

Fact sheet for health care professionals

Reprocessing of Basic Life Support Training Equipment

To reduce the risk of cross-infection between staff during basic life support (BLS) practical training, reusable equipment must be adequately reprocessed.

What equipment should be considered?

Any equipment that comes into contact with staff oral mucosa during BLS practical training must be reprocessed between each use. This mostly concerns manikin faces and resuscitation masks.

Equipment marked "Single Use" must always be discarded after use and not reprocessed. (Refer to the SA Health fact sheet on single use items¹).

Manikin lungs are not to be reprocessed but must be discarded according to the manufacturer's instructions.

What is the infection risk?

While the infection transmission risk is considered low², equipment used during BLS training may become contaminated with oral secretions/saliva, which are a potential source of viruses and bacteria. Staff undertaking BLS training are required to be free of respiratory illness and/or cuts and sores around the mouth, but the risk of cross-infection cannot be entirely eliminated.

What processes are available?

Spaulding's criteria require that BLS equipment be high level disinfected between uses. The two most commonly recommended methods are:

- > **Thermal Disinfection** – The use of a mechanical washer-disinfector delivers both cleaning and high level disinfection processes. Organisations with a Central Sterile Supply Department (CSSD) will have access to this process. It is important to confirm the time and temperature used in the CSSD, as high temperatures may reduce the life of BLS equipment. Australian Standards specify a range of validated time/temperature combinations to consider when selecting this process³. One such cycle commonly used is 10 minutes at 80°C; exceeding this temperature is likely to increase wear on this type of equipment and is not recommended.
- > **Chemical Disinfection** – BLS equipment may be disinfected by immersion in a chemical disinfectant for the required amount of time. The manufacturer's recommended chemical should be used. Items must first be cleaned in warm water and detergent, rinsed and dried. Rinsing and drying of items is also required after disinfection, in order to remove residual chemical prior to reuse.

Which chemicals are appropriate for disinfection of BLS equipment?

Sodium hypochlorite is the recommended disinfectant for BLS equipment. Agents marketed as "hard surface disinfectants" are not recommended as they may contain additional chemical agents incompatible with BLS equipment and are intended for purposes not involving instruments or surfaces likely to come into contact with broken skin⁴, which may occur during BLS training.

- > *The disinfection process validated by Laerdal is immersion in 0.5 % sodium hypochlorite (a 1 in 10 dilution of 5% bleach) for 10 minutes.*



References

1. SA Health Fact Sheet - Single Use Medical Devices
<https://www.sahealth.sa.gov.au/wps/wcm/connect/public+content/sa+health+internet/resources/single+use+medical+devices?contentIDR=fbb9a180411d3ae284dbcc189ce06e0d&useDefaultText=1&useDefaultDesc=1>
2. Australian Resuscitation Council (2010) *Guideline 10.3 Cross Infection Risks And Manikin Disinfection*
3. Standards Australia, 2014 *Australian/New Zealand Standard 4187: Reprocessing of reusable medical devices in health service organizations* p.46
4. SA Health Reprocessing of Reusable Medical Devices Policy Directive -
<http://www.sahealth.sa.gov.au/wps/wcm/connect/public+content/sa+health+internet/clinical+resources/clinical+topics/healthcare+associated+infections/prevention+and+management+of+infections+in+healthcare+settings/reprocessing+of+medical+devices>

For more information

Infection Control Service
Communicable Disease Control Branch
Telephone: 1300 232 272
www.sahealth.sa.gov.au/infectionprevention

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