



Blood brothers: Caring for the Emergency Donor

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Imagine : a remote island paradise





The kindness of strangers



- “I wouldn’t have lived if it weren’t for the people of the island,” he says.
- “The nurse told me a good 15 to 20 people were waiting to give blood

MASSIVE HAEMORRHAGE

Stop the bleeding



Pre-hospital haemorrhage control

- Tourniquets
 - Topical haemostats
- ‘C’ABCDE – restore normal physiology



Ideal Resuscitation Fluid

	Volume	Hemostatic	O2 Carrying Capacity
Crystalloid	Y	N	N
Colloid	Y	N	N
Plasma	Y	Y	N
1:1:1	Y	Y	Y
Whole Blood	Y	Y	Y

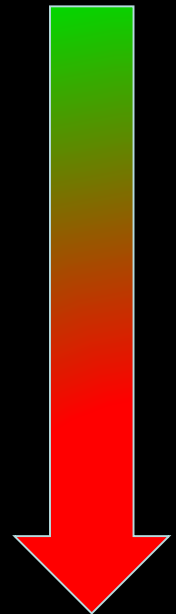
Whole blood?



EMERGENCY DONORS

Sourcing blood: In order of risk

- Receive blood from the blood bank
- Draw blood from your established Emergency Donor Panel
- Buddy-buddy transfusion from pre-screened donors
- Use of the unknown emergency donor



RISK

What is the Emergency Donor Panel (EDP)?

- The Emergency Donor Panel is a group of people who have volunteered to act as blood donors in an emergency
- Sometimes referred to as a high readiness walking 'Blood Bank'.
- They have been medically screened and tested using the blood tests required by their National Blood Service/Blood establishment.
- Military and civilian use

“Buddy-buddy transfusion”

- Personnel on the scene draw one unit of blood from a fellow soldier and subsequently administer it to the wounded soldier.
- Blood should be transfused as soon as possible after collection (within 6 hours) as Warm FWB or,
- Store at 2-6 degrees Celsius as Cold WB if not used within this timeframe.



Doughty, H. Fitchett G. , Macquire, A. & Parker, P.J. (2017). Group O low titre emergency donor panels for small combat teams. *Journal of the Royal Army Medical Corps* doi: 10.1136/jramc-2017-000830

Field emergency donor panel questionnaire and triage tool.

- Phase 1
 - Confirm what blood and when
 - Find voluntary potential donors
 - Identify past/regular donors
 - Rapid screen
- Phase 2 = risk triage tool
 - Weight/Veins
 - Occupatio/role
 - Travel and health

Field Emergency Donor Panel Questionnaire and Triage Tool

- Give blood donor briefing to potential donor group
- Confirm blood group(s) required
- Exclude air crew, HGV drivers and key machinery operators

Primary Triage (Question as a group)

Serial	Question	Yes	No	Action
1	Do you want to give blood?			Disqualify if NO
2	Have you given blood before			If yes - Consider early selection

Secondary Triage (Question individually)

Serial	Question	Yes	No	Action
3	Are you unwell now? New Fever/ Diarrhea / Vomiting Chronic medical condition and not well			Disqualify if YES
4	Are you taking medication for blood pressure; stroke or heart, lung, kidney, cancer or blood conditions?			Disqualify if YES
5	Have you had a blood transfusion or blood products in the last year			Disqualify if YES Accept after 1 year
6	Are you living with HEP B,C / HIV / AIDS – OR living with anyone with these conditions			Disqualify if YES
7	Have you ever been refused as a donor or told not to donate blood (a past history of treated anemia may be acceptable)			Disqualify if YES
8	Male donors only. Have you <u>ever</u> had sex with another male?			Disqualify if YES
9	Have you ever taken illegal drugs with a needle (even steroids)			Disqualify if YES
11	Are you currently pregnant or breast-feeding?			Disqualify if YES
12	Conduct a physical examination Check: Temperature / Rash / Malnutrition, / Pallor / Jaundice / Cyanosis / Shortness of breath / Intoxication from alcohol or drugs / Veins			Disqualify any potentially unwell donor or donors with very difficult veins

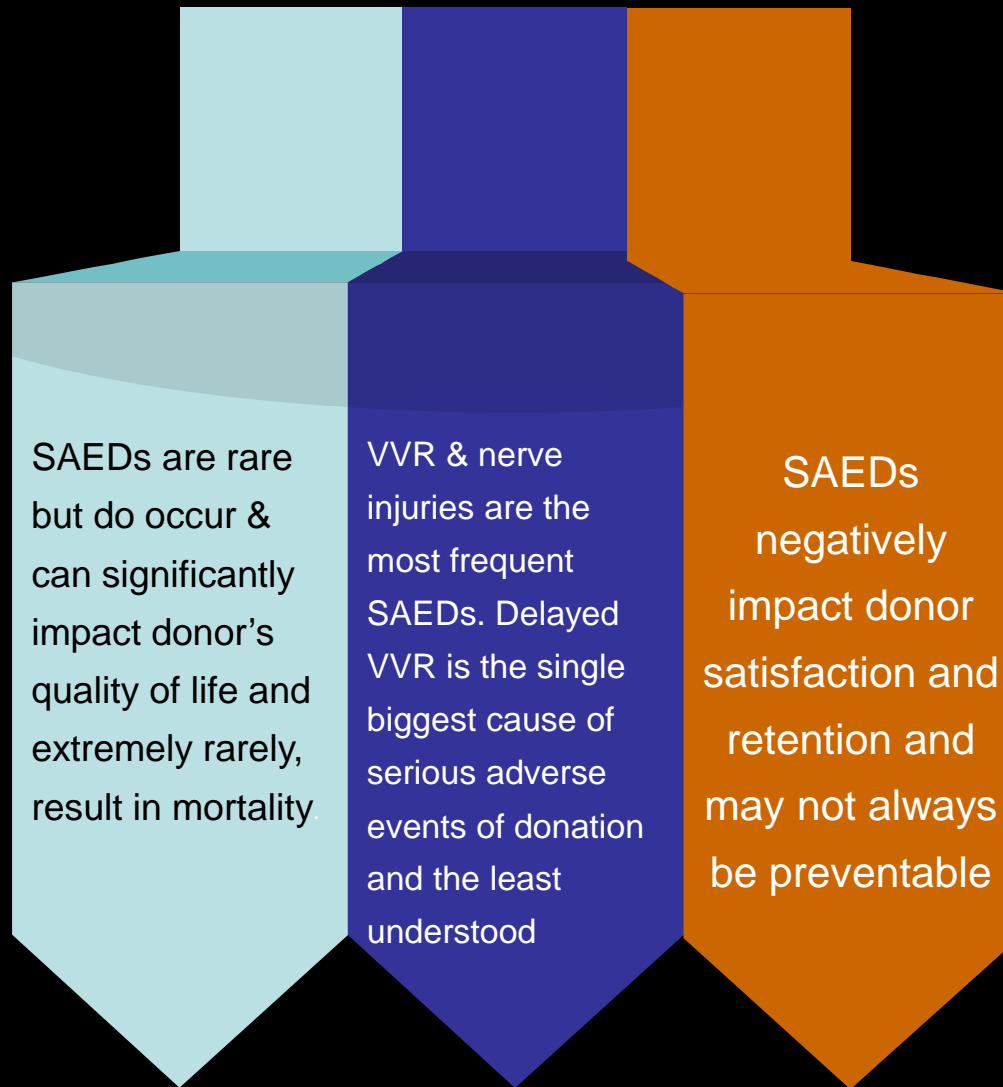
- The remaining group form the Emergency Donor Panel (EDP)
- Use the Risk Triage Screen to risk score the potential donors

Doughty et al, 2016 A proposed field emergency donor panel questionnaire and triage tool. Transfusion 56 Suppl 2:S119-27. doi: 10.1111/trf.13487.

BLOOD BROTHERS

Bugs or Blood





- Vasovagal Reactions
- Venous access
- Iron status
- Performance

Post donation performance

- What if on scene blood donation reduces the donors physical performance to a degree that puts both the donor and the entire team at risk?



Stranden, G., Skogrand, H., Spinella, P. C., Hervig, T. and Rein, E. B. (2013), Donor performance of combat readiness skills of special forces soldiers are maintained immediately after whole blood donation. Transfusion, 53: 526–530. doi:10.1111/j.1537-2995.2012.03767.x

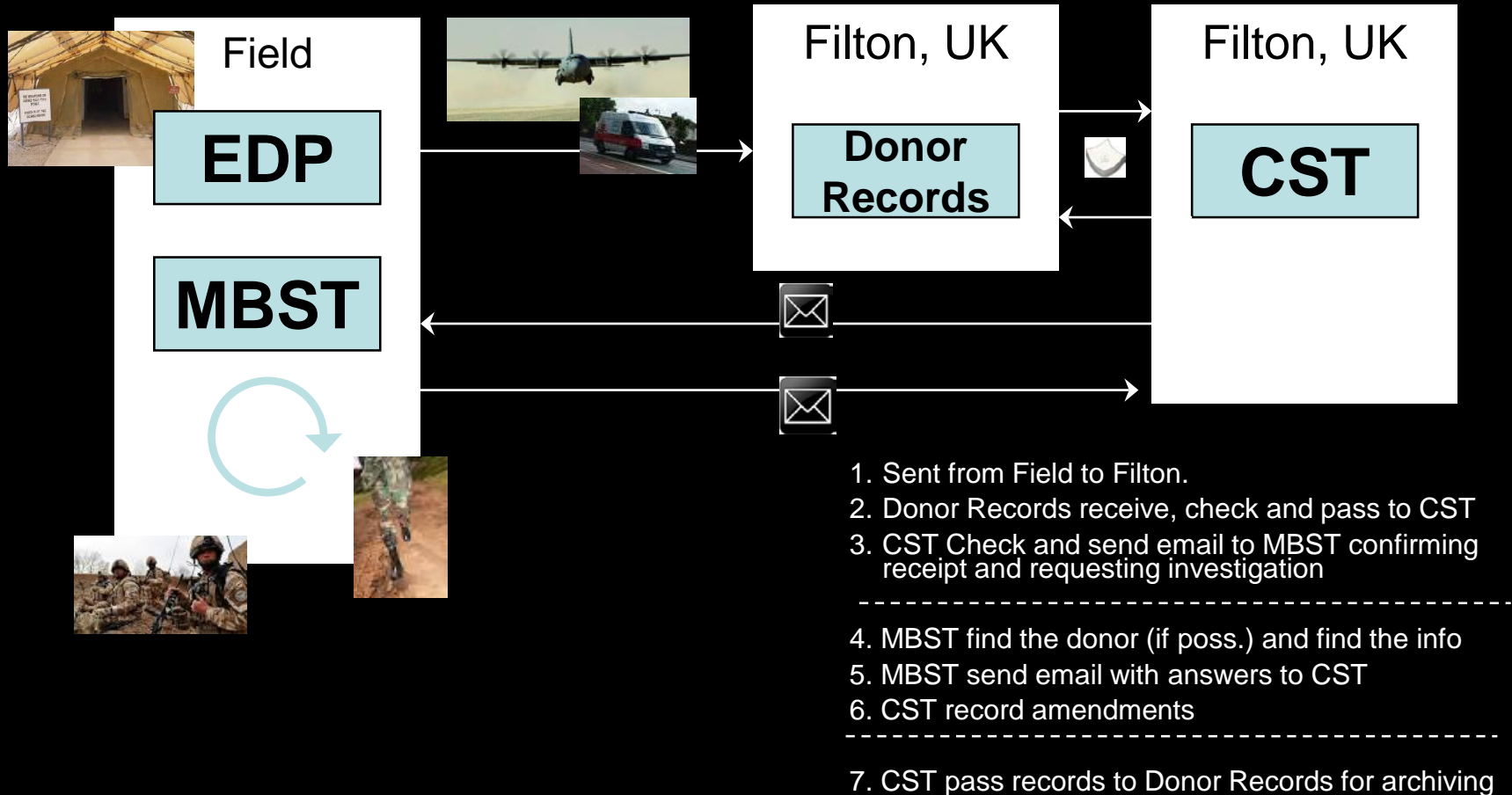
Blood brothers



- Close community
- Undue influence
- Non-disclosure
- Transfusion testing
- False positives
- Emotional connection

CARING TOGETHER

Donor care 'in action'





Venepuncture within NHSBT

DMS Nurse Clinical Placements

“BLOOD FAR FORWARD”

Three Primary Research Modules

- 1.** *Donor Performance and reinfusion - Donor safety research*
- 2.** *Blood efficacy and safety- Blood Research*
- 3.** *Training and educational requirements*





Transfusion:

Supporting the continuity of care

Thank you