Standard Operating Procedure: Hydrogen Peroxide Vapour-enhanced room decontamination

Purpose of this procedure:

Manual cleaning, even using chlorine releasing agents, is frequently sub optimal in assuring absence of persistent and clinically significant environmental bio burden. Hydrogen Peroxide room vaporisation is recognised as a useful adjunct to manual enhanced decontamination methods.

Criteria for Use:

In Lothian, HPV may be used as a supplement to conventional terminal cleaning following:

- A single case of confirmed Carbapenamase Producing Enterobacteriaceae (CPE)
- A single case of extremely drug resistant organisms (XDRs) on the advice of the IPCT
- Any transmission of hypervirulent Clostridium difficile (e.g. ribotype 027)
- Discharge of any Cystic Fibrosis patient with Mycobacterium abscessus
- Any transmission of Candida auris
- A PAG/IMT where the environment is considered a factor in ongoing transmission of infection/conventional cleaning not adequate.

The Procedure:

1. HPV should only be used if the above criteria for use have been met, or on the specific advice of the Infection Prevention & Control Team.
2. Following patient discharge, conventional terminal clean using Chlorine 1000ppm available chlorine should be completed in line with the standard operating procedures of the HFS National Cleaning Specifications.
3. Any equipment to be decontaminated with HPV must be cleaned as above and placed in the room following terminal cleaning.
4. The nurse in charge (or delegated person) and domestic supervisor must quality assure the terminal cleaning and complete a thorough visual check of all equipment and the environment prior to HPV being used.
5. The request and funding for HPV room decontamination must be authorised by the Service Manager or Associate Nurse Director. A non stock requisition should be generated on PECOS, and the reference number noted.
6. The nurse in charge is responsible for contacting Sanondaf engineers on 01506 657319 or Edinburgh@sanondaf.co.uk to arrange a suitable time for the treatment quoting the PECOS reference number. As much notice as possible should be given to the engineers, attendance is usually within the hour.

7. In line with the Control of Contractors Policy, the service who procures the services is responsible for checking documentation such as method statements and risk assessments.

8. The site health & safety advisor (HealthandSafety.Service@nhslothian.scot.nhs.uk); domestic manager and IPCT should be advised in advance of the treatment.

9. The service must provide the engineer with a copy of the NHS Lothian Control of Contractors Policy; site induction and site safety rules (see Appendices 1 and 2 of the Policy) and any other special Health and Safety Requirements. A record of this exchange must be kept in the local Health & Safety folder.

10. Sanondaf will supply and operate all decontamination equipment.

11. Confirmation of successful treatment will be provided by a) positive reaction- chemical penetration indicator strip; and b) a ‘pass’ using a biological indicator test.

12. The room(s) will be released and safe for further use on advice of the Sanondaf engineer.