

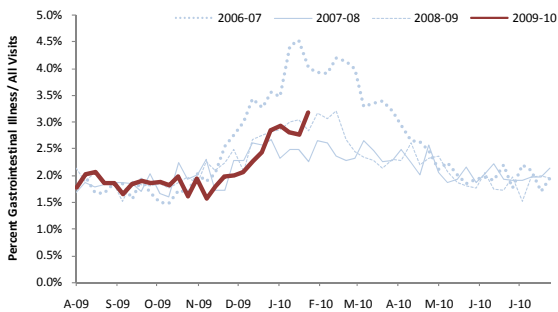


## Gastrointestinal Illness in Boston: Norovirus

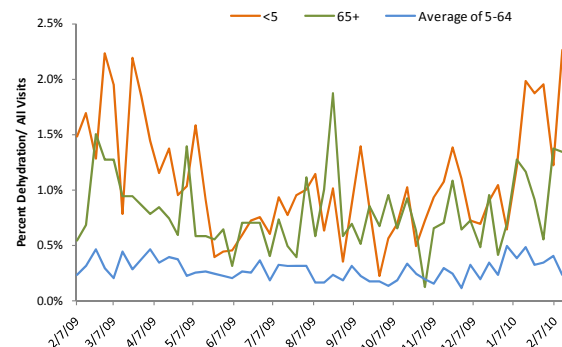
**Summary:** Annual citywide outbreaks of gastroenteritis are typically seen during the fall and winter months, often associated with presumptive norovirus. Over the past several weeks the Boston Public Health Commission (BPHC) has observed an increase in the number of patients seeking treatment for vomiting or diarrhea at Boston hospital emergency departments. Recently, institutional clusters of gastroenteritis have also been identified at four Boston sites. In one cluster, three elderly persons were hospitalized for dehydration. Laboratory testing has confirmed Norovirus, with genotype identification pending. Health care providers in Boston are reminded that all cases of calicivirus (including norovirus) and any outbreak of illness must be reported to the Boston Public Health Commission, at (617) 534-5611.

**EPIDEMIOLOGY:** Since December 2009, visits to Boston emergency departments for vomiting and diarrhea have increased from an average of 26 per day in December to 45 per day during the first two weeks of February 2010. For the week ending February 13, 2010 vomiting or diarrhea complaints accounted for 3.2% of all ED visits, compared with 2.8% for the same week in 2009 and 2.3% in 2008. Dehydration visits were highest among <5 year olds and 65+ year old patients.

Percent of Weekly ED Visits for Vomiting or Diarrhea, 2007-2010



Percent ED Visits for Dehydration, 2009-2010



**SYMPTOMS AND DIAGNOSIS:** Norovirus is characterized by moderate to severe nausea, vomiting, and diarrhea. Symptoms usually begin 1-2 days after exposure and last about 24-48 hours. Transmission is person-to-person; virus is passed in stool and vomitus of infected people from onset of illness until several days after symptoms resolve. Most persons recover without sequelae, however very young children, the elderly, and people with other medical conditions may be at an increased risk for complications associated with dehydration.

Etiologic diagnosis of norovirus is often not made because of limited laboratory testing availability, or may not be requested due to the short duration of symptoms; however, clusters of illness consistent with norovirus must be reported to BPHC. **Testing of clinical specimens in outbreak situations can be arranged by contacting BPHC.**

**PREVENTION:** Healthcare providers should emphasize hand hygiene using soap and water or alcohol based hand sanitizers to prevent transmission of infection. Ill persons should be advised to stay home and increase fluid intake to prevent dehydration until their symptoms have resolved, and be reminded that they may still be contagious for at least 3 days after symptoms subside. In addition, state regulations require that food handlers (including healthcare providers who perform services that bring them into contact with the patient's mouths, i.e. administer oral medication, etc) refrain from work for 72 hours after symptoms have resolved if norovirus is laboratory confirmed. Increased frequency of cleaning in high traffic areas in institutional settings, particularly restrooms, can help reduce the potential for transmission.

**REPORTING:** City and State regulations require that healthcare providers report any case of food poisoning or calicivirus (including norovirus) diagnosed in Boston to BPHC. Any outbreak or cluster of illness is also reportable. Laboratories in Boston must report the result of any laboratory test positive for calicivirus to BPHC.

Reporting forms for health care providers and for laboratories are available at: <http://www.bphc.org/cdc>

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