What is the value of vaccination?

Gavi CSO Project

Factsheet 29

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Vaccines are one of the most successful and ***cost-effective health investments*** in history. By helping healthy people stay healthy, vaccines:

- ✓ Enable people to reach their full potential
- ✓ Increase worker productivity
- ✓ Reduce caretaker burden
- ✓ Reduce the burden on the health system
- ✓ Free up global health resources
- ✓ Reduce household health expenditures
- ✓ Reduce suffering

Cost-effectiveness and DALYs

Disability-adjusted life years (DALYs) combine the years of life lost due to premature death with the years of life spent with illness and disability to better quantify the value of a healthy life year free of illness and disability.

A 2006 study by Brenzel et al. estimated the cost per DALY averted with traditional EPI vaccines ranges from US$ 7 to US$ 438. The cost per death averted ranges from US$ 205 in South Asia and Sub-Saharan Africa to US$ 3,540 in Europe and Central Asia.

Public health's 'Best Buy'

Immunization is just one of many health and wellbeing investments. In today's context, with national health budgets, global health resources, and donor funding under unprecedented demand, it's important to ***quantify how and why vaccination is valuable***. A recent study looked at 94 low- and middle-income countries between 2011 and 2020 and found that:

- ❑ For every dollar invested in childhood immunisation we can expect to ***save US$ 16*** in healthcare costs, lost wages and productivity due to illness and death.
- ❑ If we take into account the full value of people living longer, healthier lives, the ***return on investment rises to US$ 44***.
- ❑ In total, immunisation will yield more than ***US$ 586 billion in economic benefits*** from 2011 to 2020.

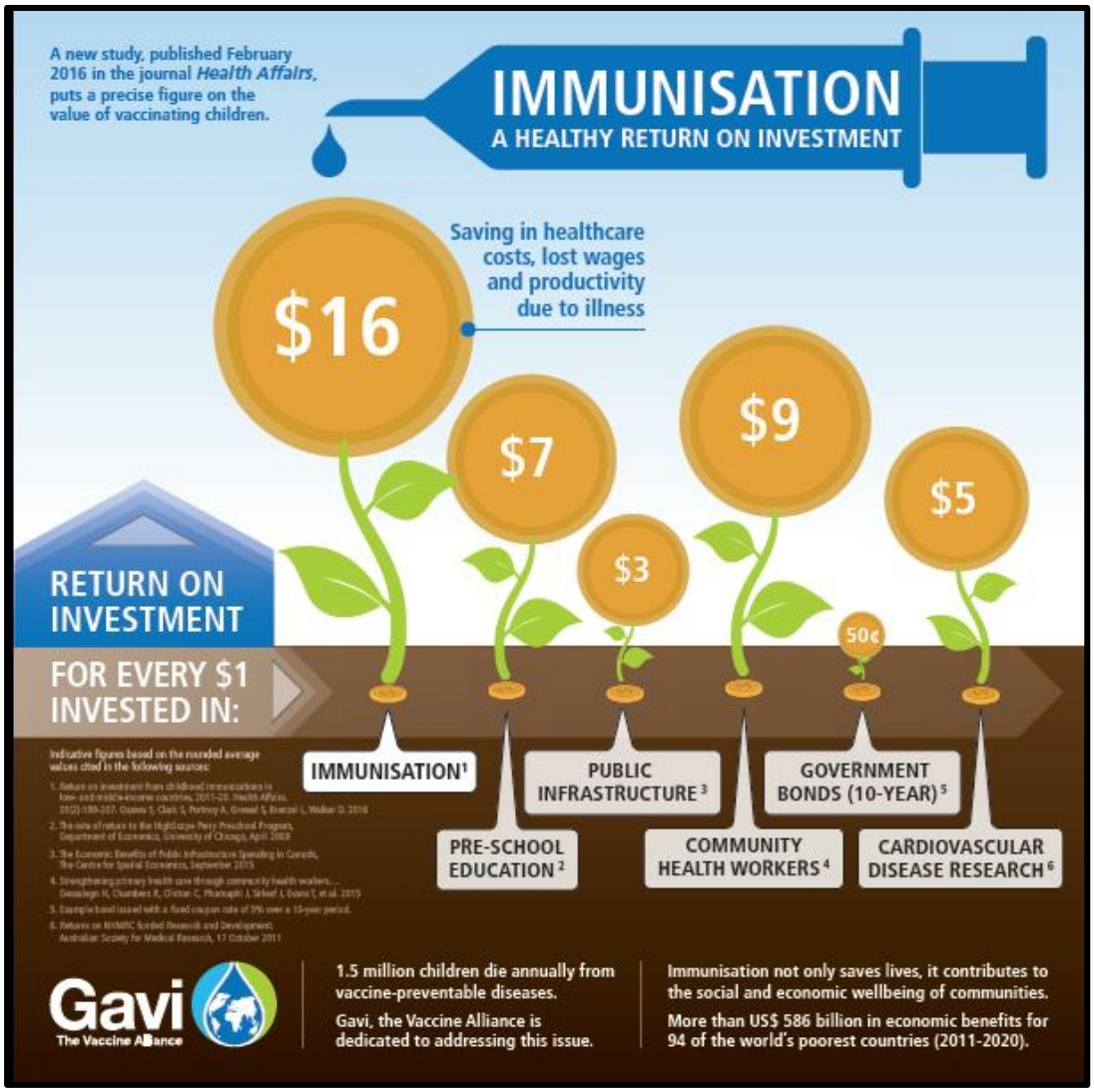
Equitable social and economic development

Good health leads to social and economic development, ***enabling people to reach their full potential***. Immunized children have higher cognitive abilities and better physical strength and are more likely to attend school and go on to be productive members of their community. They are sick less often, so their parents do not have to take time away from work to care for them. This ***strengthens the household's economic situation***.

Immunized children are ***less likely to be disabled*** by infectious diseases. Households and communities often do not have the resources to adequately care for disabled children. Moreover, the ***burden of caretaking frequently falls on women***, thereby preventing them from reaching their full potential too.

Good health also ***encourages investment*** in human capital. Investors are more interested in communities where the labour force does not suffer a heavy disease burden.

Looking just at the economic benefits of immunization, the "Value of Vaccination" study argues that there will be an ***eighteen percent return on Gavi investments*** by 2020.



For more information

- ❑ Ozawa et al. (Feb 2016). "Return on Investment from Childhood Immunization in Low- And Middle-Income Countries, 2011–20." *Health Affairs* **35**(2): 199-207.
- ❑ The Value of Vaccination (video)
- ❑ Cost-effectiveness of immunization (Gavi)

Sources

Brenzel et al. (2016). "Vaccine-Preventable Disease" in: Jamison et al. (ed). *Disease Control Priorities in Developing Countries*. New York: Oxford University Press: 389-412.

Ozawa et al. (Feb 2016). "Return on Investment from Childhood Immunization in Low- And Middle-Income Countries, 2011–20." Health Affairs 35(2): 199-207.