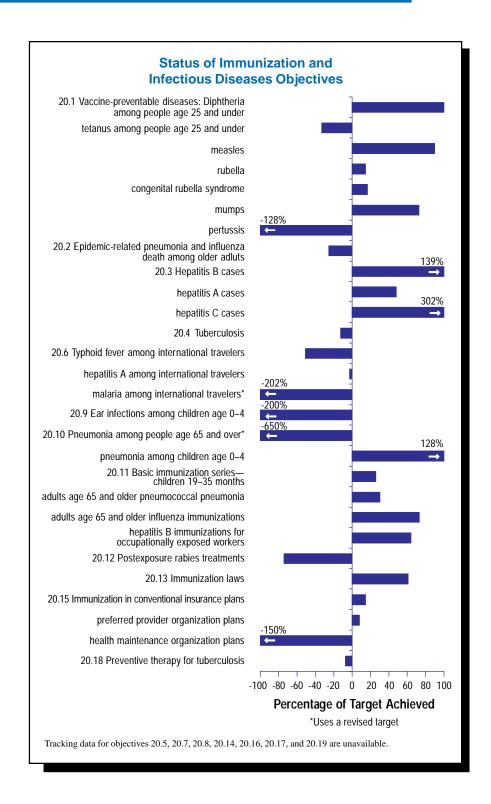
Immunization and Infectious Diseases



IMMUNIZATION AND INFECTIOUS DISEASES

The availability of vaccines and antibiotics, improved hygiene, regulations for food handling, and treated water supplies have led to tremendous inroads in preventing and controlling infectious disease. Constant surveillance and monitoring are necessary to control new, reemerging, and drug-resistant infectious agents currently causing illness and death in the United States. New infectious diseases such as Lyme disease, diarrhea caused by *Escherichia coli* 0157:H7, hantavirus pulmonary syndrome, and the large number of diseases associated with HIV infection continue to be major threats to public health.

The 19 objectives in priority area 20 set targets to decrease the number of cases of vaccine preventable diseases, viral hepatitis, and pneumonia and influenza deaths, and to reduce tuberculosis cases, surgical and nosocomial infections, illness among international travelers, bacterial meningitis, diarrhea in child care centers, and ear infections in children. The priority area also sets targets to increase the number of children and adults who are appropriately immunized and the number of States requiring immunizations.

Review of Progress

As of January 1995, substantial progress has been made in achieving the year 2000 objectives in this priority area. During 1993 and 1994 (provisional data), the number of cases of diphtheria, poliomyelitis due to wild virus, measles, mumps, and rubella had all decreased from the baselines. Although data are not available to assess progress against all causes of bacterial meningitis, the decline of Haemophilus influenza meningitis by over 95 percent since introduction of the new conjugate Hib vaccines in children suggests substantial progress toward the year 2000 target.

The U.S. map shows that 21 States and the District of Columbia had no measles cases in 1993. Eight States had 10 or more cases; no State had more than 100 cases. During 1994, reported measles cases increased but remained the second lowest total ever recorded. The international importation of an average of one measles case each week will continue to result in the spread of measles in the United States until improved coverage is achieved and sustained with the measles, mumps, and rubella (MMR) dose in preschool children and a second MMR dose in school- and collegeage children.

In contrast, disease incidence for pertussis reached a 25-year high in 1993 (6,586 cases). But in 1994 pertussis cases decreased by 40 percent to 3,590 cases. Sustaining decreases in pertussis incidence will require that acellular pertussis vaccines are introduced for infants, with booster doses for adolescents and adults. Tetanus in people aged 25 years and younger has shown a slight increase, with 36 cases reported in 1994.

In 1992 the overall immunization rate of children aged 19–35 months was 55 percent; in 1993, 67 percent of children in this age group had received four diphtheria,

tetanus, and pertussis (DTP) doses, three polio vaccine doses, and one measles containing vaccine. Full immunization levels can be aided by extension of State laws requiring immunization of children not only in schools but also in preschools and child care settings. In addition, insurance coverage of immunizations can facilitate receipt of vaccines.

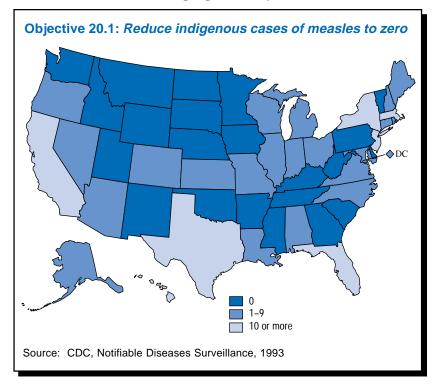
Immunization levels for pneumococcal pneumonia and influenza among adults 65 and older have increased. In 1993, 52 percent of older adults had received an influenza vaccination, and 28 percent had received a pneumococcal vaccination. However, epidemic-related pneumonia and influenza deaths among older adults continue to be substantial (estimated 50,000 to 70,000 deaths annually). Hepatitis A, B, and C have decreased. All the special population targets under hepatitis B are moving in the direction of the target. Hepatitis A among international travelers has decreased, but malaria and typhoid have increased. The increase in malaria may be attributable to an increase in the number of Americans traveling to areas with malaria, the increasing number of foreigners entering the United States, and the spread of antimalarial drug resistance.

Several factors have inhibited progress toward reducing ear infections in children, including the increased number of children in child care settings and the emergence of antimicrobial resistance. Outpatient office visits and the number of restricted activity days for otitis media in young children have increased. The development and evaluation of a new pneumococcal conjugate vaccine, and the identification of risk factors for infection could lead to new prevention strategies.

The rise in tuberculosis rates—particularly among Asians/Pacific Islanders, blacks, and Hispanics—requires that efforts be redoubled for people already infected. The

number who complete therapy to prevent the spread of the disease is moving away from the target.

Since the publication of *Healthy People 2000*, baselines have been established for objectives 20.5, 20.8, 20.14, 20.16, and 20.19. For many of these objectives, meeting the year 2000 targets poses great challenge.



Healthy People 2000 Midcourse Review and 1995 Revisions

1995 Revisions

A number of baselines have been revised, necessitating target revisions for objectives 20.2, 20.3, 20.6, 20.9–20.11, and 20.13. Black and Hispanic subobjectives have been added to 20.3 tracking hepatitis, and to objective 20.11, adult immunizations. Another revision is to track childhood immunizations through age 2 (19–35 months) rather than by age 2 (24 months).