Emergency Planning Working Group

Recommendations for Organisation of Hospital Transfusion Services following July 2005 London Bombings

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While the advice and information in these recommendations is believed to be true and accurate, neither the authors nor the National Blood Transfusion Committee accept any legal responsibility for the content of these recommendations.

Introduction

The Emergency Planning Working Group was set up with representation from Hospital Blood Banks, Accident & Emergency and the National Blood Service with the objective of reviewing lessons learned in relation to organisation of Transfusion services following the July 7th 2005 London Bombings.

The recommendations of this group are as follows:

1. Communication

1.1 NHS Trusts should use standard national definitions in relation to Major Incident Planning (Ref 1) as follows:

For the NHS, a Major Incident is defined as ‘Any occurrence which presents a serious threat to the health of the community, disruption to the service or causes/is likely to cause such numbers or types of casualties as to require special arrangements to be implemented by hospitals, ambulance trusts or primary care organisations.

Major Incident Standby – this alerts the NHS that a Major Incident may need to be declared and is likely to involve the participating organisations in making preparatory arrangements appropriate to the incident.

Major Incident declared - activate plan: this alerts NHS organisations that they need to activate their plan and mobilise additional resources.
1.2 Trusts should include the Pathology Department and the Hospital Transfusion Laboratory in Major Incident planning. The communication cascade must include early alert of the Hospital Transfusion Laboratory.

1.3 Trusts should have protocols for cascade of information after the initial alert and these should include use of different modalities including phone/fax/emails.

1.4 Trusts should have protocols for alternative means of internal and external communication in the event of failure of traditional methods stated in 1.3 (e.g. use of walkie talkies, emergency phones etc).

1.5 Each Hospital Transfusion laboratory must have a dedicated external phone line and a fax machine for communication with the National Blood Service (NBS).

1.6 The Hospital Transfusion Laboratory is responsible for informing the Blood Issues department of the local NBS centre that the hospital has been notified of a Major Incident. The Issues department will then initiate the NBS Emergency Planning procedures.

1.7 There should be clear hospital protocol for ongoing communication between Hospital Transfusion Laboratories and the NBS.

1.8 Trusts must have Contingency Plans for Major Blood Shortages incorporated into Major Incident Plans. The national integrated blood shortage plan (Ref 2) includes guidance for the clinical prioritisation of blood use based on national blood stocks provided by the NBS.

1.9 NHS Trusts and the NBS should have a clear protocol for communication with the public together with appropriate information for potential blood donors. The help of local/national media could be enlisted for this.

1.10 The profile of the National Blood Service in London Resilience planning should be heightened ensuring mechanisms for early alert and harnessing existing media protocols to keep the public informed in relation to blood donation in any future Major Incident.

2. Patient Identification

2.1 The use of unique patient identifiers (UPN) is essential for positive patient identification prior to transfusion in order to prevent transfusion of the wrong blood. All systems should support the use of the NHS number (or equivalent). Other numbering systems are available and it should be possible to incorporate various forms and configurations of such identifiers, including Hospital Unit number, Accident and Emergency numbers or Major Incident numbers for those individuals involved in a major Incident (Ref 3).

2.2 All relevant staff within Trusts must be familiar with the Major Incident numbering system used within the hospital with regular drills to ensure familiarity. A national approach to Major Incident numbering should be considered.

2.3 Caution should be exercised with the use of consecutive Major Incident numbers which has potential for error in relation to blood transfusion.
2.4 If a computerised system is used for Major Incident numbering there should be back-up manual systems allowing for electronic systems failure.

2.5 The gender of the patient must be included on blood sample requests to facilitate decisions regarding choice of RhD group of blood issued. Pathology disciplines should default to the female gender in the event of an unidentified casualty.

2.1 There should be clear guidelines regarding the change from the Major Incident number to another patient identification number particularly in relation to transfusion samples.

3. Use of Blood and Blood Components

3.1 Hospital Transfusion laboratories should be able to provide details of blood and blood component usage following a Major Incident to the NBS to guide management of blood stocks in relation to future events.

3.2 Trusts should ensure that they have a policy for management of Massive Haemorrhage/Massive Transfusion and this should be incorporated in the Major Incident Plan to promote prompt and appropriate use of blood and blood products in this setting. Trusts should refer to the British Committee for Standards in Haematology Guidelines on the Management of Massive Blood Loss (Ref 4).

3.3 Trusts should consider having Intra-operative Cell Salvage (IOCS) available where appropriate for use in major trauma.

3.1 Trusts should consider having a policy for the off-label use of recombinant factor VIIa in catastrophic haemorrhage in the context of a Major Incident together with clear guidance on how to obtain emergency stocks.

4. Maintaining the Cold Chain for Blood and Blood Products

4.1 Hospital Transfusion Laboratories should have protocols for maintaining the blood and blood product cold chain in A&E Departments in a Major Incident situation to reduce potential for wastage.

5. Traceability of Blood and Blood Components

5.1 The fate 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. These records must be kept for 30 years for compliance with the Blood Safety and Quality Regulations 2005 (Ref 5).

5.1 Hospital Transfusion Laboratories should have protocols for maintaining the systems for traceability of blood and blood components used in a Major Incident setting including the use of electronic systems or manual peel off tags to be attached to patient notes.

6. Hospital Transfusion Laboratory Staffing

6.1 Hospital Transfusion Laboratory staff must be provided with appropriate ID badges to allow access to restricted clinical areas during Major Incidents.
6.2 Hospital Transfusion Laboratories should have policies for organisation of staff in a Major Incident with systems for provision of additional staff if needed. Off duty staff should be advised to avoid coming into work unless they are called.

6.3 The use of a dedicated member of Pathology staff in A&E in a Major Incident should be considered depending on staffing numbers. The staff member can assist in the handling of blood samples, issue of blood, maintaining traceability records and communication with the laboratory.

6.1 Trusts should consider having policies for providing accommodation for staff unable to travel home with specific provision for Hospital Transfusion Laboratory staff.

7. Major Incident Plans for other sections of Pathology

7.1 All sections of Pathology including Specimen Reception, Routine Haematology, Coagulation, Biochemistry and Microbiology should have a Major Incident Plan.

7.1 All Pathology staff should be familiar with plans available in other disciplines and there should be uniform policies for patient identification including use of gender.

8. Antidote Pods in Chemical and Biological Incidents

8.1 Staff from A&E Departments must be informed regarding existing policies for delivery of antidote Pods from the National Blood Service in the event of any future Chemical or Biological Major Incident.

8.1 Nerve Agent Antidote and cyanide Pods are usually requested via the NBS Centres by the Ambulance Service whereas the Botulinum Antitoxin and the Obidoxime Pod are requested via the hospital transfusion laboratory. The requested Pods will then be issued via the NBS Centres to the relevant hospitals. The hospital transfusion laboratory must then liaise with their A&E dept. The hospital Major Incident Control Team must also know how to activate the Pods.

9. Skin and Tissues

9.1 Skin and Tissues may not be required immediately but will need to be available subsequently over several days after a Major incident. This response is likely to continue beyond the stand down of the Major incident.

9.2 In the event of a Major Incident notification to NBS, NBS Tissue Services will be notified who in turn will directly contact local burns units to establish whether allograft skin may be required.

9.3 Hospitals using allograft skin are responsible for informing NBS Tissue Services of their requirements. Tissue Services will initiate Emergency Planning procedures as necessary. This may include redistribution of skin allograft already supplied to Trusts for stock.

9.4 There should be a clear hospital protocol for ongoing communication between Hospital Burns Units and NBS Tissue Services.

9.5 Trusts must have Contingency Plans for skin shortages incorporated into Major Incident Plans. This should include the use of alternative allograft or non-allograft products.
9.6 Trusts should consider including in emergency plans the agreed donor referral contacts regarding queries raised on organ or tissue donation from victims of a Major Incident.

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References


A. Communication

1. Does your Major Incident Plan include procedure for early alert of the Hospital Transfusion Laboratory?
   - Yes □□□□  No □□□□

2. Do you have a protocol for Cascade of Information within the Trust including the Hospital Transfusion Laboratory after the initial Alert?
   - Yes □□□□  No □□□□

3. Do you have protocols for alternative means of communication in the event of system failure (e.g. use of walkie talkies, emergency phones)
   - Yes □□□□  No □□□□

4. Does your Hospital Transfusion Laboratory have a dedicated external phone line and fax line to the National Blood Service?
   - Yes □□□□  No □□□□

5. Does your Trust have a Contingency Plan for Major Blood Shortages?
   - Yes □□□□  No □□□□
   
   If yes, has this been incorporated into the Major Incident Plan?
   - Yes □□□□  No □□□□

5. Does your Trust switchboard have a protocol for communication with the public and potential donors?
   - Yes □□□□  No □□□□
B. Patient Identification

1. Are all staff in the hospital familiar with the numbering system used in a Major Incident?

   Yes ☐ No ☐

All staff to be familiar with numbering system used for patient identification for notes, X-rays and laboratory requests. Use caution with consecutive numbering. Consider back up manual numbering system in the event of electronic failure. Ensure this is incorporated into Major Incident rehearsal/practice training.

C. Use of Blood and Blood Components

1. Do you have a Massive Haemorrhage/ Massive Transfusion Policy?

   Yes ☐ No ☐

It is recommended that hospitals should have a Massive Transfusion policy and this should be adhered to even in the presence of a Major Incident.

2. Do you have a policy for the off-label use of Recombinant Factor VIIa in catastrophic haemorrhage?

   Yes ☐ No ☐

D. Cold Chain

1. Do you have a protocol for maintaining the cold chain for blood and blood components used in a Major Incident situation?

   Yes ☐ No ☐

E. Traceability

1. Do you have a protocol for ensuring traceability of blood and blood components in a Major Incident setting?

   Yes ☐ No ☐
F. Hospital Transfusion Laboratory Staff Issues

1. Do your transfusion staff have access to the key areas in a Major Incident e.g. Resuscitation Room?
   
   Yes □ □ □ □ No □ □ □ □

1. Does your Hospital Transfusion Laboratory have a policy for organisation of staff in a Major Incident situation?
   
   Yes □ □ □ □ No □ □ □ □

G. Major Incident Plans for Other Sections within Pathology

1. Do all disciplines within Pathology have a Major Incident Plan?
   
   Yes □ □ □ □ No □ □ □ □

H. Delivery of antidote Pods in Chemical/Biological Incident

1. Are A&E staff aware of delivery of antidote Pods via the Hospital Transfusion Laboratory from the National Blood Service in the event of a Chemical or Biological Major Incident?
   
   Yes □ □ □ □ No □ □ □ □

Nerve Agent Antidote and cyanide Pods are usually requested via the NBS Centres by the Ambulance Service whereas the Botulinum Antitoxin and the Obidoxime Pod are requested via the hospital transfusion laboratory. The requested Pods will then be issued via the NBS Centres to the relevant hospitals. The hospital transfusion laboratory must then liaise with their A&E dept. The hospital Major Incident Control Team must also know how to activate the Pods.