

Pneumococcal conjugate 13-valent vaccine (Pneumovax[®] 13): information for adults with high risk medical conditions

This fact sheet provides basic information for the public. It is not intended to provide or take the place of medical advice, diagnosis or treatment. Always talk to a health care professional about any health concerns you may have, before you make any changes to your diet, lifestyle or treatment.

Updates:

Effective December 2014, Ontario has expanded its publicly funded high risk pneumococcal immunization program to include conjugate pneumococcal 13-valent vaccine (Pneu-C-13, or Pneumovax[®] 13) for adults 50 years of age and older with the following high risk medical conditions related to invasive pneumococcal disease: hematopoietic stem cell transplants (HSCT); HIV infection; and other immunosuppressive conditions.

What is invasive pneumococcal disease (IPD)?

IPD is a bacterial infection caused by a type of bacteria called *Streptococcus pneumoniae* (or pneumococcus). This type of bacteria can cause any of the following:

- pneumonia (lung infection)
- bacteraemia (infection of the blood)
- meningitis (infection of the lining of the brain and spinal cord)

Pneumonia, bacteraemia and meningitis are serious infections and can sometimes cause death or long lasting problems including deafness, especially in people with a high-risk medical condition.

Streptococcus pneumoniae is the most common cause of bacterial infection in immunocompromised adults.

How do you get IPD?

The bacteria that cause IPD can live at the back of the nose and throat without causing symptoms or in healthy persons who are “carriers”. People of all ages can be healthy carriers of pneumococci bacteria. The bacteria are spread through droplets in the air from coughing or sneezing. Bacteria can also be spread through the saliva of an infected person when common items are shared, e.g., beverages (bottles, straws) or eating utensils.

Who is eligible to receive the publicly funded vaccine?

There are a number of vaccines available in Canada which protect against various serogroups (strains) that cause invasive pneumococcal disease. The primary focus of this fact sheet is on the pneumococcal conjugate 13-valent vaccine, Pneu-C-13 among high risk adults aged 50 years and older, which prevents IPD by protecting against 13 serogroups of *Streptococcus pneumoniae*.

Until recently, Pneu-C-13 has only been available for use in infants and children under 5 years of age. The vaccine indications have recently been expanded and National Advisory Committee on Immunization recommends this vaccine for use among individuals with certain high risk medical conditions to prevent pneumonia, bacteraemia and meningitis caused by *Streptococcus pneumoniae* bacteria.

Effective December 2014, adults 50 years of age and older are eligible for the publicly funded Pneu-C-13 vaccine (Pneumar[®]13) as part of the high risk pneumococcal immunization program. These individuals have the highest number of reported cases and incidence of IPD, and would be considered at higher risk of disease compared to other groups.

One dose of Pneu-C-13 is now publicly funded for individuals aged 50 years and older with the following high risk conditions (with an exception for HSCT recipients noted below):

- Hematopoietic stem cell transplants (HSCT) *
- HIV infection
- Immunosuppressive conditions, specifically:
 - Asplenia (anatomical or functional);
 - Sickle cell disease or other hemoglobinopathies;
 - Congenital immunodeficiencies involving any part of the immune system, including B-lymphocyte (humoral) immunity, T-lymphocyte (cell) mediated immunity, complement system (properdin, or factor D deficiencies), or phagocytic functions;
 - Immunosuppressive therapy including use of long term corticosteroids, chemotherapy, radiation therapy, post-organ-transplant therapy, biologic and non-biologic immunosuppressive therapies for rheumatologic and other inflammatory diseases;
 - Malignant neoplasms including leukemia and lymphoma; or
 - Solid organ or islet cell transplant (candidate or recipient).

* Note: HSCT recipients should receive 3 doses of Pneu-C-13 starting 3-9 months after transplant. These doses should be administered at least 4 weeks apart.

When should the Pneumococcal Polysaccharide 23-valent vaccine also be given?

Following immunization with the Pneu-C-13 vaccine (Pneumar[®]13), high risk adults aged 50 years and older who meet any of the criteria listed above, should also receive pneumococcal polysaccharide 23-valent (Pneu-P-23) vaccine, or Pneumovax[®]23. Please discuss with your health care provider the appropriate timing for receiving the Pneu-P-23 vaccine, depending on your high risk condition.

For more information on the Pneu-P-23 vaccine, visit http://www.health.gov.on.ca/en/public/publications/pub_immun.aspx.

For more information about the high risk pneumococcal immunization program, please contact your health care provider or local public health unit.

Who should not get the Pneu-C-13 vaccine?

Individuals with a history of anaphylaxis after a previous dose of a pneumococcal conjugate vaccine, and individuals with proven immediate or anaphylactic hypersensitivity to any component of the vaccine or its container, should not receive the vaccine.

Is the Pneu-C-13 vaccine safe and effective?

Yes, the Pneu-C-13 vaccine is very safe and effective. Vaccine safety is a priority for the ministry. All publicly funded vaccines are tested to make sure they are both safe and effective. Vaccine safety is continually monitored by public health.

Most individuals will have no side effects from the Pneu-C-13 vaccine; however, if they do occur, they tend to be mild and may include soreness or redness where the needle was given. Other side effects such as headache, dizziness and nausea may occur. Severe reactions are rare.

Please report any side effects or severe vaccine reactions to your health care provider or local [public health unit](#). You should always discuss the benefits and risks of any vaccine with your health care provider.

When should I call my doctor?

Call your health care provider or go to the nearest emergency department if any of the following symptoms develop within three days of receiving the vaccine:

- hives
- swelling of the face or mouth
- trouble breathing, hoarseness or wheezing
- high fever (over 40°C or 104°F)
- convulsions or seizures
- other serious reactions to the vaccine.

Who should I talk to if I have any questions about the Pneu-C-13 vaccine?

Talk to your health care provider or call your local public health unit for more information.

Your record of protection

After receiving a vaccine, make sure your personal immunization record (i.e., the "Yellow Card") is updated. Keep it in a safe place!

For More Information

Further information is available at:

- Your public health unit: www.phdapps.health.gov.on.ca/PHULocator.
- Immunization information is available at: www.ontario.ca/vaccines.