

## **Policy for Monmouth Rowing Club and the prevention of Legionella bacteria in our water system.**

Compiled by Dan Cowton using information from the Health & Safety Executive, Trident Water Solutions and Adrian Tully (professional plumber).

A disclaimer: I have tried to get this correct, but a few days ago I knew virtually nothing about Legionella infections, so I have done my best.

### *What is Legionella bacteria?*

What is legionella? Legionella bacteria is commonly found in water. The bacteria multiply where temperatures are between 20-45°C and nutrients are available. The bacteria are dormant below 20°C and do not survive above 60°C.

Legionnaires' disease is a potentially fatal type of pneumonia, contracted by inhaling airborne water droplets containing viable Legionella bacteria. Such droplets can be created, for example, by: hot and cold water outlets; atomisers; wet air conditioning plant; and whirlpool or hydrotherapy baths.

Source: <https://www.hse.gov.uk/healthservices/legionella.htm>

### *How do you control it?*

The primary method used to control the risk from Legionella is water temperature control. Water services should be operated at temperatures that prevent Legionella growth:

- Hot water storage cylinders (calorifiers) should store water at 60°C or higher
- Hot water should be distributed at 50°C or higher (thermostatic mixer valves need to be fitted as close as possible to outlets, where a scald risk is identified).
- Cold water should be stored and distributed below 20°C.
- A competent person should routinely check, inspect and clean the system, in accordance with the risk assessment.

Source: <https://www.hse.gov.uk/healthservices/legionella.htm>

### *What do we do/need to do?*

The system was tested for Legionella bacteria by Trident Water Solutions in September 2021.

Key procedures we need for the prevention of Legionella bacteria:

1. Run cold water weekly – typically achieved by normal club usage.
2. Keep hot water in the tanks at 60 degrees centigrade – hot water is currently heated 24/7 to this heat (according to Adrian Tully).
3. The hot water pipes around the property need frequently circulating with water of 50 degrees centigrade and above to kill the bacteria. The bacteria thrives in 30-40 degree centigrade temperatures.
4. Advised by Adrian Tully – a PIR/movement sensor (installation due Nov 2021, manual frequent operation until then) to switch on the pumps for 10 minutes whenever there is movement behind the electric shutter. This will give plenty of “movement triggers” and cumulatively achieve bacteria killing heat on a regular basis. However, during flood times access to the club may be zero for a week/10 days so a switch to turn on the pumps 24/7 in the same circuit is to be used (installation due Nov 2021). This is to be turned on when the sewage pumps are turned off as part of flood processes.