

HEALTH AND SAFETY PROCEDURE

WATER TEMPERATURE AND HOT SURFACES

WATER TEMPERATURE AND HOT SURFACES.			
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2014		Original	
2017	1	No changes	
2020	2	COVID - 19	
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INTRODUCTION

This policy explains the risks associated with hot water and hot surfaces in health and social care premises and sets out guidance to help control them. It covers the risks vulnerable people may be exposed to when bathing or showering, or where there are hot surfaces such as pipes or radiators.

Inadequate supervision of the bathing process is unacceptable. Controls in terms of water temperature and surface temperature must be made available by the provider.

A novel (new) coronavirus that has not previously been seen in humans was identified in December 2019. The virus is called Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2) and the disease that it causes is called Coronavirus Disease 2019 (COVID-19). The Department of Health is leading the government response in Ireland to COVID-19 and are providing up to date [COVID-19 public health information and guidance](#).

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The HSE declares the following survival times for Coronavirus on surfaces:

- Up to 72 hours on plastic
- Up to 72 hours on stainless steel
- Less than 24 hours on cardboard
- Less than 4 hours on copper



LAW/ REGULATIONS/GUIDELINES

- Health and Safety at Work etc. Act 1974 (HSWA), section 3;
- The Health Act 2007 31. (1) (2) Risk Management Procedures

PURPOSE

To protect our residents from burns and scalds from hot water or hot surfaces.

SCOPE

All hot water outlets, radiators and other hot surfaces.

POLICY

We will ensure that all water temperatures do not exceed the maximum limits and that access to hot surfaces is prohibited.

Staff will be trained in the correct manner of bathing residents and the dangers of hot water and hot surfaces.

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RESPONSIBILITIES

It is the responsibility of the provider to ensure that the correct thermostatic mixing valves are fitted and maintained.

The PiC must ensure that this procedure is applied and appropriate Risk Assessments are carried out. Staffs are responsible for the protection, safety and welfare of residents when exposed to hot water and or hot surfaces.

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Hot water

If hot water used for showering or bathing is above 44 °C there is increased risk of serious injury or fatality. Where large areas of the body are exposed to high temperatures, scalds can be very serious and have led to fatalities.

Hot surfaces

Contact with surfaces above 43 °C can lead to serious injury.

Prolonged contact often occurs because people have fallen and are unable to move, or are trapped by furniture. Incidents often occur in areas where there are low levels of supervision, for example in bedrooms, bathrooms and some communal areas.

Particular care needs to be taken to manage these risks where water temperatures are circulated above 50 °C to control legionella.

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HOT SURFACES

Many radiators and associated pipe work are likely to operate at temperatures which may present a burn risk. Where assessment identifies that vulnerable people may come into prolonged contact, such equipment should be designed or covered so that the maximum accessible surface temperature does not exceed 43 °C.

Where there is a risk of a vulnerable person sustaining a burn from a hot surface e.g. a radiator or pipe, then the surface should not exceed 43° C when the system is running at maximum design output. The options for ensuring safety include:

- Providing low surface temperature heat emitters e.g. cool wall radiator
- Guarding the heated area such as providing radiator covers, covering exposed pipework.
- Reducing the temperature, although this should not reduce their effectiveness or increase risk from legionella.
- Staff should be instructed to report any obvious defects immediately, and to take the facility out of use if necessary.

When alterations are necessary ensure that priority is given to those radiators, pipes etc., where residents are more likely to sustain an injury. These would include bathrooms, bedrooms and sitting areas.

Risk Assessment must be carried out on vulnerable residents to determine if they are at risk of injury from hot surfaces and the action necessary to avoid harm to residents.

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Scalding

High water temperatures are necessary in the home and it is constantly in demand. High water temperatures cause a risk of scalding. When water temperatures are in excess of 44°C, there is a high risk of burns and scalds to residents or to anyone who cannot react fast enough to prevent injury. The UK authorities have recorded fatal accidents as a result of older people being immersed in baths that have been too hot.

Precautions

If bathing facilities are accessible by residents, then the following steps should apply.

Fitting of thermostatic mixing valves to prevent water being delivered over 44°C from taps or more than 41°C from showers. It is essential that thermostatic mixing valves (TMVs) are maintained in accordance with manufacturers instruction.

Adequate training and supervision to ensure that staff involved in bathing of residents understand the risks and precautions.

This will include

- checking the temperature before the resident gets into it
- Periodic monitoring of the outlet temperature of the bath/shower water using a bath thermometer.
- If it is necessary to add hot water when the person is in the bath, this should be done slowly and the water should be tested as it is added.
- If, when filling the bath, water exceeds 44°C, this must be reported to the person in charge

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- Access to the bathroom restricted until such time as the necessary repairs have been carried out.

Risk Assessments need to take into account the vulnerability of all those who have access to the bathing facilities. The results of these assessments should be recorded in individual residents care plans, which should include an assessment of their capabilities and should specify whether a resident is able to bath themselves unsupervised.

Assess potential scalding and burning risks in the context of the vulnerability of those being cared for. A risk assessment should be carried out to identify what controls are necessary and how the systems will be managed and maintained.

The results of the general risk assessment should be taken into account when completing an individual's care assessment.

Considerations include:

- Can the resident get in/out, sit up and wash themselves unaided?
- Is the resident's user's sensitivity to temperature impaired?
- Is the resident's mental state such that they can recognize that the bath is too hot?
- Is the resident capable of summoning assistance if needed?
- Will any lifting or other aids limit the resident's mobility in the bath?
- Is the resident liable to try to run themselves a bath or add hot water when unattended? This is a particular issue for confused people or those with dementia.

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Where TMVs are not fitted to baths or showers other equally effective controls should be in place. Locking bathroom doors or removing the hot tap head is not advisable where this will prevent water being flushed out regularly to control the risk from legionella.

There must be adequate supervision by staff who have received adequate information and training on the risks of scalding and the correct procedures to follow.

Labeling hot water outlets with “very hot water” signs will alert staff and residents and will help to prevent inadvertent scalding.

These measures may only be acceptable in the short term until thermostatic controls are fitted.

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