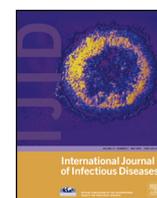


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Letter to the Editor

A probable food-borne outbreak of pharyngitis after a massive rainstorm in Beijing, caused by *emm89* group A *Streptococcus* rarely found in China

On July 28, 2012, it was reported that over 20 members of staff of a film crew with pharyngitis visited a hospital in Beijing, China. We conducted a rapid investigation of this outbreak.

From July 8, 2012, this film crew with 140 members of staff settled in a town, Beijing to make a film. Their accommodation and food were provided by local vendors. On July 21, the area where the film crew was located was hit by an unprecedented massive rainstorm in Beijing, and the provision of domestic water was compromised. Twenty-eight pharyngitis cases were identified in this outbreak, and the attack rate was 20% (28/140). The date of illness onset of the 28 cases was between midday of July 26 and midday of July 27. Eight group A *Streptococcus* (GAS) isolates were recovered from pharyngeal swabs of 15 cases. All the isolates belonged to *emm89* by *emm* typing, with resistance to erythromycin, clindamycin, and tetracycline.

The onset of illness for the cases in this GAS pharyngitis outbreak fell within a 24-h period and there were no secondary cases in the following 7 days even though no isolation measures were taken and shooting of the film continued, which suggested that this outbreak might have derived from a common-source exposure. As a rainstorm preceding the outbreak influenced the provision of domestic water in the area where the film crew were resident, the probability of contamination of their food was increased. Therefore, we presumed that this might be a food-borne outbreak. Food-borne outbreaks of GAS pharyngitis have been reported in many countries,^{1,2} but not in China. This outbreak was caused by *emm89* GAS, rarely found in China.^{3–5} However, *emm89* GAS has been one of the most predominant *emm* types in invasive GAS infections in European countries,^{5,7} and a marked expansion of *emm89* strains has occurred in Canada.⁸ All *emm89* isolates in this study were resistant to erythromycin, clindamycin, and tetracycline, which is rare in other countries.^{7,9}

This is the first probable food-borne outbreak of GAS pharyngitis reported in China. Given the possible role of the rainstorm in this outbreak, it is suggested that not only enteric diseases, but respiratory diseases should be closely monitored after a rainstorm. In light of the circulation of *emm89* GAS in many countries and this outbreak being caused by *emm89*, ongoing surveillance of *emm89* GAS is warranted in China, and changes to water purification and food preparation should be considered after a rainstorm.

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Conflict of interest: No conflict of interest to declare.

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