The Season of Norovirus

Noroviruses are highly infectious viruses that cause stomach illness. It is the most common cause of gastroenteritis in the US, causing 19-21 million illnesses and costs about $2 billion in healthcare and lost productivity annually. Estimates show that a person will get sick with norovirus about five times during their lifetime. Although norovirus causes illness year-round, more than 80% of outbreaks occur from November to April.

Norovirus outbreaks can occur in any setting, but are most common in congregate settings such as healthcare facilities (including nursing homes and hospitals), restaurants, and schools. More than half of outbreaks reported in the US, happen in long-term care facilities. Outbreaks in these settings can persist for long periods of time and cause more severe illness and sometimes death, in comparison to outbreaks that occur among people who are otherwise healthy.

Norovirus causes almost half of all foodborne illness outbreaks that have a known cause. Infected food workers are the most common source of these outbreaks; often because they touch ready-to-eat foods with bare hands. Food can also become contaminated with norovirus at the food’s source (oysters from contaminated water).

When it is not possible to get laboratory confirmation of norovirus, infection control professionals can use the Kaplan Criteria to determine if the outbreak was likely caused by norovirus.

The Kaplan Criteria:

- A mean (or median) illness duration of 12 to 60 hours,
- A mean (or median) incubation period of 24 to 48 hours,
- More than 50% of people with vomiting, and no bacterial agent found.

When all four criteria are present, it is very likely that the outbreak was caused by norovirus. However, if the criteria is not met, it does not mean that outbreak was not caused by norovirus, as about 30% of norovirus outbreaks do not meet these criteria.

One of the best ways to prevent norovirus infection is to clean and disinfect contaminated surfaces with the appropriate cleaners. This is especially important because norovirus is hardy and can persist on surfaces for many days. A bleach solution with a concentration of 5-25 tablespoons of household bleach per gallon of water is the most common and widely available disinfectant against Norovirus.

DPH Ebola Preparation

While the risk of Ebola transmission in California is low, state and local public health officials are monitoring the situation very closely and have taken and will continue to take steps to keep San Bernardino County residents safe.

San Bernardino County Department of Public Health is working with healthcare providers, hospitals and other community partners to ensure that infectious diseases are identified quickly, laboratory testing of suspect cases is conducted, and the spread of disease does not occur.

Public Health is also working to ensure each hospital has systems and protocols in place to contain infectious diseases; hospitals employ these precautions on a consistent basis. Public Health is emphasizing the importance of planning and testing systems for management of infectious diseases in emergency departments and hospitals, including proper identification of cases and immediate isolation of patients.

Top 10 Things You Really Need to Know About Ebola

1. You can’t get Ebola from a handshake or a hug.
2. Ebola is only spread from one person to another once symptoms begin.
3. The Ebola outbreak is not affecting the safety of airline travel.
4. Ebola is not airborne.
5. If you’re feeling sick, think flu not Ebola.
7. Your family members, coworkers, and neighbors returning from countries with Ebola outbreaks don’t pose a danger to you and your family.
8. Mosquitoes are the deadliest insects in the world, but they don’t carry Ebola.
9. Food and drinks imported into the United States from West Africa are safe to eat and drink.
10. Your dog or cat is not spreading Ebola.
Human papillomavirus (HPV) infection has been linked to genital and oropharyngeal cancers, many of which can be prevented by regular screening tests and vaccination. The Centers for Disease Control and Prevention (CDC) estimates 79 million Americans are currently infected with HPV and 14 million people are newly infected yearly. An estimated 360,000 people in the US will get genital warts yearly, more than 12,000 women get cervical cancer and 4,000 women will die from it yearly.

There are more than 150 types of HPV identified, with more than 40 strains capable of infecting the genital tract. In most cases HPV infection is asymptomatic and resolves on its own. HPV strains can also cause several types of warts found on the hands, fingers, elbows, heels or balls of the feet, face, neck or genitals. Genital warts may present as flat lesions, cauliflower-like bumps or small stem-like protrusions. In women, these warts most commonly develop in the vulva, anus, cervix or vagina. In men, these warts appear near the penis, scrotum or anus. Genital warts are generally not painful but they may be itchy. Treatment of genital warts usually involves application of topical agents or removal by freezing, burning, surgery or laser.

Persistent HPV infection has been linked to cancers of the genitals including the cervix, vulva, vagina, penis, anus, and the oropharyngeal area including the back of the throat, the base of the tongue and tonsils. Two strains of genital HPV (HPV16 and HPV18) are responsible for most cases of cervical cancer. These two strains do not cause warts as do HPV6 and HPV11, and infection is asymptomatic in the earliest stages.

HPV infection can be prevented in the same manner as many other STIs. There is no routine test to test for HPV as there are for other STIs. Individuals that are sexually active should use condoms correctly and consistently or be in a mutually monogamous relationship. However, HPV can infect areas not covered by a condom. Routine Pap screening for women aged 21 to 65 years can detect cervical changes early before cancer develops. Cervarix and Gardasil are two licensed vaccines available to prevent infection with some strains of HPV. Both vaccines prevent infection against the two strains which cause 70% of cervical cancers. However, Gardasil has added protection, as it can prevent infection by the four strains that cause 90% of genital warts and some cancers of the anus, vulva and vagina. Vaccination is recommended for both males and females ages 11-12 through 26 years. The vaccine is given in three injections over six months. Neither of the two vaccines available will protect against all types of cervical cancer so regular screening continues to be important. The protection incurred from the vaccine is believed to be long lasting, at least 6 years or longer. Additional information about HPV and its vaccines is available at http://www.cdc.gov/hpv/resources.html#CliniciansResources.

CDS Fast Facts

⇒ Current pertussis estimates of 2014, within the County, show that we have more than 4.5 times the number of cases we had last year at this time.

⇒ Asian and Pacific Islanders (APIs) make up less than 5% of the total population in the United States, but account for more than 50% of Americans living with chronic Hepatitis B.

⇒ Each year, chickenpox vaccine prevents an estimated 3.5 million cases in the United States, and is almost 100% effective at preventing severe cases.

⇒ Reports of gonococcal infection among county residents have increased 27% from the same time last year. Higher rates are being seen among African Americans/blacks and individuals aged 20-24 years.

⇒ Primary and secondary syphilis cases continue to increase, up 19% from 2013 figures. The majority of cases are among MSM (males who have sex with males), however cases are increasing among heterosexual males and females. In California, 53% of MSM with primary/secondary syphilis are co-infected with HIV.
International Prenatal Infection Prevention Month

February is International Prenatal Infection Prevention Month. One goal for San Bernardino County Department of Public Health Communicable Disease Section is to reduce the mother-to-child transmission of the hepatitis B virus. Hepatitis B is an infection that can pass from infected mothers to their infant causing short and long term health problems.

Medical providers and pregnant women can help in this effort: through maternal screening for hepatitis B surface antigen (HBsAg), administering human immunoglobulin (HBIg) and administering the first dose of the hepatitis B vaccine according to guidelines determined by the Advisory Committee on Immunization Practices. For more information can be obtained by calling (800) 722-4794 or visiting http://1.usa.gov/1swSEA3.

Preteen Vaccine Week February 8-14, 2015

California’s preteens include more than one million 11 and 12 year-old boys and girls. The goals of 2015’s Preteen Vaccine Week campaign are to raise awareness about California’s Tdap requirement for incoming 7th grade students, immunization recommendations for 11 and 12 year-olds, and to promote the preteen doctor visit.

The Advisory Committee on Immunization Practices (ACIP) currently recommends that both boys and girls, 11-12 years receive the following vaccines: Tdap (tetanus, diphtheria, pertussis), HPV (human papillomavirus), Meningococcal, Influenza (flu) and also Chickenpox (Varicella) for those preteens who have not received two doses.

The Tdap vaccine protects against tetanus, diphtheria and pertussis (whooping cough). One dose of Tdap is routinely given at age 11 or 12 years. California Assembly Bill 354 requires that 7th grade students are immunized with Tdap before starting school.

HPV is a common virus in the US. HPV is spread by skin-to-skin contact during any type of sexual activity with another person. The HPV vaccine is recommended for both boys and girls, 11-12 years because the vaccine works best before infection with the virus. It is recommended that preteens and teens get all 3 doses of the HPV vaccine series long before their first sexual contact. The vaccine prevents HPV infection, it does not cure it.

Meningococcal disease is a rare but serious infection in the blood or areas around the brain and spinal cord. About 10% of teens who get the disease die from it, and another 15% will have long-term disability from it such as: loss of limb(s), deafness, nervous system problems, or brain damage. Meningococcal is spread through close contact, such as kissing, coughing, sharing drinks and lip balm. One dose of meningococcal vaccine is recommended for all 11-12 year-olds. A booster dose is recommended at age 16 years.

Flu (influenza) is a contagious respiratory illness caused by influenza viruses. Flu can send even healthy kids to the hospital. Preteens should get a flu vaccine as soon as it becomes available in their community.

Some preteens may also need to catch up on other immunizations, including varicella, as many do not have their second dose. Chickenpox is a very contagious disease caused by the varicella virus. It is especially dangerous for adolescents. It can lead to severe skin infections, scars, pneumonia, brain damage, infertility and even death. A total of two doses of the varicella vaccine is recommended for those who have not had chickenpox disease. It is important that preteens are screened for both doses to help ensure proper immunity.

Preteen Vaccine Week promotes the importance of immunizations among preteens and highlights their doctor visit as an opportunity for them to receive vaccines that can protect them from very serious, yet preventable diseases. Be sure to contribute to the cause and screen preteens for all ACIP recommended vaccines.

World TB Day

World TB Day is a worldwide event aimed at increasing tuberculosis awareness. Each year the event takes place on March 24th. The day commemorates Dr. Robert Koch’s 1882 announcement that he had discovered what causes tuberculosis. Unfortunately, tuberculosis continues to remain an epidemic in certain parts of the world causing serious illness and even death.

In 2013, San Bernardino County had 53 cases of active TB. The Department of Public Health TB Control Program, the patients, and the providers work as a strong team to accomplish the goals of TB treatment. These goals are to treat the patient and prevent the spread of TB in the community. Every case in the county is followed by the TB case manager throughout the treatment process. Successful communication between team members is essential; community providers can rely on the relationship between the patient and the case manager for thorough treatment.

For more information please call (800) 722-4794 or fax (909) 387-6377 any suspected or confirmed cases of TB. TB is reportable to the TB Control program using the case report form, please see the following link. http://1.usa.gov/1wUdDko
## Events and Observances

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<tr>
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Confidential Morbidity Reports (CMRs) can be found on our website and can be faxed to: TB, Epi, STD: (909) 387-6377. For HIV CMRs call before faxing.

To report suspect or confirmed cases of TB to the Tuberculosis Control Program, please fill out a TB case/suspect form for your hospitalized or clinic patient and fax to (909) 387-6377. Follow up with a phone call to one of our TB nurses at 1(800) 722-4794.

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**The Communicable Disease Section now has a Facebook page!**
Like us at [https://www.facebook.com/CommunicableDiseaseSection](https://www.facebook.com/CommunicableDiseaseSection)

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## Web Resources

**California Department of Public Health**
- Division of Communicable Disease Control
  [http://www.cdpd.ca.gov/programs/dcdc](http://www.cdpd.ca.gov/programs/dcdc)
- Vaccine for Children (VFC)
  [http://www.eziz.org](http://www.eziz.org)
- School Immunization Requirements
  [http://www.shotsforschool.org](http://www.shotsforschool.org)
- California Immunization Registry (CAIR)
  [http://cairweb.org](http://cairweb.org)
- STD Branch Health Information for Professionals

**Centers for Disease Control and Prevention**
- Disease & Conditions (A - Z Index)
  [http://www.cdc.gov](http://www.cdc.gov)
- Immunization Schedules
  [http://www.cdc.gov/vaccines/schedules](http://www.cdc.gov/vaccines/schedules)
- HIV/AIDS & STDs
  [http://www.cdc.gov/std/hiv](http://www.cdc.gov/std/hiv)

**American Public Health Association**
[http://www.apha.org](http://www.apha.org)