CO3.3 - Session 3
LD cases and outbreaks

Title: An endless legionellosis outbreak in Cesano Maderno, a small industrial city in North of Italy

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In 2006-2007 the annual incidence rate of legionellosis in Italy was 15 cases per million.

From 21/12/2005 to 31/03/2008, 40 confirmed legionellosis cases living in the city of Cesano Maderno (30,000 inhabitants) were notified, with an annual incidence rate ranging from 400 to 700 cases per million population. After more than two years of investigations, cases are still occurring.

A case was defined as a patient residing in Cesano Maderno, with clinical symptoms of pneumonia and laboratory confirmation; we excluded nosocomial and travel-related infections. Information on demography, mobility and characteristics of individual domestic water systems of cases was obtained through a standardised questionnaire. Using a Geographical Information System, cases and environmental samples were mapped to detect spatial patterns.

Since the beginning of the outbreak, potential sources around patient movements were investigated. Clinical and environmental samples were typed by mAbs, AFLP and SBT.

The mean age of cases was 71 years, Male/Female ratio was 1.8:1, case fatality rate was 12%. Clinical strains were available only for two cases. Four cases reported that they had not left their houses during the disease incubation period. Overall, 350 environmental air and water samples were collected from patients houses, industrial and public building cooling towers and from municipal water system.

All the patients' houses, but one, were tested and 49% were Lp1 positive (102-105 CFU/L).

Wells and municipal water distribution sites were sampled and tested several times by culture and Real Time PCR .Only one sample collected from a public fountain was found positive for Lp1 (100 CFU/L).

Cooling towers of 10 factories and of 2 public buildings were sampled and Lp1 was detected in 2 sites.

The two clinical strains have the same AFLP genomic profile of those isolated from 10 patients' houses and public fountain, and different from those isolated from cooling towers. SBT analysis is still ongoing.

After two years of investigation and rigorous inspection of the town, no common source of infection has been established yet. Cases continue to be reported after the drainage and disinfection of cooling towers, and the publication of a press release on prevention methods in houses.
The finding of cases over such a prolonged period of time is unusual; is domestic water the source of the outbreak?

abstracts
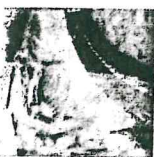
CO3.4 - Session 3
LD cases and outbreaks

Tittle: PREVENTING LEGIONELLOSIS...
TENSION BETWEEN ACTION...
Author: Sebastian Crespi, Pa...
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Conselleria de Salut i Consur...

Background
The 21st century has been w...
travel-associated legionnaire's...
ce of different regulations and...
It can generally be stated that...
ciple of following the eviden...
to identify weaknesses inhere...

Methods
We have studied some of the...
in force in Spain for domestic...
based on published data, co...
against their rapid dissemina...
impact of these measures, c...
period 2000-2007.

Results
The scientific evidence in fav...
force, including maintaining...
pling for legionellae in dome...
Spain, the cases of legionell...
terms of incidence, cluster n...
proportion of cases associat...

Discussion
Although the proposed preve...
of the problem and the idea...
circumvent rigorous evaluatio...
se a framework for evaluatin...