



California's Ambulance Services During the 1960s



By Irma West, MD

A TRIP IN A CALIFORNIA AMBULANCE in the 1960s costed about \$45 in metropolitan and \$60 in rural areas. Half the ambulances did not have enough head room to provide emergency care. Less than 10 percent had direct radio communication with a hospital.

Required of the driver (or attendant, if there was one) was an Advanced Red Cross First-Aid Certificate. Most drivers and attendants worked part time and 25 percent were volunteers. In the rural areas, 64 percent were volunteers. About 40 percent of drivers were not required to have an ambulance driver's license. Fewer commercial ambulance operators showed a profit than showed a loss or broke even. Most had support from other businesses.

These were a few of the findings in California's Ambulance Survey-Final Report¹ conducted 1968-1970 in response to the National Highway Safety Act of 1966. It required that "Every state in cooperation with its local political subdivisions shall have a program to insure that persons involved in highway accidents receive prompt emergency medical care under the range of conditions encountered."

Compliance was a condition for receiving federal highway construction funds. California was unable to meet this standard because it had no data. Services had developed independently at the local level.

With unusual speed, federal money was transferred from the state Business and Transportation Agency to the Department of Public Health for a survey and recommendations to meet the federal standard. The project was headed by a physician (me) and included a nurse, a paramedic, an epidemiologist, a statistician, two secretaries, and a part-time aircraft pilot.

An advisory committee was assembled representing government and private organizations. Thirty technical consultants were appointed. The effort took two years and produced an inch-thick comprehensive detailed report and many recommendations. Each county received an individual report and was ranked in accordance to its needs.

Obtaining a complete inventory of ambulance operations serving the public was tedious, and even more difficult when it came to special groups, such as industry, the military, state and federal institutions, and those serving racetracks and other sporting events. The first unexpected finding was how many there were. The highest estimate had been 450. The study documented 612 ground, 88 air and 1 boat ambulance service.

An 18 page questionnaire was mailed to each operator and an abbreviated version to the military. To improve chances of receiving replies, \$5 (more than \$50 in today's money) was offered for each completed questionnaire. And 95 percent responded!

Because the military had documented superior emergency care and transportation of wounded, a part of the survey was directed toward comparing California's capabilities. Additional questionnaires were sent to emergency care physicians, California Highway

Patrol commanders, Red Cross chapters and the county Emergency Medical Committees established in 1968. The pilot tracked the air ambulances and visited each one.

About two-thirds of the ambulance operations served the public. Of these, 64 percent were commercial, 20 percent were tax supported, usually from fire or police departments, and the others were voluntary or non profit. About 11 percent of the commercial operations came from Funeral Homes. The ratio of services to population was 1 to 60,000. California, with 10 percent of the nation's population, had 6 percent, or 1557, of the nation's ambulances.



Two Sacramento policeman stand next to a victim on a stretcher, circa 1945.

The photograph is from the Noel LaDue Collection at the Sacramento Archives and Museum Collection Center, and used with their permission.

Operators serving the public reported 743,182 trips in 1968; almost half were emergencies. Traffic accidents accounted for 15 percent of all trips and 35 percent of emergency trips. For voluntary ambulances, most often from rural areas, traffic accidents accounted for half of their trips. One in 1,500 emergency trips was made by helicopter.

Ambulance operators lauded the Highway Patrol for the services rendered to traffic accident victims, and saved their harshest criticism for poor emergency services at some hospitals; at times the ambulance was turned away.

One-fourth of the geographic area of the state was notably deficient in ambulance services. Not included in this assessment were uninhabited areas without traffic. In rural areas, the nearest service might take over 30 minutes to arrive at the scene, and the hospital could be 100 miles away. These delays in themselves were judged inadequate emergency care and transportation, no matter how skilled and well equipped the ambulance service was when it arrived.

More persons per 1,000 population were injured in rural highway accidents, their survival rate was worse, they died of less severe injuries, and they died sooner after their injuries. In rural areas, most of the ambulance personnel were part-time volunteers and an attendant was less likely to be on the ambulance. Thirty-two percent of emergency trips in rural areas were for non-residents, while only 5 percent were for outsiders in metropolitan areas. Response time in metropolitan areas was 10 minutes or less.

Only Los Angeles County had a communications center. Call boxes along highways were experimental. The 911 system was on the drawing board. Most ambulances had two-way radios but half the operators reported that they were ineffective in part of the area served. Three-quarters of the ambulance services were not listed among the emergency numbers in the telephone directory and 13 percent were not listed anywhere.

Station wagon and van ambulances without headroom were a national problem. In 1969, the National Academy of Sciences, National Research Council convened an advisory group (including me) to set standards for ambulance construction and equipment. Ambulances began their conversion to roomy trucks.



This ambulance was built by Jame C. Cunningham and Sons, Rochester, NY, and used in Bar Harbor, Maine, until the 1950s; it was also used as a hearse. Its body is made of hand-formed aluminum

The photo was taken by Dr. Robert LaPerriere and used with permission of Peter Cunningham, the vehicle's owner and the great grandson of James C. Cunningham, the builder of the Towe Auto Museum in Sacramento.

It was clear that emergency medical transportation, particularly in the rural areas, was on a financial starvation diet. Compliance with the most basic recommendations of the survey would require substantial new financial resources and improved governmental administrative and regulatory responsibility.

For example, all parties to the survey agreed that medically directed paramedical training at educational institutions must be provided and required for ambulance personnel, and they

recommended that a state law require an attendant as well as the driver present whenever a patient was in an ambulance. Neither could be required without first finding the resources to make it possible.

We often lament passage of the "good old days." But today's ambulance services are far superior to those of a half century ago.

imariewest@aol.com

1. Available at the SSVMS Museum of Medical History.

Sierra Sacramento Valley Medical Society
5380 Elvas Avenue #100 • Sacramento, CA 95819
916.452.2671 PH • 916.452.2690 FX • Email: info@ssvms.org

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