**Section 1**

**DUTY HOLDER RESPONSIBILITES**

**CATAGORY: STC owned and STC Managed property – Occupied**

WMP means Water Management Plan; RA means Risk Assessment

|  |  |  |
| --- | --- | --- |
| **Identified responsibility** | **Duty Holder responsible for the provision** | **Notes** |
| Provision of the initial Legionella RA and survey report | STC Asset Management | Minimum survey requirement to formulate the WMP. |
| Issuing of the WMP documents | STC Asset Management |  |
| Review of RA including schematic drawings | STC Asset Management | To be reviewed on an annual basis. |
| Carrying out routine water checks and maintenance – Appendix A | STC Asset Management | Where STC Asset Management is not in control, the Local Duty Holder must provide all records to Asset Management for WMP updating. |
| Changes to hot and cold water system(s) | STC Asset Management | STC Asset Management must be notified of all projects. |
| Review of WMP performance and arrangements | STC Asset Management | To be reviewed on an annual basis. |
| Updating of WMP records | STC Asset Management |  |
| Site control / WMP site ownership | Local Duty Holder |  |
| Contractor control | Local Duty Holder &  STC Asset Management | For works under their control. |
| Project control | STC Asset Management | STC Asset Management must be notified of all projects. |
| Staff training | Local Duty Holder  BTSTC Health & Safety  STC Asset Management | Depending upon staffing arrangements. |
| Provision of information | Local Duty Holder &  STC Asset Management | Where necessary to update WMP. |

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| Extract from  **Legionnaires Disease HSG274 Part 2: The control of legionella in hot and cold water systems**  *5. Under general health and safety law, duty holders including employers or those in control of premises, must ensure the health and safety of their employees or others who may be affected by their undertaking. They must take suitable precautions to prevent or control the risk of exposure to legionella. They also need to either understand, or appoint somebody competent who knows how to identify and assess sources of risk, manage those risks, prevent or control any risks, keep records and carry out any other legal duties they may have.* |

Note: This section is to be audited as part of the WMP review.

**Section 2**

**CONTACTS**

|  |  |
| --- | --- |
| **Property Name** |  |
| **Property Address** |  |
| **Property**  **Tel: Number** |  |

**Organisation**

|  |  |  |  |
| --- | --- | --- | --- |
| **Position** | **Name** | **Phone** | **Email** |
| STC Asset Management Statutory Compliance Officer |  |  |  |
| Local Duty Holder 1  (lead) |  |  |  |
| Local Duty Holder 2 |  |  |  |
| Other |  |  |  |
| Other |  |  |  |
| Other |  |  |  |
| Notes on Local Duty Holder management arrangements: | | | |

Note: This section is to be audited as part of the WMP review.

**Section 3**

**Water Management Plan Document WMP**

**DUTY HOLDER ACCEPTANCE**

By signing this document I understand and accept the apportioned DUTY HOLDER responsibilities in relation to COSHH 2002 (Control of Substances Hazardous to Health) Regulation 3 ‘The Duty to Manage’ and as described within Section 1 of the this document.

All Duty Holders should also be familiar with the STC Corporate Guidance as detailed in Section 7.

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| --- | --- | --- |
| PROPERTY NAME:  PROPERTY ADDRESS: | | |
| South Tyneside Council Asset Management  representative | Name:  Position: | Sign:  Date: |
| Property Local  Duty Holder 1 (Lead) | Name:  Position: | Sign:  Date: |
| Property Local  Duty Holder 2 | Name:  Position: | Sign:  Date: |
| Other: | Name:  Position: | Sign:  Date: |
| Other: | Name:  Position: | Sign:  Date: |
| Other: | Name:  Position: | Sign:  Date: |

Note: This section is to be audited as part of the WMP review.

**Section 4**

**Assessment of Buildings Water Systems for Legionella**

The Risk Assessment will be conducted in accordance with HSG274 Technical Guidance and will include the detailed assessment of

* Proliferation potential
* Aerosol Production, Dissemination, and Exposure
* Exposed Population susceptibility

**The checklist below gives the most common requirements when assessing risks associated with a hot and cold water system based on mechanical operational chemical and management aspects.**

1. Details of management personnel who play an active role in the risk management process to include names job titles and contact information for:

* The duty holder,
* The appointed responsible person
* Any service providers.

2. Assessment of the competence of those associated with risk management including their training records;

3. Identification of the rules and responsibilities to include employees, contractors and consultants;

4. A check that consideration has been given to removing the risk by substitution or elimination;

5. Scope of the assessment that is the details and integrity of the plant being assessed;

6. Assessment of the validity of the **schematic diagram** which should include all parts of the system where water may be used or stored;

7. Details of the design of the system including an asset register of all associated plant pumps strainers outlets and other relevant items;

8. An assessment of the potential for the system to become contaminated with Legionella and other material;

9. Details of any pre-treatment process;

10. Assessment of the potential for Legionella to grow within the system and effectiveness of control measures:

* Chemical on physical water treatment measures.
* Disinfection and cleaning regimes.
* Remedial work and maintenance.

11. Evidence of collective actions being implemented;

12. Evidence of proactive management and follow up of previous assessment recommendations or identified remedial actions;

13. Evidence of the competence of those involved in control and monitoring activities;

14. A review of the Legionella control system including management procedures and site records all logbooks;

**The following specific considerations should also be assessed for hot and cold water systems.**

1. The quality of supply water where this is not wholesome additional risks and measures to mitigate the risk must be included in the risk assessment process;

2. Examination of tanks for configuration floor pattern protection against contamination materials of construction condition temperature size in comparison to water consumption and cleanliness or contamination;

3. Any points in the system where there is a possibility of low or no flow such as blind ends dead legs and little used outlets;

4. Any parts of the sea CWDS susceptible to heat gain to the extent that could support the growth of regional;

5. Any parts of the system with law water throughput including for example low use fittings in unoccupied areas or oversized tanks that may lead to stagnation;

6. Any parts of the system which are configured in parallel with others and where the water flow could be unbalanced;

7. Hot water supply return pipes stagnation often occurs particularly at points furthest away from the water heater where circulation has failed and the hot water has cooled;

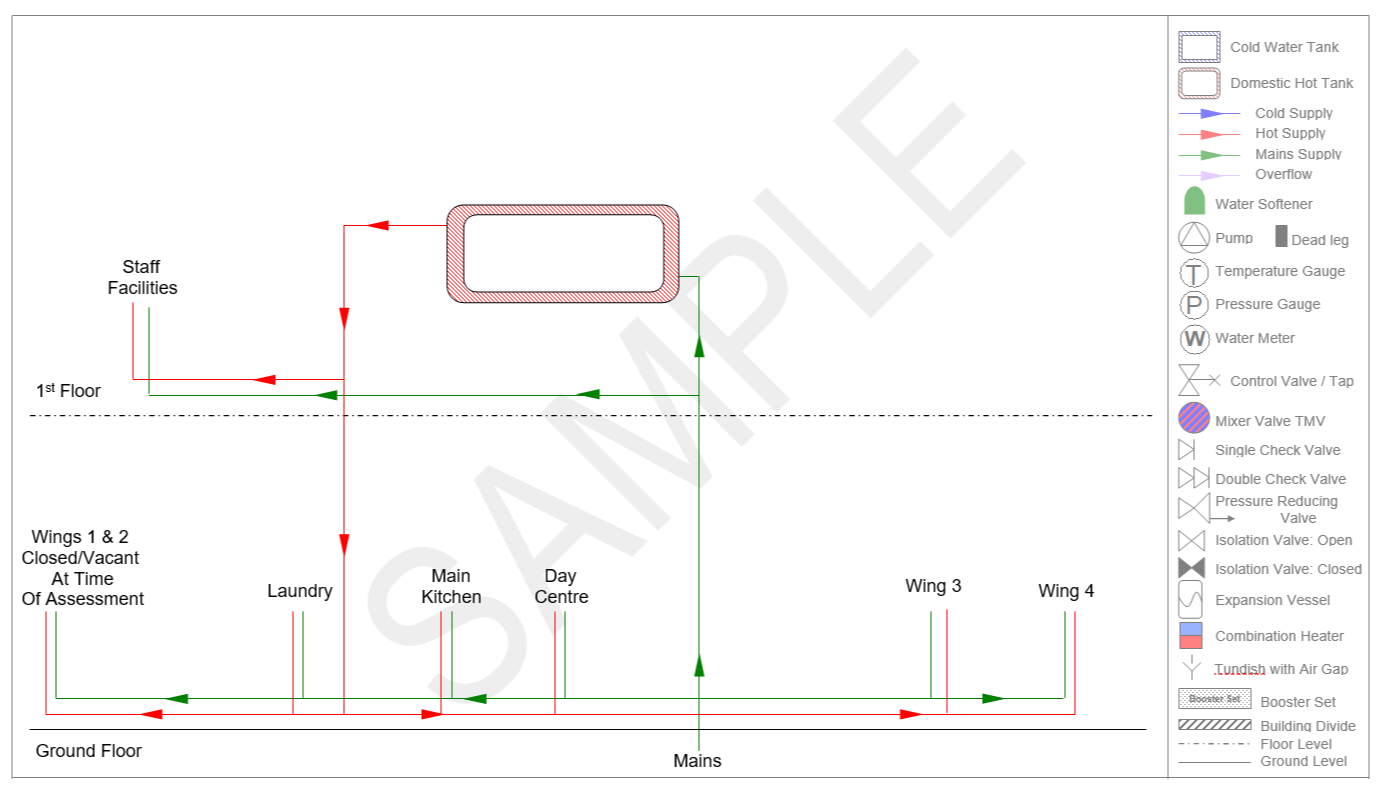
8. Timely appropriate remedial action to poor temperature all monitoring results and using this as an indicator all the effectiveness and adequacy of the of management controls in place;

The assessment should also include recommendations for remedial actions for controlling Legionella, where necessary and identify who will undertake those actions and the actions should be prioritised under review date set for determining completion of those tasks.

**Section 5**

**Building Water System Schematic**

**Sample:**

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**Routine Water Hygiene Checks and Maintenance Schedules Section 6**

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| **Schedule 1 Water Systems Legionella Control Management** | | | |
| **Serial** | **Task** | **Frequency** | **Assigned to** |
| 1. | In accordance with ACoP L8 (Fourth edition 2013), a risk assessment must be carried out and reviewed regularly or whenever there is reason to believe that the current assessment is no longer valid. | To be determined by the Duty holder | STC Asset Management |
| 2. | The schematic diagram of the water system must be regularly assessed for its validity. This should be performed, as a minimum, on an annual basis, or more frequently if building conditions or inspection results indicate water system changes. | Annually or  as required | STC Asset Management |
| 3. | Perform regular review meetings to discuss the preventative regime and any outstanding remedial actions. This should be performed, as a minimum, on an annual basis, or more frequently if building conditions or inspection results require. | Minimum annual  Basis | STC Asset Management |
| 4. | Review the operation and performance of the written scheme of control and prevention to comply with the requirements under L8 (Fourth edition 2013). This should be performed, as a minimum, on an annual basis, or more frequently if required by building conditions or inspection results require. | Minimum annual  Basis | STC Asset Management |
| 5. | Review the management structure to ensure this correctly represents the actual structure. This should be performed, as a minimum, on an annual basis, or more frequently if changes in personnel occur. | Minimum annual  Basis | STC Asset Management |
| 6. | Review the legionella awareness and competence of those involved with the management process. This should be performed, as a minimum, on an annual basis, or more frequently if changes in personnel occur. | Minimum annual  Basis | STC Asset Management |
| 7. | Review the non-conformance process, including the detection of legionella within a water system plan, ensuring this represents actual performance. This should be performed, as a minimum, on an annual basis, or more frequently if changes in the regime management, personnel or building water system use occur. | Minimum annual  Basis | STC Asset Management |
| 8. | Review the results and inspection results to ensure the operating parameters of the system are being achieved. This should be performed, as a minimum, on an annual basis, or more frequently if changes in the regime management, personnel or building water system use occur. | Minimum annual  Basis | STC Asset Management |
| 9. | Any temperature thermometers should undergo regular calibration to ensure the unit is in correct working order. | Annually or as per manufacturers’ instructions | STC Asset Management |

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| **Schedule 2 Incoming Cold Water Supply** | | | |
| **Serial** | **Task** | **Frequency** | **Responsibility** |
| 1. | Check temperatures at sentinel taps (typically those nearest to and furthest from the incoming cold supply to the building but may also include other key locations on long branches to zones or floor levels). These outlets should be below 20°C within two minutes of running the cold tap. To identify any local heat gain, which might not be apparent after one minute, observe the thermometer reading during flushing | Monthly | STC Asset Management |
| 2. | Regular flushing of all outlets for several minutes to significantly reduce the risk of legionella proliferation in the system. | Weekly | Local Duty Holder |
| 3. | Taps with spray /other inserts should be removed, cleaned, de-scaled and disinfected. | Quarterly or more frequent if necessary | STC Asset Management, Local Duty Holder |
| 4. | Strainers installed to a water system can act as bacterial breeding grounds. The operation and maintenance of strainers should be removed and cleaned periodically to remove any dirt, debris or nutrients they may provide for bacteria such as legionella. | Annually | STC Asset Management |
| 5. | Check thermal insulation is intact. | Annually | STC Asset Management |
| 6. | All representative outlets should be tested over a twelve-month period, to ensure the temperature is below 20˚C after running for up to two minutes. | Monthly/ Annually | STC Asset Management |

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| **Schedule 3 Hot Water Storage Vessel** | | | |
| **Serial** | **Task** | **Frequency** | **Responsibility** |
| 1. | Check, inspect and record hot water storage vessel stored, flow and where applicable, return temperatures, to ensure the storage and flow temperature is at least 60˚C and return temperature is at least 50°C. | Monthly | STC Asset Management |
| 2. | Inspect hot water storage vessel internally by removing the inspection hatch or using a boroscope and clean by draining the vessel. The frequency of inspection and cleaning should be subject to the findings and increased or decreased based on conditions recorded. | Annually or more frequently if necessary | STC Asset Management |

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| **Schedule 5 Hot Water System** | | | |
| **Serial** | **Task** | **Frequency** | **Responsibility** |
| 1. | Circulating systems: Check, inspect and record the domestic hot water services at the return leg of each principal loop (sentinel point), to ensure the temperature is at least 50°C. | Monthly | STC Asset Management |
| 2. | Regular flushing of all outlets for several minutes to significantly reduce the risk of legionella proliferation in the system. | Weekly | Local Duty Holder |
| 3. | Taps with spray /other inserts should be removed, cleaned, de-scaled and disinfected. | Quarterly or more frequent if required | STC Asset Management, Local Duty Holder |
| 4. | Strainers installed to a water system can act as bacterial breeding grounds. The operation and maintenance of strainers should be removed and cleaned periodically to remove any dirt, debris or nutrients they may provide for bacteria such as legionella. | Annually | STC Asset Management |
| 5. | Take temperatures at a representative selection of other outlets on a monthly basis to confirm a minimum of 50°C to create a temperature profile of 100% of the whole system annually. | Monthly/ Annually | STC Asset Management |
| 6. | Risk assess whether the TMV fitting is required, and if not, remove  Where needed, inspect, clean, descale and disinfect any strainers or filters associated with TMVs to maintain protection against scald risk, TMVs require regular routine fail-safe testing and maintenance carried out by competent persons in accordance with the manufacturer’s instructions.  The NHS Estates Health Guidance Note, refers to maximum hot water and surface temperatures for  safe use. These are recommended for all healthcare premises and those premises registered under  the Registered Homes Act 1984 (Ref 3) but are applicable for other types of occupied building.   * • 44ºC for an unassisted bath fill * • 46ºC for an assisted bath fill (\*\*) * • 41ºC for shower applications * • 41ºC for washbasin applications * • 38ºC for bidet applications   \*\* This high fill temperature should only be considered in exceptional circumstances where there  are difficulties in achieving an adequate bathing temperature. The building manager should also  have in place specific policies that prevent the possibility of persons judged to be at risk gaining  access to the bath unaccompanied | Annually | STC Asset Management |

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| **Schedule 6 Instantaneous Water Heater and System** | | | |
| **Serial** | **Task** | **Frequency** | **Responsibility** |
| 1. | Check and record cold water supply temperature to the unit, to ensure the water supplying the unit is below 20˚C. | Monthly | STC Asset Management |

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| **Schedule 7 Low Storage Volume Water Heaters and Systems** | | | |
| **Serial** | **Task** | **Frequency** | **Responsibility** |
| 1. | Check and record water temperatures to confirm the heater operates at least 50°C at a representative outlet (including TMV input if present) | Monthly | STC Asset Management |
| 2. | Regular flushing of all outlets for several minutes to significantly reduce the risk of legionella proliferation in the system. | Weekly | Local Duty Holder |
| 3. | Taps with spray /other inserts should be removed, cleaned, de-scaled and disinfected. | Quarterly or more frequent if necessary | STC Asset Management |
| 4. | Risk assess whether the TMV fitting is required, and if not, remove  Where needed, inspect, clean, descale and disinfect any strainers or filters associated with TMVs to maintain protection against scald risk, TMVs require regular routine fail-safe testing and maintenance carried out by competent persons in accordance with the manufacturer’s instructions.  The NHS Estates Health Guidance Note, refers to maximum hot water and surface temperatures for  safe use. These are recommended for all healthcare premises and those premises registered under  the Registered Homes Act 1984 (Ref 3) but are applicable for other types of occupied building.   * • 44ºC for an unassisted bath fill * • 46ºC for an assisted bath fill (\*\*) * • 41ºC for shower applications * • 41ºC for washbasin applications * • 38ºC for bidet applications   \*\* This high fill temperature should only be considered in exceptional circumstances where there  are difficulties in achieving an adequate bathing temperature. The building manager should also  have in place specific policies that prevent the possibility of persons judged to be at risk gaining  access to the bath unaccompanied | Annually | STC Asset Management |
| 5. | Strainers installed to a water system can act as bacterial breeding grounds. The operation and maintenance of strainers should be removed and cleaned periodically to remove any dirt, debris or nutrients they may provide for bacteria such as legionella. | Annually | STC Asset Management |
| 6. | Check and record water temperatures to confirm the heater operates at least 50°C at a representative outlet (including TMV input if present) | Monthly | STC Asset Management |

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| **Schedule 8 Aerosol Sources** | | | |
| **Serial** | **Task** |  |  |
| 1. | Low flow rate spray tap inserts should be removed, cleaned, de-scaled and disinfected including all heads, inserts and hoses where fitted. | Quarterly or more frequent if necessary | STC Asset Management, Local Duty Holder |

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| **Closed Water Systems** | | | |
| **Serial** | **Task** | **Frequency** | **Responsibility** |
| 1. | Domestic pipework supplying closed water systems with pressurisation units and fast fill connection loops should be classed as infrequently used and the supply pipework to each pressurisation unit and fast fill connection loop should be opened and flushed for several minutes to ensure no stagnant water can remain within this supply pipework also ensuring adequate backflow protection is in place.  **Additional Note:** Although closed systems in normal use are low risk, whilst carrying out ppm or maintenance tasks, appropriate PPE and RPE or hazard assessment is carried out. | Monthly | STC Asset Management |

**Section 7**

**Duties of External Organisations When Dealing with an Outbreak of Legionnaires Disease**

Legionnaires Disease (LD) is a notifiable disease and Legionella is a notifiable causative agent under the Health Protection (Notification) Regulations 2010. All cases (including suspected) of LD must be notified by the clinician to the Proper Officer of the relevant LA (usually the Consultant in Communicable Disease Control) verbally as soon as reasonably practicable and then in writing within 3 days. All diagnosing laboratories must notify the local HPT when Legionella spp. has been identified in a human sample, verbally as soon as reasonably practicable and then in writing within 7 days.

**Investigating cases, clusters and outbreaks of LD requires collaborative effort from specialist teams:**

**Public Health England Health Protection Team**

The HPT is responsible for the local surveillance, data collection and for co-ordinating investigation of cases, clusters and outbreaks of LD. The HPT is responsible for receiving notifications, ensuring completion of the national surveillance form, notifying the national legionella surveillance team and providing support to environmental health colleagues for risk assessment and management.

**Public Health England National Legionella Surveillance Team (NLST)**

The national surveillance team receives surveillance forms (Appendix 3), scrutinises the information for consistency and completeness and queries inaccuracies before processing case information. The NLST identifies clusters and outbreaks using the national database to determine associations between cases and/or locations, conduct postcode analyses and provide assistance with investigations. The NLST co-ordinates activities relating to the notification of travel associated cases to the European Legionnaires’ disease Surveillance Network (ELDSNet) and/or other national health focal points.

**Public Health England Food, Water and Environmental (FW&E) Microbiology Laboratories**

The FWE microbiology laboratories provide expert advice and testing of water and environmental samples along with support and training around sampling to environmental health officers (EHOs) and other professionals.

**National Legionella Reference Laboratory (NLRL), Respiratory and Vaccine Preventable Bacteria Reference Unit (RVPBRU)**

The NLRL, based in Colindale and part of the RVPBRU, provides a range of specialist and reference services, including routine and additional services during outbreaks. They provide confirmatory and diagnostic testing on clinical specimens taken from suspected cases of LD, undertake specialist molecular typing and provide microbiological advice on interpretation of results.

**Public Health England Specialist Microbiology Services (SMS) Regional Laboratories and Primary Diagnostic Laboratories**

These laboratories provide initial testing and clinical expertise to support the diagnosis of legionella infections. The PHE laboratories provide day-to-day support and guidance relating to the range and availability of clinical testing. SMS regional and primary diagnostic laboratories are responsible for ensuring that relevant samples are referred to the NLRL. They should notify the appropriate HPTs of any provisional positive results.

**Local authority (LA) Environmental Health Department (EHD)**

The EHOs have legal powers to undertake inspection of potential LA-enforced places/sources associated with cases, clusters and outbreaks, to review risk assessments, to monitor and enforce legislation relating to the control of legionella, and to undertake sampling as appropriate.

**Section 8**

If a Legionella Outbreak is Declared in any STC owned Property, the Protocol below will be followed:

Building and Compliance Team Leader will notify Local Duty Holder in charge of affected building and instruct them to isolate the affected area immediately

Building and Compliance Team Leader will notify South Tyneside Council Environmental Health Team (local enforcing authority).

South Tyneside Council Environmental Health Team should then notify the National Legionella Surveillance Team and Local Health Protection Team (Newcastle);

Statutory Compliance Team to supply all water management information to South Tyneside Council Environmental Health Team and await further instruction;

Building and Compliance Team Leader to assist with implementation of control measures following the investigation by the relevant organisations such as; cleaning and disinfection of hot/ cold water systems.

Statutory Compliance Team will review Water Risk Assessment for the affected building following implementation of control measures:

Statutory Compliance Team Await instruction from South Tyneside Council Environmental Health Team that the affected system and/ or area is safe for reoccupation.

Statutory Compliance Team will Update Water Management Plans (WPS as required

**Section 9**

On receiving a notification of and outbreak of legionella from South Tyneside Council the National Legionella Surveillance Team is expected to establish an Outbreak Control Team (OTC) which carries out the following functions:

1. Coordinates the investigation.
2. Advises on Control measures;
3. Establishes a means of recording and communicating information;
4. Declaring an End of Outbreak and deals with aftermath.

Overview from Public Health England Guidance on Investigating Cases, Clusters and Outbreaks of Legionnaires Disease page 32 See [Here](https://www.google.co.uk/search?source=hp&ei=fVo3YM2GGdCIlwT3rarwBw&iflsig=AINFCbYAAAAAYDdojZU0L9VCoW9-AagS0gp8vuAEpnNu&q=Public+Health+England+Guidance+on+investigating+cases%2C+clusters+and+outbreaks+of+Legionnaires+disease+&oq=Public+Health+England+Guidance+on+investigating+cases%2C+clusters+and+outbreaks+of+Legionnaires+disease+&gs_lcp=Cgdnd3Mtd2l6EANQ6RRY6RRgzh1oAHAAeACAAQCIAQCSAQCYAQCgAQKgAQGqAQdnd3Mtd2l6&sclient=gws-wiz&ved=0ahUKEwiNuZCEyoTvAhVQxIUKHfeWCn4Q4dUDCAk&uact=5)

**Outbreak Control Team (OCT) established**

**OCT Actions**

|  |  |  |  |
| --- | --- | --- | --- |
| **Investigation** | **Control Measures** | **Communications** | **End of Outbreak** |
| 1. Descriptive epidemiology  2. Environmental investigation  3. Microbiological investigation  4. Analytical study | 1. Source identified and controlled  2. Revised risk assessment of systems  3. Assurance that ongoing control measures are effective | 1. Communication flows and protocols  2. OCT minutes  3. NIRP protocols  4. Media and press statements | 1. No further cases  2. No public health risk requiring investigation  3. Declare outbreak over  4. Debrief, lessons learned  5. Produce outbreak report and case summary |