Troubleshooting Guide:
RHSC Satellite Blood Fridges for the Storage of Red Cells Only

This document is intended as a troubleshooting guide. For full guidance on fridge use, refer to the [NHS Lothian Satellite Blood Fridges Policy](#) and [NHS Lothian Satellite Blood Fridge Procedures](#).

The fridge is fitted with an alarm system which monitors the temperature. When the alarm is activated, it will automatically telephone dial the Lauriston Building central telephone exchange.

The RHSC Theatre Coordinator (during the working day) or Senior Nurse on Duty (out of hours) will then be contacted by the Lauriston Building telephone exchange.

In the event of a prolonged failure of the RHSC blood fridge Emergency O Negative cover will continue to be provided and stored in a cool box placed in the RHSC stairwell fridge. When the BTS supervisor is informed of the fridge failure they will contact the RHSC clinical co-ordinator. The RIE blood bank will make arrangements to return the blood contained in the fridge back to the blood bank. Emergency O Negative blood will be sent to the RHSC in a cool box with an SNBTS form EDIRCAF110, which will be attached to the box (this is the in/out register for all units within the box).

RIE blood bank should be contacted as soon as possible after the first unit of blood is removed from this box; all required units contained within must be transfused within 4 hours of the box being opened.

➢ IF THE ALARM IS SOUNDING BUT THERE IS NO OBVIOUS FAULT

1. Mute audible alarm; do **not** switch fridge or alarm off.

2. Check the door is closed and for any obvious fault.

3. Check the temperature display. If this shows a temperature lower than 2°C or higher than 6°C, the stored blood may have to be returned to the hospital transfusion laboratory (HTL).

4. Then contact the HTL Supervisor (ext 27501/27502). Tell them when the alarm was first heard, the fridge temperature and how long it has been at this temperature. They will advise whether or not the fridge needs to be temporarily taken out of operation.

5. If it does, appropriate arrangements will be made to transport the blood to the RIE HTL. Remember to complete the In/Out register for all units transferred.

6. Place a prominent notice on the fridge telling users that the fridge is not in use, and that blood is available from the RIE HTL (ext 27501/27502).

7. **Once fault has been rectified, put audible alarm back on.**

➢ IF THERE IS AN OBVIOUS FAULT SUCH AS SMOKE OR NOISE COMING FROM THE FRIDGE

1. Switch off the fridge if safe to do so.

2. If risk of fire, follow Fire Policy and evacuate area if necessary.

3. Then contact the HTL Supervisor (ext 27501/27502) who will contact the fridge maintenance/servicing contractors. Ask whether the fridge needs to be temporarily taken out of operation.

4. If it does, arrangements will be made to transport the blood to the RIE HTL. Remember to complete the In/Out register for all units transferred.

5. Place a prominent notice on the fridge telling users that the fridge is not in use, and that blood is available from the RIE HTL (ext 27501/27502).

6. Inform the Senior Nurse in charge.

➢ IF THERE IS A POWER FAILURE AFFECTING THE FRIDGE

1. If the power failure was scheduled ('Black Start'), check fridge is working and is operating within safe temperature limits. If so, no action is required.

2. In the event of a prolonged unscheduled power failure, contact the HTL Supervisor immediately (ext 27501/27502). The supervisor will contact the fridge maintenance servicing/contractors. Ask whether the fridge needs to be temporarily taken out of operation.

3. If it does, arrangements will be made to transfer blood to RIE HTL. Remember to complete the In/Out register for all units removed.

4. Place a prominent notice on the fridge telling users that the fridge is not in use and that blood is available from RIE HTL and inform the Senior Nurse in Charge.