Prevalence of extended-spectrum β-lactamase-producing Enterobacteriaceae in humans living in municipalities with high and low broiler density

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Original Submission: 18 October 2012; Revised Submission: 28 December 2012; Accepted: 28 December 2012
Editor: R. Cantón
Article published online: 7 January 2013

Abstract

Prevalence of, and risk factors for, carriage of extended-spectrum β-lactamase (ESBL) -producing Enterobacteriaceae were determined for 1025 Dutch adults in municipalities with either high or low broiler densities. Overall prevalence of ESBL carriage was 5.1%. The hypothesis that individuals in areas with high broiler densities are at greater risk for ESBL carriage was rejected, as the risk was lower (OR = 0.45; p = 0.009) for these individuals. Owning a horse increased the risk (OR = 4.69; p ≤ 0.0001), but horse owners often owned multiple species of companion animals. Routes of transmission from animals to humans in the community, and the role of poultry in this process, remain to be elucidated.

High-resolution melting analysis for the detection of two erythromycin-resistant Bordetella pertussis strains carried by healthy schoolchildren in China

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Original Submission: 16 September 2012; Revised Submission: 10 December 2012; Accepted: 10 January 2013
Editor: D. Raoult
Article published online: 11 March 2013

Abstract

Two erythromycin-resistant strains of Bordetella pertussis were isolated from nasopharyngeal specimens of two asymptomatic schoolchildren in China. High-resolution melting and sequencing analyses confirmed the homogeneous A2047G mutation in 23S rRNA genes of the two isolates. High-resolution melting (HRM) analysis is a useful assay for the rapid detection of erythromycin-resistant B. pertussis. The appearance of erythromycin-resistant B. pertussis strains in China is alarming.