

|  |
| --- |
|  **Review Sheet** |
| Last Reviewed Last Amended Next Planned Review in 12 months, or23 Jul '20 23 Jul '20 sooner as required. |
| Business impact | Changes are important, but urgent implementation is not required, incorporate into your existing workflow.**MEDIUM IMPACT** |
| Reason for this review | Scheduled review |
| Were changes made? | Yes |
| Summary: | Updating legislation changes, identifying accreditation body and legionella risk assessment standard, additional references and adding the "Communication Actions" to the policy. |
| Relevant legislation: | * Control of Substances Hazardous to Health Regulations 2002
* Health and Social Care Act 2008 (Registration and Regulated Activities) (Amendment) Regulations 2015
* Health and Safety at Work etc. Act 1974
* Management of Health and Safety at Work Regulations 1999
* Reporting of Injuries, Diseases and Dangerous Occurrences Regulations 2013 (RIDDOR)
 |
| Underpinning knowledge - What have we used to ensure that the policy is current: | * Author: HSE, (2014), *Health and safety in care homes (HSG220)*. [Online] Available from: [Accessed: ]
* Author: HSE, (2014), *Legionnaires’ disease: Technical guidance, Part 1: The control of legionella bacteria in evaporative cooling systems, HSG274 Part 1*. [Online] Available from: <https://www.hse.gov.uk/pubns/priced/hsg274part1.pdf>[Accessed: 23/7/2020]
* Author: HSE, (2014), *Legionnaires’ disease, Part 2: The control of legionella bacteria in hot and cold water systems, HSG274 Part 2*. [Online] Available from: <https://www.hse.gov.uk/pubns/priced/hsg274part2.pdf>[Accessed: 23/7/2020]
* Author: HSE, (2013), *Legionnaires’ disease: Technical guidance, Part 3: The control of legionella bacteria in other risk systems, HSG274 Part 3*. [Online] Available from: <https://www.hse.gov.uk/pubns/priced/hsg274part3.pdf>[Accessed: 23/7/2020]
* Author: HSE, (2020), *Managing legionella in hot and cold water systems*. [Online] Available from: <http://www.hse.gov.uk/healthservices/legionella.htm>[Accessed: 23/7/2020]
* Author: HSE, (2012), *Control of Legionella in hot and cold water systems in care services / settings using temperature*. [Online] Available from: <https://www.hse.gov.uk/foi/internalops/sims/pub_serv/07-12-07/index.htm>[Accessed: 23/7/2020]
* Author: HSE, (2020), *Legionnaires’ disease - The control of legionella bacteria in water systems (L8)*. [Online] Available from: <https://www.hse.gov.uk/pubns/priced/l8.pdf> [Accessed: 23/7/2020]
 |
| Suggested action: | * Encourage sharing the policy through the use of the QCS App
* Share ‘Key Facts’ with all staff
* Ensure relevant staff are aware of the content of the whole policy
 |
| Equality Impact Assessment: | QCS have undertaken an equality analysis during the review of this policy. This statement is a written record that demonstrates that we have shown due regard to the need to eliminate unlawful discrimination, advance equality of opportunity and foster good relations with respect to the characteristics protected by equality law. |

**1. Purpose**

* 1. To comply with the Health and Safety at Work Act 1974, and The Control of Substances Hazardous to Health 2002 (CoSHH) in particular Regulation 6 and the control of legionella bacteria in water systems: Approved Code of Practice L8 (Fourth edition) 2013'.
	2. To ensure that all who are affected by the business operations at Holbeach & East Elloe Hospital Trust are protected from the risk of harm from legionella.
	3. To support Holbeach & East Elloe Hospital Trust in meeting the following Key Lines of Enquiry:

## Key Question Key Lines of Enquiry

|  |  |
| --- | --- |
| RESPONSIVE | R2: How are people’s concerns and complaints listened and responded to and used to improve the quality of care? |
| SAFE | S5: How well are people protected by the prevention and control of infection? |
| WELL-LED | W2: Does the governance framework ensure that responsibilities are clear and that quality performance, risks and regulatory requirements are understood and managed? |

* 1. To meet the legal requirements of the regulated activities that {Holbeach & East Elloe Hospital Trust} is registered to provide:
		+ Control of Substances Hazardous to Health Regulations 2002
		+ Health and Social Care Act 2008 (Registration and Regulated Activities) (Amendment) Regulations 2015
		+ Health and Safety at Work etc. Act 1974
		+ Management of Health and Safety at Work Regulations 1999
		+ Reporting of Injuries, Diseases and Dangerous Occurrences Regulations 2013 (RIDDOR)

**2. Scope**

* 1. The following roles may be affected by this policy:
		+ All staff
	2. The following Service Users may be affected by this policy:
		+ Service Users
	3. The following stakeholders may be affected by this policy:
		+ Family
		+ Advocates
		+ Representatives
		+ Commissioners
		+ External health professionals
		+ Local Authority
		+ NHS

**3. Objectives**

**3.1** To monitor the water supply systems of any establishment owned or controlled by Holbeach & East Elloe Hospital Trust.

**4. Policy**

* 1. Maintenance of establishments at Holbeach & East Elloe Hospital Trust will be carried out in accordance with the procedures detailed below in order to minimise, as far as is practical, the risk of Legionella infection.
	2. Water storage containers will be sampled by a competent person. Water samples should be analysed for Legionella periodically by a UKAS accredited company to demonstrate that bacteria counts are acceptable. The frequency should be determined by the level of risk, in accordance with the risk assessment.
	3. ‘Sentinel’ outlets (furthest and closest to each tank or cylinder) must be identified for monthly checking of the distribution temperatures. The hot water storage cylinder temperatures should be checked every month and cold water tank temperatures at least every six months.
	4. Stagnant water favours Legionella growth. To reduce the risk, dead legs/dead ends in pipework should be removed, infrequently used outlets should be flushed out (including shower heads and taps) at least weekly and shower heads and hoses should be cleaned and descaled at least quarterly. Cold water storage tanks should be cleaned periodically, and water should be drained from hot water cylinders to check for debris or signs of corrosion.

**5. Procedure**

## Legal Requirements

The Health and Safety at Work Act 1974 etc. places duties on employers to ensure the health, safety and welfare of their employees at work and anyone else who may be affected. This duty extends to any risks from Legionella bacteria, which may arise from work activities. The Management of Health and Safety at Work Regulations 1999 provide a broad framework for controlling health and safety at work which includes the legal requirement for employers to carry out risk assessments. The Control of Substances Hazardous to Health Regulations 2002 also place duties on employers and occupiers of premises to carry out risk assessments, which includes the control or release of micro-organisms and microbiological agents. In addition, the Approved Code of Practice and Guidance “Control of Legionella Bacteria in Water Systems (L8)” gives practical advice on how to comply with the law. Holbeach & East Elloe Hospital Trust is committed to meeting its legal obligations to its employees and others (e.g. Service Users,

contractors, etc.) who may be affected by its undertaking by ensuring that an ongoing prioritised programme of controls is in place and implemented as follows:

* + - Identification, assessment and regular review of risks
		- Preparation of a scheme of works for the prevention and control of identified risks
		- Implementation and management of the scheme by appointing persons to be managerially responsible
		- Maintenance of records and monitoring of controls
		- Provision of appropriate training

## Premises where a Formal Risk Assessment has been Arranged by The Registered Manager

The risk assessment arranged by The Registered Manager will enable the potential sources of risks and the required controls who are UKAS accredited to **ISO/IEC** 17020. The report should also identify remedial plumbing works in order to ensure that all water systems are safe, so far as is reasonably practicable. Holbeach & East Elloe Hospital Trust has a prioritised programme for identifying and carrying out risk assessments based on:

* + - The vulnerability of the user group
		- Water systems that are considered likely to create a risk. Examples of measures required to control Legionella will include ensuring that the temperature at water outlets is below 20ºC for cold water and above 50ºC for hot water
		- Minimising the creation of airborne water droplets and aerosols
		- Minimising supplies of nutrients such as sediment, sludge, scale or other material e.g. in water tanks and other water storage devices
		- Ensuring movement of water to avoid water stagnation e.g. in storage tanks
		- Removing ‘dead-legs’ (lengths of pipe closed at one end through which water cannot flow freely)
		- Disconnecting and draining pipework and water outlets to rooms or other areas of a building that are not being used

## Remedial Plumbing Works, Water Treatments and Sampling

The Registered Manager will:

* + - Identify the routine maintenance required for the water systems during the risk assessment process
		- Appoint a specialist contractor to carry out disinfecting, dosing, sampling or other work to the water system e.g. fitting lids to water tanks

## Scalding

Where a significant risk of scalding has been identified during the risk assessment procedure, thermostatic mixing valves (TMVs) must be fitted to sinks, baths and showers to reduce water temperatures of hot water outlets (taps/shower heads etc.) to no greater than 44C. The Registered Manager will arrange for necessary work to be carried out. TMVs will be fitted as close as possible to the point of use. A warning sign (e.g. 'caution – hot water') will be displayed by any uncontrolled hot water tap without a TMV, e.g. in certain kitchen areas. The hazards associated with such hot water outlets should be addressed in the local risk assessment procedure.

## Record Keeping – The Organisation Water Monitoring Logbook

Where Holbeach & East Elloe Hospital Trust has arranged for the assessment of a water system to be

undertaken, a Water Monitoring Logbook will be issued to the local person who is managerially responsible for the building(s). This logbook includes:

* + - The formal risk assessment
		- A schematic plan of the water system
		- Details of the duties and responsibilities of the named appointed persons
		- Details of weekly/monthly/quarterly/six monthly/annual checks to be carried out on the water system i.e. flushing of identified water outlets such as sinks and showers
		- Temperature checks of the calorifier (both the water heater and hot/cold water outlets)
		- Dismantling, cleaning and de-scaling shower heads and hoses

## Training

When the Water Monitoring Logbook is issued, training is given to:

* + - The person (and deputy) carrying out the checks
		- The local person (and deputy) with the delegated responsibility of managing the water system(s) on the premises

These two key positions are fundamental in ensuring that control measures are implemented and ensuring that Holbeach & East Elloe Hospital Trust fulfils its legal obligations in the control of Legionella. Changes to these personnel must be accompanied by training to meet this policy and procedure.

## Premises where a Formal Risk Assessment has not yet been Arranged by Holbeach & East Elloe Hospital Trust

Any premises occupied by employees of Holbeach & East Elloe Hospital Trust which have not been formally risk assessed (as arranged by maintenance), will not have been issued with the Water Monitoring Log Book at Holbeach & East Elloe Hospital Trust. Where this is the case, actions are still required by the person in charge of the premises to ensure the control of Legionella.

## Action Required Taps

Any tap that is not used within a seven-day period must be flushed through for 2 minutes on a weekly basis (avoid splashing to minimise the release of water droplets/aerosols). The following should be carried out:

* + - Monthly temperature testing of the cold taps furthest from and nearest to the storage tank to check that water is below 20ºC
		- Monthly temperature testing of the hot taps furthest from and nearest to the calorifier (water heater) to check that water is above 50ºC
		- Any uncontrolled hot water taps (e.g. without a TMV) must be identified with an appropriate sign e.g. 'Caution – Hot Water'

The Registered Manager must be informed where:

* + - The cold water temperature is above 20ºC after running the water for 2 minutes
		- Hot water temperature is below 50ºC after running the water for 1 minute

Where TMVs have been fitted, the hot water temperature should be taken at an uncontrolled tap (one without a TMV) or using a surface contact thermometer probe on the hot water supply pipework entering the TMV.

## Showers

Any shower (whether heated directly by an instant water heater or through the mains hot water system) that is not used within a seven-day period must be flushed through for 2 minutes every week at both maximum and minimum temperatures. The release of water droplets/aerosols should be avoided e.g. by either securing a plastic bag over the shower head with a corner cut off to allow water to escape or by removing the shower head and placing the shower hose directly over the drain outlet.

Emergency showers should be installed ‘upstream’ of higher-use outlets to maintain frequent flow. Further advice can be sought from maintenance.

## Toilets

Any toilet that is not used for a period of seven days or more must be flushed at least weekly (the lid should be closed to avoid contact with any water droplets/aerosol). Flushing should be undertaken more frequently if the risk assessment indicates that it is necessary. In the case of urinals, ensure that the continuous flushing systems are working correctly. Please note service providers are encouraged to incorporate a flushing regime as part of their Legionella Risk Assessment.

## Records

A record must be retained on site of any water system checks that are undertaken using the record logs at the end of this policy.

## All Premises

Operation and maintenance of all water systems.

In order for Holbeach & East Elloe Hospital Trust to control the risk of Legionella, approval must be obtained from The Registered Manager by email or fax prior to the commencement of:

* + - Installation of new water systems e.g. in new buildings
		- Alteration of existing water systems
		- Change of use of buildings
		- Change of occupation of buildings
		- Change in number of persons occupying buildings
		- Closure of a building or part of a building
		- Areas of a building temporarily or permanently out of use
		- Repairs to all water systems (except emergency repairs, for example, leaking pipes or taps, in which case The Registered Manager must be notified afterwards by fax or e-mail)

This procedure is essential, as it will ensure that:

* + - The integrity of water systems is maintained (disinfecting/sterilisation may be required)
		- Corporate records and local logbooks are kept up to date
		- The risk assessment, where applicable, remains valid

## Redundant Water Systems

The Registered Manager should be informed by fax or e-mail of any redundant water systems such as taps, showers, toilets and fire hose reels etc. so that their removal can be considered.

## Water Features

Where an ornamental water feature is on site, advice on the potential risks can be sought from The Registered Manager.

## Air Conditioning and Cooling Towers/Evaporative Condensers

Regular maintenance and monitoring of these systems must take place. Maintenance of these systems is arranged by The Registered Manager. The Registered Manager should be informed where this routine maintenance is not being carried out and also prior to the installation of any new, or alterations to existing air conditioning systems or cooling towers/evaporative condensers.

## Fire Hose Reels

Where testing of fire hose reels is carried out, this must be done carefully (i.e. by opening the operating valve slowly) to avoid the creation of water droplets/aerosols.

Fire hose reels are for emergency use only and must not be used for any other purpose e.g. watering the garden or washing vehicles.

In consultation with the Fire Service, consideration is being given to the complete removal of fire hose reels at certain locations for safety reasons. There are concerns that employees may place themselves at risk by attempting to fight a fire for longer than is safe, by using fire hose reels, there is also a significant trip hazard posed to persons vacating the building due to the hose pipe being on the escape route.

**6. Definitions**

## TMV

* + - Thermostatic mixing valves (TMVs) - these are fitted to regulate the temperature that water from the main tank supply comes through the taps - see the scalding section of the policy

## Risk Assessment

* + - Used to assess the risk of harm to persons from exposure to legionella. Considers the likelihood that risk of vapours/droplets may occur and the consequences of such harm occurring. This risk factor determines if the risk is acceptable or further control measures are needed to lower the risk to as far as is reasonably practicable

## Flushing

* + - Periodically, water systems are flushed at a temperature at which the Legionella bacteria can not

grow and by so doing, any traces are reduced by using water under pressure to flush out any traces of bacteria. This is done at above 60ºC for approximately 2 mins

## Legionnaires' Disease

* + - Legionnaires’ disease is a potentially fatal form of pneumonia, which can affect anybody. It is caused by the bacterium Legionella Pneumophila and related bacteria. Legionella bacteria can also cause less serious illnesses, which are not fatal or permanently debilitating. On average, there are approximately 200-250 reported cases of Legionnaires’ disease per year. Infection with Legionella bacteria can be fatal in approximately 12% of reported cases. This rate can be higher in a more susceptible population,

e.g. immuno-suppressed patients or those with other underlying diseases. Certain groups of people are known to be at a higher risk of contracting Legionnaires’ disease; e.g. men appear more susceptible than women, as do those over 45 years of age, smokers, alcoholics, diabetics and those with cancer or chronic respiratory or kidney disease. It was first identified following a large outbreak of pneumonia in 1976 of people who attended an American Legion Convention in Philadelphia

* + - Legionnaires’ disease is normally contracted through inhaling the Legionella bacterium in tiny droplets of water (aerosols) such as showers, steam rooms and whirlpools etc. At this time, there is no evidence of Legionnaires’ disease being caught through person-to-person contact. The incubation period is between 2-10 days and not everyone exposed will develop the full-blown disease but may suffer mild flu-like symptoms. Initial symptoms of the disease include high fever, chills, headaches and muscle pain. About one-third of patients infected also develop diarrhoea or vomiting

**Key Facts - Professionals**

Professionals providing this service should be aware of the following:

* + - Managers of Holbeach & East Elloe Hospital Trust will ensure that all staff are aware of the symptoms of Legionella and what action to take
		- Managers of Holbeach & East Elloe Hospital Trust will ensure that staff receive Legionella awareness training and ongoing refreshers to ensure that they are competent in seeking help and knowing how to respond to any outbreak

**Key Facts - People affected by the service**

People affected by this service should be aware of the following:

* + - Family and friends who are concerned about a Service User whom they visit who may have flu-like symptoms or anything which may point to the potential of Legionella must report this to The Registered Manager or the most senior person on duty

**Further Reading**

There is no further reading for this policy, but we recommend the 'underpinning knowledge' section of the review sheet to increase your knowledge and understanding.

**Outstanding Practice**

To be ‘ outstanding ’ in this policy area you could provide evidence that:

* + - Active monitoring and ongoing maintenance of water systems take place and a log of any activity is kept. This is key to the management of Legionella
		- An open line of communication is kept between management and staff with regards to Legionella control and any ongoing maintenance

**Forms**

The following forms are included as part of this policy:

|  |  |  |
| --- | --- | --- |
| **Title of form** | **When would the form be used?** | **Created by** |
| Weekly Log Sheet - ME02 | To record weekly flushing | QCS |

# Weekly Log Sheet – Rarely Used Outlets

|  |
| --- |
| **Rarely used outlets are defined as outlets not used within a 7-day period.****Flush water out of the outlet, taking care not to generate a mist of water, for at least 2 minutes at weekly intervals.****Record the action below.** |
| **Location** | **Flushed – sign and date** | **Comments** |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

**Weekly Log Sheet – Showers and Specialist Baths**

|  |
| --- |
| **Flush water out of the shower outlet for at least 2 minutes, running the water to drain and draining the shower hose, at weekly intervals. Record the action below:** |
| **Location** | **Flushed – sign and date** | **Comments** |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

**Weekly Log Sheet – Unoccupied Areas**

|  |
| --- |
| **Every outlet in an unoccupied area must be flushed weekly, including washbasins, baths, showers, and toilet basins. Flush water out of the outlet, taking care not to generate a mist of water, for at least 2 minutes at****weekly intervals. Record the action below:** |
| **Location** | **Flushed – sign and date** | **Comments** |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |