Bill and Melinda Gates



RECIPIENTS OF THE JIMMY AND ROSALYNN CARTER AWARD



ne of the most significant areas of medical achievement during the last century has been the development of vaccines against major diseases such as diphtheria, pertussis, poliomyelitis, measles, rubella, pneumococcal pneumonia, and hepatitis B. Vaccines that prevent these diseases are now routinely used in developed countries. But many of these advances are not reaching the people who need them the most.

A significant and pioneering step towards closing this gap has been taken by this year's recipients of the Jimmy and Rosalynn Carter Award for Humanitarian Contributions to the Health of Humankind, William "Bill" H. Gates III and his wife Melinda French Gates.

In 1998 Bill and Melinda Gates donated \$100 million to create the Children's Vaccine Program with the goal of immunizing children worldwide against vaccine preventable diseases.

A year later, the Bill & Melinda Gates Foundation announced a grant of \$750 million over a five-year period to establish The Vaccine Fund. In January 2000, an international collaborative effort known as the Global Alliance for Vaccines and Immunization (GAVI) was announced. Since then, the governments of several countries

including the United States, Britain, Canada, The Netherlands, Denmark, and Norway have contributed to support the work of the alliance, with more pledges on the way. The Vaccine Fund now totals more than \$1 billion.

In addition to national governments, partners in the global alliance include a number of research and public health institutions, the Rockefeller Foundation, UNICEF, the World Bank, WHO, and the International Federation of Pharmaceutical Manufacturers Associations.

The GAVI board is in effect the oversight group for this effort. An independent review committee of developing country health experts assesses proposals submitted to GAVI by the countries and presents its findings to the GAVI board, which in turn makes its recommendations to The Vaccine Fund.

Through the end of last year, the first full year of The Vaccine Fund's operations, it approved funding awards totaling nearly \$800 million over five years to 52 nations in Africa, Asia, Europe, and the Americas. Twelve nations have received their first shipments of hepatitis B vaccine and another 30 will receive them in 2002. Working through purchasing agreements



with manufacturers, GAVI and the Fund have committed to purchase hundreds of millions of doses of vaccines.

The award process channels resources to developing country health systems so that approximately 98% of the Vaccine Fund's current resources go directly to the countries, according to the GAVI Secretariat. Based on the strength of the individual country's programs and their needs, support by The Vaccine Fund can take the form of financial assistance to strengthen the health infrastructure or providing funds for newer, under-used vaccines such as hepatitis B and Haemophilus influenzae type b.

GAVI points out that currently used vaccines save more than 3 million lives annually but another three million die because they lack access to immunization. Measles alone kills nearly one million children every year.

"The power of GAVI is in the collaboration between the partners. When you have UN agencies, industrialized country donors, vaccine manufacturers, and developing country health officials all sitting around the same table, public health programs can be much more effective," says Carol Bellamy, chair of GAVI's board.

"None of this would have happened if it hadn't been for Bill Gates," she adds in a comment to a newspaper reporter. Bellamy is executive director of the United Nations Children's Fund (UNICEF).

The Bill & Melinda Gates Foundation initiatives to increase immunization levels in developing countries are coming at a crucial time. A

recent report by the US General Accounting Office, for example, notes that while immunization coverage for the six diseases originally targeted by the WHO (hepatitis B, Haemophilus influenzae type b, TB, DTP, polio, and measles) has improved significantly since the 1970s in sub-Saharan Africa, immunization coverage declined during the 1990s. In 1997, less than a third of the children were immunized against these six diseases, the GAO stated. The report also notes that UNICEF spent \$51.5 million on immunization in 1998, one-third less than the agency spent in 1990.

Several factors are limiting the availability of vaccines for children in the developing world. One is the relatively high cost of additional vaccines now recommended by the WHO, such as hepatitis B. In addition, a major roadblock is an inadequate health infrastructure in many countries. GAVI has stated that if countries are to receive continued funding they must demonstrate progress with the funds they receive, such as improved immunization rates.

For example, *The New York Times* wrote in January 2002 that "some of the nations that had fallen furthest behind, including Nigeria and much of East Africa, are again mounting aggressive vaccination campaigns."

The Times editorial continued: "The Vaccine Fund is also trying to solve a perennial obstacle by providing incentives to industry to make vaccines and sell them cheaply. The fund is stimulating production and bringing down prices by assuring manufacturers of a market and giving



them long-term contracts. The Fund is also planning to spend money on a final push to bring to market vaccines in the late stages of development, including one for viral diarrhea."

Many regard it as a revolutionary step in international health. "Nothing like this has been tried before. I don't think I'm overstating it to say that this could be the most important thing that has happened in global health, at least in my lifetime," Dr. William Foege said in recent interview. Dr. Foege, formerly director of the US Centers for Disease Control and Prevention and executive director of the Carter Center in Atlanta, advises GAVI on strategies that can be usefully pursued in global health.

The commitment of Bill and Melinda Gates to improving global health and the impact that their vision of change will have is expressed by US Senator John Kerry of Massachusetts:

"Through the unprecedented focus and generosity of their foundation, Bill and Melinda have changed the outlook in public health for the developing world and raised awareness among policymakers in the developed world that we need to do more to address global health concerns...[They] have animated their foundation with a vivid sense of the wonderful possibilities

of the future and grounded it in a consciousness of the responsibility to ensure that our resources are used wisely and well."

In addition to their \$2.5 billion support for improving global health equity, the Bill & Melinda Gates Foundation has committed, to date, more than \$1.5 billion to fund scholarships and high school improvements designed to dramatically increase the high school and college graduation rates of the most disadvantaged students in society. The foundation is working with public libraries to provide computers, Internet access and training to public libraries in low-income communities in the United States and Canada. In addition, about \$300 million has been committed to community projects in the Pacific Northwest and more than \$432 million to special projects.

While Bill and Melinda Gates are actively involved, they have delegated the management of the foundation to Patty Stonesifer, a former Microsoft executive, and to Bill's father, William H. Gates, Jr. "Melinda has a strong interest in children and early childhood; Bill is very interested in medical interventions and new tools, in figuring out what is possible with new scientific technology; and they are both passionate about how these areas can work together," says Stonesifer.

In the words of Bill Gates: "Millions of lives can be and should be saved...this is a cause that deserves more visibility...saving lives...that's what it is all about."

