CLUSTERS OF TRAVEL ASSOCIATED LEGIONNAIRES' DISEASE IN FRANCE; 2001-2012

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Since 2001, France has applied the European guideline procedure for Travel Associated Legionnaires' disease (TALD) notified by European LD Surveillance network (Eldsnet).

This study presents a summary of the Eldsnet clusters notified in France from 2001 to 2012.

A cluster of TALD is defined as 2 or more cases who stayed at or visited a tourist accommodation site between 2 and 10 days before illness onset and whose onset dates were within the same two year period.

From 2001 to 2012, 2085 sites were notified; 186 (8.9%) sites were associated with TALD clusters. These clusters concerned 472 cases [2-7 cases per site]. The median length of patient's stay was 3 days [1-62 days]. Foreign citizens were involved in 56% of the clusters. Among the 472 cases, clinical isolates were available for 50.(11%). Environmental investigations were systematically performed and water samples were collected. *Legionella* was found in 106 sites (59%) and among these, a concentration of Legionella more than 10³cfu/liter was found in 64 (35%). Among the 50 sites where clinical isolates were available, 40 (80%) had positive environmental samples. A comparison of clinical and environmental isolates was possible for 31 sites, and identical genomic profiles were found in 26 (84%). While, the number of cluster sites decreased (23 in 2005 versus 15 in 2012), the percent of sites with positive samples stays important (75% in 2005 versus 50% in 2012 p=0.25).

A new regulation introduced in February 2010 recommends an annual sampling for Legionella in all tourist accommodation sites. The sites associated with TALD clusters represent less than 10% of sites notified but the reinforcement of preventive measures in tourist accommodation sites remains necessary.

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