Health Advisory
Norovirus Transmission Occurring in Philadelphia
January 12, 2012

In recent weeks, the Division of Disease Control (DDC) of the Philadelphia Department of Health has identified steady increases of visits to Philadelphia emergency departments for vomiting and diarrhea as well as increases of over-the-counter sales of anti-diarrheal medications and electrolyte solutions at local pharmacies. In addition, DDC has confirmed four outbreaks of norovirus infection in long-term care facilities.

Noroviruses are a group of viruses that are a leading cause of gastroenteritis, especially in winter months. The virus typically causes severe vomiting and diarrhea accompanied by nausea, abdominal cramps, and fatigue in infected persons. Children may experience more vomiting than adults. Most persons ill with norovirus will experience symptoms suddenly, be sick for about 1-2 days, and recover on their own. Oral rehydration fluids may be used to treat dehydration due to vomiting and diarrhea. In outbreak situations, a laboratory test can be used to identify the virus in stool or vomitus using rt-PCR. The virus is highly contagious and is spread through the oral-fecal route, typically person-to-person or through contaminated food. Norovirus is of special public health concern in residential facilities or institutions, where transmission occurs readily and disease can spread widely. Because infection is now actively circulating in the community, DDC recommends the following to help prevent and control the spread of the virus:

- Persons with unexplained vomiting or diarrhea should be advised to stay home from work, school or childcare until they are completely well, especially if they work in high-risk situations like foodservice, healthcare, or childcare. Persons with suspected norovirus infection who work in these settings should remain excluded from work for at least 72 hours after symptoms have resolved.
- Hand washing and facility cleaning are critical for the control of this infection. All persons should be reminded to clean hands before eating or drinking, after using the bathroom or changing diapers, and after contact with ill persons. Hand washing should be reinforced in all high-risk settings with young children, especially residential shelters and childcare programs, where children should be supervised to ensure that they wash hands after using the toilet and before eating.
- Frequently touched surfaces such as doorknobs and handrails along with shared bathrooms should be cleaned frequently using a fresh chlorine bleach solution at a concentration of 1,000–5,000 ppm (5–25 tablespoons household bleach [5.25%] per gallon of water) or other EPA approved disinfectant against noroviruses such as phenolic-based disinfectants.
- Norovirus is highly resistant to many disinfectants including quaternary ammonium or alcohol and can persist in the environment for hours to days if not effectively removed.
- Vomit and/or stool should be disposed of immediately in a toilet or plastic bag placed in the trash. The surrounding area should be subsequently cleaned. Any clothing or linens contaminated with vomitus or stool should be immediately removed and washed using hot water and soap.
- Healthcare facilities, childcare centers, and residential facilities should discourage guests from visiting while they are ill. Facilities should post signage to ensure that potential visitors understand this policy. DDC has developed guidance for the control of norovirus in these facilities.
- Report any cluster or outbreak of gastrointestinal illness to DDC at 215-685-6740 or 215-686-4514 after business hours. Individual cases of norovirus infection are not reportable, however DDC should be notified of outbreaks, particularly those that are facility-associated or possibly food-borne. DDC can assist with infection control recommendations and the submission of stool samples to the Philadelphia Public Health Laboratories for norovirus detection.

Fact sheets, posters, and guidance on controlling the spread of norovirus in institutional, childcare, and school settings are available at https://hip.phila.gov.