



5th EWGLI Training course:

“Legionnaires’ disease: investigating outbreaks and incidents - risk assessment, sampling and control “

Colindale 13th to 16th October 2008.

Target Audience

This very successful course is being repeated for a fifth year in succession. It is funded by the ECDC and is open to EWGLI and EWGLINET participants and other scientific / technical / epidemiological staff who may be involved in the environmental investigation of outbreaks of Legionnaires’ disease. Prior experience is not essential but a basic knowledge of microbiology, of the *Legionella* organism, diseases caused, and diagnostic methods will be assumed. Participants will also be expected to have read the European Guidelines for Control and Prevention of Travel Associated Legionnaires’ Disease (http://www.ewgli.org/data/european_guidelines/european_guidelines_jan05.pdf) and will also find it useful to have read the SCA document on sampling for legionellae *The determination of Legionella bacteria in waters and other environmental samples (2005) - Part 1 - Rationale of surveying and sampling.* (http://www.environment-agency.gov.uk/commondata/acrobat/book_200_1028650.pdf)

Objectives

A practical and workshop based course to enable participants: to recognise potential sources of legionnaires’ disease; to be familiar with the factors that modulate the risk from potential sources; to appreciate the methods commonly applied to control the risk; to have an understanding of the use, methods and problems of sampling for *Legionella* species, the interpretation of typing and to understand how to perform an assessment of the risk from legionnaires’ disease in a building or other facility.

Venue

Health Protection Agency, Centre for Infections, 61 Colindale Avenue, London NW9 5EQ, England

Date and Time

The course will start at 09:00 on Monday 13th – and finish at 12:30 on Thursday 16th October.

PLEASE NOTE: You should allow about 1h 30 minutes minimum to travel to Heathrow Airport from Colindale. Thus to ensure participants can attend the whole course we advise you that you should not arrange your return flights before 1600 on the Thursday or you should return the following day.

Organiser

Dr John V. Lee
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Tutors

Dr John V Lee and Dr S Lai

Water and Environmental Microbiology Reference Unit, HPA Centre for Infections

Dr Susanne Surman-Lee

HPA London Food Water and Environmental Laboratory

Dr Carol Joseph

Respiratory Diseases Department, HPA Centre for Infections

Dr Tim Harrison, Dr Norman Fry and Dr Baharak Afshar
Respiratory and Systemic Infections Laboratory, HPA Centre for Infections

Dr Sebastian Crespi
Biocontrol S A, Polyclinica Miramar, Palma de Mallorca, Spain

Dr Vladimir Drasar
National Legionella Reference Laboratory, Vyskov, Czech Republic

Format

The course will take three and one half days and include lectures, workshops involving desk-top risk assessments and outbreak investigations, laboratory practical demonstrations and field trips to look at aspects of risk assessment and sampling.

Course content

Epidemiology

Brief epidemiological history, types of disease the current situation in Europe and the rest of the world, international developments in surveillance, principles of investigation of clusters or cases and single cases, modes of transmission.

Diagnostics and the organism

Species causing disease, methods of diagnosis, potential problems, growth requirements, cultural characteristics, colony recognition and typing methods.

Biology and ecology of *Legionella* species – the scientific basis to control

Where the organisms occur in nature, growth requirements, the importance of other organisms, significance of other organisms and biofilms to survival, temperature and growth, aerosol formation, methods of detection, media QC, reproducibility of sampling results.

Principles of control of legionellae in man made water systems

Factors affecting survival and growth in different types of man-made water systems, importance of scale, corrosion, stagnation, and dirt in the promotion of growth; modes of transmission, aerosols, the fundamental principles of control common to all water systems.

Hot and cold water systems and spa pools

Descriptions of hot and cold water systems, spa pools and other systems that potentially can be sources of infection including humidifiers and closed loop systems, the features that may encourage growth within them and the methods of control including temperature control and chlorination and "alternatives" such as copper/silver ionisation, chlorine dioxide and UV.

Cooling towers and other cooling systems.

Features of wet cooling systems, types of cooling tower, evaporative condensers, features encouraging growth of legionellae and the methods of controlling them

Basics of water treatment

The chemical bases of corrosion and scale formation, the methods of controlling them, concentration factor and a means of controlling it, basic dynamics of disinfection, oxidising and non oxidising biocides and their application, control equipment, what you should be looking for on-site and in the water treatment company report.

Other risk systems

Interactive discussion of other recognised and potential risk systems including: solar heating; food and other humidification systems; air scrubbers; effluent treatment plants; vehicle washes; horticultural systems; machine tools; closed systems during maintenance etc.

Fundamentals of risk assessment

Basic logic of risk assessment, key features, equipment needed, identifying the hazards, determining the risks, establishing a method of control, monitoring, record keeping, audit, the management structure and training.

The legislative background.

The framework behind the European Guidelines, the responsibilities of environmental health officers or their equivalents, and possible future developments.

Sampling and outbreak investigations.

The principles of outbreak investigation, identifying potential sources, the importance of sampling, key samples, key interactions, personal protection, emergency disinfection, continuity of evidence.

Workshops.

Exercise 1: Using photographic illustrations from real investigations and risk assessments participants will discuss the risk assessment of systems or their components.

Exercises 2 and 3: Participants will be divided into groups to carry out interactive desk top exercises including risk assessments and outbreak investigations of scenarios based on real life.

Laboratory Session

Demonstrations of urinary antigen detection, and isolation, detection and typing *L. pneumophila* from clinical and environmental samples. If possible participants will be divided into groups according to their experience and interests

Field trips

Participants will be taken on visits to premises to review the control of some real risk systems in buildings in London. These visits have been organised with the kind collaboration of Environmental Health Officers from some local authorities in London. **N.B.** Flat shoes, trousers and outdoor clothing are required for visits.

Participants

There will be space for a maximum of 16 individuals to participate.

Costs

Participants will be provided four nights bed and breakfast (Sunday 12th till Wednesday 15th October) at a hotel (name to be confirmed) situated a short journey away from Colindale on the underground and that is convenient if you wish to travel into London. Coffee, tea and lunch will be provided during each day and there will be a course dinner provided for all participants on one night. Participants will be able to reclaim their travel costs to the course. Travel should be by economy class air or second class rail and not exceed **€500**. In addition participants may claim reasonable expenses for evening meals and daily travel to and from Colindale. All expenses will be paid in Euros. Expenses will not be paid in other currencies. If the participant is accompanied by a partner they will have to pay the double room supplements. Similarly additional nights at the hotel will have to be paid by the participant.

Booking

To request a place on the course fill in the attached registration form and email or fax it to:

Michael Lattimore
Training and Events Coordinator
Training and Events Unit
HPA, Centre for Infections
61 Colindale Avenue
London, NW9 5EQ

Telephone +44 (0) 20 8327 7569; Email: Michael.Lattimore@hpa.org.uk ;
Fax: +44 (0) 20 8327 7804

Confirmation

Please note that the course is usually overbooked and we try to ensure that a wide range of countries is represented so we cannot guarantee all applicants a place. Your application will be acknowledged within 5 working days after receipt but confirmation of your place will follow later. Closing date for applications is Friday 25 July 2008. Applications will be informed if they are successful by 1 August.