



# WINTER NEWSLETTER

**IEI MISSION STATEMENT:**

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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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**Immunization  
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Initiative**

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## FOCUS ON IMMUNIZATION RECORDS

An immunization record is a written documentation of the immunizations a person has received.

Immunization records are important because they are a useful tool in helping people to keep their immunizations up to date. They also provide proof of immunization, which may be needed for an individual to attend work, school, or day care, or to travel to certain countries.

There are 3 types of immunization records:

1. A **personal immunization record** kept by an individual. Parents or guardians should keep these records for their children. Since people may switch doctors or move from province to province, and since doctors retire and move away, it is important for people to keep track of their own immunizations. Each individual should:
  - ▶ ask their doctor for a personal immunization record form
  - ▶ keep the form up to date by bringing it to each doctor's appointment
  - ▶ keep the immunization record in a safe place
2. A **health professional's office record** showing the immunizations given to each patient. This allows health professionals to monitor an individual's immunization history and determine when they may need additional vaccinations.
3. A **provincial or territorial immunization registry**. Provinces and territories are developing registries to provide a central electronic immunization record. This could help health professionals identify people who may need immunizations, keep track of vaccine side effects, and serve as a back-up when people cannot locate their personal immunization record.

A health professional's office record should list the following information (the personal immunization record may contain a smaller subset (\*) of this information):

- ▶ vaccine brand name and manufacturer\*
- ▶ vaccine lot number\*
- ▶ vaccine dose
- ▶ diseases that the vaccine protects against\*
- ▶ route and site of administration
- ▶ day, month, and year the vaccine was given\*
- ▶ name and title of the person giving the vaccine

## FOCUS ON ROTAVIRUS

### ROTAVIRUS: THE BASICS

#### What is rotavirus?

Rotavirus is a viral infection that causes vomiting and fever followed by severe watery diarrhea (rotavirus gastroenteritis). The diarrhea usually goes away within 3 to 8 days.

The main complication of rotavirus is dehydration caused by vomiting and diarrhea.

In young children, this can be severe and can even lead to hospitalization. Rotavirus causes 7,000 hospitalizations, 56,000 doctor visits, and 27,000 visits to the emergency department each year in Canada.

Most healthy children will become ill from rotavirus before the age of 5 years, and the risk of severe infection is highest in children under 2 years of age. The incidence of rotavirus peaks in February to March in western Canada and one to two months later in eastern Canada.

#### How is rotavirus spread, and what can be done to prevent it?

Rotavirus spreads through hands and objects (such as toys) that have become contaminated by the virus found in the stool. Proper handwashing can help limit the spread of the virus. Vaccination is another important way to protect against rotavirus.

### ROTAVIRUS VACCINATION

Vaccination helps reduce the risk of rotavirus gastroenteritis. It also reduces infection severity and dehydration risk in children who do become infected.

#### Who should receive the vaccine?

Group	Vaccine Recommended?*
Healthy infants	Yes
Premature infants	Yes
Immunocompromised infants	Not without a consultation with a specialist
Infants with a history of rotavirus infection	Yes
Infants with a history of intussusception†	No

#### How is the vaccine given?

Rotavirus vaccine is given as a series of 2 or 3 doses (depending on the vaccine; see table below). Specific schedules may vary from province to province.

#### What vaccines are available in Canada?

Two vaccines are available: RotaTeq® and Rotarix™. The chart below shows some important similarities and differences between products.

#### Both RotaTeq® and Rotarix™

- ▶ are given orally as a liquid.
- ▶ must be protected from light and stored in a refrigerator (2° to 8° C).
- ▶ can be given at the same time as other routine childhood vaccinations.

#### Differences between products

- ▶ RotaTeq® is given as 3 doses, 4 to 10 weeks apart, starting between 6 and 12 weeks of age.
- ▶ Rotarix™ is given as 2 doses, at least 4 weeks apart, starting from 6 weeks of age and finishing by 24 weeks of age.
- ▶ RotaTeq® is packaged in a squeezable dosing tube (2 mL). Rotarix™ is packaged in a prefilled oral syringe (1.5 mL).
- ▶ RotaTeq® is a live human-bovine pentavalent (5 strains, from humans and cows) vaccine. Rotarix™ is a live-attenuated human monovalent vaccine (1 strain, from humans only).

Both vaccines are safe and effective at reducing the risk of rotavirus gastroenteritis. The same product should be used for all vaccine doses. For more complete information on these vaccines, refer to their specific product monographs.

*\*Recommendations are from the Canadian Paediatric Society (CPS) and the National Advisory Committee on Immunization (NACI). The CPS provided recommendations for healthy infants, and the NACI provided recommendations on all groups listed in the chart.*

*† Intussusception occurs when one part of the intestine slides into the next (similar to a telescope when the pieces slide into one another), which may cause blockage or tearing of the intestine. This recommendation is based on an older vaccine, RotaShield®, which had an increased risk of intussusception. Large studies of current vaccines (RotaTeq® and Rotarix™) found no increased risk of intussusception with vaccination compared to placebo.*

## IEI NEWS

### Interested in becoming an Immunization Education Nurse?

#### 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 [www.immunizationeducation.ca](http://www.immunizationeducation.ca) or make it your home page.

### Immunization Education Nurses 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).



## WHAT'S NEW IN INFLUENZA VACCINATION THIS SEASON?

The following are some of the highlights from the National Advisory Committee on Immunization (NACI) statement for the 2011–2012 influenza season:

### Influenza strains

The strains that are likely to be circulating in the 2011–2012 influenza season are the same as those from 2010–2011. Therefore, this season's vaccines contain the same 3 strains as last year:

- ▶ A/California/7/2009 (H1N1)-like virus
- ▶ A/Perth/16/2009 (H3N2)-like virus
- ▶ B/Brisbane/60/2008-like virus

### New product

Fluad® is a trivalent, surface antigen inactivated influenza vaccine for people aged 65 and over. It is the first influenza vaccine in Canada to contain an adjuvant (MF59C.1). Studies suggest that the vaccine may lower the risk of influenza-related hospitalization compared to flu vaccine without adjuvant. However, because of limitations in study design, these studies do not provide enough evidence to suggest that Fluad® should be used preferentially over other influenza vaccines in people 65 and over.

### Additions to the high-risk group

Aboriginal people and people with morbid obesity (BMI ≥ 40) have now been added to the group of people at high risk of influenza complications. These individuals should receive the influenza vaccine annually.

### Changes to the influenza vaccine dose for children

Children 6 to 35 months of age should now receive a full dose of influenza vaccine. This improves their response to the vaccine without an increase in side effects.

### New recommendations on egg allergies

Trivalent inactivated influenza vaccine (TIV) is no longer contraindicated in people with an egg allergy. People with egg allergies can receive TIV without an allergy skin test once they have been assessed for allergy risk as shown in the table below.

Risk level	Definition	Recommendations
<b>Low risk</b>	Mild gastrointestinal or mild local skin reaction to eggs.	Give a single dose of TIV, observe for 30 minutes after the dose to check for an allergic reaction.
<b>Higher risk</b>	History of a cardiovascular or respiratory reaction, or generalized hives, when exposed to eggs.  People with egg allergies and poorly controlled asthma are also part of the higher-risk group since they may be at a greater risk of difficulty breathing, which can be part of a serious allergic reaction.	2-dose schedule: 10% of the regular TIV dose, followed by the other 90% if no reaction after 30 minutes. Observe for 30 minutes after the second dose.

Live attenuated influenza vaccine (LAIV) is not recommended for people with egg allergy because there is not enough evidence to support its safety in these individuals.



## IMMUNIZATION NEWS

- ▶ Researchers have discovered an anti-HIV antibody called PGT 128 that can neutralize about 70% of HIV viruses. It works by attaching itself to two sugars (glycans) found on the HIV surface, plus part of the virus's protein backbone, which is used to infect cells. Further research is needed to identify how best to use antibodies such as PGT 128 to develop an HIV vaccine.

## VACCINE TRUTHS

- ▶ It is safer to get immunity from a vaccination than from being infected with the disease. Immunity from natural infection may last longer. However, this benefit is greatly outweighed by the serious health risks of a natural infection, such as death, brain damage, deafness, and paralysis.
- ▶ Although serious vaccine side effects are rare, people who experience a severe or unexpected side effect after a vaccine should report it to their health care professional, who will complete an Adverse Effects Following Immunization (AEFI) form to help document and monitor vaccine side effects.

## IMMUNIZATION – DID YOU KNOW?

- ▶ Most children will have a rotavirus infection before the age of 5, but many parents are not familiar with the condition. A recent study by the Canadian Institute of Child Health (CIHC) found that over 50% of parents had not heard of rotavirus.
- ▶ FluMist®, the nasal spray flu vaccine, is not recommended for pregnant women because it contains live attenuated influenza virus and there is not sufficient safety data in pregnant women. However, the other influenza vaccines currently available in Canada can be used by pregnant women because they contain trivalent inactivated influenza virus.



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## IMMUNIZATIONS ON THE JOB

All adults need certain immunizations, including tetanus, diphtheria, pertussis, varicella (or a history of chickenpox infection), measles, mumps, and rubella. Influenza immunization is also recommended for people without contraindications to the vaccine, and is especially important for people in certain occupations (see table below). The table below shows some additional immunizations that may be required for certain jobs. These recommendations also apply to all people who encounter these situations, not just to workers.

Vaccine	Workers who may need the vaccine
<b>Cholera</b>	<ul style="list-style-type: none"><li>▶ people (e.g., armed forces, health professionals, relief workers, aid workers) whose work takes them to high-risk areas (e.g., countries with poor sanitation)</li></ul>
<b>Hepatitis A</b>	<ul style="list-style-type: none"><li>▶ people (e.g., armed forces, health professionals, relief workers, aid workers) whose work takes them to locations with poor sanitation</li><li>▶ veterinarians, zoo workers, and research workers who handle primates</li><li>▶ researchers who work with hepatitis A virus or hepatitis A vaccine production</li><li>▶ workers with chronic liver disease</li><li>▶ people whose work takes them to high-risk areas (e.g., India, Africa, the Middle East, Central and South America, and Far East Asia [except Japan])</li></ul>
<b>Hepatitis B</b> (if not already vaccinated)	<ul style="list-style-type: none"><li>▶ health care, personal care, or nursing home workers</li><li>▶ workers who may be exposed to bites or cuts (e.g., at prisons, institutions for the developmentally challenged, emergency services such as police or firefighters)</li><li>▶ people whose work takes them to high-risk areas (e.g., South-East Asia, Africa)</li><li>▶ people with chronic liver disease</li></ul>
<b>Influenza</b>	<ul style="list-style-type: none"><li>▶ health care, personal care, childcare, or nursing home workers</li><li>▶ workers at high risk of influenza complications (people with chronic health conditions, people with morbid obesity [BMI ≥ 40], Aboriginal people, seniors, and pregnant women)</li></ul>
<b>Japanese encephalitis (JE)</b>	<ul style="list-style-type: none"><li>▶ laboratory workers who handle JE virus</li><li>▶ people who will be spending 1 month or more in a high-risk country (e.g., selected countries in Southern and Eastern Asia, Far Eastern Russia)</li></ul>
<b>Meningococcal vaccine</b> (protects against invasive meningococcal disease, which can cause fever, headache, and stiff neck)	<ul style="list-style-type: none"><li>▶ laboratory workers who handle <i>Neisseria meningitidis</i> cultures</li><li>▶ people travelling for more than 3 weeks to the “meningitis belt” (sub-Saharan Africa) and anyone who will be providing health care to or having close contact with the local population there</li></ul>
<b>Rabies</b>	<ul style="list-style-type: none"><li>▶ workers exposed to animals (e.g., veterinarians, animal control workers, zoo workers, laboratory workers, trappers and hunters)</li><li>▶ people whose work requires them to travel to countries without adequate medical care</li></ul>
<b>Smallpox</b>	<ul style="list-style-type: none"><li>▶ laboratory workers who handle vaccinia and other orthopoxviruses</li></ul>
<b>Typhoid</b>	<ul style="list-style-type: none"><li>▶ laboratory workers who handle live cultures of <i>Salmonella typhi</i></li><li>▶ people whose work takes them to high-risk areas (e.g., Africa [except South Africa], Asia [except for Singapore and Japan], the Middle East [except Israel and Kuwait], Central and South America, the Dominican Republic and Haiti) for 4 weeks or more</li></ul>
<b>Yellow fever</b>	<ul style="list-style-type: none"><li>▶ people who need to travel to certain countries in Africa and South America</li></ul>