

WHAT IS INVASIVE PNEUMOCOCCAL DISEASE?

Invasive Pneumococcal Disease (IPD) is a serious illness caused by bacteria (called *Streptococcus pneumoniae*) that enters the body and can cause disease if they spread to the blood (blood poisoning), brain (meningitis) or lungs (some severe forms of pneumonia).¹



WHO IS AT RISK OF IPD?²

Young children <2 years

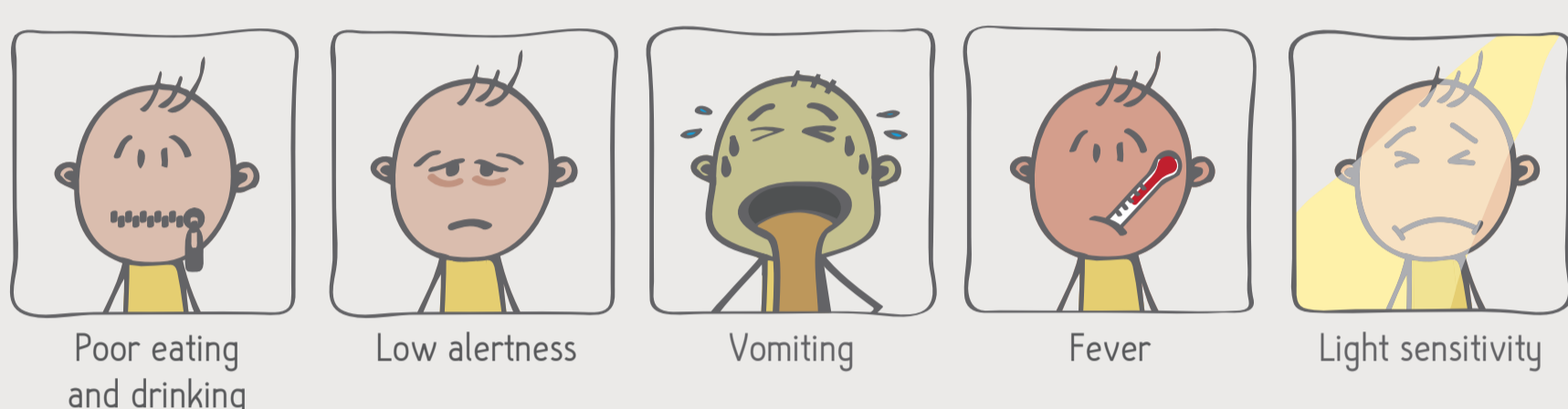


ADULTS >65 YEARS AND PEOPLE WITH COMPROMISED IMMUNE SYSTEMS ARE ALSO AT RISK

WHAT ARE THE SYMPTOMS OF IPD?

DEPENDS ON THE DISEASE AND MAY NOT ALWAYS BE OBVIOUS.

SYMPTOMS INCLUDE:^{3,4}



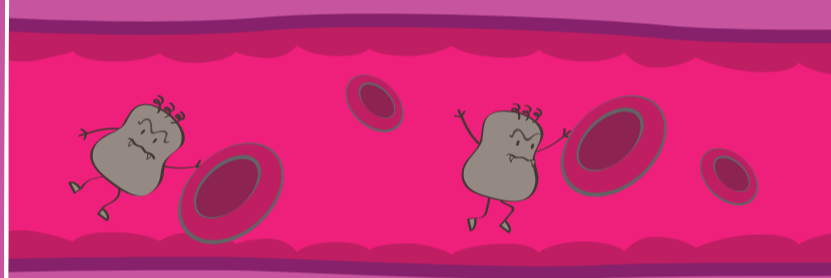
HOW COULD YOUR CHILD GET IPD?

Children can **breathe in bacteria** through the nose or mouth when an infected person:⁵



On rare occasions, these bacteria can cause serious infections by:¹

Invading the **blood stream** or



Spreading to other parts of the body, such as the **brain or lungs**.

WHAT IS THE IMPACT OF IPD IN CHILDREN?

IPD IS A **MAJOR WORLDWIDE PROBLEM** RESULTING IN **HOSPITALISATIONS** AND, IN SOME CASES, **DEATH**.⁶

AN ESTIMATED **9 MILLION** CASES GLOBALLY

OF SERIOUS PNEUMOCOCCAL DISEASE EVERY YEAR IN **CHILDREN <5 YEARS**.⁷

WORLDWIDE, AN ESTIMATED **476,000** CHILDREN AGED <5 **DIE EVERY YEAR** FROM PNEUMOCOCCAL INFECTIONS.⁸

IN **CANADA**, IN 2015, CHILDREN <1 YEAR HAD ONE OF THE **HIGHEST INCIDENCE RATES** OF INVASIVE PNEUMOCOCCAL DISEASE AT **14.5 CASES PER 100,000**. ADULTS 60+ HAD A HIGHER INCIDENCE RATE THAN INFANTS⁹

Around 1 in 15 children aged <5 who get pneumococcal meningitis die from the infection.³

HOW CAN YOU HELP PROTECT CHILDREN AGAINST IPD?⁹⁻¹¹



1. Government of Canada. Invasive pneumococcal disease. Available at: <https://www.canada.ca/en/public-health/services/immunization/vaccine-preventable-diseases/invasive-pneumococcal-disease.html> (Last accessed Jan 2019). 2. Government of Canada. Invasive pneumococcal disease: risk. Available at: <https://www.canada.ca/en/public-health/services/immunization/vaccine-preventable-diseases/invasive-pneumococcal-disease/risks.html> (Last accessed Jan 2019). 3. Centers for Disease Control and Prevention. Pneumococcal disease, Symptoms & Complications. Available at: <http://www.cdc.gov/pneumococcal/about/symptoms-complications.html> (Last accessed Jul 2018). 4. Government of Canada. Invasive pneumococcal disease: symptoms. Available at: <https://www.canada.ca/en/public-health/services/immunization/vaccine-preventable-diseases/invasive-pneumococcal-disease/symptoms.html> (Last accessed Jan 2019). 5. Government of Canada. Invasive pneumococcal disease: causes. Available at: <https://www.canada.ca/en/public-health/services/immunization/vaccine-preventable-diseases/invasive-pneumococcal-disease/causes.html> (Last accessed Jul 2018). 6. World Health Organization. Pneumococcal conjugate vaccine for childhood immunization - WHO position paper. Weekly epidemiological record 2007; 82:93-104. Available at: http://www.who.int/immunization/ver8212pneumococcus_child_Mar07_position_paper.pdf (Last accessed Jul 2018). 7. Wahl B, et al. Burden of Streptococcus pneumoniae and Haemophilus influenzae type b disease in children in the era of conjugate vaccines: global, regional, and national estimates for 2000-15. Lancet Glob Health 2018; 6: e744-57. 8. World Health Organization. Pneumococcal vaccines WHO position paper - 2012. Weekly epidemiological record 2012; 87:129-44. Available at: <http://www.who.int/wer/2012/wer8714.pdf> (Last accessed Jul 2018). 9. Government of Canada. National laboratory surveillance of invasive streptococcal disease in Canada - Annual summary 2016. Available at: <https://www.canada.ca/en/public-health/services/publications/drugs-health-products/national-laboratory-surveillance-invasive-streptococcal-disease-canada-annual-summary-2016.html> (Last accessed Jan 2019). 10. Centers for Disease Control (CDC). Pneumococcal Disease (Streptococcus pneumoniae) <https://wwwnc.cdc.gov/travel/diseases/pneumococcal-disease-streptococcus-pneumoniae> (Last accessed Jul 2018). 11. Centers for Disease Control (CDC). Respiratory Hygiene/Cough Etiquette in Healthcare Settings. Available at: <https://www.cdc.gov/flu/professionals/infectioncontrol/resphygiene.htm> (Last accessed Jul 2018).