NBTC Emergency Preparedness, resilience and Response guidance for Hospital Transfusion Teams

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| Section | Criteria | Compliance Y N N/A | Comments/Action Required | To be completed by: |
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| **Emergency Preparedness** | Hospital Trusts must include the Pathology department and HTT in Major Incident planning | | | |
| | Ambulance Services should have arrangements with pre-selected Transfusion Laboratories for the provision of blood to scene in Major Incidents. | | | |
| | Staff should be placed where most transfusion samples are being collected and transfusion is taking place | | | |
| | Members of the extended transfusion team may be used to assist in a range of supporting activities | | | |
| | Hospital transfusion laboratories may consider moving stocks of universal blood components to key clinical areas for use in a Major Incident. Where blood is moved, secure systems should be in place for blood selection, maintaining the cold chain, and traceability records. | | | |
| | The consultant with responsibility for transfusion and the Transfusion Laboratory Manager are responsible for maintaining | | | |

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| | their own departmental action cards | | | |
| | Hospital Transfusion Laboratories should be aware of their Trust's pre-determined casualty plan in the context of a MCE. | | | |
| **Incident Notification and communication** | The initial internal communication cascade or call-out list should include the Transfusion Laboratory, | | | |
| | Hospital Transfusion Laboratories are currently advised to inform the Hospital Services department of the local NHSBT centre /stock holding unit once the hospital has been notified of a Major Incident and again when stood down | | | |
| | Trusts should have protocols for alternative means of internal and external communication in the event of a failure of traditional or digital telecommunication technology. | | | |
| | Hospital Transfusion Laboratories should be permitted to maintain ongoing communication with NHSBT. It is recommended that hospitals consider retaining external phone lines for communication as a resilience measure. | | | |
| | Press enquiries should be referred to the Trust's Press Liaison Officer. All communications for potential blood donors should be led by NHSBT. | | | |
| **Hospital Transfusion Laboratory Response** | A senior member of the Hospital Transfusion Laboratory should assume responsibility for transfusion services and assess the required response | | | |
| | Staffing. An initial assessment of current | | | |

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| | laboratory staffing should be undertaken along with determining the need for additional personnel. Other transfusion staff should be redeployed according to departmental plans. Off-duty staff should not report for duty until advised to do so. Staff reporting for work should use the pre-determined check-in points according to Trust plans | | | |
| | Blood Stock & Critical Consumables. Stock levels of blood components within the laboratory and in remote fridges i.e. ED, theatres and satellite fridges should immediately be assessed, as should the availability of other critical consumables, including reagents and transport containers | | | |
| | Stock movement: Routine surgery and some day care patient activity may be suspended. Blood already issued may no longer be immediately required for those cases. Consideration should be undertaken to de-reserve and re-centralise blood before reissuing to emergency areas to meet the potential surge in demand. | | | |
| | Plasma. It is assumed that hospitals will hold enough frozen blood components to meet their planned admissions for the first hour | | | |
| | Platelets. Early consideration should be given to the demand and storage for platelets | | | |
| | Pre-hospital transfusion. In the context of Major Incidents, Transfusion Laboratories should anticipate the requirement for pre- | | | |

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| | hospital transfusion and the implications for blood stock management. | | | |
| | Documentation. All key decisions should be documented, and all documentation should be clear, accurate and timely. All documentation (electronic and paperwork) must be preserved. | | | |
| Hospital Response | Guidelines for identifying 'unknown' patients in emergency and mass casualty situations recommend non-sequential unique patient identifiers and gender as a minimum requirement. | | | |
| Patient Identification and blood samples | The use of unique patient identifiers and careful patient identification before blood sampling and administration of blood is essential to reduce the risks of incorrect blood transfusion | | | |
| | Baseline blood samples for pre-transfusion testing should be obtained before administration of any blood component | | | |
| | The use of group-specific blood is normally recommended once the patient's blood group has been confirmed | | | |
| | The gender of the patient should be included on both the blood sample bottles and request forms to optimise blood group selection | | | |
| | Request forms should include treatment priority, age or estimated age and special requirements if known. Distinguishing children from adults enables age-related criteria to be applied to component selection | | | |

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| | There should be clear guidelines regarding the change from the Major Incident identifier to the routine hospital identifier, particularly in relation to transfusion samples. | | | |
| Guidance for clinical blood use | Trusts should ensure that they have a policy for the management of massive haemorrhage and massive transfusion and this should be incorporated into the Major Incident plan | | | |
| | Trusts should consider having an Intra-Operative Cell Salvage (IOCS) service for use in major haemorrhage; including traumatic haemorrhage to reduce reliance on allogeneic blood. | | | |
| | Trusts should have contingency plans for major blood shortages incorporated into Major Incident plans | | | |
| Selection and issue of blood components | All patients admitted to hospital should have a baseline sample taken for transfusion testing of blood group (ABO and D) and atypical antibody screen. However, blood grouping should be initially prioritised to the most urgent cases (P1 and P2 cases | | | |
| | Laboratory procedures should be in place to prioritise and handle emergency samples. | | | |
| | Appropriate blood group substitutions should be considered to optimise stock management of all blood components | | | |
| | Group O positive red cells may need to be used in unknown males. D and K negative blood should be prioritised for unknown females under the age of 50 | | | |

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| | Arrangements must be in place for the traceability of blood sent to other hospitals and the Ambulance Service. | | | |
| | Hospital Transfusion Laboratories should be able to provide details of blood and blood component usage following a Major Incident to NHSBT within 72 hour | | | |
| Regulatory Requirements | Due consideration must be given to securely maintaining the cold chain of any blood components stored and transported during an incident | | | |
| | Hospital Transfusion Laboratories should have protocols for the timely thawing and issue of plasma together with the option of post-thaw storage of FFP at 4oC for up to five days. | | | |
| | The use and disposal of any blood component must be documented in the clinical notes and in the Hospital Transfusion Laboratory records using the unique number of both the blood unit and the patient | | | |
| | Hospital Transfusion Laboratories should have procedures for maintaining the systems for traceability of blood and blood components, used and wasted | | | |
| | All adverse incidents related to either the provision of transfusion services and/or the use of blood components should be reported to the Hospital Transfusion Team | | | |
| Staff Support and Welfare | Hospital Transfusion Laboratories should have policies for the organisation of staff in a Major Incident with systems for provision of additional staff only if needed. | | | |

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| | Trusts should consider having policies for providing food, rest facilities and accommodation for staff unable to travel home | | | |
| | Staff may need some psychosocial support in the time following the incident. In some circumstances those affected may need additional support for a considerable period. Debriefing may help individuals and support the transfusion team | | | |
| | At the command “Major Incident Stand Down” the transfusion team should hold a short ‘hot debrief’ meeting drawing out issues that presented problems or where improvements can be mad | | | |
| | A representative from the transfusion department should attend their hospital hot debrief meeting which is normally initiated by the director leading the Gold control team | | | |
| Recovery Phase | Transfusion Laboratories should re-assess their blood stocks in the light of these future activities and adjust standing orders with NHSBT as required. | | | |
| | Transfusion Laboratories should complete their traceability audits and endeavour to account for all blood components issued during the incident. | | | |
| Business Continuity | Local business continuity plans should be held in readiness in the Transfusion Laboratory as well as in the emergency planning and command control rooms | | | |
| | Hospital Transfusion Laboratories should | | | |

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| | maintain the capability to use manual techniques for testing and non-electronic record keeping. | | | |
| | It is specifically recommended that non-electronic records of regularly transfused patients with clinically significant antibodies and special requirements are regularly maintained to enable timely transfusion in the event of a cyber-attack or power failure | | | |
| | Pathology services should comply with cyber and data security good practice to reduce the risk of IT failure | | | |

With thanks to Julie Staves, BT Lab Manager