



# SAN LUIS OBISPO COUNTY *Messenger* Public Health Laboratory

## December 2012

### **Norovirus activity in the County of San Luis Obispo**

After a relatively quiet summer, the SLO Public Health Laboratory has detected Norovirus in three separate outbreaks in the past ten days using reverse transcription PCR testing of stool specimens. Two outbreaks were associated with restaurants; a third occurred in a long-term care facility. All three outbreaks were caused by a genetic group or genogroup of Norovirus called GII. Sequencing of the genomic RNA of these strains is proceeding at the state laboratory.

Of recent interest is the documented spread of a GII strain from Australia to many other nations in the past few years. Like influenza virus, the emergence of a new strain of Norovirus is accompanied by increased numbers of cases and outbreaks, with subsequent spread in pandemic fashion of the new strain world-wide, displacing other strains and infecting immunologically naïve populations.

Noroviruses are the primary cause of epidemic viral gastroenteritis and the leading cause of foodborne outbreaks in the United States. Although Norovirus outbreaks occur year-round, they are more common during the winter months. Norovirus is highly contagious, with as few as 20 virus particles sufficient to initiate infection and enormous numbers of virus particles shed in stool --- detectable by current PCR methods for up to a month after illness.

Norovirus is a member of a large group of RNA viruses called Caliciviruses, among which are other gastroenteritis agents, such as Sapoviruses. As an RNA virus, Norovirus replicates its genome using an RNA polymerase that often make "mistakes", substituting an unmatched nucleotide, increasing the probability of emergence of a new strain.

Infection can be transmitted by contact with an infected person, by consuming contaminated food or water, or by contact with contaminated surfaces or objects. The virus spreads rapidly in closed environments such as hospitals, schools, nursing and residential homes. Noteworthy are the outbreaks that have been reported for cruise ships. Symptoms include a sudden onset of vomiting and/or diarrhea. Some people may have a temperature, headache, and stomach cramps. The illness usually resolves in one or two days and there are no long-term effects. Although the course of disease is usually self-limited, the young, the elderly and immunocompromised persons are at risk for complications caused by severe vomiting and diarrhea and deaths have been reported.

**Billing Note:** When testing is ordered that is covered by Medicare, please submit a copy of the subscriber ID card with the requisition. New Medicare regulations effective October 1, 2012 impact claim reimbursements. All providers are affected. Attached is information pertaining to the new regulation taken from the Palmetto GBA website:

<http://www.palmettogba.com/palmetto/providers.nsf/DocsCat/Providers~Jurisdiction%201%20Part%20B~Browse%20by%20Topic~General~8YYP2C6610?open&navmenu=%7C%7C>