

SEPTEMBER - OCTOBER
2009

THE CENTER FOR PHARMACY CARE

1000 Fifth Avenue, Muldoon Building
 Monday – Friday 9:00 a.m. to 4:00 p.m.

Complimentary Screenings and Services

- Bone density
- Body composition analysis
- Facial skin analysis
- Serum glucose and A1C testing for diabetes & Living My Life®
- Cholesterol screening
- Tobacco Cessation Program
- Health Care Coaching
- Medication Therapy Management
- Anemia Screening

Please call for an appointment, x5874.

Blood Pressure Screening

- September 23, 10 a.m.-noon
- October 14 & 28, 10 a.m.-noon

3rd Floor, Duquesne Union

No appointment necessary



A publication of:

Mylan School of Pharmacy
 Center for Pharmacy Care
 Pharmaceutical Information Center (PIC)

Additional information on newsletter topics:

Pharmaceutical Information Center
 412-396-4600
 pic@duq.edu

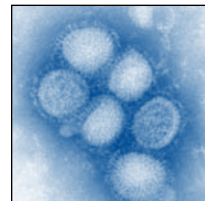
Questions about screenings or programs:

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**NOVEL INFLUENZA A:
 H1N1 2009**



Flu season is fast approaching and with it comes a more serious influenza concern with the pandemic of novel H1N1 virus, initially referred to as the “swine flu.” Cases originated in Mexico started in March 2009. The first cases did not have contact with animals and outbreaks were since reported throughout Mexico and in the USA via human to human contact. The virus is being described as a new subtype not previously detected in swine or humans. This was found to be a new strain of influenza virus A/H1N1. In July 2009 WHO experts changed the name to pandemic H1N1/09 virus to distinguish it from the current seasonal H1N1 virus, and as of August, 2009, the CDC began referring to it as the novel H1N1 virus.

WHAT DOES H AND N STAND FOR?

There are three types of influenza viruses: A, B, and C. Influenza A viruses are the most dangerous to humans. Influenza A may then be further sub typed on the basis of the surface hemagglutinin (H) and neuraminidase (N) antigens. There are 16 different hemagglutinin proteins contained in a virus and nine variations of neuraminidase.

The World Health Organization reports that multiple outbreak sites have demonstrated that this virus “has established itself and is now the dominant influenza strain in most parts of the world.” While most individuals experience mild symptoms when exposed to the virus, there exists a potential for more severe or even fatal consequences. Certain individuals, such as those with a lowered immune system, are more susceptible to infection.

A vaccine to protect against H1N1 flu has just been licensed and is expected to be available by mid-October, 2009. The CDC’s Advisory Committee on Immunization Practices (ACIP) has recently provided preliminary guidelines on use of the vaccine. Patient categories considered at highest risk for acquiring and transmitting this infectious virus include:

- Pregnant women
- Persons who live with or provide care for infants aged <6 months (e.g., parents, siblings, and daycare providers)

- Health-care and emergency medical services personnel
- Persons aged 6 months – 24 years
- Persons aged 25 – 64 years who have medical conditions that put them at higher risk for influenza-related complications (see accompanying box below)

CHRONIC MEDICAL CONDITIONS THAT INCREASE THE RISK OF COMPLICATIONS FROM INFLUENZA

- Cardiovascular disease (except hypertension)
- Disorders affecting the blood, cognitive function, kidney, liver, lung (including asthma), muscles and nervous system
- Metabolic diseases (including diabetes)
- Immunosuppression caused by medication or HIV infection

It is estimated that approximately 160 million persons in the United States will fall into these target groups. In the event vaccine supply is insufficient, subsets of some of these target categories will receive priority. The following is a brief summary of other important aspects of the 2009 H1N1 vaccine:

- Immunization with the standard *seasonal* influenza vaccine offers little to no protection against the novel H1N1 virus.
- The new vaccine will be available in both inactivated and live formulations.
- Two doses of vaccine (separated by 21 days) may be required for children and young adults.
- Seasonal and H1N1 2009 vaccines can be administered at the same time, but in different anatomical sites; simultaneous administration of the live formulations of each vaccine is not recommended.
- Candidates for seasonal influenza vaccine should receive their dose as quickly as possible and not wait until the new H1N1 vaccine is available.

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- In clinical trials, adverse reactions have been minimal.
- It is anticipated that the new vaccine will be available in formulations with and without the preservative thimerosal.
- Regardless of their trimester, all pregnant women should be immunized.

Data on the vaccines being investigated for prevention of the H1N1 virus is rapidly accumulating. The overall number of people who are eventually immunized will be dependent on the local availability and demand for the vaccine. The reader is referred to the attached CDC links (*see Flu Update Information*) for additional and more specific information on both the H1N1 influenza and *seasonal* influenza vaccines. They are also encouraged to discuss any concerns about H1N1 infection and the vaccine with their physician, nurse, pharmacist or health department.

The spread of flu viruses occurs via droplet or direct contact transmission. Droplet transmission occurs mainly through coughing or sneezing on a person infected with the flu virus. Direct contact involves skin-to-skin touching. The virus may also spread by indirect contact with the virus in the environment. Individuals may become infected by touching a surface with a flu virus on it and then touching their nose or mouth. The influenza virus can survive and infect a person for up to 2 to 8 hours once deposited on a surface.

FLU PREVENTION TIPS

- Cover your nose and mouth with a tissue when you cough or sneeze. Throw the tissue in the trash after you use it.
- Wash your hands often with soap and water, especially after you cough or sneeze. Alcohol-based hand cleansers are also effective.
- Avoid touching your eyes, nose, or mouth
- Try to avoid close contact with sick people

OTHER CDC RECOMMENDATIONS

- Persons with influenza-like illness (ILI) (i.e., fever with either cough or sore throat) should be advised to stay home for 24 hours after resolution of the fever without fever-reducing meds
- Persons who are at high risk of complications from H1N1 infection (for example, persons with certain chronic medical conditions, children less than 5 years, persons 65 or older, and pregnant women) should consider their risk of exposure to novel influenza if they attend public gatherings in communities where novel influenza A virus is circulating. In communities with several reported cases of H1N1 virus infection, persons who are at risk of complications

from influenza should consider staying away from public gatherings

- All persons should be reminded to use appropriate respiratory and hand hygiene precautions.
- Based on currently available information, for non-healthcare settings where frequent exposures to persons with H1N1 are unlikely, masks and respirators are not recommended.

Large public gatherings offer a good opportunity for public health officials and event organizers to deliver key educational messages about measures attendees can take to help reduce the spread of the H1N1 flu. Event organizers should consider communicating to attendees about the need to remain home if ill and to use good hygiene practices while at the event. Such information may be communicated through a variety of means such as letters, newspaper notices, public service announcements, Web site postings, and text messages.

ADDITIONAL MEASURES

Other measures can be used by event organizers to help reduce the risk for H1N1 flu. The feasibility of their use may vary depending on the type and setting of the event.

- Make hand washing widely available at the event facilities with soap and running water, hand sanitizer, and tissues
- Provide on-site medical assessment and care for persons with ILI
- Provide alternative options and venues for participation and simultaneously reduce crowding.

ROLE OF PHARMACISTS AS VACCINE ADVOCATES

Immunizations are considered one of the greatest public health achievements in the United States during the last century. All health professionals have a duty to participate in protecting the health of the public by advocating and facilitating disease

prevention and health promotion programs based on their scope of practice. Pharmacists are among the resources that consumers may consult on issues regarding disease prevention and health promotion.

While pharmacists have a long history of encouraging and providing support for vaccinations programs, tremendous growth has occurred within the last decade. Pharmacists can advance public health through immunizations in several ways: educating about vaccines and advocating vaccinations, facilitating or hosting vaccinations programs at pharmacies and other practice sites, or administering vaccines to patients.

More than 40,000 pharmacists and student pharmacists have been taught to immunize through the *American Pharmacists Association Pharmacy-Based Immunizations Delivery: A National Certificate Program for Pharmacists*. As of August 2009, all 50 states have granted pharmacist the authority to administer vaccines to varying degrees. According to the American Pharmacist Association and the American College of Physicians, pharmacists are uniquely positioned to provide vaccination programs in the community and can serve as a resource to help meet immunization goals.

AVAILABLE RESOURCES ON CAMPUS

Vaccinations for the *seasonal flu* are currently available at the Center for Pharmacy Care. For more information about vaccinations or to schedule an appointment to receive a vaccination, please call the Center for Pharmacy Care at 412.396.2155.

FLU UPDATE INFORMATION

- Center for Disease Control and Prevention www.flu.gov
- Pharmaceutical Information Center pic@duq.edu • 412.396.4600
- Duquesne University Student Health Services www.duq.edu/health-updates • 412.396.1650

REFERENCES

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www.duq.edu/pharmacy