Hotline® Blood and Fluid Warmer Cleaning and Change of Recirculating Solution

Purpose
To describe the infection prevention & control (IPC) requirements for maintenance and changing the recirculating fluid for the Smith’s Medical Hotline® Blood and Fluid Warmer.

Scope
Designated staff, trained by USL are responsible for changing the recirculating solution in the Hotline® blood and fluid warmer and for cleaning the devices.

This procedure should be referenced in departmental location manuals.

The scope of this procedure applies to infection prevention maintenance – not mechanical/engineering maintenance which is outside this scope.

Associated documents
- CDHB Infection Prevention & Control Policy: Decontamination of Equipment
- Smith’s Medical Operator’s Manual for Hotline Blood and Fluid Warmer

Equipment and forms
- Operator’s manual
- Detergent wipes
- Distilled Water (1,260mls required)
- 3% Hydrogen peroxide (obtained from pharmacy)
- Felt pen / log book / sticker
- Presept solution (1000ppm) if visibly contaminated

Relevant education and training
Staff shall be trained by USL (distribution and support for these devices) in the correct use and maintenance of the machines.

1 Recirculating solution
The manufacturer’s instructions provides a choice of three different recirculating solutions. CDHB users shall only use the following:

- 0.3% Hydrogen Peroxide Solution

The solution is prepared by one of two methods, depending on the volume required:

i. Mix 140 ml of 3% hydrogen peroxide with 1,260 ml of distilled water

ii. Use 1000mls of distilled water (1 bottle) and remove 100mls of water. Add 100mls of 3% hydrogen peroxide (1 bottle) to the distilled water which gives 1000mls in total
1.1 Changing the recirculating solution

The solution shall be changed every 6 months.

NB: the instruction manual recommends a change of fluid every 12 months – however the CDHB IPC Service has made a risk assessment that the fluid is changed every 6 months.

Refer to Operator’s Manual for procedure.

1.2 Machines where recirculating solution is not retained

Some departments, e.g. Kaikoura, where the units are rarely used may choose to empty the fluid after each use.

In this situation, prepare the recirculating solution as above and fill the chamber when required.

2 Disinfection of the recirculating fluid chamber

There is NO requirement to disinfect the recirculating fluid chamber as per the Operator’s Manual. This is because a hydrogen peroxide solution is used.

Regular microbiological testing of circulating fluid is not required.

3 Cleaning and disinfection of the exterior of the unit

Examine the unit after each use.

Wipe the exterior with a detergent wipe.

If visibly contaminated follow the cleaning step with a disinfection step using sodium hypochlorite (Presept) 1000ppm solution.

4 Recording the fluid change

Use a laminated sticker on the front of the unit and record initial and date each time the circulating fluid is changed.

A record of fluid change is not required for those units that are drained immediately after patient use (ref 1.2 above).

The label below has been adapted from one designed and used by CDHB Theatres Anaesthetic Technicians

<table>
<thead>
<tr>
<th>Reservoir Fluid Filling</th>
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</thead>
<tbody>
<tr>
<td>Hotline</td>
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<tr>
<td>Date</td>
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<tr>
<td>Initial</td>
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Measurement/Evaluation

IPC Environmental audits.