



Centers for Disease Control and Prevention

CDC 24/7: Saving Lives. Protecting People.™

Investigation Update on the *ms Ryndam*

Cruise Line: Holland America Line

Cruise Ship: *ms Ryndam*

Voyage Dates: 11/03 – 11/20/2011

Number of passengers who have reported being ill during the voyage out of total number of passengers onboard: 148 of 1188 (12.46%)

Number of ill crew who have reported being ill during the voyage out of total number of crew onboard: 11 of 574 (1.92%)

Predominant symptoms: vomiting, diarrhea

Causative agent: Norovirus

Actions: In response to the outbreak, Holland America Line and the crew aboard the ship have taken the following actions:

- Increased cleaning and disinfection procedures in accordance with their outbreak prevention and response plan,
- Made numerous announcements by the Captain to both notify passengers of the outbreak and encourage case reporting,
- Collected stool specimens from ill passengers and crew for submission to the CDC lab,
- Made twice daily reports of gastrointestinal illness cases to the VSP, and
- Consulted with CDC on plans for:
 - Next cruise passenger notification procedures and draft letter, which was sent to passengers on the following voyage prior to their embarkation day, about the this outbreak and the planned delayed embarkation schedule,
 - Providing additional staff and time for thorough public and accommodation super-sanitization cleaning and disinfection during an extended period between disembarkation and embarkation,
 - Disembarkation plans for active cases, terminal and transport infection control procedures, and
 - Additional management monitoring, and documentation of planned cleaning and disinfection protocols.

A CDC Vessel Sanitation Program environmental health officer and two epidemiologists boarded the ship on arrival in Holland America Line's private island in the Bahamas on November 18, 2011 and conducted a comprehensive environmental health assessment and evaluation of the outbreak and response activities. Ship crew intensified sanitation procedures for the final two days of the voyage based on guidance from the CDC Vessel Sanitation Program officers, and completed a full comprehensive super-sanitization turn around between disembarking and embarking passengers on November 20, 2011. Stool specimens were sent to the CDC lab for testing. The ship remains in contact with CDC Vessel Sanitation Program for follow-up and monitoring.

Page last updated: November 30, 2011

Content source: National Center for Environmental Health

Centers for Disease Control and Prevention 1600 Clifton Rd. Atlanta, GA
30333, USA
800-CDC-INFO (800-232-4636) TTY: (888) 232-6348 - Contact CDC-INFO

