

## History of Public Health in Colorado

*From Health in Colorado: The First One Hundred Years, Rowene Danbom, 1969, and other sources. Adapted.*

**E**arly disease reports: After Lt. Zebulon Pike and Major Stephen Long came to explore the Louisiana Territory, trappers and traders came to the area for fur trading, gathering at various forts along Colorado's rivers. They brought measles and smallpox to the Indians. The first recorded epidemic, in 1849, caused many deaths from cholera among people in wagon trains heading to the Oregon Trail who drank from polluted wells in the Julesburg area.

The discovery of gold in 1858 brought 100,000 people to the territory. There was little concern for sanitation. Human sewage was dumped into streams, and typhoid fever spread.

### **Colorado, a mecca for consumptives**

After the Civil War, Colorado gained a reputation as a health resort due to its sunshine, clean air and hot mineral springs. Thousands of people came to the state seeking a cure for consumption (now known as tuberculosis), and many hospitals and sanatoriums sprang up to serve them. At one point, someone estimated that one-third of the state's population came to Colorado for health reasons.

### **Board of Health**

In 1876, a Territorial Board of Health in the Colorado Territory was established, consisting of nine male physicians. The board's goals were to study vital statistics, study the influence of climate on disease and health in different localities for citizens and invalids who came to seek relief, make sanitary investigations on the cause of disease and recommend hygiene for schools. Colorado became a state that year.

The next year, in 1877, the State Board of Health replaced the Territorial Board of Health. Its goals were similar: to collect and study vital statistics to determine the causes of illness and death, control epidemics and contagious disease, and advise on proper sources of water supplies and sewage disposal. The board's first official vital statistics report showed that 24.7% of deaths were caused by consumption (tuberculosis), 7.8% by diphtheria, 5.4% by scarlet fever and pneumonia, and 5% by heart disease.

### **Public Health Nursing services established**

Public health nursing was initiated in Colorado on November 7, 1889, when a group of women volunteers, known as Denver's Flower Mission, was organized to visit Denver's sick. Two nurses were hired in 1892, and a third in 1905. The Flower Mission was incorporated as the Visiting Nurse Association in 1905. In the period from 1921-1925, the Colorado Tuberculosis Association established public health nursing services in eleven counties.

### **Disease control**

The first state law for controlling communicable diseases in Colorado was passed in 1893. As early as 1893, the exploitation of persons with venereal disease had become of such great concern that the legislature passed a measure prohibiting "the advertisement of substances to cure private diseases, prevent conception or produce abortion."

### **First employees**

The State Board of Health hired its first employees in 1900, a stenographer and clerk to compile vital statistics. The board's first complete mortality report showed the top four causes of death in Colorado were TB (1,303), typhoid fever (333), scarlet fever (316) and

diphtheria (212). In 1902, the State Board of Health recommended that the State Superintendent of Public Instruction require all pupils to be immunized before attending school, but the recommendation was largely ignored.

By 1904, the State Board of Health had five employees with a monthly payroll of \$375.

#### **Laws passed, programs begun**

In 1907, the legislature created and funded a pure food division. The legislature also authorized a state system of birth and death registration, but the vital statistics function was not funded until 1910, when the board's staff had increased to 13 employees. The legislature gradually gave additional authority to the Board of Health to protect public health, as it became aware of problems.

In 1909, the Board was charged with inspection and licensing of hospitals, dispensaries and sanatoriums and upgrading of standards for those institutions. A Colorado State Committee for the International Congress on Tuberculosis (later the Colorado Tuberculosis Association) was established. Legislation was passed abolishing public drinking cups and compelling tuberculosis registration. In 1913, the TB Association, in cooperation with the State Board of Health, conducted the first concerted educational campaign to call attention to contamination of Colorado waters.

The Board of Health was traditionally composed only of physicians until 1916, when two lay members were appointed. By that time, the Board had five divisions: vital statistics, medical inspection (epidemiology), bacteriology, chemistry, and food and drugs.

Five other divisions were created in the next 19 years including: plumbing inspection (1917); venereal disease (1918) changed to social hygiene (1925); public health nursing (1922); enlarged to child hygiene and public health nursing (1925); sanitary engineering (1925); and administration (1925). Also, in 1925, medical inspection was changed to epidemiology.

#### **Traveling health clinics**

Funded by the 1921 Sheppard-Towner Act, the TB Association started traveling health clinics along with the State Board of Health, University of Colorado Extension Division, State Welfare Bureau and State Dental Association. Public health nurses also participated in these clinics. The clinics offered child welfare conferences, free physicals for pre-school children, help with public health and community issues, and exhibits on child welfare and public health. Colorado was a forerunner in using the traveling clinic concept; and the clinics were tremendously successful.

#### **Disease Reporting**

On Feb. 7, 1916, the State Board of Health passed a regulation requiring physicians to report cases of venereal disease without names and addresses, but it was unsuccessful. In 1918, the legislature created a venereal disease division and empowered the board to develop regulations covering VD. A few years later, the legislature created a 28-bed detention home for women infected with VD, which ran from April 1920 to October 1925, when it closed due to lack of funds. The division of venereal disease operated free VD clinics around the state until 1933, when appropriations were stopped. Control efforts were resumed in 1937.

#### **State Health director named**

In 1935, the Social Security Act provided federal funds for health and sanitation work in Colorado. That year, Dr. Roy L. Cleere was named executive officer of the State Division of Public Health and the secretary of the State Board of Health. The division had 14 employees and a \$40,000 budget.

### **Sabin, public health crusader**

In 1944, the governor appointed a Subcommittee on Health with a retired physician and researcher, Dr. Florence Sabin, as chair. She secured foundation funding and got the American Public Health Association to do a health survey of Colorado. The Buck report was issued in January 1946. Buck said 8,245 deaths from 1940-44 could have been prevented had the state used known prevention techniques.

Dr. Sabin organized a statewide campaign to update public health laws, going to every county and speaking to local clubs and groups with local statistics about their health status. She was successful in getting seven of eight proposed laws passed in the 1947 state legislature. The bills reorganized the state health department and authorized various local health units. The laws also appropriated money for public health departments and the medical school, enabled the state to participate in a federal hospital construction program, and increased the per diem rate for poor TB patients and built 30 hospital beds for them.

Sabin's grassroots public awareness campaign about the need for better public health laws resulted in the expansion of both state and local health services. In 1948, the first immunization program was planned to reduce deaths from whooping cough and measles.

### **Local health departments established**

A number of local health departments were established with their own local boards of health. Otero County was the first in 1924, but it disbanded during the depression and was re-established in 1938, along with Weld County. Other local health departments were established: 1939, El Paso and Denver; 1944, Las Animas (joined by Huerfano in 1951); 1948, Tri-County, Northeast and San Juan Basin; Mesa; 1952, Pueblo; 1954 Boulder; 1958, Jefferson; 1968, Larimer; 1981 Delta; and 2001, Broomfield.

### **Push for environmental protection began**

Development and refinement of environmental protection programs began in the last half of the century. In 1950, the state health department joined federal officials in studying the effects of exposure to radioactive ores.

In 1959, a study of sewage effluent control measures was done. In 1962, the first statewide air pollution study was done, leading to the air pollution control program. In 1966, the federal water pollution control law led to emphasis on proper sewage treatment and wastewater treatment to prevent disease outbreaks. Colorado's solid waste disposal legislation passed in 1967.

In 1970, the first Earth Day marked the beginning of a major push for improving the environment. At the federal level, the Environmental Protection Agency was created and the National Environmental Policy Act was passed.

In 1976, federal hazardous waste law was passed to track hazardous waste from "cradle to the grave." The state eventually assumed control of the program. In 1986, the Superfund law was passed to clean up the nation's worst toxic waste sites around the country. Colorado also became involved in that program and in additional measures authorized under amendments to that law.

During the 1980's, there were major declines in death rates for three of the leading causes of death among Americans: heart disease, stroke, and unintentional injuries. Infant mortality also decreased, and some childhood infectious diseases were nearly eliminated. Much of our progress mirrors reductions in risk factors. The more than 40 percent drop in heart disease mortality since 1970 reflects dramatic increases in high blood pressure detection and control, a decline in cigarette smoking, and increasing awareness of the role

of blood cholesterol and dietary fats. The precipitous drop in stroke death rates-over 50 percent in the same period-also reflects gains in hypertension control and declines in smoking.

Unintentional injuries have declined. In the last decade and a half, traffic fatalities dropped by one third, partly reflecting increased use of seatbelts, lower speed limits, and declines in alcohol abuse. Recent reductions in fatal occupational injuries have been facilitated by enhanced occupational safety standards. Studies are beginning to yield promising approaches to alcohol and other drug problems.

Progress has been made in the health status of children as well. In 1987, we achieved a record low rate of 10.1 infant deaths per 1,000 live births. Although still higher than rates in many other developed countries, this figure represents a 65 percent decline since 1950. Preventable childhood diseases, such as mumps, measles, and rubella, are now unusual in this country due to the widespread use of vaccines. (Healthy People 2000)

Healthy People 2010 is the current prevention agenda for the nation. It is a statement of national health objectives designed to identify the most significant preventable threats to health and to establish national goals to reduce these threats. ***The overall goals of Health People 2010 are to increase quality and years of healthy life, and to eliminate health disparities.***

**Supporting these goals are 28 focus areas:**

1. Access to Quality Health Services
2. Arthritis, Osteoporosis, and Chronic Back Conditions
3. Cancer
4. Chronic kidney disease
5. Diabetes
6. Disability and Secondary Conditions
7. Educational and Community-Based Programs
8. Environmental Health
9. Family Planning
10. Food Safety
11. Health Communication
12. Heart Disease and Stroke
13. HIV
14. Immunization and Infectious Diseases
15. Injury and Violence Prevention
16. Maternal, Infant and Child Health
17. Medical Product Safety
18. Mental Health and Mental Disorders
19. Nutrition and Overweight
20. Occupational Safety and Health
21. Oral Health
22. Physical Activity and Fitness

23. Public Health Infrastructure
24. Respiratory Diseases
25. Sexually Transmitted Diseases
26. Substance Abuse
27. Tobacco Use
28. Vision and Hearing

In order to measure the health of our nation over the next 10 years, the Leading Health Indicators will be used. Each of the 10 Leading health Indicators has one or more objectives from Healthy People 2010 associated with it. As a group, the Leading Health Indicators reflect the major health concerns in the United States at the beginning of the 21<sup>st</sup> century. The Leading Health Indicators were selected on the basis of their ability to motivate action, the availability of data to measure progress, and their importance as public health issues.

**They are:**

1. Physical Activity
2. Overweight and Obesity
3. Tobacco Use
4. Substance Abuse
5. Responsible Sexual Behavior
6. Mental Health
7. Injury and Violence
8. Environmental Quality
9. Immunization
10. Access to Health Care
- 11.

To learn more about Healthy People 2010, see Appendix B or go to their website at [www.healthypeople.gov](http://www.healthypeople.gov).