



The Scottish  
Government

CEL 03 (2012)

07 February 2012

Dear Colleague

## Water sources and potential infection risk to patients in high risk units<sup>1</sup>

### Introduction

The purpose of this letter is to remind you of the potential infection risks posed by water systems in healthcare facilities and to clarify actions required. This follows up the Health Facilities Scotland (HFS) email of 25 January 2011 "Water sources and potential for infection from taps and sinks" and communication to Infection Prevention and Control Teams (IPCTs) of January 2012 "SBAR on Pseudomonas and water".

### Background

A number of incidents of pseudomonas and related infections have been reported across the UK where the source of infection is thought to be related to handwashing facilities. The emerging evidence is being collated and UK technical guidance is expected to issue later in the spring (2012) on sampling, testing and monitoring, along with further advice to inform local water safety plans. Detailed guidance will also be issued from Health Protection Scotland (HPS) and HFS to IPCTs.

In the meantime the immediate actions required are:

### Actions

#### **Chief Executives**

- Ensure all high risk units<sup>1</sup> where patients may be at increased risk of pseudomonas and related infections are identified
- Ensure directors of these units are fully alerted to this issue
- Ensure best practice relating to the use of hand washing facilities is consistently and fully applied.

#### **Infection Prevention and Control Teams**

- Ensure any *Pseudomonas. aeruginosa*\* found in invasive specimens are identified as an alert organism and ensure appropriate surveillance systems are in place
- Ensure full and appropriate investigation of any such infection, including an assessment of whether the source may be water in this instance
- If water may be considered the source, the case/incident must be discussed with HPS

Review existing microbiological data to determine whether there are areas which could pose an immediate pseudomonas risk and undertake a risk assessment in these

### For action

Board Chief Executives  
Directors of  
Estates/Facilities  
Strategic Facilities Group  
HAI Executive Leads  
Infection Control  
Managers  
Infection Control Doctors

### For information

Directors Nursing  
Medical Directors  
Directors Public Health  
CsPHM (Health  
Protection)  
HAI Task Force  
Health Protection  
Scotland  
Health Facilities Scotland

### Enquiries to:

#### Policy Issues

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#### Medical Issues

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- areas as a priority, including sampling
- In an area where there may be an immediate risk, work urgently with Estates/Facilities to minimise any risk identified

### **Directors of Estates/Facilities**

- Ensure site engineering and cleaning protocols are fully compliant with current guidance (including SHTM 04-01) and that manufacturers' instructions with regard to installation and maintenance have been followed
- Ensure a coordinated approach between IPCTs and Estates/Facilities department on all water issues including through the establishment of a board/hospital water safety group
- Ensure all taps are flushed in accordance with the attached best practice for handwash basins to minimise the risk of *Pseudomonas aeruginosa* contamination in high risk units

<sup>1</sup> For example high dependency adult, paediatric and neonatal critical care, renal, transplant, haemato-oncology and burns unit

\* *Pseudomonas aeruginosa* and other related Gram negative water-borne organisms.

Yours sincerely

**Harry Burns**

**Derek Feeley**

**SIR HARRY BURNS**  
Chief Medical Officer

**DEREK FEELEY**  
Director General

# 1. Best practice for hand wash basins to minimise the risk of *Pseudomonas aeruginosa*<sup>1</sup> contamination in high risk units<sup>2</sup> in Scotland

- 1.1 Only use the hand wash basin for hand washing
  - Do not dispose of body fluids at the hand wash basin – use the dirty utility area
  - Do not wash any patient equipment in hand wash basins
  - Do not use hand wash basins for storing used equipment awaiting decontamination
- 1.2 Run **all** taps (hot and cold) in high risk units (manually or automatically) at maximum flow first thing every morning for a period of two minutes and keep a record of when they were flushed.
- 1.3 Identify any problems or concerns relating to safety, maintenance and cleanliness of the hand wash basin to the Infection Prevention & Control Team (IPCT) and the Estates and Facilities Department.
- 1.4 Encourage good dialogue and communication between the IPCT, Infection Control Manager (ICM), Estates and Facilities department and High Risk Unit(s).
- 1.5 Use pre-filled single-use bottles for all hand hygiene products. Do not top-up hand hygiene dispensers or cleaning sprays/bottles.
- 1.6 Ensure that domestic staff have been trained on the correct decontamination procedures for taps and sinks and follow the guidance in the National Cleaning Specification for wash hand basins.

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<sup>1</sup> *Pseudomonas aeruginosa* and other related gram negative water-borne organisms

<sup>2</sup> For example high dependency, adult and neonatal critical care, renal, transplant, haemato-oncology and burns units

## 2. Best practice for assessing and managing the risks<sup>1</sup> in high risk units<sup>2</sup> to minimise the risk of *Pseudomonas*<sup>3</sup> *aeruginosa* contamination

- 2.1 NHS Boards should set up a Water Safety Group to develop a water safety action plan - see link for more information [http://whqlibdoc.who.int/publications/2011/9789241548106\\_eng.pdf](http://whqlibdoc.who.int/publications/2011/9789241548106_eng.pdf)
- 2.2 NHS Boards should identify a Responsible Person (Water).
- 2.3 Boards should develop a risk assessment and written scheme specific to *Pseudomonas aeruginosa* in addition to that in place for legionella. The risk assessment should identify elements such as: at risk patients and services, the suitability of the water distribution system – including types of taps used, identifying under-used outlets and hand wash basins, use of flexible hoses.
- 2.4 Ensure the Board's ability to demonstrate compliance with the National Infection Prevention and Control Manual and related guidance.
- 2.5 Ensure taps and thermostatic mixing valves (manual and automated) have been commissioned (including programming auto flushing cycles), and routinely validated, as per the manufacturer's instructions.
- 2.6 Further advice can be obtained from Health Protection Scotland and/or Health Facilities Scotland.

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<sup>1</sup> Technical guidance on testing, sampling and managing the risk of *Pseudomonas aeruginosa* contamination in high risk units will be published in spring 2012. The implications of this document on the recently published SHTM 04-01 will be assessed for NHS Scotland.

<sup>2</sup> For example high dependency, adult and neonatal critical care, renal, transplant, haemato-oncology and burns units

<sup>3</sup> *Pseudomonas aeruginosa* and other related gram negative water-borne organisms