

Childhood Immunization:

PROTECTING INDIVIDUALS AND COMMUNITIES

To most people, immunization is as American as apple pie. One of the greatest public health achievements in modern times, immunization has saved millions of lives. Today, the U.S. has the highest coverage rates of childhood vaccines and the lowest incidence of vaccine-preventable disease in its history.

In fact, vaccines have been so successful that many people today have little firsthand knowledge of the diseases they prevent and their devastating effects. As a result, the public tends to take for granted the enormous protective benefits of vaccines.

At the same time, vaccines do carry certain risks, which, most of the scientific community agrees, are quite small. Nevertheless, questions have been raised about the value and safety of specific vaccines – underscoring the need for balanced, accurate information about vaccines and the diseases they prevent.

THE IMPORTANCE OF COMMUNITY IMMUNITY

Immunization provides a true public health benefit, in that it not only protects individuals from infectious disease, but their communities as well. The current level of protection against infectious diseases in the U.S. depends upon what immunologists and epidemiologists refer to as community immunity. Modern childhood vaccines are approximately 90 to 95 percent effective. This means that for every 20 children who are vaccinated, one or two may not develop a sufficient immune response to protect them from the virus or bacteria if they encounter it. In addition, a small percentage of the population cannot be vaccinated for medical reasons. These people are susceptible to disease. For them, community immunity is the only hope of protection because it prevents the spread of disease.

Today, all 50 states have varying sets of immunization requirements. Children cannot enter school or day care programs unless they have been immunized in accordance with state requirements. The establishment of these requirements has made a huge impact on disease control and is largely responsible for the high level of community

immunity in the U.S.

Maintaining community immunity is critical to protecting the public from infectious disease. When levels of immunization within a community drop too low to stop viruses and bacteria from spreading, epidemics are the result. In 1989-1991, the U.S. experienced a resurgence of measles, with 55,622 reported cases – mainly among children less than 5 years old – more than 11,000 hospitalizations, and 125 deaths. Recently, in California's San Francisco Bay area, two infants who were too young to be immunized themselves died of pertussis when the level of community immunity fell too low to protect them.

EFFORTS TO PROMOTE IMMUNIZATION

Many activities to increase immunization coverage and provide information about vaccines are underway in the U.S. The National Medical Association and Rotary International are among the groups that have immunization programs. Others, like Every Child by 2 and the Immunization Action Coalition, focus on improving immunization rates and disseminating information about immunization programs and policies.

Some groups, like the American Academy of Pediatrics, the American College of Obstetricians and Gynecologists, the American Public Health Association, the American College Health Association, and Healthy Mothers Healthy Babies, are also involved in immunization issues because of their constituencies and their missions. In addition, coalitions for victims of vaccine-preventable diseases and their families, such as Parents of Kids with Infectious Diseases (PKIDs) and the Hepatitis Foundation International, actively communicate on issues related to vaccines.

The National Immunization Program of the U.S. Centers for Disease Control and Prevention is engaged in a number of communication activities. These include an information hotline, a number of general and vaccine-specific publications, a web site, and collaborative efforts to disseminate accurate information about vaccines.

WHAT GRANTMAKERS ARE DOING

Foundations are also supporting immunization efforts. As more foundations focus on population-based health, health promotion, and disease prevention, they are coming to recognize immunization as an area where grantmaking can contribute significantly to the public health.

- *The Robert Wood Johnson Foundation* launched the All Kids Count (AKC) program in 1991, following a measles epidemic in which 120 people, mostly infants, died. AKC is a national network of demonstration projects to develop and implement community-based immunization registries for infants and toddlers. These registries perform a number of valuable services. For parents, they consolidate into one reliable list all the vaccines a child has received; provide a free copy of a child's immunization history for school, day care, or camp entry requirements; help ensure a child's immunizations are up to date; and provide reminders of immunizations due or missed. For communities, immunization registries help control vaccine-preventable diseases, sustain immunization rates or increase rates in pockets of need, and help identify high-risk or under-immunized populations.
- Other grantmakers are providing support for immunization registries as well. For example, a three-year, \$450,000 grant by *The Skillman Foundation* is funding a program to link physicians and other medical providers to the South-eastern Michigan immunization registry. Participation will help improve immunization coverage for children up to 3 years old. Previously, the Foundation provided support for the planning and development of the registry.
- *The Bill and Melinda Gates Foundation* funds immunization programs at two levels. Within the U.S., the Foundation has committed \$100 million toward speeding the delivery of several new vaccines that protect children against respiratory, diarrheal, and liver disease. Internationally, the Foundation's gift of \$750 million to the Global Fund for Children's Vaccines will help ensure that life-saving vaccines are accessible to children in poor countries.
- In Tennessee, the *Cumberland Pediatric Foundation* focuses its efforts on keeping both the medical community and the general public well informed on the increasingly complex issues surrounding immunization. The Foundation alerts pediatricians to new developments and breaking news stories on immunization via a fax-based rapid information network. The Foundation has also organized information forums with pediatricians, vaccine manufacturers, and the local news media to help disseminate balanced and accurate information on immunization issues.
- In 1994, the *John S. and James L. Knight Foundation* awarded \$1.7 million in grants to organizations in 26 cities

to establish or improve public awareness and parent education activities promoting childhood immunization. At the end of the two-year grant period, the grantees had educated more than 6,000 health care professionals and reached more than 119,000 parents. Since then, the Foundation has approved six transition grants to help projects at critical junctures strengthen their programs.

- *The Colorado Trust* has funded a five-year, \$1.8 million project to develop and implement strategies for ensuring that all Colorado children are fully immunized against infectious diseases. Late in 1996, The Trust convened and funded a statewide task force to examine immunization rates and come up with recommendations to improve them. Subsequently, the Colorado Children's Immunization Coalition was launched to implement the task force's strategies. In 1998, The Trust awarded \$515,980 to improve immunization rates in five Colorado communities through physicians and their staffs.
- In Ohio, *The Columbus Foundation* has funded a comprehensive health care and developmental screening program for children. This door-to-door immunization project, which provides vaccines and screening and preventive care services, was expanded in 1998.
- *The California Endowment* has also focused on pediatric immunization. The Endowment awarded a two-year, \$419,000 grant to develop a five-county, community-based immunization project. The goal is to achieve a 90 percent immunization rate for 2-year-olds.
- Some grantmakers are working in collaboration with government agencies to improve immunization rates. For example, *The Healthcare Foundation of New Jersey* has awarded a \$92,200 grant to the New Jersey Department of Health and Senior Services to develop a computerized immunization tracking system for children who live in the South Ward of Newark. In South Carolina, the Caswell County Health Department is working to improve coverage of child immunization, as well as breast and cervical cancer screening for the medically underserved, with a \$75,000 grant from the *Kate B. Reynolds Charitable Trust*.
- Many programs include immunization as part of a more comprehensive package of services that they provide for people who are medically underserved. The *Rose Community Foundation* has provided funding for a county health center located in a preschool that offers a range of child health services, including immunizations, simple lab work, and dental and mental health care. The Caring Program for Children, supported by the *Blue Cross Blue Shield of Michigan Foundation*, provides free, basic health care, including immunization, to uninsured Michigan children.