

## **CLUSTERS OF TRAVEL ASSOCIATED LEGIONNAIRES' DISEASE IN FRANCE, 2001-2005**

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From 2001 to 2005, 857 French sites were notified by Ewglinet to the French surveillance network. Among them, 83 (9.7%) sites were identified as clusters of travel associated Legionnaires' disease, including 14 sites that were notified more than once. The median delay, between the date of onset of the first clustered case and the date of Ewgli notification was 20 days [5 – 206 days].

These clusters occurred in 62 hotels and 21 campsites and implicated 197 cases [2 - 6 cases per site]. The median length of patients' stay was 2 days (1- 62 days). French citizens were involved in 78% of the clusters whereas 42% involved only French.

Among the 197 cases, clinical isolates were available for 24 cases (12%) (23 sites).

For all the sites, environmental investigations were performed and water samples were collected in 78 (94%). In 53 sites (68%), *Legionella* was found and among these, the level was found higher than  $10^3$ cfu/litre in 37 (73%).

Control measures were implemented or reinforced in all of the accommodation sites. Nine sites were closed for improvements. Fourteen sites were closed for the season period and checked before reopening.

Among the 23 sites where clinical isolates were available, 16 (70%) had positive environmental samples. For 12 sites, comparison of clinical and environmental isolates was possible and identical genomic profiles of the isolates were found in 10 (9 by PFGE and 1 by SBT with the UK). For 3 of the 10 sites, the sample result was under  $10^3$ cfu/litre.

In 1 site where environmental isolates were not available, the 2 clinical isolates were identical by SBT (Spain/France).

Eight sites were published on the Ewgli public website.

The high number of French citizens involved in the clusters emphasises the importance of the European countries notifying the national cases travelling inside their own country.