The 20th Century's Ten Great Public Health Achievements in the United States*

Top 10 Achievements in Public Health

1. Vaccination
2. Motor-vehicle safety
3. Safer workplaces
4. Control of infectious diseases
5. Decline in deaths from coronary heart disease and stroke
6. Safer and healthier foods
7. Healthier mothers and babies
8. Family planning
9. Fluoridation of drinking water
10. Recognition of tobacco use as a health hazard

1. **Vaccination**
   Programs of population-wide vaccinations resulted in the eradication of smallpox; elimination of polio in the Americas; and control of measles, rubella, tetanus, diphtheria, Haemophilus influenzae type b, and other infectious diseases in the United States and other parts of the world.

2. **Motor-vehicle safety**
   Improvements in motor-vehicle safety have contributed to large reductions in motor-vehicle-related deaths. These improvements include engineering efforts to make both vehicles and highways safer and successful efforts to change personal behavior (e.g., increased use of safety belts, child safety seats, and motorcycle helmets and decreased drinking and driving).

3. **Safer workplaces**
   Work-related health problems, such as coal workers' pneumoconiosis (black lung), and silicosis -- common at the beginning of the century -- have been significantly reduced. Severe injuries and deaths related to mining, manufacturing, construction, and transportation also have decreased; since 1980, safer workplaces have resulted in a reduction of approximately 40% in the rate of fatal occupational injuries.

4. **Control of infectious diseases**
   Control of infectious diseases has resulted from clean water and better sanitation. Infections such as typhoid and cholera, major causes of illness and death early in the 20th century, have been reduced dramatically by improved sanitation. In addition, the discovery of antimicrobial therapy has been critical to successful public health efforts to control infections such as tuberculosis and sexually transmitted diseases (STDs).

5. **Decline in deaths from coronary heart disease and stroke**
Decline in deaths from coronary heart disease and stroke have resulted from risk-factor modification, such as smoking cessation and blood pressure control coupled with improved access to early detection and better treatment. Since 1972, death rates for coronary heart disease has decreased 51%.

6. **Safer and healthier foods**
Since 1900, safer and healthier foods have resulted from decreases in microbial contamination and increases in nutritional content. Identifying essential micronutrients and establishing food-fortification programs have almost eliminated major nutritional deficiency diseases such as rickets, goiter, and pellagra in the United States.

7. **Healthier mothers and babies**
Healthier mothers and babies are a result of better hygiene and nutrition, availability of antibiotics, greater access to health care, and technologic advances in maternal and neonatal medicine. Since 1900, infant mortality has decreased 90%, and maternal mortality has decreased 99%.

8. **Family planning**
Access to family planning and contraceptive services has altered social and economic roles of women. Family planning has provided health benefits such as smaller family size and longer interval between the birth of children; increased opportunities for preconceptional counseling and screening; fewer infant, child, and maternal deaths; and the use of barrier contraceptives to prevent pregnancy and transmission of human immunodeficiency virus and other STDs.

9. **Fluoridation of drinking water**
Fluoridation of drinking water began in 1945 and in 1999 reaches an estimated 144 million persons in the United States. Fluoridation safely and inexpensively benefits both children and adults by effectively preventing tooth decay, regardless of socioeconomic status or access to care. Fluoridation has played an important role in the reductions in tooth decay (40%-70% in children) and of tooth loss in adults (40%-60%).

10. **Recognition of tobacco use as a health hazard**
Recognition of tobacco use as a health hazard in 1964 has resulted in changes in the promotion of cessation of use, and reduction of exposure to environmental tobacco smoke. Since the initial Surgeon General's report on the health risks of smoking, the prevalence of smoking among adults has decreased, and millions of smoking-related deaths have been prevented.

*According CDC's MMWR Web Page