



# Hot Water Risk Assessments

Don't get  
burned by lack  
of knowledge

# HSE Guidance States

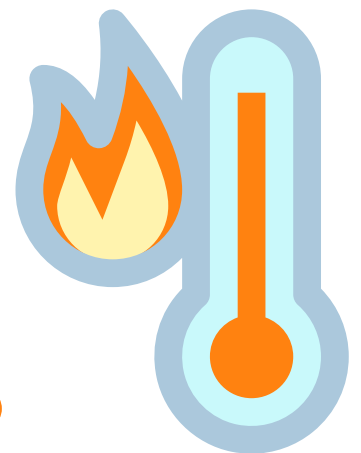
**“You should assess the potential scalding and burning risks” and a risk assessment of the premises should be carried out to identify what controls are necessary and how systems will be managed and maintained”**

# Let's unpick that...

**Dutyholders, employers or premises owners have a duty of care under health and safety law to protect users of their water systems.**

**All systems require a risk assessment, however not all systems will require elaborate control measures.**

**A simple risk assessment may show that the risks are low and being properly managed to comply with the law.**



# What if it's not simple

**Hospitals, GP Surgeries, healthcare and nursing home or other residential facilities will need to complete much more detailed risk assessments.**

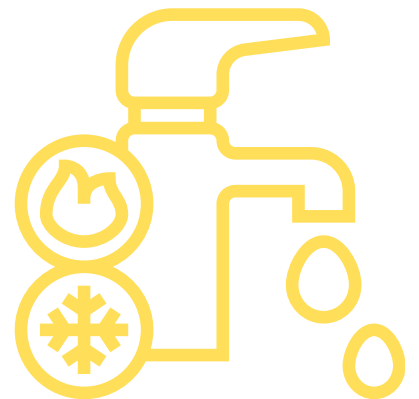
**The main risks include**

- **Scalding**
- **Legionella**



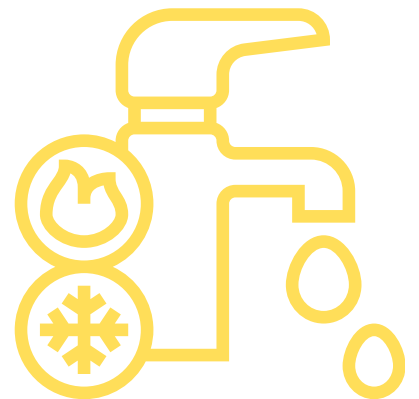
# Reducing the risk of scalding

- Scalding cannot be controlled by simply reducing water temperature
- Legionella bacteria will also need to be assessed as part of a Hot Water Risk Assessment
- This assessment may require the duty holder to maintain their systems at a temperature that represents a scald risk
- This is the traditional control strategy for Legionella – using heat to kill it.



# Getting the assessment right

- All outlets delivering hot water should be assessed
- Particular attention should be paid to full immersion outlets (baths & showers)
- Where there are individuals how are elderly, very young, mentally or physically disabled, high risk outlets must be quickly identified and assessed.
- A site survey should be carried out to cover all outlets onsite and this should be kept up to date considering evolving site usage.



# Legionella Control

**For Legionella control, hot water outlet temperatures are required to be 50°C within one minute of operation (55°C in healthcare buildings), however, temperatures above 41°C can result in scalding injuries.**

# The role of the TMV

TMVs (thermostatic mixing valves) should be considered at all outlets where there is deemed to be a significant risk of scalding.

These allow the outlet temperature to be adjusted to within a more comfortable range to prevent the risk of scalding and injury.



# TMV Valves

There are three common types of TMVs available;

- Type 1 – a mechanical mixing valve with or without temperature stop (i.e., manually blended);
- Type 2 – a thermostatic mixing valve: BS EN 1111 and or BS EN 1287;
- Type 3 – a thermostatic mixing valve with enhanced performance: HTM 04-01: Supplement, D08. These are high-performance mixing valves that are designed to operate and protect users from scalding under both high and low water pressure, temperature instability and thermal shutdown

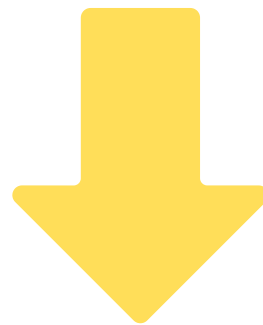
# Additional Measures

- Adequate supervision of those who are vulnerable around hot water
- Ensuring rooms with water access are locked around vulnerable people and children.
- Using warning and hot water stickers and notices on outlets that are not used for hand washing
- Using temperature restricted, instant water heaters.



**Need support?**

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consultation**



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