

Oxfordshire County Council
Water Services Hygiene, Legionellosis and
Scalding

Schools Logbook

Oxfordshire County Council
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CAPITA



Water Services Hygiene, Legionellosis & Scalding Logbook

PROPERTY DETAILS

School:.....

Head of
Establishment:.....

Responsible
Person:.....

ACTION NOTE

If water temperatures are not acceptable action as follows:

Schools responsibility for correcting. (Phone the
Service Providers Helpdesk if bought into service).

Ensure that all actions taken are entered on the appropriate record sheet.

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1.0 Water Service Hygiene and Scalding Logbook

1.1 Introduction – Purpose of Logbook:

The purpose of this Logbook is for record keeping and to communicate to site staff the importance of water hygiene and scald control measures, their responsibility for maintaining water hygiene and scald control measures, the role of OCC Service Provider (SP), the precautions which both SP and site staff are required to implement and their responsibility for record keeping.

1.2 Policy and Procedures Document

It is important that the reader understands fully the actions necessary to control the risk and their role in the control process. If there is any doubt about the content or implications of this logbook, the reader should first refer to Policy and Procedures document and, if still in doubt, contact the SP or OCC Helpdesk.

Failure to adopt appropriate measures for the minimisation of legionellosis risk (in accordance with the Health and Safety at Work etc Act 1974, the Control of Substances Hazardous to Health Regulations 2002 and the HSE Approved Code of Practice on Legionnaires Disease - the control of legionella bacteria in water systems (L8)) renders Heads of Establishment Resources staff, SP and others liable to prosecution.

1.3 Legal Duty to Adopt Measures of the Type Presented in this Logbook.

The following information should be retained with this Logbook:

- Copied pages of all record keeping log sheets;
- Copy of the current risk assessment record;
- Any correspondence relating to water hygiene and scald control measures;
- Any chlorination certificates relating to water hygiene and scald control measures;
- Storage Tank Maintenance Records;
- Copy of the site plan showing the location of boiler and heater plant, hot and cold water outlets etc; and
- Where applicable details and maintenance logs of any water treatment systems.

2.0 Water Hygiene and Scalding Risk Assessment

Property:.....

This form is to acknowledge that the following has been undertaken or provided:

Item	YES / NO	Initial
A copy of the County Council Water Service Hygiene and scalding Logbook		
A risk assessment of the hot and cold water services		
A copy of the risk assessment record identifying actions necessary		
Where applicable details of any water treatment systems installed		
The location of hot and cold water sources		
Thermometer provided		
Hot water and surface temperature risk assessment carried out		

Signed on behalf of School:.....

Title:.....

Signed on behalf of OCC:.....

Title:..... Date:.....

This copy to be retained at the Establishment in the Water Service Hygiene Legionellosis and Scalding Logbook.

3.0 Guidance on Record Keeping:

Please retain the record keeping sheets supplied with this Logbook as masters and copy the sheets for record keeping purposes.

Retain the completed record sheets together with this Logbook.

4.0 Temperature Monitoring Records

Water Service Hygiene & Scalding Logbook from SP
0808 156 6659

↓

Hot and cold water supply temperatures to be tested once a month

1. Sentinel outlets (nearest and furthest taps) at any location or on a run of pipework, from each water source, should be tested per month (All outlets should be tested over a 12 month period).
2. Thermometer should be held under running tap and required temperature should be reached within one minute (hot) or two minutes (cold)
3. Results must be recorded in the Water Service Hygiene & Scalding Logbook.

↓

Hot Water Supply:

Check temperature:

- If 50°C or above – OK.
- If lower than 50°C refer to Water Service Hygiene & Scalding Logbook for details of action necessary.

↓

Cold Water Supply:

Check temperature:

- If 20°C or below – OK.
- If higher than 20°C refer to Water Service Hygiene & Scalding Logbook for details of action necessary.

↓

Warning:

1. If there are young children or vulnerable adults, to avoid a scalding risk, the temperature should be as stated in Table 1 of the Water Hygiene policy . Current storage and supply temperatures are stated in the risk assessment for the property.
2. Risk assessments for legionellosis and scalding for current installations, have been carried out at all OCC properties. **Any change to the existing installations will require a new assessment to be made.** For details please contact SP.

4.1 Temperature records for hot water outlets

Why?

The growth of all pathogenic water borne micro-organisms is dependent upon temperature. *Legionella sp.* cannot breed in cold water below 20°C, and will die rapidly at temperatures above 60°C. As such we aim to store cold and hot water at these temperatures where risk dictates it to be necessary. It is important that distribution temperatures are maintained at less than 20°C for cold water, and above 50°C for un-mixed hot water where scalding is not deemed a risk. If these temperatures are achieved, and there is sufficient turn-over of water to prevent stagnation Legionella bacteria will be controlled.

Where?

Identify the **sentinel** outlets. For hot water services these are the first and last taps on a re-circulating system. For cold systems (or non re-circulating hot water systems), they are the nearest and furthest taps from the storage tank. The choice of sentinel taps may also include other taps which are considered to represent a specific risk.. This information should be on your schematic drawing and in the risk assessment. If you are not clear which ones are the sentinel outlets then please speak to the Service Provider (Carillion).

Please use a separate record sheet for either a single outlet or a group of hot water outlets and enter the number of outlets on the record sheet.

When?

Temperatures should be monitored and recorded as follows and should comply with the temperatures identified on the form:

- A minimum of sentinel outlets (nearest and furthest taps to the source) at any location or on a run of pipework tested on a monthly basis.
- All outlets should be tested within a period of 12 months. If there are more than 12 outlets on a system it is recommended that more than one is tested monthly to ensure that all outlets are tested within the 12 month period.
- For scalding issues outlet temperatures from point-of-use water heaters should not exceed 41°C.
- Point-of-use water heaters are to be set at 50°C for legionella control. In buildings used by: young children of nursery and foundation stage age; persons with sensory impairment or people with a learning difficulty then a TMV must be installed prior to the terminal fitting to achieve a maximum temperature of 41°C for scald control.

Please refer to Section 4.4.1 Table 1 Maximum Safe Hot Water Temperatures, in the Policy, Strategy & Management Procedures

Where vulnerable people are bathed refer to and follow: **OCC Safe Practices and Procedures: Bathing, Showering and Washing of Vulnerable Adults and Children**

(this guidance is published separately on the OCC intranet and does not form part of the guidance).

How?

Identify the temperature test points as discussed above;

- Photocopy the temperature test form over-page and use the copies to record temperatures;
- Ensure you use an accurate calibrated thermometer appropriate for taking water temperatures.
- Visit each identified tap. Those sites with large centralised systems and outlets with mains cold water run the tap at full flow holding the probe so that it is fully submerged with the tip fully immersed in the flowing water for 1 minute. Record the temperature on the form A. Those sites with point-of-use water heaters do not run the water for 1 minute as this may drain the contents of the water heater and the temperature reading will be incorrect. To avoid this situation, run the tap of the point-of-use water heater for 15 seconds then immerse the tip of the probe in the flowing water and record the temperature on the form A.

Form A - Temperature record for hot water outlets

Year

Hot Water Temperatures														
Type	No	Location	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Sentinel Outlets	1													
	2													
	3													
	4													
	5													
	6													
Representative outlets on a rotational basis	7													
	8													
	9													
	10													
	11													
VISIT DETAILS			Date											
			Initials											

NOTES: 1. Hot water temperatures should reach 50°C within one minute.



4.2 Temperature records for stored cold water fed outlets

Why?

The growth of all pathogenic water borne micro-organisms is dependent upon temperature. Legionella sp. cannot breed in cold water below 20°C, and will die rapidly at temperatures above 60°C. As such we aim to store cold and hot water at these temperatures where risk dictates it to be necessary. It is important that distribution temperatures are maintained at less than 20°C for cold water, and above 50°C for un-mixed hot water where scalding is not deemed a risk. If these temperatures are achieved and there is sufficient turn-over of water to prevent stagnation, the growth of Legionella bacteria will be controlled.

Where?

Identify the **sentinel** outlets. Sentinel outlets are the taps or shower heads that are **the nearest and the furthest to/from the cold water storage tank or the incoming mains**. This information should be on your schematic drawing and in the risk assessment. If you are not clear which ones are the sentinel outlets then please speak to the OCC Service Provider (Carillion).

Please use a separate record sheet for either a single outlet or a group of cold water outlets and enter the number of outlets on the record sheet.

When?

Temperatures should be monitored and recorded as follows and should comply with the temperatures identified on the form:

- A minimum of sentinel outlets (nearest and furthest taps to the cold water source) at any location or on a run of pipework tested on a monthly basis.
- All outlets should be tested within a period of 12 months. If there are more than 12 outlets on a system it is recommended that more than one is tested monthly to ensure that all outlets are tested within the 12 month period.

How?

Identify the temperature test points as discussed above;

- Photocopy the temperature test form over-page and use the copies to record temperatures;
- Ensure you use an accurate calibrated thermometer appropriate for taking water temperatures.
- Visit each identified tap. Those sites with large centralised systems and outlets with mains cold water run the tap at full flow holding the probe so that it is fully submerged with the tip fully immersed in the flowing water for 2 minutes and record the lowest temperature achieved within that time on form B.

Form B - Temperature record for stored cold water fed outlets:

Year:

Cold Water Temperatures															
Type	No	Location	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Sentinel Outlets	1														
	2														
	3														
	4														
	5														
	6														
Representative outlets on a rotational basis	7														
	8														
	9														
	10														
	11														
VISIT DETAILS			Date												
			Initials												

5.0 Records of Routine Legionella Control Tasks

5.1 Shower Head Cleaning

Why?

Legionellosis is contracted when tiny water droplets (aerosol) contaminated with Legionella sp. bacterium is inhaled. This is possible with shower-heads and other outlets. However, showers tend to be infrequently used compared to taps. As such procedure 5.2 of this logbook (Flushing of Infrequently Used Showers & Taps) must also be implemented.

Where?

All showers.

When?

At least every 3 months.

How?

- Disconnect showerhead from unit.
- Dismantle the showerhead and replace parts as necessary.
- Scrub all parts with a stiff brush to remove scale and check that all spray jets are clear.
- Soak in a de-scaler as per the de-scaler manufacturers recommendations (where necessary carry out a COSHH risk assessment from the information provided in the manufacturers "Product Safety Data Sheet").
- Rinse all parts thoroughly with clean water.
- Reassemble and reconnect to unit.

Flexible hoses where fitted:

- Disconnect from showerhead and unit.
- Flush hose through with soapy water.
- Soak in a de-scaler as per the de-scaler manufacturers recommendations (where necessary carry out a COSHH risk assessment from the information provided in the manufacturers "Product Safety Data Sheet").
- Flush hose through with clean water.
- Reconnect to showerhead and unit.

5.2 Flushing of Infrequently Used Showers & Taps

Why?

Stagnation of water leads to conditions which encourage the Legionella bacterium to grow quickly. Stagnant water tends to be warm and dirty, ideal for high numbers of micro-organisms. This procedure is to be implemented whenever stagnation occurs (e.g. an infrequently used shower or tap; a room which is currently un-occupied; part or all of a building that is temporarily un-occupied).

Where?

Infrequently used showers and taps are defined as outlets used less than once a week. You should identify these outlets on your site.

When?

All infrequently used showers & outlets are to be operated for at least 3 minutes at least once per week.

How?

Identify the infrequently used showers & Taps as discussed above;

- Run the hot and cold taps at full flow for at least 3 minutes. Flush all WCs. Ensure that this exercise is conducted at least once every week, more often if possible;
- In the case of showers this should be done creating as little aerosol as possible. This can be done by immersing the shower head in a bucket of water before turning the shower on.
- Maintain a simple record that you have implemented the flushing regime using form D. Again photocopy the form, and use copies for record keeping;
- Should the area be proposed for indefinite closure (i.e. longer than 60-days), please contact the SP Helpdesk. If services are disconnected this would negate the need for the flushing exercise but they would require disinfection prior to bringing back into service.

Note: Schools should refer to section 14 of the Water Hygiene and Scalding Policy and section 5.3 of this Logbook for procedure to be followed during holiday periods.

5.3 Re-opening a School after the Summer Holidays

Why?

In most schools the domestic hot water systems are switched off during holiday periods also the warmer weather which increases the temperature of the stagnant water and allows Legionella to breed within the water system.

Where?

All taps, showers, toilet cisterns and any other water outlets.

When?

School domestic hot water systems must be turned on and taken up to operating temperature at least 7 days prior to re-occupation. All taps, showers, toilet cisterns and any other water outlets are then to be run each day to create good circulation prior to the first day of term.

How?

- Locate All taps, showers, toilet cisterns and any other water outlets;
- Run the hot and cold taps at full flow for at least 3 minutes and Flush all WCs. Ensure that this exercise is conducted at the frequencies listed above;
- Maintain a simple record that you have implemented the flushing regime using form E. Again photocopy the form, and use copies for record keeping;
- Should the area be proposed for indefinite closure (i.e. longer than 60-days), please contact the SP Helpdesk.

5.4 Thermostatic Mixing Valve Maintenance and Temperature Testing

Why?

To ensure that where a thermostatic mixing valve (TMV) has been fitted it remains operational at the correct temperature to prevent a scalding incident.

Where?

At each outlet where a TMV has been installed.

When?

For scalding risks all TMV's shall be temperature tested every six months and should be maintained in accordance with manufacturer's recommendations and section 9.5 of OCC Policy and Procedure document.

How?

Site should ask the SP or a specialist contractor to complete this work and record actions on Form F

6.0 Maintenance Records



6.1 Site Legionella & Scald Risk Assessment (reviewed by OCC every two years)

6.2 General Correspondence

**6.3 Storage Tank Maintenance Records
(Where Applicable)**

6.4 Chlorination Certificates (Where Applicable)

6.5 Schematic Drawing or Site Plan

**6.6 Maintenance of Water Treatment Plant
(Annual Where Applicable)**

6.7 The Private Water Supplies Regulations 2009 Risk Assessment

6.8 The Private Water Supplies Regulations 2009 Audit & Check Sampling Results