Recommendations for Management of Influenza and Other Community Viral Respiratory Diseases Winter 2009-2010

(October 14, 2009)

Medical Center infection control precautions designed to minimize the spread of influenza (and other severe community-acquired respiratory viruses) within our facilities should be followed at all times. These precautions are detailed in Infection Control Policy #5003 and available on OurNet. All staff should perform hand hygiene before and after every patient encounter.

Respiratory Hygiene and Cough Etiquette

Everyone should be encouraged to “cough into their sleeve” to prevent transmission of these viruses by coughing or sneezing.

All patients who present to any health care setting with respiratory symptoms should be given a surgical mask to wear. Patients who call their providers and are scheduled for an appointment should be instructed regarding the availability of these masks, and instructed to put one on as soon as they arrive. Surgical masks and signs directing patients/visitors with respiratory symptoms to wear them will be made available at the Emergency Department and outpatient entrances.

Epidemiologic Considerations

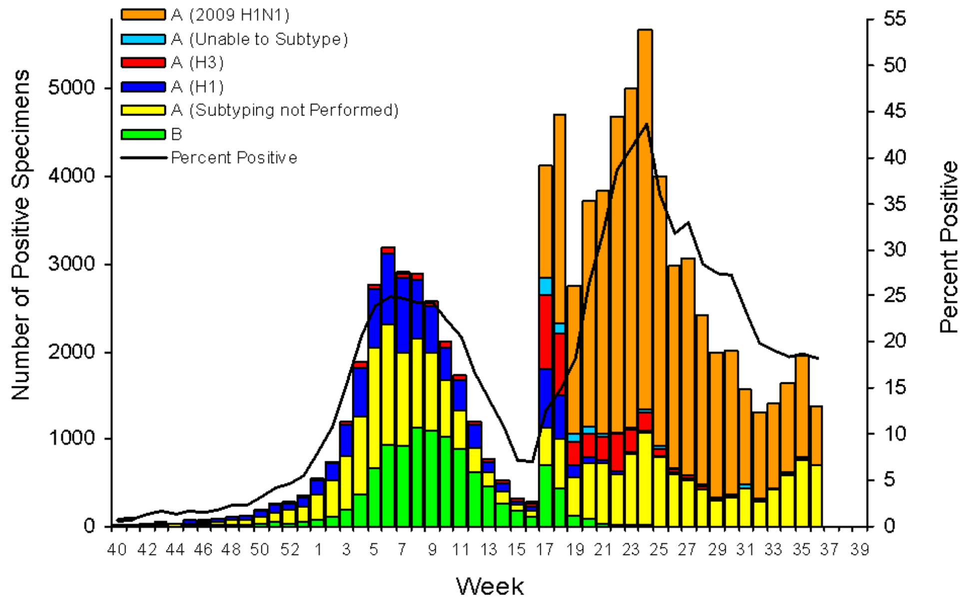
During the 2008 - 2009 flu season there was initial circulation during the winter months of two influenza viruses; a seasonal influenza A H1N1 strain as well as an influenza B strain (figure); with the seasonal influenza A H1N1 strain being predominantly oseltamavir resistant and rimantidine susceptible and the influenza B strain being oseltamivir sensitive and rimantidine resistant. There was a small amount of circulation of an influenza A H3N2 strain. The majority of the flu cases were in the very young and elderly as is normally seen in seasonal influenza.

Beginning in late April and continuing through the summer there was widespread circulation of the novel 2009 influenza A H1N1 virus that has been predominantly oseltamivir sensitive and rimantidine resistant. The illness associated with this novel influenza A H1N1 virus has been generally mild, but it impacted a much younger population with the peak incidence in persons aged 5 to 24 years of age. Pregnant women became more seriously with this virus, and in Massachusetts the hospitalization rate for pregnant women infected with the virus was almost three-fold that of the general population. During the 2009 summer flu season in the southern hemisphere, there has been co-circulation of seasonal influenza A H1N1, influenza A H3N2, influenza B, and the novel 2009 influenza A H1N1 virus; but approximately 60 percent of all infections were due to the 2009 H1N1 virus.

It is anticipated that during the 2009 - 2010 winter season, the predominant circulating influenza virus will be the novel 2009 H1N1 virus, but there may be lesser circulation of the three

predominant seasonal influenza viruses seen last year (A H1N1, A H3N2, and B). It is anticipated that the morbidity associated with these viruses will be similar to that observed this past winter and summer.

Influenza Positive Tests Reported to CDC by U.S. WHO/NREVSS Collaborating Laboratories, National Summary, 2008-09



Community Respiratory Virus Surveillance

The Infection Control Department will provide weekly updates on OurNet concerning regional community respiratory virus disease activity in central Massachusetts. Updates concerning the global surveillance for avian influenza, or other significant respiratory viral activity will also be posted, as relevant. As influenza is the most frequent of the community respiratory viral diseases to cause serious epidemics, the majority of these recommendations focus on influenza.

Additional information on influenza activity can be obtained at the CDC web site and the MDPH website. In addition, a novel surveillance program is performed by Google and used by the CDC (http://www.google.org/flutrends/intl/en_us/).