

MAPHM Symposium 2017

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Abstract Title:

Norovirus outbreak among staff working at a food processing company in Malta, February-March 2017

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Abstract

Background

On 03/03/2017, the Infectious Disease Prevention and Control Unit (IDCU) in Malta was notified about an outbreak of gastroenteritis affecting employees of a food processing company since 28/03/2017. We aimed to identify the source and implement control measures.

Methods

We inspected the company, identified all employees through Human Resources, and collected data on risk exposures using self-administered questionnaires. We defined cases as company employees with at least two episodes of vomiting or diarrhoea in 24 hours since 28/02/17. We calculated risk ratios (RR) and 95% confidence intervals (95%CI). Stool samples were collected and analysed.

Results

Of 514 employees, 272 (53%) responded; 55 (20%) met the case definition with onset dates from 28/02/2017- 04/03/2017. Five (9%) cases required hospitalisation. Fifty-three (96%) cases ate from the canteen from 27/02/2017 - 02/03/2017. Eating in the canteen was associated with illness (RR: 11; 95% CI: 2.7 - 43). No significant food exposures were identified. Eleven of 26 (42%) stool samples were positive for norovirus. Of these, 3 were food handlers in processing plants; 8 were canteen food handlers, of which 3 (38%) were asymptomatic. Environmental inspections identified deficiencies in food safety practices; food handlers preparing canteen food were also responsible for cleaning the toilets and premises of the company.

Conclusions

Environmental and epidemiological evidence suggest this point source outbreak occurred due to cross-contamination of canteen food and/or inadequate adherence to food hygiene practices. To prevent further cases, food processing was temporarily suspended, positive food handlers were excluded, the company's premises was disinfected and staff responsibilities revised. This outbreak highlights the potential role of asymptomatic food handlers in norovirus transmission and the importance of reinforcing adherence to personal hygiene and food safety practices.



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Message

This research highlights the potential role of asymptomatic food handlers in norovirus transmission and the importance of reinforcing adherence to personal hygiene and food safety practices.