Vaccines Europe
An industry for healthy lives

ECONOMIC IMPACT OF VACCINES

By improving people's health, vaccination also contributes to enhanced individual and societal economic wellbeing.[1]

In the absence of a vaccine, something as small as a virus can bring down global economies.

VACCINATION IS AMONGST THE MOST COST-EFFECTIVE PREVENTION INTERVENTIONS

VACCINATION IS HIGHLY COST-EFFECTIVE

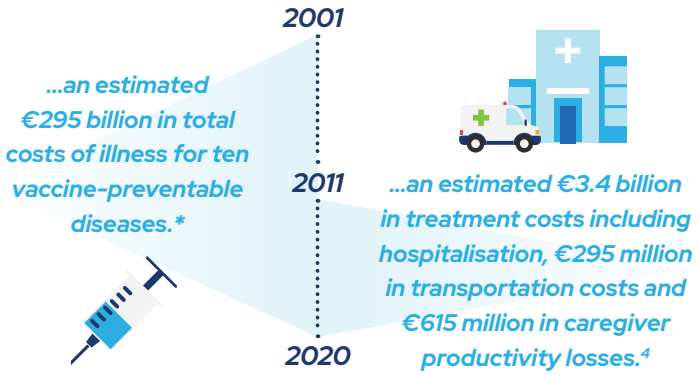
Vaccination programmes take up a low proportion of overall healthcare expenditure and have been highly cost-effective in reducing the burden of disease.[2]

61% ***saving***

60% ***saving***

The implementation of a 90% universal varicella vaccination coverage could prompt 61% direct and indirect cost savings in Germany and 60% in France.[3]

In low or-middle-income countries, vaccination averted...



VACCINATION CAN REDUCE HOSPITALISATION COSTS AND INCREASE PRODUCTIVITY

A study in the US found that, annually, around 500,000 cases of pneumococcal pneumonia lead to ***200,000 hospitalisations, 19,200 deaths, and €4.6 billion*** in costs due to healthcare expenses and lost productivity. This could be greatly reduced with pneumococcal vaccination.[5]

Yearly seasonal influenza ***vaccination can save between €248 and €332 million in healthcare costs*** in Europe by avoiding hospitalisations and visits to the General Practitioner.[6,7]

VACCINATION IS ASSOCIATED WITH GREATER POSITIVE IMPACTS BEYOND HEALTH

VACCINATION CAN HAVE A POSITIVE IMPACT ON THE MACROECONOMIC LEVEL

Beyond public health benefits, wider economic impact of vaccination may also be felt at the macroeconomic level:[1]

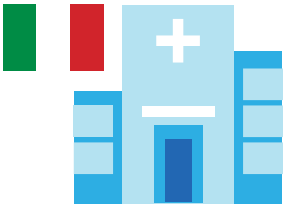
Vaccination can help protect specific economic sectors such as travel, hospitality, brick-and-mortar retail, transportation, and entertainment, which are especially vulnerable to shutdowns in the case of pandemics.[1]

In 12 EU Member States, the tourism sector generates between 10% and 25% of national GDP. Therefore, avoiding travel restrictions and shutdowns thanks to vaccination, for example during the COVID-19 pandemic, will protect millions of jobs and economic activity in many EU regions.[8]

A HEALTHY POPULATION CONTRIBUTES TO A MORE PRODUCTIVE WORKFORCE

A healthy working population attracts more foreign direct investment, which is often accompanied by technology transfer and trade, all of which serve to promote economic growth.[1]

During a flu epidemic in an Italian hospital, €220 of savings in work productivity can be generated for each hospital worker vaccinated against influenza.[9]



***21.2** days absenteeism*

***€3,379** direct cost*

A measles epidemic in Europe resulted in an average of 21.2 days of absenteeism from work among healthcare professionals who acquired the disease. On average, this resulted in an estimated total direct cost of €3,379 per measles case and a total indirect cost of €1,359.[10]

VACCINATION ALSO BRINGS SIGNIFICANT SOCIOECONOMIC BENEFITS

The value of vaccination goes well beyond avoided morbidity and mortality with a broad range of health, economic and social benefits, which have been increasingly recognised in recent years.[1]

Compared to those unvaccinated, on average, vaccinated children attend school more regularly, have better cognitive performance, and obtain higher grades.[11]

Vaccinated adults are more likely to participate in the work force, tend to work more hours and have increased productivity compared to those who are not vaccinated. Vaccination of older adults contributes to healthy ageing, allowing individuals to remain active and productive for longer.[1]

VACCINATION PROGRAMMES: A WORTHY INVESTMENT

SMALL INVESTMENT COMPARED TO HIGH FINANCIAL RETURN

Every Euro invested in adult vaccination (starting at age 50) yields €4 of future economic revenue for government over the remaining lifetime of the cohort.[13]

The net economic impact of eradication of smallpox and elimination of polio worldwide:[11]

Cost saving annually:

***€1.1** billion saved*

***€1.3** billion saved*

Italian case study[14]

Based on 2.1 million ***influenza*** infections per year (among people aged 30-65):

- ***fiscal impact*** (decrease in income tax revenues resulting from the reduction in individual incomes due to illness): ***€160 million***
- ***social costs*** (productivity loss on individuals, social insurance, and employers due to temporary absence from work): ***€840 million***
- an influenza vaccination strategy resulting in the reduction of the number of infected people by 200,000 would increase annual tax revenue by €18 million.

Based on 90,000 ***pneumococcus*** infections per year (among people aged 30-65):

- ***fiscal impact: €24 million***
- ***social costs: €124 million***
- a pneumococcal vaccination strategy resulting in the reduction of the number of infected people by 9,000 would increase annual tax revenue by €2 million.

Based on vaccinating a cohort of 65 year olds over lifetime:

- ***direct medical cost savings: €2.8 million***
- ***social cost savings: €2.8 million***
- the herpes zoster vaccination strategy would result in a reduction of 11,880 HZ cases.

IMMUNISATION: AN INVESTMENT IN WEALTH, NOT A COST

- ***Securing sustainable financing for life-course vaccination programmes should be seen as an investment in health and to the whole economy and not as a cost.*** Vaccination programmes are proven to not only prevent diseases and costly outbreaks, but also to be highly cost-effective for healthcare systems by reducing healthcare expenses and productivity losses.
- ***EU countries should recognise the broader value of vaccination beyond just the healthcare sector and strengthen their vaccination programmes and budgets accordingly.*** Vaccination has a positive impact on both micro- and macroeconomic levels, for example by reducing healthcare costs, increasing workforce productivity, and increasing tax revenue. Vaccination has also proven to protect specific economic sectors such as travel and hospitality.

* Haemophilus influenzae type b, hepatitis B, human papillomavirus, Japanese encephalitis, measles, Neisseria meningitidis serogroup A, rotavirus, rubella, Streptococcus pneumoniae and yellow fever.

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