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Season Update

Though temperatures have been at times unseasonably warm and wildfires hold everyone's attention, the season of influenza transmission is very much underway with the California Department of Public Health categorizing activity as "regional". Laboratory surveillance conducted by the County of San Luis Obispo Public Health Laboratory (SLOPHL) indicates significant activity for Influenza type A subtype H3 with fewer numbers of Influenza type B virus, subtypes Yamagata and Victoria, with no detections of Type A 2009 H1N1 as yet.

It is too early as yet to gauge the effectiveness of this vaccine formulation in use this year, but reports of H3 variants have been few, and the virus infections characterized indicate a good match with the strains chosen for the vaccine. However, numerous cases of respiratory virus illness caused by enterovirus/rhinovirus, parainfluenza virus, corona viruses, and respiratory syncytial virus are being detected using the Respiratory PCR panel. Many of these cases of infection—while caused by "cold" viruses—are serious enough to require hospitalization.

Coincident with what is commonly called the "Flu" season is the Norovirus outbreak season, although no outbreaks have been recorded as yet, even with significant testing activity. Public health officials are still dealing with slowly diminishing levels of Zika virus infections in travelers, the conclusion to an enormous outbreak of Hepatitis A, several Legionella events, and hopefully to end of mosquito-vector illnesses including West Nile and St Louis encephalitis cases.

Mumps Update

According to the Centers for Disease Control and Prevention, between January 2016 and June 2017, there have been 150 mumps virus outbreaks throughout the United States with a total of 9,200 cases. Fully half of these outbreaks occurred in university settings. This activity prompted studies that demonstrated the effectiveness of a third dose of the Measles-Mumps-Rubella vaccine in preventing spread. This strategy was employed recently to control a mumps virus outbreak on the Syracuse University campus that recorded 27 confirmed and 48 probable cases.

Infections are often characterized by fever and swelling of the parotid and or sublingual or submaxillary salivary glands., but the virus has been isolated up to seven days before symptoms onset with maximal infectiousness occurs two days before and four days after onset. As transmission can occur before symptoms of illness arise, this can make control of Mumps virus outbreaks –similar to Measles virus outbreaks—very challenging.

County oi San Luis Obispo providers should know the SLOPHL is now capable of performing a high quality, sensitive and specific PCR assay to detect Mumps within 5-6 hours of delivery of a specimen to the SLOPHL. The Public Health Department Communicable Disease staff should be alerted immediately (805) 781-5500 in the event that a possible case of

mumps virus infection is observed. Isolation of possible cases with accurate swift testing is essential to prevent spread. Referral of specimens including blood specimens for serology to private reference laboratories may result in several days delay in diagnosis while the referral of a buccal or throat swab in viral transport medium to the SLO PHL will result in an accurate diagnosis within hours. Call the Laboratory for additional information (805) 781-5507.