# Infection prevention and control in burns services

Burns patients are vulnerable to infection caused by micro-organisms including bacteria, viruses, and fungi. Burns patients may also be a reservoir for micro-organisms and a source for transmission of micro-organisms to other patients.

Guidance has been developed by a multidisciplinary Working Party involving healthcare professionals working in IPC and burn care. Recommendations are based on a systematic review of research evidence, with good practice points reflecting the collective experience and expertise of Working Party members where evidence is lacking.

The guidance covers: recognition of risks; antimicrobial prophylaxis, antiseptics, and burn wound dressings; built environment; cleaning and disinfection (decontamination) of equipment and the environment; microbiological screening and diagnostic sampling; staffing; transfer of patients between burns services and admission of non-burns patients to burns wards; visitors; environmental impact and sustainability.

**This summary highlights three good practice points regarding the built environment, which are intended primarily for new-build projects and where extensive refurbishment is planned.**

- A burns service should be designed to minimize the need for burns patients to access care outside the service. It should have its own entrance that is controlled so that patients can be brought in and out of the area without having to traverse other areas of the hospital. The service should have a clear access pathway separate from the emergency department.

  *Physical separation of burns services from other areas of the hospital is intended to protect burns patients from infection and prevent the spread of MDR or other relevant micro-organisms to other clinical areas.*

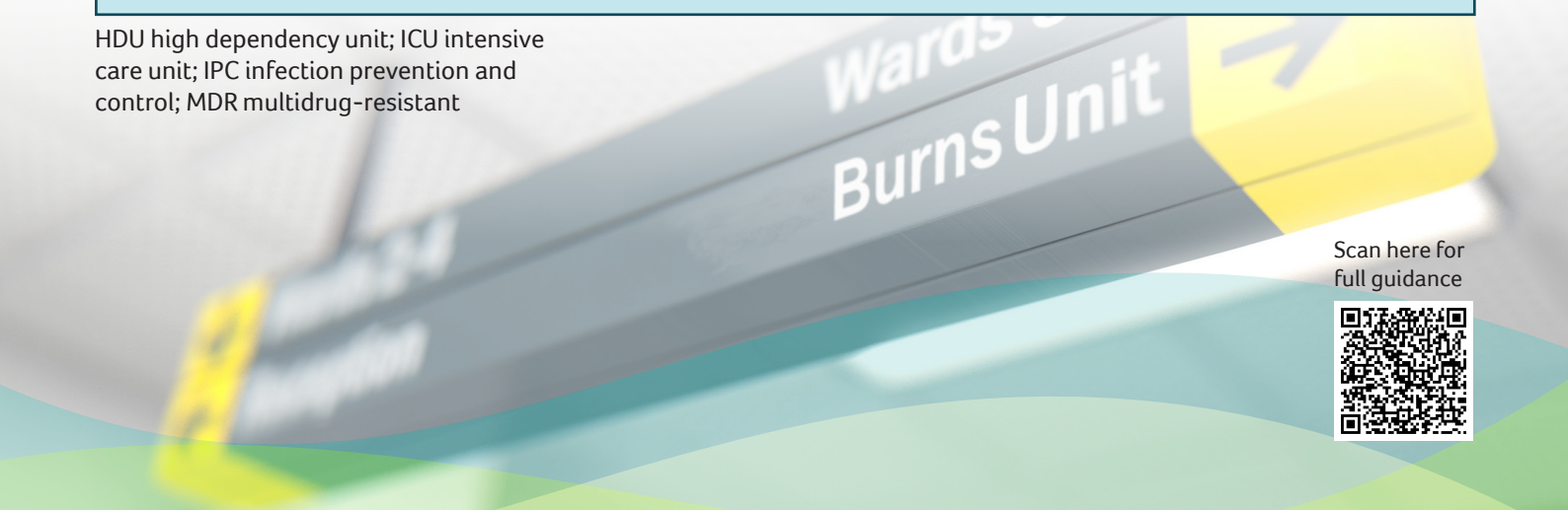
- ICU/HDU rooms and theatres should be ventilated at negative pressure to their surrounding environments (rather than being at neutral pressure, positive pressure, or with switchable air pressures).

  *The principle behind this recommendation is containment. Negative pressure ventilation determines the direction of airflow and air coming in from the corridor will have been filtered. The recommendation reflects existing practice in one UK burns centre and the Working Party noted a study in which MDR micro-organisms originating from a burns patient were detected on settle plates in a corridor adjacent to a burns theatre, demonstrating an airborne origin.*

- Where there is a safe alternative, consider reducing the use of water for the care of burns patients, or using sterile water where feasible.

  *The consensus view of Working Party members was that a weak ('consider') recommendation encouraging burns services to explore possibilities for reducing the use of water where it is safe to do so, or using sterile water where feasible, should be included in the guidance. The weak recommendation reflected limitations of the available evidence, which was not specific to burns services, and potential barriers to reducing the use of water in burns services.*

HDU high dependency unit; ICU intensive care unit; IPC infection prevention and control; MDR multidrug-resistant

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