access, reliance on public transport.
- Prepare Laboratory to prioritise work streams -
 - Defer antenatal testing.
 - Complete existing work to clear automation.
 - Check storage capacity and stock levels.
 - Prepare paperwork and disposables for incoming samples and stock deliveries.

Blood Stocks Management

- Transfer of blood and components within an organisation: consideration on getting blood stocks from neighbouring non-acute sites and how would those be transported? Will police/ambulance assistance be required?
- Awareness of possible satellite fridge locking problems in network failures. Plan how to manage fridges such as unlocking all fridges manually (traceability risks), placing somebody at the blood fridge handing out units when required (staffing implications), bringing all the stocks back to the laboratory and issuing units in cool boxes (cold chain risks).
- Use of transfusion adjuncts if readily available-
 - rVIIa
 - Prothrombin complex concentrate
 - Fibrinogen concentrate
 - Tranexamic acid
 - Cell salvage
- Consideration on level of clinical authorisation required and replacing if used
- Management of stock that is over-ordered in the heat of the moment? Return to NHSBT? Transfer to another site with higher daily usage?

NHSBT Considerations

- Advice.
- Component stocks and deliveries.
- Nerve gas PODS. Make sure staff know who orders them and where are the delivery points for all PODS/antidotes.
- Do hospitals know whether they are a CBRN (Chemical/ Biological/ Radiological/ Nuclear) receiving centre or not? Don't assume because there is not a Major Trauma Centre or Trauma Unit that these cases won't come - they possibly will.

London and South East Haematology and Trauma Group

- Ensure Switchboard have the details of how potential donors can contact NHSBT.
- Establish who in the Laboratory will link in with NHSBT hospital services.
- Ensure information from NHSBT regarding need for further blood donors is communicated to Trust Comms Team.
- Assurance of arrangements to replenish blood stocks.
- If there is difficulty accessing the hospital either because of traffic/road blocks or hospital security what should the NHSBT or hospital do?
- Discussion post event on the take back of over ordered stock.

Patient Management

- Pre-prepared packs of patient notes with Pathology request forms.
- Consider quality of ID used.
- Make sure MI numbering/naming system is compatible with LIMS - this is often a set of folders with pre-printed labels, wristbands and documentation but may not have been updated if recently installed a new PAS, LIMS or Blood Tracking system. If incompatible more staff needed to communicate with clinical areas (send and receive calls).
- Acceptance criteria for samples with limited patient information.
- Use of safest components clearly defined for all levels of patient testing (no group, manual group, poor quality samples, full automated group)
- Patient movement in Trust (Theatres, ICUs, Interventional Radiology)
- Ensure paediatric patients are considered (Bastille Day tragedy in Nice June 2016 involved multiple children and adult casualties).
- Review of patients post event for adverse incidents (may not have been reported at time).

Documentation

- Ensure all major incident documentation (e.g. action plan summary form) are completed with as much information as known.
- Traceability of units.

Communication

- Establish who is giving the laboratory update information on the incident. This may be a Pathology Manger, Blood Sciences Manager or Hospital Site Manager; two-way communication is vital. They will also require updates on NHSBT including further supplies, deliveries, PODS etc.
- Manage a Whiteboard if used. Ensure responsibility for updating is allocated.

Component Selection

- If only using O RhD Neg RBC potential to have a huge impact on the stocks.
- Ensure plans to move to group specific red cells have been considered.
- Use of group A FFP in unknown patients. Ensure gender information is coming to the laboratory on the casualties.

London and South East Haematology and Trauma Group

- Distance (and time) from NHSBT to hospital: ability to re-supply (also Octaplas for SD-FFP and blood products for haemostasis).
- Management of routine 'essential' transfusions e.g. Sickle Cell, post BMT platelet support, other non MI urgent surgery lists ensuring both clinical and laboratory input into the decision making process.
- Patient ID changes as information becomes available – issuing blood on known names and date of birth – when to switch from MI “unknown” ID information?
- Keep a log of process deviations or concessionary release items so that these can be signed off after the event. Non-MB FFP to 1/1/1996, D pos RBC/platelets to unknown WoCBP, blood out of temperature control etc.
- Consideration for a pre-agreed concessionary release process in the major incident SOP

9. Other Considerations

- External movement restrictions, NHSBT access to Trust, patient transfers out (or in), staff access, and other supplier access.
- Management of “spoke” staff/services (if in Pathology hub and spoke network).
- Component usage data to NHSBT to assist with future contingency planning.
- Prepare information (successes, lessons learnt) for regional review - RTC meeting, London & South East Trauma & Haematology Group, TAG, TP Group.
- Ensure plan in place for post event de-brief.
- Consider successes and areas for review

References

- Glasgow SM et al Blood and bombs: the demand and use of blood following the London Bombings of 7 July 2005--a retrospective review. *Transfus Med.* 2012 Aug;22(4):244-50.
- Glasgow SM et al Going for gold: blood planning for the London 2012 Olympic Games. *Transfus Med.* 2014 Jun;24(3):145-53
- Doughty H et al .Mass casualty events: blood transfusion emergency preparedness across the continuum of care *Transfusion.* 2016 Apr;56 Suppl 2:S208-16.

*On behalf of the London and South East Haematology & Trauma Group
September 2016*