Standard Operating Procedures for Public Health Response to Community Outbreak or Travel Associated Cluster of Legionnaires' Disease

Version	Date	Originator	Reviewer	Comment
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Standard Operating Procedures for Public Health Response to Community Outbreak or Travel Associated Cluster of Legionnaires' Disease

Investigation of Legionnaires' disease should be carried out in line with National Guidelines for the Control of Legionellosis in Ireland, 2009 (HPSC). Chapter 9 of this document contains detailed guidelines for investigation of an outbreak.

Definitions

Outbreak

An outbreak is defined as two or more cases associated with the same geographical location or probable source during the preceding six months.

Travel associated cluster

A cluster of travel associated cases is defined as two or more cases of Legionnaires' disease who stayed at, or visited, the same accommodation site in the two to ten days before onset of illness and whose onset is within the same two-year period.

(NOTE: ELDSNet only accepts the notification of travel acquired cases who fall within the 10 day period before illness onset**.** However, in some situations, cases may stay at sites, just outside this time period (incubation period) e.g. 11 to 14 days before illness onset and in these situations, following risk assessment, an environmental investigation of the site may be warranted to ensure complete epidemiological follow up and investigation and to prevent further cases.)

1. **Detection of a travel associated cluster or a community outbreak:** Linked cases may be identified by the local Department of Public Health or, if cases are in different HSE areas/countries, by the HPSC or ELDSNet.
2. **Declaration of travel associated cluster/outbreak:** Following confirmation of cases and consultation between the relevant Department(s) of Public Health and HPSC the outbreak/cluster is declared.
3. **Chair of OCT:** Once cluster/outbreak declared a chair should be agreed between the Department(s) of Public Health and the HPSC.
    a. If single site or geographical area identified at the onset the chair should be the DPH/CPHM from that HSE area.
    b. If a number of sites in different HSE areas identified (e.g. tour group visited several sites) the chair could be a DPH/CPHM for one of the HSE areas or CPHM from HPSC.
    c. If a number of sites in different HSE areas identified and international cases the chair should be the CPHM from HPSC.
    d. Once a site is identified it may be appropriate to change the chair to the DPH/CPHM for that HSE area.
4. **Members of OCT**
    a. Essential Personnel
        i. DPH/CPHM for each HSE area involved (cases and sites)
        ii. PEHO/SEHO from HSE area of site/location
        iii. HPSC (CPHM and SMO)
        iv. Consultant Microbiologist (ideally from HSE lab processing environmental samples). Input from Consultant Microbiologist processing clinical samples may also be requested in certain circumstances.

v. HSA (should be alerted immediately and involved once potential workplace site/sites identified)

NOTE: In some situations the OCT may need the input of a technical advisor re water systems, cooling towers etc. This is currently not available to the OCT for community outbreaks and travel associated clusters in Ireland.

b. Other personnel, e.g. communications officer or ID physician, may be required in specific situations.

5. Roles of the OCT and its members

a. OCT

To advise on, and coordinate, the response to the outbreak.

b. HPSC

i. Provision of epidemiological investigation and advice on identified cases and potential cases across different areas in Ireland and internationally.
ii. Provision of expertise on surveillance, analytical and epidemiological studies, infection control, and supporting communications.
iii. Liaison with ELDSNet, including completion of Forms A and B.
iv. Liaison with Public Health in other countries if international cases or contacts.
v. In a large scale outbreak it may be appropriate to alert all Departments of Public Health, GPs, consultant microbiologists and hospitals physicians.
vi. Chair OCT in certain circumstances (see above)

c. Department of Public Health – Implicated site

i. Chair OCT in most situations
ii. Through management of the OCT confirm that all involved clearly understand their respective roles, and carry out their investigative and management tasks promptly and effectively in co-operation with each other as required.
iii. Alert local GPs, hospital clinicians and laboratories, if appropriate.
iv. Arrange case finding (active or passive), if appropriate.
v. Consider need for public health physician to do initial visit to site, with the EHO, to outline current situation and answer any medical questions.
vi. Provide a copy of the anonymised surveillance questionnaire and checklist to the EHO investigating potential site.
vii. Provide updates on the investigation to the Assistant National Director, ISD - Health Protection.

d. Department of Public Health – Cases

i. Rapid investigation and follow up of cases. Completion of the enhanced surveillance questionnaire with details of possible exposure sites and times as soon as possible (see checklists 4 and 5, P. 86-87 in national guidelines).
ii. Ensure that surveillance details are promptly entered onto CIDR.

iii. Provide an anonymised copy of the surveillance form and checklists, with details on possible exposure sites and times, to the DPH/CPHM of the area with implicated site.
iv. Liaise with local EHOs to arrange testing of home, accommodation or work site, if required.
v. Liaise with clinician and microbiologist re confirmatory testing of clinical specimens, if appropriate. This may involve sending samples to HPA in Colindale; HPSC will liaise with HSE area in this regard.
vi. Arrange case finding (active or passive), if appropriate.

e. Environmental Health Services

i. The National Guidelines for the Control of Legionellosis in Ireland, 2009, specify the role of the Environmental Health Services as follows – "The PEHO or accredited commercial company should ensure that the appropriate environmental investigations are carried out including identification of potential sites, early visiting of any identified implicated site and sampling as appropriate".

f. Consultant Microbiologist

i. Provide interpretation of the clinical and environmental laboratory findings.

g. Health and Safety Authority

i. HSA, through liaison with other parties on the HSE Outbreak team, will take the appropriate action to ensure that the risks from Legionella are prevented or controlled in the outbreak zone, and that workers are adequately protected.
ii. HSA will seek to ensure compliance with H&S legislation, in particular, the Safety, Health and Welfare at Work Act 2005 and the Safety, Health and Welfare at Work (Biological Agents) 1994 (as amended)
iii. HSA will provide advice on corrective action to control Legionella in affected premises, and will ensure appropriate safety management systems and processes are provided by the employer to ensure the potential for growth of Legionella in water systems is minimised
iv. HSA would consider enforcement action where necessary. Sections 8 (c) (i) and 8(c)(iii) of the 2005 Act would be relevant in this context. In addition the HSE may be in position to use its powers under the Infectious Diseases Act 1981, following legal advice.

6. Information Disclosure and Dissemination

a. Confidentiality is essential regarding both the patient and site investigation information. No information should be released without agreement of the OCT.
b. Procedures for disseminating information should be agreed in advance, so that all relevant professionals are aware of the latest findings and developments in the investigation.
c. All communication with the management of the potential site should be agreed by the OCT.

d. All communication with the cases should be agreed by the OCT.
e. It should be noted that the notification does not imply that the accommodation named is the source of infection. It is important that this is communicated appropriately following consultation with the OCT.

7. **Correspondence from OCT**: In general correspondence from an OCT issues from the chair of the OCT. However, in the situation of a Legionnaires' disease investigation specific correspondence may need to issue from various members of the OCT, as outlined below.
    a. Correspondence to the manager of the potential site: This will usually issue from the DPH/CPHM or the PEHO for the HSE area of the potential site.
    b. Correspondence to the cases: Protecting confidentiality is essential in any correspondence to cases; any details of the investigation should not be released without agreement of the OCT.
    This will usually issue from the DPH/CPHM for the HSE area of residence of the case.
    In international cases this will usually issue from the DPH/CPHM for the HSE area of the potential site. However, in these cases the HPSC may need to assist in the flow of information.
    c. Correspondence with ELDSNet: From HPSC
    d. Correspondence with Public Health in another country: From HPSC
    e. Correspondence re health and safety issues. This will usually issue from the HSA.
8. **Legal action on closure**: Chapter 3 of the National Guidelines for the Control of Legionellosis in Ireland, 2009 contains guidance on the legal situation regarding legionella prevention and control. If the OCT recommends closure of a site the management may agree to a voluntary closure. If there is no agreement from the management then legal actions may need to be taken. There is no legionella-specific legislation in Ireland. The two options are:
    a. Infectious Disease Regulations 1981 – S.I. No. 390 of 1981. Article 11 of the regulations states: "On becoming aware, whether from a notification or intimation under these Regulations or otherwise, of a case or a suspected case of an infectious disease or of a probable source of infection with such disease, a medical officer of health, or a health officer on the advice of a medical officer of health, shall make such enquiries and take such steps as are necessary or desirable for investigating the nature and source of such infection, for preventing the spread of such infection and for removing conditions favourable to such infection." However, this legislation has never been evoked in Ireland in relation to a legionnaires' disease outbreak and legal advice would be required if it were to be used in this situation.
    b. Enforcement action taken by the HSA under Sections 8 (c)(i) and 8(c)(iii) of the Safety, Health and Welfare at Work Act 2005
9. **Final report**: The Chair of the OCT should co-ordinate the production of the final report.

Appendix 1. Incident/Outbreak Control Meeting – Suggestions for an Agenda

1. Introduction and reminder of "confidentiality".
2. Declarations of conflicts or vested interests.
3. Minutes of last meeting (if applicable) including review of actions agreed at previous meeting.
4. Incident/outbreak resume/update – risk assessment:

    4.1 General situation statement
    4.2 Case definition and patient(s) report
    4.3 Microbiological report
    4.4 Environmental health report – inspection of premises, sampling undertaken
    4.5 HSA report – inspection of premises, sampling advised
    4.6 Other relative reports.
    4.7 Risk assessment conclusion.

5. Management of incident/outbreak – risk management:

    5.1 Control measures

        5.1.1 Closure of premises
        5.1.2 Reopening of premises

    5.2 Investigation

        5.2.1 Inspection
        5.2.2 Epidemiological
        5.2.3 Microbiological aspects (specimen and resources).

6. Advice and risk communication;

    a. Premises and related companies in relation to main suspected premises.
    b. Advice to professionals (GPs, hospital doctors, PH in other HSE areas) ,
    c. Media/press.
    d. Agree content of further press statements
    e. ELDSNet (where appropriate)
    f. Nominate others to assist CPHM in interviews (if required)
    g. Consider need for Helpline or arrangement for enquiries from the public.

7. Obtain telephone numbers of all key personnel within and outside hours.
8. Agree actions required and a timetable for action. Identify individuals responsible for delivering actions as agreed.
9. Agree criteria for defining the end of the outbreak.
10. Date and time of next meeting.