

Norovirus Transmission on an Airplane

Copyright 2010 by Virgo Publishing.
<http://www.infectioncontrolday.com/>
Posted on: 04/08/2010

 PRINT

Transmission of norovirus on cruise ships is quite common, but Kirking HL, et al. (2010) report on possible transmission on an airplane. The researchers looked at the experiences of the members of a tour group who had diarrhea and vomiting throughout a flight from Boston to Los Angeles in 2008, resulting in an emergency diversion three hours after takeoff. An investigation was conducted to determine the cause of the outbreak, assess whether transmission occurred on the airplane, and describe risk factors for transmission.

Passengers and crew were contacted to obtain information about demographics, symptoms, locations on the airplane, and possible risk factors for transmission. Case patients were defined as passengers with vomiting or diarrhea (three loose stools in 24 hours) and were asked to submit stool samples for norovirus testing by realtime reversetranscription polymerase chain reaction.

The researchers discovered that 36 (88 percent) of 41 tour group members were interviewed, and 15 (41 percent) met the case definition (peak date of illness onset, 8 October 2008). Of 106 passengers who were not tour group members, 85 (80 percent) were interviewed, and 7 (8 percent) met the case definition after the flight (peak date of illness onset, 10 October 2008). Multivariate logistic regression analysis showed that sitting in an aisle seat (adjusted relative risk, 11.0; 95 percent confidence interval, 1.4–84.9) and sitting near any tour group member (adjusted relative risk, 7.5; 95 percent confidence interval, 1.7–33.6) were associated with the development of illness. Norovirus genotype II was detected by reversetranscription polymerase chain reaction in stool samples from case patients in both groups.

The researchers concluded that despite the short duration, transmission of norovirus likely occurred during the flight. The study was published in the May issue of the journal *Clinical Infectious Diseases*.

Reference: Kirking HL, et al. Likely transmission of norovirus on an airplane, October 2008. *Clin Infect Dis*. 2010;50:1216-1221.