Societal benefits of immunization

How was this document developed?

This document is part of a WHO series of supporting documents concerning events that could erode confidence in vaccination. Such events can be related to vaccine safety, adverse events following immunization, changes in the vaccination programme, negative public debate, outbreaks or pandemics.

All documents were developed based on scientific evidence, laboratory research and fieldwork within psychology, social and behavioural science and communication and lessons learnt in countries. For an introduction to the theoretical background and evidence, refer to the WHO publication Vaccination and trust, available here: www.euro.who.int/vaccinetrust.

The supporting documents are intended for use by national

• ministries of health
• centers for disease control
• immunization programmes
• regulatory authority institutions.

How to use this document

This document presents the wider societal benefits of immunization as related to poverty, maternal health, equity, education, child mortality, health systems strengthening. Use it for advocacy purposes – as a fact sheet or to prepare for an interview or a meeting with key stakeholders.
Investing in immunization

Benefits each individual and the society as a whole

Immunization is not only one of the most successful health interventions ever, protecting children and families from suffering and death. It is a human right and a key element in ensuring health, education and equity; and it represents important social and economic returns that go far beyond the individual person or family.

The immense suffering that today’s vaccine-preventable diseases posed on individuals, families and societies just 50 years ago should act as a constant reminder to keep investing in immunization systems.

Immunization affects the individual and society as a whole

When families are protected from disease and disability and the financial burden of medical care, this benefits both themselves and their societies as a whole.

**Poverty**
The burden of disease falls disproportionately on the socially and economically disadvantaged. Immunization thereby has the greatest advantages for the weakest members of our societies. The absence of disease means that parents can uphold and income and thus removes an important obstacle to breaking out of poverty.

**Life expectancy**
An immunized population lives longer, considerably increasing average life expectancy.

**Productivity**
Parents who are not prevented from going to work by illness in the family continue contributing to growth, production and tax revenues.

**Maternal health**
Reaching every family with immunization puts mothers more in touch with maternal care services. In addition, certain vaccine benefit women in particular. Rubella vaccines indirectly protect pregnant women against an infection that can cause miscarriage, stillbirth and severe birth defects in babies. HPV vaccines help prevent cervical cancer.

**Equity**
Immunization is an affordable health intervention, which is not reserved for the few and privileged. It thus reduces inequalities in our societies by ensuring lifelong protection to everyone regardless of gender, race, religion, political belief or economic or social condition.

*MDG 1
End poverty and hunger

*MDG 5
Improve maternal health

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Healthy children attend school more regularly and are able to learn more. Absence of disease has a strong positive impact on their cognitive development, physical strength and educational achievements.

**Antibiotic resistance**

Vaccines reduce the need for treatment, including antibiotics. Resistant antibiotic strains are an emerging challenge, and any reduced need to use antibiotics may hinder their development.

**Education**

Healthy children attend school more regularly and are able to learn more. Absence of disease has a strong positive impact on their cognitive development, physical strength and educational achievements.

**Tourism, global trade and international reputation**

Repeated outbreaks of preventable diseases affect how the world perceives a country – e.g. their perception of the risks of travelling to the country and their view on how well the public systems and structures are managed.

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**Health system**

A well-functioning immunization system strengthens the health system as a whole (and vice versa). Immunization saves the health system immense treatment costs. Reaching every family with immunization in addition puts parents more in touch with maternal care and public health care services. Immunization delivery can serve as a platform to reach groups that are hard to reach and for providing other public health interventions.

**Child mortality**

When a vaccine is introduced and immunization coverage rates increase, the infant and child mortality rates decline dramatically. Access to key life-saving immunizations such as measles, Hib, rotavirus and pneumococcal vaccines is essential to reduce child mortality. Worldwide, immunization saves approximately 2.5 million deaths each year.*

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**Estimated global annual childhood deaths due to vaccine-preventable disease**

<table>
<thead>
<tr>
<th>Disease</th>
<th>Pre-PCV Mortality Rate</th>
<th>Mortality Rate After the Introduction of PCV 10/13 (2011-2013)</th>
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<tbody>
<tr>
<td>HIB</td>
<td>199,000</td>
<td>195,000</td>
</tr>
<tr>
<td>PERTUSSIS</td>
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</tr>
<tr>
<td>MEASLES</td>
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<td>NEONATAL TETANUS</td>
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<td>PNEUMOCOCCAL DISEASE</td>
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<tr>
<td>ROTAVIRUS</td>
<td>453,000</td>
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</tr>
</tbody>
</table>

**Impact of pneumococcal conjugate vaccine on child mortality rate in Denmark**

After introduction of PCV10/PDV13 vaccine Denmark experienced a 71% reduction in the rate of children under age 2 who died of invasive pneumococcal disease.

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*MDG 4

Reduce child mortality

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* MDG 2

Achieve universal primary education

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