

Pneumococcal Disease Fact Sheet

Pneumococcal Disease

- **Pneumococcal disease is a leading infectious killer of children and adults worldwide.** Pneumococcal disease is a bacterial infection that causes pneumonia, meningitis, sepsis and other life-threatening ailments. Pneumococcal disease kills 1.6 million people — including more than 800,000 children under age five — every year.¹
- **Pneumococcal disease is common.** Pneumococcal disease is caused by a common bacterium, *Streptococcus pneumoniae*, also known as pneumococcus. There are more than 90 known pneumococcal serotypes, the ten most common of which account for approximately 62 percent of invasive disease worldwide.²
- **Pneumococcal disease affects persons of all ages.** Anyone can get pneumococcal disease, but some groups are at particularly high risk, including infants, the elderly, and adults and children with weakened or compromised immune systems, or chronic illnesses.^{3, 4}

Global Public Health Impact

- **Pneumococcal disease — including pneumonia — takes a devastating toll in developing countries.** More than 150 million cases of pneumonia occur every year among children under five in developing countries, accounting for more than 95 percent of all new cases worldwide. The most common causes of severe pneumonia in the developing world are *Streptococcus pneumoniae* and *Haemophilus influenzae* type b.⁵
- **HIV infection significantly increases the risk of pneumococcal disease in children and adults.** Children with HIV are up to 40 times more likely to get pneumococcal disease than HIV-negative children.^{6, 7}
- **Pneumonia kills more children than any other disease.** Pneumonia causes nearly 1 in 5 deaths of children under five worldwide — more than 2 million children each year — and kills more children than AIDS, malaria and measles combined.⁸
- **Pneumococcal meningitis kills, and can cause lifelong disabilities for survivors.** As many as one in four children in developing countries who contract and survive pneumococcal meningitis are left with serious disabilities, including cerebral palsy, epilepsy, brain damage, kidney disease, deafness, limb amputations and developmental delays.⁹

Awareness. Action. Prevention.

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Pneumococcal Vaccines Save Lives

- **Pneumococcal disease is preventable.** Safe and effective vaccines currently exist to prevent pneumococcal deaths in children and adults. In 2000, a new 7-valent pneumococcal conjugate vaccine (PCV7) became available and is currently in use in over 70 countries. Currently, 10- and 13-valent pneumococcal conjugate vaccine formulations are in advanced stages of development. These conjugate vaccines are expected to prevent 50-80 percent of all serious pneumococcal infections in children worldwide¹⁰ and have the potential to make a major health impact, especially in rural settings where access to treatment is limited.
- **Pneumococcal vaccines save lives.** Since U.S. infants began receiving routine pneumococcal conjugate vaccination in 2000, the country has nearly eliminated childhood pneumococcal disease caused by vaccine serotypes.¹¹ Estimates show that routine vaccination in developing countries could help save more than 7 million lives by 2030.¹²
- **Pneumococcal bacteria are becoming resistant to some of the most commonly used antibiotics, making treatment more costly and less effective.** Increasing rates of drug-resistant pneumococcal infections threaten the effectiveness of antibiotic treatment.^{13, 14, 15}
- **Vaccination of infants has public health benefits for adults.** Vaccination of infants reduces the spread of pneumococcal bacteria so that adults have less contact with pneumococci and are thus indirectly protected from pneumococcal disease, a public health phenomenon known as herd immunity.¹⁶
- **Widespread immunization with the pneumococcal conjugate vaccine has been identified as a priority by the World Health Organization (WHO).** In March 2007, the WHO issued a position paper stating that pneumococcal conjugate vaccine should be a priority for inclusion in national childhood immunization programs.¹⁷
- **Pneumococcal vaccines are a good investment.** Healthy children and families contribute to growing economies. At a cost of \$1 to \$5 per dose, introduction of pneumococcal vaccines in the world's poorest countries is projected to be highly cost-effective and substantially reduce childhood mortality.¹⁸

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