

International Poster 1

An Outbreak of *Salmonella* Serotype Dublin Infections Associated with Eating Egg Sandwiches from a Supermarket — Zhejiang Province, China, 2011

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BACKGROUND: *Salmonella* infection is estimated to cause 10% of bacterial gastroenteritis outbreaks in China. In October 2011, a gastroenteritis outbreak occurred in school M in Zhejiang Province. We conducted an investigation to identify the risk factors and source of contamination.

METHODS: We defined a case as acute onset from October 16–20, of diarrhea (at least 3 times/24hr) in a student or teacher of the school. We isolated and/or identified enteric bacteria and norovirus from rectal swabs. We used PFGE to evaluate homology of isolates. We compared food exposure among 91 case-students to 184 healthy control students randomly selected from the same classrooms as case-student. We checked preparation of the implicated foods.

RESULTS: We found 91 student-cases (attack rate: 3.7%) and one teacher-case. We isolated *Salmonella* Dublin from 10 of 15 rectal swabs and all 10 isolates had the same PFGE pattern. 96% (87) of case-student and 48% (88) of control-students ate food from a supermarket (odds ratio [OR] =24, 95% confidence interval [CI]: 8.3-92). Among the students who ate supermarket food, 93% case-students and 31% of control-students ate egg sandwich (ES) (OR=31, 95% CI: 11-89). Of those who ate ES 88% of 81 case-students ate ES produced on October 18 compared with 41% of 27 control-students (OR=50, 95% CI=18-140). To make ES, 336 raw eggs were mixed together before cooking. Temperature and time of cooking and leftover ES were not available.

CONCLUSIONS: This outbreak was likely caused by ES contaminated by a single strain of S Dublin. Good food handling practices need to be reviewed for this establishment.

KEYWORDS: *Salmonella* Dublin, egg sandwiches, norovirus