HEALTH ALERT: Norovirus

Summary: The Boston Public Health Commission (BPHC) has seen an increase in emergency room visits for acute GI illness, along with reported clusters of confirmed or suspected norovirus. The norovirus strain GII.4 Sydney has been the etiologic agent in all clusters where laboratory testing was done this season in Boston. Healthcare facilities and providers should promptly report any known or suspected clusters of illness and any laboratory confirmed norovirus cases to BPHC at 617-534-5611. Particularly with norovirus, thorough environmental cleaning is an important control measure.

BACKGROUND
The Boston Public Health Commission has seen an increase in emergency department visits for acute gastrointestinal (GI) symptoms over the last two weeks. Norovirus is a common cause of gastrointestinal illness particularly during the winter months. Additionally, three clusters of confirmed or suspect norovirus were reported within the last week.

Several of the recent norovirus clusters have been positive for a strain of norovirus known as the GII.4 Sydney. First detected in Australia in 2012, GII.4 Sydney has been the source of most outbreaks of GI illness with an identified viral etiologic agent in the United States.

SYMPTOMS AND DIAGNOSIS
Symptoms of norovirus include abdominal pain, cramping, vomiting, and diarrhea. Onset occurs 24-48 hours after exposure to norovirus; symptoms usually resolve in 1-3 days. Severe dehydration can occur due to fluid loss from vomiting and diarrhea. Norovirus can spread through contact with an infected individual, contact with contaminated surfaces, or ingestion of contaminated food or water.

In outbreak situations, testing for norovirus can be conducted on vomitus or stool samples at the Hinton State Laboratory Institute (a minimum of 3-5 samples must be submitted at the same time for testing). A lack of confirmed results should not preclude precautionary measures.
RECOMMENDATIONS
Aggressive environmental cleaning and good personal hygiene are the best methods of preventing and controlling norovirus transmission. If clusters of illness occur, the frequency of cleaning particularly high touch areas such as railings, elevator buttons and door handles should be increased. A chlorine bleach solution with a concentration of 1000–5000 ppm (5–25 tablespoons of household bleach [5.25%] per gallon of water) OR other disinfectants registered by the Environmental Protection Agency (EPA) as effective against norovirus should be used (a full list can be found at http://www.epa.gov/oppad001/list_g_norovirus.pdf). Soiled laundry should be handled with care and thoroughly cleaned. Frequent hand washing is also critical, especially after using the bathroom or caring for someone who is ill, before preparing food, and before eating. Alcohol-based hand sanitizers can be used in addition to hand washing, but are not advised unless soap and water is not available. If possible, persons with vomiting or diarrhea should not prepare food for 2-3 days after their symptoms resolve. Healthcare providers who provide direct patient care and foodhandlers must refrain from work and other public activities for 72 hours after their symptoms resolve.

REPORTING
Healthcare providers and facilities in Boston are required by state and city regulations to report all suspect or confirmed clusters of illness and all laboratory confirmed cases of norovirus to the Boston Public Health Commission (BPHC) at 617-534-5611. For more information about norovirus, including fact sheets in multiple languages, visit http://www.bphc.org/norovirus