

A Great Public Health Achievement



Immunization



Public Health
Prevent. Promote. Protect.

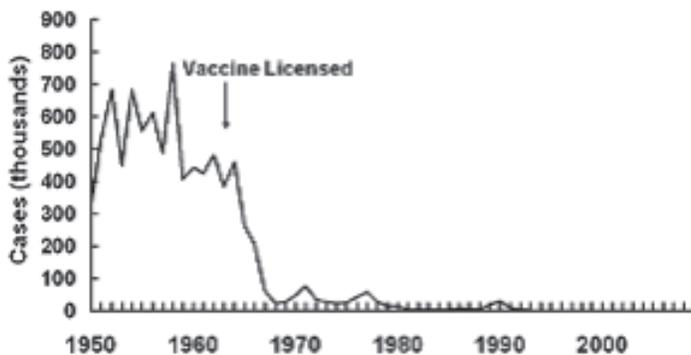
Vaccinations are important disease prevention interventions. They help prevent infectious diseases that were once common; disease such as polio, diphtheria, pertussis (whooping cough); mumps, measles, rubella, tetanus and Haemophilus Influenzae type b. An immunized child is not only protected against these diseases but it also protects the rest of the community, especially those people who cannot be immunized themselves. Immunization rates that are low create pools of susceptible children and increased risk of disease outbreaks.

“I know of no other medical or scientific invention that has led to healthier individuals, families, and communities, and saved so many lives and prevented so many hospitalizations and illnesses than the routine use of vaccines.”

Gregory A. Poland, MD, Mayo Clinic



Measles - United States, 1950-2009



“Immunization is the best tool we have to protect us against a number of serious diseases.”

Centers for Disease Control and Prevention

“I take comfort in the fact that, as a parent, I have the opportunity to protect my children from deadly disease, and, at the same time, protect other vulnerable babies and children in my community. I care about all the children in my community, not just mine—which is why I vaccinate.”

Economic Benefits of Vaccine

In addition to saving lives and improving the quality of life, immunization generates significant economic benefits.

“Vaccination against childhood communicable diseases is one of the most cost-effective public health interventions available.”

Unicef 2003: World Bank 1993

- According to an extensive cost-benefit analysis by the Centers for Disease Control, every dollar spent on immunization saves \$6.30 in direct medical costs, with an aggregate savings of \$10.5 billion across the U.S.
- When including indirect costs to society -- a measurement of losses due to missed work, death and disability as well as direct medical costs -- the CDC notes that every dollar spent on immunization saves \$18.40, producing societal aggregate savings of \$42 billion.¹ Various cost-benefit analyses produce similar measurements.²

“One missed measles vaccine, one new outbreak”

StarTribune Health, September 2, 2011

2011 measles outbreak in the Twin Cities Metro Area

In the recent 2011 measles outbreak, the Twin Cities Metro Area had more measles cases in two months than had occurred in the entire state of Minnesota over the preceding 14 years (1997-2010). During the outbreak, the majority of the patients were hospitalized; fortunately, all recovered. The outbreak was started by an unvaccinated Minnesotan who recently returned from traveling to a country experiencing a measles outbreak. The outbreak was curtailed by direct intervention by Public Health.

- A total of 16 people were hospitalized.
- At least 3,009 people were known to be exposed over the 10-week period of the outbreak.
- 3 people were placed in quarantine with monitoring.
- Cost of privately purchased Measles, Mumps, Rubella (MMR) vaccine: \$52.07/dose.

Vaccines Are Cost-Effective

For every \$1 spent ¹:

DTaP	saves	\$27.00
MMR	saves	\$26.00
H. Influenza Type B	saves	\$5.40
Perinatal Hep B	saves	\$14.70
Varicella	saves	\$5.40
Inactivated Polio (IPV) s	saves	\$5.45



¹ Ross Rapoport, “CDC: Immunizations High But Shot In Arm Still Needed,” Cox News Service. 1 August 2003.

² Zhou, et al, “Economic Evaluation of Routine Childhood Immunization with DTaP, Hib, IPV, MMR and Hep B Vaccines in the United States,” Pediatric Academic Societies Conference, Seattle, Washington, May 2003.

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