

## Pneumococcal High-Risk Immunization Program – Information for Physicians and other Health Care Providers

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

Eligibility criteria for the pneumococcal vaccines provided through the “high-risk” program:

The pneumococcal vaccines are available, and can be given, at any time throughout the year to high-risk persons.

Due to novel influenza A (H1N1) activity in Canada, and the potential for secondary infection with *S. pneumoniae*, the Ministry of Health and Long-Term Care is recommending that all eligible persons should be vaccinated against pneumococcal disease according to the *Publicly Funded Immunization Schedules – January 2009*.

**Pneumococcal conjugate vaccine:**

The vaccine is available free of charge, on a routine basis, for all children under 2 years of age. In addition, unimmunized children 24 to 59 months of age who are of First Nations origin and/or who attend a child care centre should receive one dose of pneumococcal conjugate vaccine. Children 24-59 months of age with the following high-risk conditions are eligible to receive both the pneumococcal conjugate and the pneumococcal polysaccharide vaccines free of charge.

**High-risk medical conditions that increase the risk of invasive pneumococcal disease:**

- Chronic pulmonary disease (excluding asthma except those treated with high dose corticosteroid therapy)

- Chronic cardiac disease
- Cirrhosis or alcoholism
- Chronic renal disease or nephrotic syndrome
- Diabetes mellitus
- Asplenia, splenic dysfunction, sickle-cell disease and other sickle cell haemoglobinopathies (the vaccine can be given simultaneously with Hib or meningococcal conjugate vaccine, but at a separate anatomic site)
- Cerebrospinal fluid leaks
- HIV infection
- Primary immune deficiency
- Other conditions associated with immunosuppression (malignancies, long term systemic corticosteroids and other immunosuppressive therapy)
- Solid organ transplant recipients
- Cochlear implant recipients (pre or post implant)

Note: After the age of 6 months, the pneumococcal conjugate vaccine and the influenza vaccine can be administered at the same time, but at a different site. The influenza vaccine is not recommended for use in infants younger than 6 months of age.

The pneumococcal conjugate vaccine may also be administered at the same time (but at a different site) as the other routine childhood vaccines.

**Catch-up:** Children who have missed the primary series remain eligible for the pneumococcal conjugate vaccine up to six years of age; please refer to the *Publicly Funded Immunization Schedules for Ontario – January 2009*, Schedule 2.

**Note:** High-risk children 24 to 59 months of age, who have received the pneumococcal conjugate vaccine, should receive the pneumococcal polysaccharide vaccine as a booster dose and to increase the serotype coverage. The polysaccharide vaccine should ideally be given at least 8 weeks after the conjugate vaccine.

NACI (National Advisory Committee on Immunization) recommendations for the immunization of high-risk children < 5 years of age<sup>1</sup>

Age	Previous doses	Recommendations
≤ 23 mos	None	<ul style="list-style-type: none"> <li>Pneumococcal conjugate vaccine (Pneu-C) as recommended for unvaccinated children<sup>2</sup></li> </ul>
24-59 mos	4 doses of Pneu-C	<ul style="list-style-type: none"> <li>One dose of Pneumococcal polysaccharide 23-valent vaccine (Pneu-P-23), 8 weeks after the last dose of Pneu-C</li> </ul>
24-59 mos	1-3 doses of Pneu-C	<ul style="list-style-type: none"> <li>One dose of Pneu-C-7</li> <li>One dose of Pneumococcal polysaccharide 23-valent vaccine (Pneu-P-23), 8 weeks after the last dose of Pneu-C-7</li> <li>A single reimmunization of Pneu-P-23, 3 years after the first dose of Pneu-P-23, if recommended</li> </ul>
	1 dose of Pneu-P-23	<ul style="list-style-type: none"> <li>Two doses of Pneu-C-7, 2 months apart, and at least 6-8 weeks after the Pneu-P-23</li> <li>If recommended, a single reimmunization of Pneu-P-23, 3 years after the first dose of Pneu-P-23,</li> </ul>
	None	<ul style="list-style-type: none"> <li>Two doses of Pneu-C-7, 2 months apart</li> <li>One dose of Pneu-P-23, 6-8 weeks after the last dose of Pneu-C-7</li> </ul>

<sup>1</sup> Adapted from National Advisory Committee on Immunization. Statement on recommended use of

pneumococcal conjugate vaccine. CCDR 15 January 2002; Vol 28.

<sup>2</sup> Canadian Immunization Guide, 2006

#### Pneumococcal polysaccharide vaccine:

- Persons 2 to 64 years of age with high risk medical conditions listed on the previous page are eligible to receive a single dose of pneumococcal polysaccharide vaccine.
- All residents of nursing homes, homes for the aged and chronic care facilities or wards.
- All persons 65 years of age and older regardless of medical condition.

#### Re-immunization with the pneumococcal polysaccharide vaccine:

In general, for immunocompetent persons, pneumococcal polysaccharide vaccine is given only once. However, NACI recommends that persons with the following conditions receive a one-time re-immunization:

- Functional or anatomic asplenia or sickle cell disease
- Hepatic cirrhosis
- Chronic renal failure or nephrotic syndrome
- HIV infection
- Immunosuppression related to disease or therapy

For these individuals ≥ to 2 years of age, a single re-immunization is recommended once after 5 years in those aged over 10 years of age at the time of the initial immunization, and once after 3 years in those 10 years of age or younger at the time of the initial immunization.

**For additional information, please consult the Canadian Immunization Guide 7<sup>th</sup> edition, 2006, and product monograph.**