

July 8, 2025

Public Health Alert – Increase in Invasive Pneumococcal Disease (IPD)

Situation

Northwestern Health Unit's (NWHU) rate of IPD is triple the rate of Ontario. In 2024, the rate for NWHU was 34.7 cases per 100,000 while Ontario's rate was 11.3 cases per 100,000. An increase in the number of IPD cases in our catchment area was noted throughout late winter and early spring. So far this year, we have had 20cases of IPD and two deaths, in 2024 we experienced a total of 29 cases. This alert is to increase awareness of IPD and vaccination eligibility in our region.

Issue

IPD is caused by the bacteria Streptococcus pneumoniae. Colonization is common among healthy people, but in a small proportion of carriers the bacteria invade a normally sterile site, leading to IPD. Pneumonia with secondary bacteremia, bacteremia, and meningitis are the most common forms of IPD.

The majority of IPD cases require hospitalization, and since 2018, NWHU area has had 20 deaths attributed to IPD. The highest risk factors for IPD in the region are chronic illnesses, substance misuse, being unimmunized, and being immunocompromised.

IPD is vaccine preventable

Invasive pneumococcal disease is most common in the very young (those under age two) and the elderly (those 65 and over). Immunization for IPD is given through routine childhood immunizations as well as to those 65 and older, and to those meeting high-risk criteria.

Children 17 and under who are high-risk based on the below criteria and have previously completed their immunization schedule without a dose of pneumococcal 20-valent conjugate vaccine, are now eligible for one dose of Pneumococcal 20- valent conjugate vaccine.

Those eligible for high-risk IPD vaccine include those with:

- Asplenia (functional or anatomic), splenic dysfunction
- Congenital (primary) 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
- HIV infection
- Immunocompromising therapy including use of long-term systemic corticosteroid, chemotherapy, radiation therapy, post-organ transplant therapy, certain antirheumatic drugs and other immunosuppressive therapy
- · Malignant neoplasms, including leukemia and lymphoma



- · Sickle-cell disease and other sickle cell hemoglobinopathies
- Solid organ or islet cell transplant (recipient)
- · Hepatic cirrhosis due to any cause
- Chronic renal disease, including nephrotic syndrome
- · Chronic cardiac disease
- · Chronic liver disease, including hepatitis B and C
- Chronic respiratory disease, excluding asthma, except those treated with high dose corticosteroid therapy
- · Chronic neurologic conditions that may impair clearance of oral secretions
- · Diabetes mellitus
- Cochlear implant recipients (pre/post implant)
- · Chronic cerebral spinal fluid leak
- Residents of chronic care facilities or wards
- Hematopoietic stem cell transplant (HSCT) (recipient)

Please see the Ontario's routine and high-risk vaccination schedule for more details on vaccine eligibility. Those over 65 who have already received a pneumococcal vaccine are not eligible for another dose unless they meet high risk criteria.

Please note

NWHU does see many IPD cases who are not eligible for publicly funded vaccination.

The National Advisory Committee on Immunization (NACI) lists social, behavioural, and environmental factors that place certain people at higher risk for IPD and encourage them to receive the vaccine. This is NOT publicly funded but with a prescription the vaccine can be purchased at a pharmacy. These factors include:

- Individuals who are unhoused
- Individuals living in communities or settings experiencing sustained high IPD rates, including those who are in residential care
- Smoking, particularly in those over 50 years of age
- Substance use (i.e., alcohol misuse, cocaine use, and injection drug use)
- Occupational risk with long-term continuous exposure to metal fumes (i.e., welders)



Requested actions

- Continue to consider and screen for symptoms of IPD when assessing patients in the region
- Assess individuals for eligibility for pneumococcal vaccine as per Ontario's publicly funded schedule.
- Assess individuals of all ages for eligibility for high-risk Pneumococcal vaccination
- · Immunize with appropriate pneumococcal vaccine, if eligible

Resources

- Appendix 1: Pneumococcal disease, invasive
- Invasive Pneumococcal Disease Public Health Ontario
- Invasive Pneumococcal Disease for Health Professionals
- Health Care Provider Fact Sheet: Pneumococcal Conjugate Vaccine for Individuals Aged 18
 Years and Older
- Health Care Provider Fact Sheet: Pneumococcal Conjugate Vaccines for Children Aged 6
 Weeks to 17 Years

Contact

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