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**IEI MISSION STATEMENT:**

The **Immunization Education Initiative** (IEI) is a national group of nurses partnering with other immunization supporters, who educate about the importance of immunization to enhance the health of Canadians.

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**EDITOR**

Lindsay Thompson

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## IMMUNIZATION FOR PREGNANT AND BREAST-FEEDING WOMEN

Immunization to protect against vaccine-preventable diseases can greatly benefit the mother and the baby. All women who can become pregnant should consult their doctor or health care provider about the recommended vaccines before, during, and after pregnancy, and while breast-feeding.

Before pregnancy, it's important for women to check if they are up-to-date with the adult immunization schedule. For women who plan on becoming pregnant, they should try to receive all these vaccinations before getting pregnant since some vaccines cannot be given to pregnant women.

Immunizations that adults may need include:

- ▶ hepatitis A and/or B vaccine
- ▶ influenza vaccine
- ▶ meningococcal vaccine
- ▶ pneumococcal vaccine
- ▶ varicella (chickenpox) vaccine
- ▶ HPV (human papillomavirus) vaccine
- ▶ measles, mumps and rubella vaccine
- ▶ pertussis vaccine
- ▶ tetanus and diphtheria vaccine
- ▶ travel vaccine (e.g., typhoid vaccine, yellow fever vaccine)

During pregnancy, women can still receive most types of vaccines if they need them as part of their immunization schedule. However, there are some vaccines that pregnant women should not receive. These include:

- ▶ measles, mumps, and rubella vaccine
- ▶ varicella vaccine
- ▶ yellow fever
- ▶ other *live attenuated* vaccines  
(vaccines that contain viruses or bacteria that are whole and alive but weakened)

For the other types of vaccines that can be given during pregnancy, the vaccine is safe for both the mother and the unborn baby. In fact, not only is it safe, vaccines given to a pregnancy mother can have health benefits for the baby as well. The antibodies that the mother produces in response to the vaccine can be passed onto the baby. This can help provide immunity to the baby during the first few weeks to months of life, and this is taken into account in the recommended immunization schedule for infants.

After pregnancy and while breast-feeding, mothers can once again receive any routine vaccines. Mothers who were not able to receive all the recommended adult immunizations during pregnancy can now be safely immunized and continue to follow the recommended adult immunization schedule. The baby should receive all vaccines according to the recommended immunization schedule for infants.



# SUMMER NEWSLETTER

## THE 2009 H1N1 FLU PANDEMIC



### The 2009 influenza pandemic has started.

Since April 2009, the world has been gripped with constant reports and updates about the H1N1 (swine) flu virus. The government of Mexico first reported cases of the H1N1 in March 2009. The number of cases rose steadily through April, which was when the rest of the world became aware of the H1N1 virus outbreak in Mexico.

Symptoms of H1N1 flu virus include fever, fatigue, loss of appetite, coughing, and sore throat. Some people have also had vomiting and diarrhea. Since these symptoms are similar to the seasonal flu symptoms, it's important to see your doctor if you are experiencing these symptoms and recently travelled to an area with reports of H1N1 flu.

On June 11, 2009, the WHO declared the H1N1 virus is causing the current influenza pandemic. The WHO Pandemic Phase is at level 6, the highest phase and the phase they consider a pandemic to have started. At this phase, there is human to human spread of the virus in at least two countries in one WHO region and the virus has caused outbreaks in at least one other country in another WHO region. The members of the WHO are grouped into six regions and are based on geographical locations.

Since the WHO first warned that H1N1 could potentially cause the next influenza pandemic, countries around the world started to prepare for one, taking steps to increase vigilance against this disease and to reduce the impact of pandemic on citizens. Now that they've declared a pandemic, countries are implementing the plans they prepared. The WHO also want to stress that at the moment, the influenza pandemic is moderate, one of the reasons being because most people infected experience mild symptoms, and recover without the need to be hospitalized or to receive medical care.

In Canada as of June 10th, 2009, there are almost 3000 laboratory-confirmed cases, and the majority of these have been mild and did not require hospitalization. At this time there have been 4 deaths associated with the virus, although the role the virus played in the deaths is not completely clear. The seasonal flu and its complications can kill between 4000 and 8000 Canadians each year.

Although all strains of influenza can potentially cause fatalities, experts are concerned about this virus causing pandemic because it is a new influenza strain, not seen in humans previously, meaning the population will have no natural immunity to protect against the virus. Experts worry that this virus could spread quickly and research is underway to learn more about H1N1.

The WHO has consulted with vaccine manufacturers around the world to determine the availability of materials needed to start producing a vaccine against H1N1. At this point, the Canadian government has not ordered the production of a vaccine. However, they have measures in place to produce the vaccine if it becomes necessary to do so. In the United States, the Centers for Disease Control and Prevention (CDC) has started to develop a vaccine against H1N1. The CDC has isolated the new H1N1 virus and made a candidate vaccine virus. They've provided this candidate vaccine virus to vaccine manufacturers so that they can begin to make a vaccine, if necessary. The production of any new vaccine takes several months and there is no date yet for completion.

The best way to help prevent the spread of H1N1 flu virus is to avoid close contact with people who have flu-like symptoms and by doing the following:

- ▶ Get the annual seasonal flu shot.
- ▶ Wash hands often and thoroughly for at least 20 seconds with soap and warm water (about the time it takes to sing "Happy Birthday" twice). If you don't have access to soap and water, an alcohol-based hand sanitizer will also work.
- ▶ Avoid touching your mouth and nose.
- ▶ Cover your coughs and sneezes with a disposable tissue. Throw the tissue immediately into the garbage. Use your arm or sleeve if tissue is not available.

If you're a healthcare worker who will be in contact with ill patients, it is especially important to remain vigilant to help prevent the spread of the virus.



# SUMMER NEWSLETTER

## VACCINE TRUTHS

- ▶ The annual seasonal flu shot must be given every year to protect you from the flu. The flu viruses can change from year to year so the vaccine must be changed every year. Every year, the World Health Organization (WHO) makes an educated guess and selects 3 influenza virus strains they believe are most likely to cause the flu. The flu shot is made based on these 3 strains.
- ▶ The annual flu shot will likely not protect against the H1N1 (swine) flu virus. However, the Public Health Agency of Canada continues to recommend you get your annual flu shot to protect against seasonal flu.
- ▶ There is no vaccine that is 100% effective. Even if people have had their shots, there will always be some people who are not immune. Because of this, it's important to continue taking measures to prevent the spread of infection (e.g., proper handwashing).

## IMMUNIZATION – DID YOU KNOW?

- ▶ Manufacturers make the annual flu vaccine by replicating (multiplying) the vaccine in eggs (some manufacturers use animal cells). That is why people who have egg allergies are generally advised to avoid the annual flu shot.
- ▶ You can't get H1N1 influenza from eating properly prepared pork. The H1N1 virus is not transmitted through pork meat. Cooking the pork to an internal temperature of at least 70°C (160°F) kills the H1N1 virus, which is what pork is generally recommended to be cooked at to prevent foodborne illness.
- ▶ Making a brand new vaccine for a particular influenza strain (such as H1N1) can take five to six months.

## MENINGOCOCCAL DISEASE UPDATE

Invasive meningococcal disease is a serious infectious disease caused by the bacteria, *Neisseria meningitidis*. Symptoms of meningococcal disease include high fever, stiff neck, headache, drowsiness, and vomiting. Some people may also experience sensitivity to light, confusion, and a purple-coloured skin rash. Most people who are infected do not develop the disease. It is not very contagious and is spread through direct, close, or prolonged contact with an infected person via secretions from the nose or throat. Sometimes, though, the bacteria can cause serious diseases, including meningitis (inflammation of the meninges, the tissue surround the brain and spinal cord), and meningococemia (infection of the blood and other organs).

Meningococcal disease is fatal in about 10% of people who get the disease. Another 10% of people infected will develop long-term complications, such as brain damage, deafness, nervous system problems, and seizures. Overall, there are about 2 cases per 100 000 each year of invasive meningococcal disease in Canada, with the highest rate among children less than 1 years old and adolescents aged 15 to 19.

There are 12 different subtypes of *Neisseria meningitidis* and the subtypes A, B, C, Y, and W135 cause the majority of meningococcal disease. Immunization against meningococcal bacteria subtype C is part of the recommended routine vaccination schedule for infants and children.

Recently, the National Advisory Committee on Immunization (NACI) updated their recommendations on meningococcal disease and meningococcal vaccine recommendations. This update was made in light of the meningococcal vaccine against 4 subtypes of meningococcal bacteria (A,C,Y, and W135), called the quadrivalent meningococcal vaccine. The NACI recommends:

- ▶ Infants (children less than 1 year old), children aged 1 to 4, adolescents, and young adults to be immunized using the meningococcal C vaccine. The vaccine can be considered for children 5 years or older who have not yet reached adolescence.
- ▶ Routine dose (a booster shot) of meningococcal C vaccine for people in early adolescence, around 12 years old. A booster shot should also be given to children in their second year of life (from 12 to 23 months of age) if they were give the vaccine when they were less than 12 months of age.
- ▶ Immunization with the quadrivalent meningococcal vaccine for people aged 2 to 55 years who are at high risk for meningococcal disease. The vaccine can be considered for people who are at high risk and 56 years of age and older.
- ▶ Immunization with quadrivalent vaccine for children with primary antibody deficiencies who are at least 2 years old.

**For more information on the NACI recommendations, please go to:**  
<http://www.phac-aspc.gc.ca/publicat/ccdr-rmtc/09pdf/acs-dcc-3.pdf>

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**Interested in becoming a nurse speaker?** Contact the IEI for more information!

**Don't forget to visit the IEI website at [www.immunizationeducation.ca](http://www.immunizationeducation.ca)!** To stay informed on immunization news, bookmark or make [www.immunizationeducation.ca](http://www.immunizationeducation.ca) your home page.



## PREPARING FOR A PANDEMIC



A pandemic is a worldwide outbreak of infectious disease that affects a large portion of the population. The Canadian government at local, provincial/territorial, and national levels are working on pandemic preparedness. Many employers and health care facilities also have plans in place to respond to pandemic.

Federal, provincial and territorial officials, and more than 200 experts created the Canadian Pandemic Influenza Plan for the Health Sector. This Plan was created for health care workers, public health officials, emergency workers, and departments of health, and includes guidelines, checklists and an emergency response plan. The goals of influenza pandemic preparedness are to minimize serious illness, to minimize the number of deaths, and to limit any social disruption among Canadians as a result of pandemic.

Are you prepared for a pandemic? Though you may not have a formal plan, it's important to be prepared for a pandemic. Here are some things you can do:

- ▶ Stay informed of the most up-to-date information. The Canadian Pandemic Influenza Plan for the Health Sector is a good place to start. Your provincial or territorial government will also have pandemic preparedness plans. Check their websites or local department of health for more information. Get copies of the plan.
- ▶ Find out if your employer has any pandemic preparedness plans. If they don't, ask if they plan on making any.
- ▶ Practice good hygiene to prevent the spread of influenza, such as washing hands thoroughly and frequently. (See main story for ideas).
- ▶ Follow general emergency plan guidelines. For example, prepare an emergency kit with the right supplies to take care of you and your family with no outside assistance for at least 72 hours. The emergency kit should contain non-perishable food, a can opener, water, medications, first aid supplies, flashlight, battery-operated radio, extra batteries, and some cash.

## IEI NEWS

The IEI welcomes its newest full nurse speakers nationally, recently confirmed at the IEI National Update Forum in Toronto:

- Anne-Sandra Caron** (St. Jérôme, QC)
- Kathy Coumoundouros** (Tecumseh, ON)
- Sheila Ehmke** (Oshawa, ON)
- Ingrid LeClaire** (Aurora, ON)
- Jo Anne Genua** (Mount Hope, ON)
- Felicity Hemming** (Delta, BC)
- Nancy Hogue** (St. Jérôme, QC)
- Lisa Jarvos** (Abbotsford, BC)
- Sylvie Lemelin** (Quebec, QC)
- Cathy Lewis** (Calgary, AB)
- Sylvie Limoges** (Boucherville, QC)
- Renée Mellish** (Wawa, ON)
- Maria Spalvieri** (Tottenham, ON)
- France Tousignant** (La Prairie, QC)

IEI Nurse Speakers are available to provide education sessions for your group or organization of health care professionals.

There are several presentations to choose from: *Administration Techniques, Communication Strategies, Immunology/Vaccinology, Immunization Overview, and Influenza.*

Each session takes about 1½ hours and light refreshments are provided. Best of all, there is no cost to your group!

For further information or to book a presentation, please visit our website at [www.immunizationeducation.ca](http://www.immunizationeducation.ca).