



## Tackling Vaccine-Preventable Illnesses: The Crucial Role of Gavi

*By Jean-Francois Tardif, National Coordinator, Global Poverty Solutions*

In 1990, the World Summit for Children was called to address the scandal of 40,000 children dying from preventable diseases – the equivalent of 100 jumbo jet carrying 400 children crashing - every day! Today, that number has been cut by more than half, largely due to the massive scale-up of basic immunizations. For instance, measles mortality is now down by 78% compared to year 2000 data, saving half a million lives each year.

### ***The challenge***

While remarkable progress has been made, the World Health Organization estimates that every year 1.5 million children still die from vaccine-preventable diseases, mainly in the developing world. That's almost one child every 20 seconds - a shocking and unacceptable statistic. <sup>1</sup>

This is why the international community rallied around the Global Vaccine Action Plan, launched in 2011, which set out goals and objectives for the immunization community for the decade to 2020. Its vision was of a world in which all individuals and communities enjoy lives free from vaccine preventable diseases. <sup>2</sup>

### ***GAVI: A Key Mechanism to Advance the Immunization Agenda***

Based in Geneva, Gavi is a multi-stakeholder alliance created in 2000 to improve access to vaccines for children of the developing world. Not unlike the Global Fund Against AIDS, TB and Malaria (see our fact sheet on the Global Fund on this site), it brings together key UN Agencies, donor countries, implementing countries, the private sector and civil society. Since its creation, Gavi has invested more than US\$14 billion in vaccines, reaching over 700 million children and preventing more than 10 million deaths in the process. As of December 2018, Canada had contributed to Gavi a cumulated total of US\$ 518 million, which corresponds to 3.9% of all donor contributions. Gavi now has a budget of over US\$2billion/year with which it has been producing impressive results:

“Countries immunised 65 million children – often with more than one Gavi-supported vaccine – in 2017. This is 3 million more than in 2016 and brings the total number of children immunised with our support in the current strategic period to 127 million. We are on track to help countries immunise 300 million children between 2016 and 2020. (...) Developing countries prevented approximately 1.3

---

<sup>1</sup> <https://www.who.int/en/news-room/fact-sheets/detail/immunization-coverage>

<sup>2</sup> [https://www.who.int/immunization/global\\_vaccine\\_action\\_plan/en/](https://www.who.int/immunization/global_vaccine_action_plan/en/)

million future deaths in 2017, up from 1.2 million in 2016, thanks to Gavi-supported vaccines. This puts us well on track to help countries to avert 5–6 million future deaths in the 2016–2020 period”.<sup>3</sup>

## ***The task ahead***

### *General Coverage*

Coverage of three doses of the diphtheria–tetanus–pertussis vaccine (DTP3) is used as a proxy indicator of the performance of national immunization programmes.

“Overall DTP3 vaccination coverage increased, but by only 1%, to 86%. Progress therefore still remains too slow for most goals to be reached by the end of the Decade of Vaccines in 2020.” This means an estimated 20 million children under the age of one did not receive their full DPT vaccine course. This is nearly on in ten infants. Around 60% of these children live in 10 countries: Afghanistan, Angola, the Democratic Republic of the Congo, Ethiopia, India, Indonesia, Iraq, Nigeria, Pakistan and South Africa.

Pakistan, Indonesia and Nigeria each have approximately one million of DTP3 unvaccinated children.

Targeted efforts will therefore be required to increase the global vaccination rate to levels equivalent to those in developed countries.

### *Pneumococcal and Rotavirus-related Diseases*

Pneumonia and diarrhea are two of the leading killers of children under the age of five. At the beginning of the decade, severe pneumococcal diseases (pneumonia, meningitis, sepsis) were robbing the lives of one million children, three quarters of them in Africa. Rotavirus, the primary cause of diarrheal disease, accounted for the death of 500,000 children annually, and an additional two million children would become severely ill. In 2011, two proven vaccines (pneumococcal and rotavirus) were launched by Gavi, which, coupled with improved sanitation and handwashing with soap and water, would protect children from sickness and death.

Helen Evans, then Interim CEO of the GAVI Alliance addressed the crowd gathered at the official pneumococcal roll-out in Nicaragua in February 2011, stating that “access to suitable vaccines for children in developing countries is a matter of life and death. That’s why today is so exciting. Unlike many diseases where there are no solutions, we have a solution to this. We have the tools, including this vaccine to prevent the leading causes of pneumonia”. Nicaragua was the first country to roll out the pneumococcal vaccine, with community health workers even going door-to-door to deliver the vaccine to ensure all children are reached.

Pneumococcal vaccine had been introduced in 135 countries by the end of 2017. According to the Center for Disease Control, however, 53% of the global infant population is still not receiving the

---

<sup>3</sup> <https://www.gavi.org/progress-report/>

pneumococcal vaccine.<sup>4</sup> There could still be as many as 400,000 deaths of children due to pneumococcal disease each year.<sup>5</sup>

**Rotaviruses** are the most common cause of severe diarrhoeal disease in young children throughout the world. Rotavirus vaccine had been introduced in 91 countries by the end of 2017, including six in some parts of the country, and global coverage was estimated at 28%.

Estimates of Rotavirus-related deaths stand at around 200,000.<sup>6</sup>

There is still a lot of work to do to increase immunization coverage for these two categories of diseases.

Thanks to increased market penetration, Gavi believes it will be able to save an additional 200,000 lives from pneumococcal and rotavirus diseases over the 2018-2020 period, according to its mid-term review.<sup>7</sup>

---

### *Key Self-Directed Learning Questions*

*Why are vaccines important?*

*What is the importance of the role of Gavi in global health?*

*How many lives does Gavi think it can save?*

---

<sup>4</sup> <https://www.cdc.gov/pneumococcal/global.html>

<sup>5</sup> Wahl B, O'Brien KL, Greenbaum A, Liu L, Chu Y, Black R, et al. Global burden of Streptococcus Pneumoniae in children younger than 5 years in the era of pneumococcal conjugate vaccines (PCV): 2000–2015. 10th International Symposium on Pneumococci and Pneumococcal Diseases (ISPPD-10); 2016; Glasgow, Scotland

<sup>6</sup> For a discussion on this estimate, see <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5593200/>

<sup>7</sup> <https://www.gavi.org/library/publications/gavi/gavi-2016-2020-mid-term-review-report/>, p.5