Ambulance Victoria emergency use red blood cell (RBC) access from a transfusion laboratory/health service flowchart

Adult Retrieval Victoria Clinical Coordinator contacts nearest transfusion laboratory/health service for provision of emergency use RBC.

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Adult Retrieval Victoria confirms with transfusion laboratory/health service:

- Number of units to be prepared, either

  2 units RBC
  Packed into 1x Lifeblood R3 shipper (or validated equivalent) [Appendix 1];

  OR

  4 units RBC
  Packed into 2 Lifeblood shippers, each with 2x units into 2x Lifeblood R3 shipper (or validated equivalent) [Appendix 1: R3 Lifeblood shipping configuration]

- Pickup location (e.g. at the pathology laboratory, Urgent Care Centre, Emergency Department)
- Pickup time
- Ambulance Victoria contact name and number

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Pack required blood components into Lifeblood R3 shipper (or validated equivalent) and ensure following details completed on transport label [Appendix 2: Emergency use blood component transport label];

- Ambulance Victoria contact name (if known)
- Patient name/sex or age (if known) and Ambulance Victoria case number (if known)
- Time and date packed
- Initials of person packing the blood
- Time blood must be returned to blood fridge
- Transfusion laboratory/health service sending the blood
- Contact name and number of transfusion laboratory.

Use local laboratory policy for issuing emergency use RBC

Include compatibility report if supplied (as per local policy)

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Ambulance Victoria collect the packed emergency use RBC from agreed location at agreed time

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Ambulance Victoria notify transfusion laboratory/health service of fate of emergency use RBC:

1. Transfused - will give patient details
2. Discarded at scene
3. Transferred to another facility with patient – will give patient & destination health service details
4. Returned to original health service

Transfusion laboratory or health service to contact Ambulance Victoria if further information required:
patientreview@ambulance.vic.gov.au

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If no transfusion laboratory on site, health service staff packing RBC must inform transfusion laboratory that emergency use RBC have been packed for Ambulance Victoria pickup.

Transfusion laboratory to arrange replacement emergency use RBC be sent to health service.

Contact your transfusion laboratory if you require further information

Health service receiving unused blood components

Do not open the shipper

- Contact your transfusion laboratory who will advise next steps

Contact your transfusion service if you require further information

Transfusion laboratory receiving unused blood components

- Are emergency use RBC packed appropriately?
- Has cold-chain been maintained?
- Decide if units are to be retained, or discarded

Yes	- Contact transfusion laboratory/health service who sent the RBC - Ask for copy of fridge records - Arrange BloodNet transfer
No	- Contact transfusion laboratory/health service who sent the RBC and inform them of fate of units - Discard in BloodNet as per appropriate discard code, for example; "Transport – Incorrect packing", or "Storage – Temperature control unknown", or "Storage – Out of controlled storage for …" - Contact Ambulance Victoria patientreview@ambulance.vic.gov.au inform them of fate of units. Ambuance Victoria to investigate process fault if required.

Abbreviation	Definition
AV	Ambulance Victoria
ARV CC	Adult Retrieval Unit Clinical Coordinator
HEMS	Helicopter Emergency Medical Services
MICA	Mobile Intensive Care Ambulance

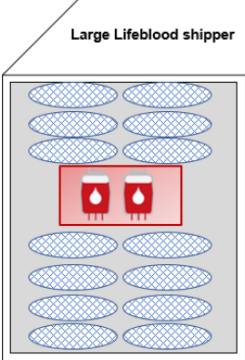## Appendix 1: R3 Lifeblood shipping configuration

R3 Lifeblood shipping configuration for Ambulance Victoria emergency use RBC

2 units red blood cells (RBC). Validated transport time: 8 hours 25 minutes

Total chilled ballast required = 14. If 4x RBC required, pack into 2x Lifeblood shippers.

Ballast MUST be chilled at 2-6°C for ≥24 hours prior to use.

Lifeblood shipping configurations available at https://www.lifeblood.com.au/health-professionals/products/storage-and-handling/transport-of-blood

Large Lifeblood shipper

Step	Legend	Name	Quantity	Note
1.		Foil pouch	1	Used to line box and contains all other items
2.		Chilled ballast	8	Inside foil pouch, 4 layers of 2
3.		Plastic liner bag and 2x RBC	1	Used to contain RBC (and temperature logger if used)
4.		Chilled ballast	6	Inside foil pouch, 3 layers of 2
5.	Close foil pouch, seal shipper (including compatibility report if supplied) and attach completed label to top of shipper			

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Ambulance Victoria

Adapted by Blood Matters from: Australian Red Cross Lifeblood. Lifeblood Shippers – Receipt and Use by External Institutions WI-00635 Version: 10. Effective date: 21/11/2022. https://www.lifeblood.com.au/health-professionals/products/storage-and-handling/transport-of-blood

Appendix 2: Emergency use blood component transport label

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URGENT BLOOD
for Ambulance Victoria use only

Version 2, September 2023

Ambulance Victoria

AV contact name (if known): _____

AV case number (if known): _____

Patient details (if known): _____

Contents of box:
☐ 2x O RhD neg emergency use RBC
☐ 2x patient specific (crossmatched) RBC
☐ Other: _____

Ambulance Victoria	**DO NOT OPEN unless you are going to transfuse** **Remove one unit at a time** **Document use or units 'handed over' in ePCR**
Receiving hospital	**DO NOT OPEN, even if transfusion required. Call your transfusion laboratory for instructions ASAP**

Packed time: _____ Date: _____/_____/_____ Initials: _____

Cold chain valid until (8 hrs from packing): _____ Date: _____/_____/_____

If applicable (Ambulance Victoria/Air Ambulance Victoria to document if shipper opened):
Opened time: _____ Closed time: _____ Initials: _____
Opened time: _____ Closed time: _____ Initials: _____

From: <Insert name and address of transfusion laboratory and sending health service>

Telephone number: <Insert contact telephone number of transfusion laboratory>

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Version 2. December 2024