

San Antonio Metropolitan Health District Monthly Morbidity Report (MMR)

November 2008

Norovirus

Norovirus is the official genus name for the group of viruses previously described as “Norwalk-like viruses.” Infections with norovirus have also been associated with what has been called “winter vomiting virus.” While norovirus outbreaks have occurred in Bexar County on occasion, usually during the winter months, this November 2008 was marked by four outbreaks that were characteristic of norovirus infections. Earlier this month, two assisted living nursing homes reported that their residents were experiencing an acute onset of nausea, vomiting & diarrhea (NVD); both facilities were owned by the same company. A total of about 50 residents were affected and five required hospitalization. Infection control measures were immediately implemented, ill patients were isolated, and staff was required to wear gowns, gloves and masks. The measures taken by the facility helped curtail the spread and few cases occurred after appropriate steps were taken. Two weeks later, Metro Health received a call from the director of a local private boy’s school notifying us that he was closing the school due to a large number of students becoming ill with NVD. The school sent students home on Thursday afternoon and was closed the next day. By Monday, a check of absenteeism indicated that their decision to close the school had interrupted the spread of the illness and normal absenteeism was noted for the remainder of the week. One week later, a local public elementary school reported students with similar symptoms and had an absenteeism rate of about 30% – nearly 10 times the baseline rate of absenteeism. Fortunately, this occurred on the Friday before the Thanksgiving holiday and the school would be closed the following week. Although there were some patients that saw physicians, the specimen testing, unfortunately, did not include any specific tests for norovirus. All specimens were negative for bacterial pathogens. In all four incidents the patients were usually better within 24-48 hours.

CDC scientists discovered a new strain of norovirus in January 2006 when passengers aboard a cruise ship fell ill with a particularly virulent gastrointestinal illness. Genetic testing on stool samples from these patients identified the new strain from previously identified versions.

A quick search on the internet shows that there has been an increase of norovirus outbreaks this year, especially in Europe. The following incident occurred two weeks ago.

BERLIN - German authorities have quarantined a British ship cruising the river Rhine after an outbreak of the highly contagious norovirus, a spokeswoman for the German Red Cross said on Tuesday. All 100 passengers and crew onboard the Lady Anne were banned from leaving the ship after the captain contacted the emergency services in Bad Kreuznach when about 42 people showed norovirus symptoms, the Red Cross said. The passengers, most of whom are pensioners, were being treated by German medics on board the vessel, which is docked near Boppard in western Germany.

See Norovirus Factsheet

Influenza 2008-2009

LOCAL

We've had very little influenza reported so far this season, but lots of other respiratory viruses have been noted. There have been reports of in-office rapid antigen test as positive, but very few actual viral isolates. The U.S. has experienced a low level of influenza activity which is typical for this time of year and similar to the past four influenza seasons. The peak of influenza activity has come before January in only five of the past 20 seasons; February or March has been the peak month in 11 of those 20 seasons (CDC, unpublished data, 2008).

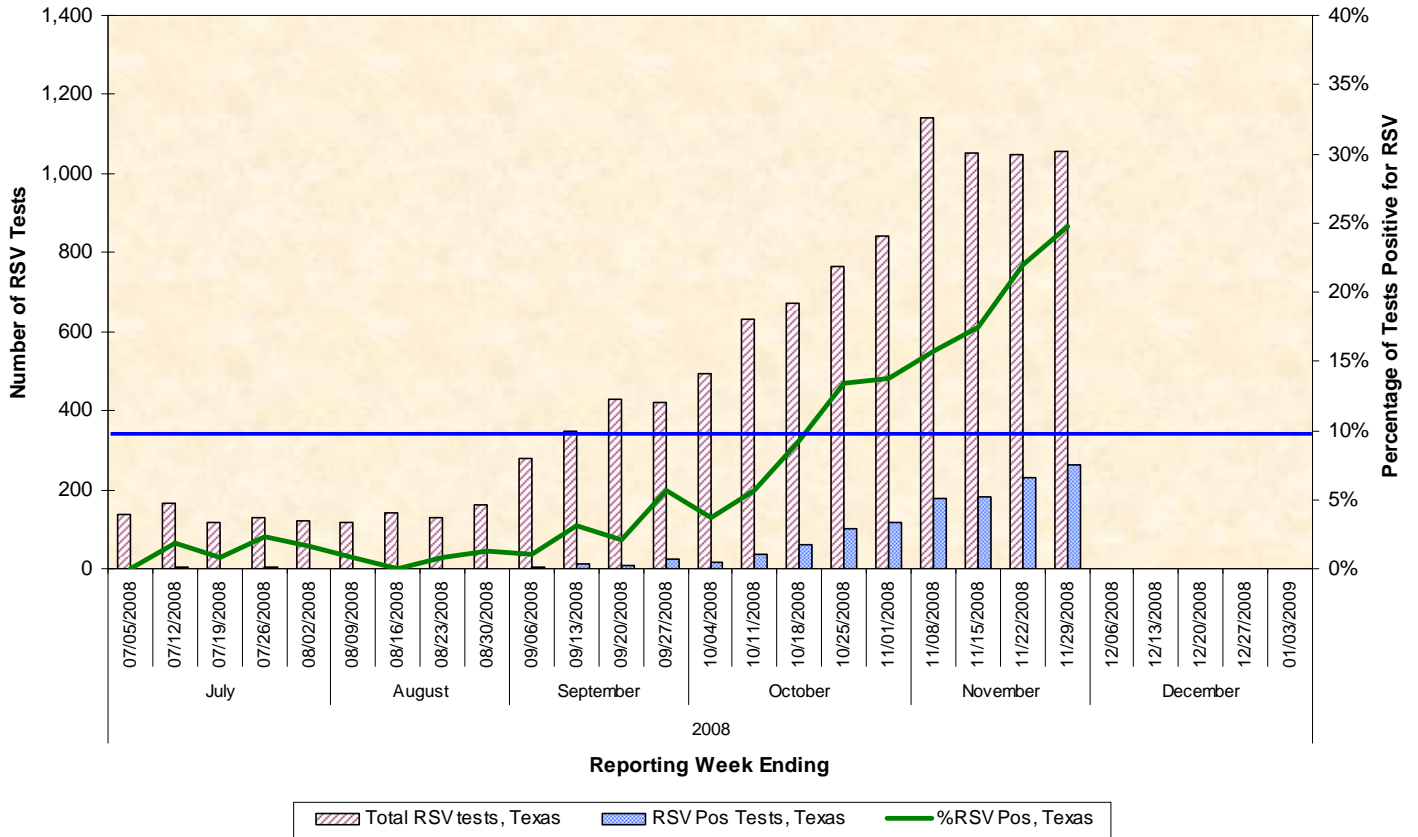
STATE

The influenza (flu) activity level for Texas for the week ending November 29, 2008 was "sporadic." Sporadic activity indicates that isolated reports of lab-confirmed influenza along with influenza-like illness have been reported. During week 48, twenty-two (3.8%) specimens tested by NREVSS laboratories in Texas were positive for influenza. The percentage of visits for influenza-like illness as reported by ILINet providers in Texas was below the regional baseline. Flu is occurring in the state at a low level.

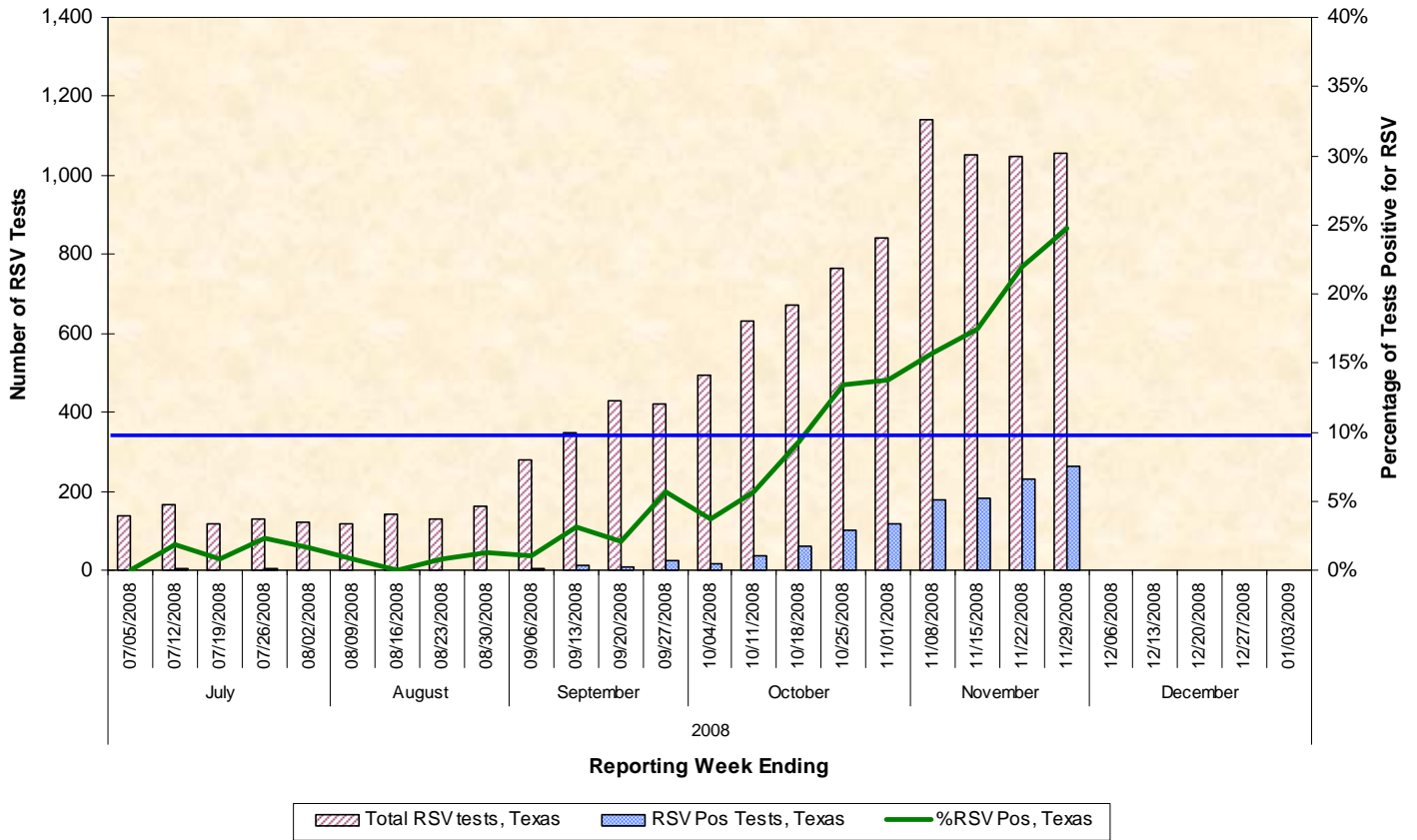
Respiratory Syncytial Virus (RSV)

It appears that as of this month (November 2008) we haven't reached the peak of the RSV season as the percent positive is a bit over 25 %. At the peak of the RSV season the percent positive is usually closer to 40% or greater. The following graphs are the latest information on RSV from three of our largest hospital in SA, and statewide RSV data from 44 hospitals across Texas.

**Number and Percentage of Tests Positive for Respiratory Syncytial Virus (RSV)
All Texas Sites, 2008–2009 Season**



Number and Percentage of Tests Positive for Respiratory Syncytial Virus (RSV) All Texas Sites, 2008–2009 Season



Cases of Notifiable Events in Bexar County for 2008 January-November 2008

Condition	Grand Total
Amebiasis	3
Aseptic meningitis	62
Bacterial meningitis, other	2
Brucellosis	1
Campylobacteriosis	121
Cryptosporidiosis	41
Escherichia coli, Shiga toxin-producing (STEC)	10
Group A Streptococcus, invasive	15
Group B Streptococcus, invasive	32
Hepatitis A, acute	21
Hepatitis B, acute	71
Legionellosis	16
Listeriosis	1
Malaria (Imported)	1
Mumps	1
Neisseria meningitidis, invasive (Mening. disease)	10
Pertussis	40
Salmonellosis	253
Shigellosis	301
Strep pneumoniae, invasive	66
Strep, other, invasive, beta-hem (non-A nonB)	1
Typhoid fever (Salmonella typhi)	1
Typhus fever-fleaborne/ Murine typhus	2
Varicella (Chickenpox)	429
Vibrio vulnificus infection	2

Norovirus Fact Sheet (Winter Vomiting Virus)

Q. What is winter vomiting virus?

It is in essence an extremely infectious stomach bug belonging to a group of viruses called norovirus. This produces a gastro-enteritis illness.

It is dubbed the “winter vomiting virus” because it is more likely to cause illness during the winter months. These infections are, however, also common all year round.

Q. What are noroviruses?

Noroviruses are a group of viruses that cause the “stomach flu,” or gastroenteritis in people. The term norovirus was recently approved as the official name for this group of viruses. Several other names have been used for noroviruses, including:

- Norwalk-like viruses (NLVs)
- caliciviruses (because they belong to the virus family *Caliciviridae*)
- small round structured viruses.

Viruses are very different from bacteria and parasites, some of which can cause illnesses similar to norovirus infection. Like all viral infections, noroviruses are not affected by treatment with antibiotics, and cannot grow outside of a person’s body.

Q. What are the symptoms?

Nausea, vomiting, diarrhoea, and some stomach cramping. Sometimes people additionally have a low-grade fever, chills, headache, muscle aches, and a general sense of tiredness. The illness is short lived and normally resolves over 24-48 hours.

Q. How is winter vomiting virus treated?

Currently, there is no antiviral medication that works against norovirus and there is no vaccine to prevent infection. Norovirus infection cannot be treated with antibiotics. This is because antibiotics work to fight bacteria and not viruses.

Norovirus illness is usually brief in healthy individuals. When people are ill with vomiting and diarrhea, they should drink plenty of fluids to prevent dehydration. Dehydration among young children, the elderly, the sick, can be common, and it is the most serious health effect that can result from norovirus infection. By drinking oral rehydration fluids (ORF), juice, or water, people can reduce their chance of becoming dehydrated. Sports drinks do not replace the nutrients and minerals lost during this illness.

Q. Is it contagious?

It is extremely contagious. Noroviruses are found in the stool or vomit of infected people. People can become infected with the virus in several ways, including:

- eating food or drinking liquids that are contaminated with norovirus
- touching surfaces or objects contaminated with norovirus, and then placing their hand in their mouth
- having direct contact with another person who is infected and showing symptoms (for example, when caring for someone with illness, or sharing foods or eating utensils with someone who is ill)

People infected with norovirus are contagious from the moment they begin feeling ill to at least 3 days after recovery. Some people may be contagious for as long as 2 weeks after recovery.

Therefore, it is particularly important for people to use good handwashing and other hygienic practices after they have recently recovered from norovirus illness.