

COUNTY OF SAN LUIS OBISPO PUBLIC HEALTH LABORATORY

Messenger

FEBRUARY 2017

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INFLUENZA SURVEILLANCE

Laboratory-based seasonal influenza surveillance ended on February 3rd. However, influenza transmission throughout California and San Luis Obispo County remains widespread. The season has been marked by the singular predominance of influenza type A H3N2 subtype with few detections of the pandemic 2009 type A H1N1 or type B viruses. It is too early to measure vaccine effectiveness, but soon decisions must be made regarding the formulation of influenza vaccine for the 2017-18 influenza season. It appears that the H3N2 strain is accumulating mutations and is 'drifting' from its original genetic profile.

Use of the new Respiratory Pathogen PCR panel by area healthcare providers showed that many serious cases of illness were caused by rhinoviruses, while many other viruses were detected including parainfluenza virus type 1, 2, and 3; coronaviruses; adenoviruses; and human metapneumovirus and Mycoplasma pneumoniae. Second only to influenza virus in detection frequency, respiratory syncytial virus (RSV) was frequently detected in children and in adults.

HERPES VIRUS LABORATORY DIAGNOSIS

News media stories detailing inaccuracies in herpes virus serologic testing have been published recently. Accounts of personal mental agonies suffered by individuals given inaccurate positive results abound. Genital herpes, typically caused by herpes simplex virus (HSV) type 2 is a common sexually transmitted disease. Most individuals who are infected don't have symptoms and don't know they carry a latent virus. HSV can exist in a latent state within nerve tissue for a substantial time period reminiscent of varicella virus that causes chicken pox and, later in life, shingles.

The County of San Luis Obispo Public Health laboratory (SLOPHL) performs one the most accurate tests available for detection of HSV, culture by tissue culture. Tissue culture takes 2-4 days to complete and is regarded as less sensitive than newer molecular tests, but is virtually 100% specific. If tissue culture is positive for HSV, a false-positive result is extremely unlikely.

However, HSV culture is mostly performed when a man or a woman has a visible, often painful, genital lesion. Diagnosis of asymptomatic herpes infection is relegated to a serologic test. These tests can be highly unreliable. The US Preventive Services Task Force (USPSTF) recommends against routine serologic screening for HSV at any time for asymptomatic pregnant women as well as asymptomatic adolescents and adults.

https://www.uspreventiveservicestaskforce.org/Page/Document/UpdateSummaryFinal/genital-herpes-screening

MEASLES TESTING

The SLOPHL performed a number of Measles PCR tests in January detecting two cases and ruling out a number of other cases. Fortunately, further transmission was averted with prompt identification and isolation of cases. The SLOPHL performs a Centers for Disease Control and Prevention (CDC) developed reverse-transcription, real-time PCR test that is highly sensitive and specific, with results available within 5-6 hours after receipt of the specimen.

SAVE THE DATE - Laboratory Workshop on Agents of Bioterrorism

SLO Public Health Laboratory will host a "wet" workshop on agents of bioterrorism on March 25th, 2017 at Cal Poly in San Luis Obispo. You will learn, as sentinel lab personnel, proper rule-out and referral protocols through a series of lectures and a practical, hands-on section. Best yet, you can earn 7 CEUs offered through the California Association of Public Health Laboratory Directors. For more information, contact Kyllie Bouget at 805-781-5507 or kbouget@co.slo.ca.us

Priority for seats for the workshop will be reserved for individuals who have not previously attended this workshop. Registration for individuals who have previously attended this workshop may be waitlisted if demand is high. Students may request registration to attend lectures only. Registration Form follows:

Laboratory Preparedness for Bioterrorism FREE Wet Lab Workshop and Tabletop Exercise Cal Poly University – San Luis Obispo March 25th, 2017 Presented by San Luis Obispo County Public Health Laboratory

In a Bioterrorism, Natural, or Chemical exposure event, the Sentinel Clinical Laboratory would be most likely to receive the first specimens. These laboratories must have the capacity to either rule out suspect isolates as critical agents or refer the isolate for confirmation. This workshop will combine a lecture series and hands-on methods to address the responsibilities and best practices of Clinical Microbiology Laboratories during such an event. *Reserve now!*

Course Objective

Using hands on methods, participant will learn their roles and understand the practices and procedures used to operate within the Laboratory Response Network.

Audience

Clinical Laboratory Scientists, Microbiologists primarily those responsible for performing or managing microbiology procedures at their laboratory.

7 Continuing Education Units Awarded by CA Assoc. Public Health Lab Directors 4600 Broadway Suite 2300, Sacramento, Ca 95820 California Accreditation Number 0078

Contact Kyllie Bouget kbouget@co.slo.ca.us Phone: (805) 781-4843 Fax: (805) 781-1023

<u>Agenda</u>

8:00 -8:30 Registration-coffee/networking
8:30-9:00 Pre-Test, Introduction, Overview
9:00-9:30 Bacillus anthracis
9:30-10:00 Yersinia pestis
10:00-10:30 Francisella tularensis
10:30-10:45 Break
10:45-11:15 Burkholderia
11:15-11:45 Brucella
11:45-12:15 Packaging/Shipping, Specimen
Collection - chemical exposure
Form 3 Select Agent
12:15-1:00 Lunch
1:00 -3:30 Wet Lab
3:30-4:00 Group Tabletop
4:00 -4:30 Post Test and Evaluation
Name:
Work facility:
Email:
CLS #: