Mass Casualty Major Incident – Code Brown Emergency Blood Release NSWHP PD 021



1. Purpose

To define the minimum requirements in a *Mass Casualty Major Incident - Code Brown Emergency* to avoid delays in providing urgent life-saving blood products to critically bleeding/injured patients.

2. Background

The normal patient blood distribution policies are rigorous and ensure the right blood is transfused into the right patient and all blood and blood products are traceable.

In a *Mass Casualty Major Incident - Code Brown Emergency*, normal policies may delay lifesaving blood delivery to patients, and therefore may be overridden, with appropriate authorisation.

In a Mass Casualty Major Incident - Code Brown Emergency, this policy may be activated to provide urgent life-saving blood products to critically bleeding/injured patients where required.

3. Scope

Once activated per section 5.2, this policy is mandatory and applies to all:

- a) NSW Health Pathology Transfusion and Blood Bank staff
- b) Mass Casualty Major Incident Code Brown Emergencies and
- c) Patients needing immediate life-saving transfusions.

4. Definitions

Major Incident can be defined as an incident or event where the location, number, severity or type of live casualties requires extraordinary resources. A significant and coordinated response is required to manage the incident and health resources (as defined in the NSW HEALTHPLAN PD2014_012 and NSW MEDPLAN GL2018_017.

Code Brown - External Emergency is declared when the resources of the health care facility are required as part of the heath response to an emergency/major incident that has taken place external to the facility. The response may include reception of mass casualties from/but not limited to aircraft crash, train crash, major traffic incident, terrorist incident, natural disaster, structural collapse (Planning for Emergencies: Health Care Facilities AS4083-2010).

Blood Bank is the blood storage and distribution point of blood products in the local facility.

Blood Bank Manager is the most senior Transfusion staff member at the facility or the Laboratory Manager in smaller facilities.

5. Policy Statement

This policy sets out the minimum requirements to urgently release large amounts of blood products due to the presentation of a *Mass Casualty Major Incident - Code Brown Emergency* to a health care facility.

5.1 Activitation of a Mass Casualty Major Incident - Code Brown Emergency

A Mass Casualty Major Incident - Code Brown Emergency (as outlined in the Local Health Facility Emergency Response Plan) is activated by the Local Health Facility eg the Local Health District Health Service Functional Area Coordinator (HSFAC) or Hospital Incident/Disaster Controller.



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The Local Health Facility Emergency Response Plan is published on the local intranet.

The following emergency management plans may also be activated:

- a) <u>Health Services Functional Area Supporting Plan (NSW HEALTHPLAN) PD2014_012</u> by the State HSFAC
- b) <u>Major Incident Medical Services Supporting Plan (NSW MEDPLAN) GL2018_017</u> by the State HSFAC or State Medical Controller
- c) NSW Health Pathology Emergency Management Plan NSWHP_CG_005 by the State Pathology Controller.

5.2 Authorisation to Activate this Policy

This policy can only be activated in a *Mass Casualty Major Incident - Code Brown Emergency* to allow normal patient blood distribution procedures to be overridden to provide urgent life-saving blood products to critically bleeding/injured patients where required.

The activation of this policy must be authorised by the:

- a) Operations Director and
- b) Local Pathology Director.

5.3 Implementation of this Policy

The Blood Bank Manager must:

- a) Be aware of the Local Health Facility Emergency Response Plan and the procedures for activation and notification to the Blood Bank.
- b) Once notified of the *Mass Casualty Major Incident Code Brown Emergency*, follow the notification and escalation procedures in the <u>NSW Health Pathology Emergency Management Plan NSWHP_CG_005</u> and any local Health Pathology emergency response plans/procedures (i.e. to the Operations Manager, Operations Director and Local Pathology Director).
- c) Ensure contact telephone numbers of relevant staff are up-to-date and available in the Blood Bank electronically on the local approved records management systems as well as in hard copy in the Blood Bank.
- d) Contact additional Blood Bank staff as required, or as directed.
- e) Participate in the local emergency/disaster response coordinating group meeting as outlined in the Local Health Facility Emergency Response Plan. Participation in this group would also apply if operating theatres were suspended and scheduled transfusions cancelled.
- f) Alert the Australian Red Cross Blood Service of the *Mass Casualty Major Incident Code Brown Emergency*. Continue communication with the Australian Red Cross Blood Service to continually review stock levels.
- g) Where staffing levels permit, Haematology staff could be based in the Emergency Department during the *Mass Casualty Major Incident Code Brown Emergency* to assist with individual patient blood needs and liaison with the Blood Bank.



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h) Once official notification of the Stand Down of the *Mass Casualty Major Incident - Code Brown Emergency* has been received from the Local Health Facility, notify all relevant parties so that normal blood release policies can be restored.

5.4 Blood Requirements Per Patient

On average each critical patient requires:

- a) Approximately three (3) units of red cells in a *Mass Casualty Major Incident Code Brown Emergency*. This averages all trauma severity scores and
- b) Support with fresh frozen plasma, cryoprecipitate and platelets as per the local Massive Transfusion Protocol.

5.5 Blood Stocks

Each facility will have a predetermined optimal major incident inventory.

The Blood Bank Manager must review the level of blood stocks held at the facility.

If additional products are required, the local Operations Director will coordinate the transfer of blood from the surrounding Blood Banks including the:

- a) Role of the other Blood Banks in the Mass Casualty Major Incident Code Brown Emergency
- b) Local patient requirements and
- c) Availability of shippers and transport.

Stock levels must be regularly re-assessed during the *Mass Casualty Major Incident - Code Brown Emergency*.

5.6 Issuing Blood

5.6.1 Issue of Group O Positive Red Cells

Group O positive red cells should be issued for:

- a) All males and
- b) Females who are over 50 years of age.

5.6.2 Issue of Group O Negative Red Cells

Group O negative red cells should be issued for females:

- a) Where their identity is unknown or
- b) If they are under 50 years of age.

5.6.3 Shortage of Group O Negative Red Cells

Where there is a shortage of Group O negative red cells an individual patient should not receive more than 4 units.



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5.6.4 Component Therapy

The treating clinician is responsible for ensuring that individual patients receive appropriate component therapy.

Group A FFP should be issued.

Up to 8 thawed Group A FFP could be made available during the *Mass Casualty Major Incident* - Code Brown Emergency.

5.6.5 Tracking the Issue of Blood Products

Staff should implement a local procedure to track the issue of blood products, the current inventory, anticipated deliveries, patient issues and transportation.

A whiteboard may be a useful and important tool for documenting and sharing this information.

5.7 Patients Not Requiring Urgent Blood Transfusion

This policy applies only to patients needing immediate life-saving blood transfusions.

All other patients requiring blood transfusions will follow normal clinical blood transfusion protocols.

It may be required that such patients have a separate sample collected for confirmatory blood group prior to issuing group specific blood.

5.8 Documentation

Every effort must be made to obtain the appropriate and normal paperwork.

In a *Mass Casualty Major Incident - Code Brown Emergency*, a transfusion request form and a blood request form is not required if it is going to jeopardise providing urgent life-saving blood products to critically bleeding/injured patients.

Where no transfusion or blood request forms are available, Group O red cells and Group A FFP can be issued on the approval of the Blood Bank Manager. Group O red cells must be issued to the clinical area to avoid ABO incompatible transfusions.

For unknown patients, the local policy for issuing MRN's must occur and blood samples must be appropriately labelled.

Each unit of blood/FFP should be issued with a dispense sheet and upon patient administration will be noted with the time, date and signature of the administering staff. The dispense sheet must be kept with the patient/or patient records to allow for reconciliation and traceability.

5.9 Accepting Blood Back into Stock

Acceptance of blood back into stock must conform to all normal acceptance criteria or be discarded.



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6. Legal and Policy Framework

Health Services Functional Area Supporting Plan (NSW HEALTHPLAN) PD2014_012

Major Incident Medical Services Supporting Plan (NSW MEDPLAN) GL2018_017

NSW Health Pathology Emergency Management Plan NSWHP_CG_005

Local Health Facility Emergency Response Plan (published on the local intranet)

7. Review

This policy will be reviewed by 01/03/2024.

8. Risk

| Risk Statement | To ensure that urgent life-saving blood products are provided to critically bleeding/injured patients in a Mass Casualty Major Incident - Code Brown Emergency. |
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| Risk Category | Emergency Management |

9. Further Information

For further information, please contact:

| Policy Contact Officer | Position: Lead, Transfusion Clinical Stream | | |
|------------------------|---|--|--|
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10. Version History

The approval and amendment history for this document must be listed in the following table.

| Version No | Effective Date | Approved By | Approval Date | Policy Author | Risk Rating | Sections Modified |
|---------------|-------------------|---|------------------|---|----------------|---|
| V1.0 | 03/10/19 | Clinical Governance Quality and Risk Committee | 03/10/19 | Transfusion Clinical Stream Lead | High | New policy |
| V2.0 | 29/03/22 | Director, Clinical Operations | 02/03/22 | Transfusion Clinical Stream Lead | High | Policy reviewed with no amendments required. Review date changed. |

