

Health Protection Scotland (HPS) Position Statement [Final] August 2018
SBAR: PORTABLE COOLING FANS (BLADED and BLADELESS) FOR USE IN
CLINICAL AREAS

<p>Situation</p>	<p>NHS boards have approached HPS requesting advice on the suitability of portable cooling fans for use by patients in NHSScotland. This follows reports/feedback from NHS England that bladeless fans were suspected to be a contributing factor in an outbreak of healthcare associated infection; investigation found the internal mechanism of the fans were contaminated with the causative organism of the outbreak.</p> <p>This SBAR is a position statement from HPS in regards to the use of bladeless fans and similar products by NHSScotland.</p>
<p>Background</p>	<p>Bladeless fans were procured for use by NHSScotland following agreement at a National Procurement Commodity Advisory Panel (CAP) in 2014; there was no specialist infection control input to this panel.</p> <p>The outcome of an initial investigation by NHS National Services Scotland (NSS) Incident Reporting and Investigation Centre (IRIC) in consultation with a manufacturer concluded a potential risk of infection to patients and a lack of appropriate decontamination guidance from the manufacturer. This resulted in IRIC, in discussion with National Procurement and HPS, recommending the immediate removal of these fans from use in all healthcare settings, and an interim hold on the ability of NHSScotland to purchase bladeless fans until further review was completed (December 2017).</p>
<p>Assessment</p>	<p>The manufacturer has advised that their bladeless fan was not marketed or manufactured for use in healthcare settings. Whilst they have provided decontamination guidance for the external surfaces of the fan, which is consistent with the NIPCM¹, they have not to date provided assurance that any contamination within the internal mechanism of the fan will not be disseminated back into the surrounding environment in which it is placed, even with the installation of a HEPA filter, available in one of the models.</p> <p>Feedback from NHS boards has indicated that the external surface of the bladeless fans is also difficult to decontaminate due to the grooves and indents of the design which may harbour dust and dirt particles.</p> <p>In NHSScotland the use of cooling fans is not recommended in any high-risk patient areas due to the risk of possible transmission of infection;^{2,3} or when a patient is known or suspected to have an infectious agent transmissible by the airborne/droplet route.^{2,3}</p> <p>If cooling fans, from any manufacturer, are necessary for patient comfort for a non-infectious patient, then a clinical risk assessment is required to ensure that these are able to withstand decontamination as outlined in the NIPCM,¹ and be subject to planned preventative maintenance.</p>

Recommendations	<p>HPS recommendations:</p> <ol style="list-style-type: none"> 1. Portable cooling fans should not be used during outbreaks of infection, or where known or suspected infectious patients are being managed. 2. If deemed clinically necessary that a portable cooling fan is required then a risk assessment is required to ensure that the fan can be reused. This should include: advice on how to maintain and decontaminate the equipment consistent with the NIPCM¹ and the inclusion of a sealed HEPA filter. If the fan cannot be decontaminated it requires disposal. 3. If bladeless fans specifically are considered for use in clinical healthcare settings in Scotland, the company should provide assurance and evidence that any potential contamination within the internal mechanism will not be dispersed back into the patient environment. 4. All fans in use within NHSScotland should be subject to planned preventative maintenance to ensure ongoing suitability (safe) for use. 5. National Procurement Scotland should consider specialist infection control input into CAPs to ensure that procurement of all reusable patient care equipment is sufficiently risk assessed prior to purchase. 6. NHS boards must ensure that Infection Prevention and Control teams are consulted when patient equipment is being procured locally for use in clinical areas. 7. Portable cooling fans can be used in non-clinical areas; these should be visibly clean and maintained.
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References

1. Health Protection Scotland. National Infection Control Manual source: <http://www.nipcm.hps.scot.nhs.uk>
2. Health Protection Scotland. Interim infection control precautions to minimise transmission of respiratory tract infections (RTIs). HPS; 2015.
3. Health Protection Scotland. Infection control guidance for severe respiratory illness from novel or emerging pathogens: MERS-Cov and Avian Influenza. HPS; 2015