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**An outbreak of tularaemia in Tuscany, Central Italy, linked to a natural spring water**

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**Aims:** We report an outbreak of tularaemia occurred in the Italian province of Pistoia, Tuscany, linked to a natural spring water.

**Methods:** Between April 2007 and March 2008, 43 cases of tularaemia were confirmed by clinical signs and serological analysis by tube agglutination test. Most cases (n = 38) occurred between December 2007 and March 2008. The probable source of infection was natural spring water collected from a small cement basin at about 950 m of altitude. Water from the spring was usually collected by resident people and tourists, stored in containers and consumed at home. Water samples from the spring were collected twice, on February 15<sup>th</sup> and March 4<sup>th</sup>, 2008 and tested for *Francisella tularensis* by PCR, microbiological methods and mouse inoculation.

**Results:** Out of the 43 confirmed cases, 34 (79%) had been exposed to a common source of water. The most frequently clinical presentation observed was a cervical lymphadenopathy and tonsillitis and sore throat were observed in a few cases. Antibodies titres of confirmed cases ranged from 1:50 to 1:1,600. *Francisella tularensis* subsp. *holarctica* (type B) was demonstrated both times in the natural spring water by PCR and mice inoculation. Direct culture of the organism from water was unsuccessful. The outbreak was brought under control after the demolition of the cement basin and the restoration of the water source as stream.

**Conclusions:** This large epidemic occurred about 20 years after two last important outbreak of Tularaemia recorded in northern and central Italy (Liguria and Tuscany regions) and confirms the circulation of *Francisella tularensis* in Tuscany. Nevertheless further investigations are needed to explain the route of contamination and the environmental characteristics that could have maintained or supported the presence or the replication of *Francisella tularensis* in the natural spring waters.