The deaths of 1.63 million children under five could be prevented by 2030 with one of the most powerful pneumonia-fighting vaccines - the pneumococcal conjugate vaccine (PCV) - according to the Vaccine Impact Modelling Consortium (VIMC).

The vast majority - 1.5 million or 94% - of lives saved are in 40 countries across Africa (28), Asia (9), and the Middle East (3), with many experiencing fragility and/or conflict and food shortages at crisis proportions. Thirty-three countries (80%) are eligible for financial assistance to introduce PCV from Gavi, the Vaccine Alliance (Gavi).

It is critical that these 40 governments protect at least 90% of their children with PCV by 2030, starting with those at greatest risk of death due to malnutrition and other risks.

Where governments are fragile and/or conflict-affected, international vaccine and humanitarian agencies must join forces to protect children with an integrated package of vaccines, food, and medicines.
National governments should:

1. Accelerate PCV coverage to the Immunization Agenda 2030 target of at least 90%, prioritizing the populations of children at greatest risk of death from pneumonia.

2. Deliver PCV vaccines alongside services to diagnose and treat child wasting.

3. Leverage relationships with international vaccine agencies to access more affordable PCVs.

4. Negotiate access to next generation PCVs that offer more protection at reasonable prices.

5. Publish PCV coverage progress as part of national pneumonia control strategies.

Where governments are fragile and unable to vaccinate or reach children with healthcare, international vaccine and humanitarian agencies must join forces to protect children.

HIGH RETURN ON PCV COVERAGE

High and sustained PCV coverage delivers:

- Reductions in child pneumonia, meningitis, and sepsis deaths, accelerating achievement of Sustainable Development Goal 3.2 - a child mortality rate of at least 25 deaths per 1,000 births by 2030.
- Reductions in catastrophic health care costs for families required to pay the high costs of child pneumonia, meningitis, and sepsis hospitalization.
- Reductions in antimicrobial resistance as higher PCV vaccination means lower demand for antibiotics to treat pneumonia, meningitis, and sepsis.

PCV INNOVATION

The World Health Organization (WHO) currently prequalifies three PCVs for children which offer protection against 10 and 13 strains of pneumococcal disease. But there are efforts underway to produce pneumococcal vaccines that protect against 14, 15, 20, and even 25 strains. If these efforts are successful, PCVs will become an even more effective tool in the fight to reduce pneumococcal deaths among children.

- PCV-10: Protects against 10 strains and is manufactured by GlaxoSmithKline as Synflorix® (including serotypes 4 and 18C) and the Serum Institute of India as PNEUMOSIL® (including serotypes 6A and 19A).
- PCV-13: Protects against 13 strains and is manufactured by Pfizer as Prev(e)nar®.
- PCV-14: Protects against 14 strains and is being developed by Biological E as BE-PCV14.
- PCV-15: Protects against 15 strains and is manufactured by Merck as VAXNEUVANCE®. Approved for use in children in the USA in 2022.
- PCV-20: Pfizer (20vPnC) is currently conducting clinical trials with a pneumococcal vaccine for children that protects against 20 pneumococcal serotypes.
- PCV-25: Protects against 25 strains and is in early development by Inventprize and the Bill & Melinda Gates Foundation as IVT-PCV-25.
These 40 countries are home to 94% of all 1,630,000 child lives that could be saved with PCV coverage by 2030 according to the Vaccine Impact Modelling Consortium (VIMC). Data for PCV coverage is from the 2022 WHO/UNICEF Estimates of National Immunization Coverage (WUENIC), and data for food security (Phase 3 and above) from the Integrated Food Security Phase Classification (IPC).