

Special considerations for healthcare and care homes

2.152 Legionnaires' disease is a potentially fatal form of pneumonia and everyone is susceptible to infection, but there are a number of factors that increase susceptibility, including increasing age (particularly those over 50 years); those with existing respiratory diseases or certain illnesses and conditions such as cancer, diabetes, kidney disease; alcoholics; smokers; and those with an impaired immune system.

2.153 Special consideration should be given to patients or occupants within healthcare premises, residential or care homes where they are exposed to water systems and a range of potential sources of waterborne infection, eg patient ventilation humidification systems that are not necessarily present in a non-healthcare setting.

2.154 This guidance gives information on special considerations where there are susceptible individuals but should be applied proportionately, eg in an acute hospital setting where there are likely to be a larger number of susceptible patients at risk of infection, the organisation may need to follow most or all aspects of the guidance. However, in other settings where there may be less susceptible residents, a local risk assessment will help determine which aspects of this guidance are relevant. Further guidance is also available for care settings in *Health and safety in care homes*.

2.155 Appendix 2.1 gives information on what the risk assessment should consider and should take into account the susceptibility of 'at risk' patients. Both the relative risks of legionella infection, scalding and any additional measures that may be required to effectively manage those risks should be considered.

Info box 2.9: Patients in augmented care units

Water systems: Health Technical Memorandum HTM 04-01 published by the Department of Health (England) advises that it may be preferable to provide separate small systems, with independent supply and local heating sources for patients in augmented care units (ie where medical/nursing procedures render the patients susceptible to invasive disease from environmental and opportunistic pathogens and include patients).

2.156 Hot and cold water systems should be maintained to keep cold water, where possible, at a temperature below 20 °C, and stored hot water at 60 °C and distributed so that it reaches the outlets at 55 °C within one minute. The minimum temperature at the most distant point should be 55 °C, ie the temperature of the hot water as it returns to the calorifier should not fall below 50 °C. Circulation of cold water and refrigeration should only be considered in specialist units where people are at particular risk as a result of immunological deficiency, eg transplant units. All other uses of water should also be considered and appropriate action taken, as these may not be appropriate in an augmented care setting (eg use of ice machines, drinking water fountains, bottled water dispensers etc). Where required, they should be considered as part of the risk assessment as there is an increased risk in compromised patients for legionella infection to occur following aspiration of ingested water contaminated with legionella.