

investigative work of this Division are known to have made important contributions.

*Example A. Work life expectancy of American males at birth.*¹—

	Years		Years
1900-----	32. 1	1950-----	41. 9
1940-----	38. 3	1960-----	41. 4

¹ "The Length of Working Life for Males, 1900-60," Manpower Report No. 8, Manpower Administration, U.S. Department of Labor, July 1963, p. 7. The report explains (p. 1): "During the decade of the 1950's, the length of working life—a key indicator of economic and social development—reversed its long-term rise. Work life expectancy for men declined by one-half year between 1950 and 1960. This decline is associated with a longer training period prior to entering upon a work career and a drop in the age of retirement, both of which are hallmarks of modern industrial society. During past periods the effects on the length of working life of the longer training period and earlier retirement had been offset by large increases in life expectancy, and work life expectancy had continued to increase. Between 1900 and 1950 life expectancy for a male child increased 18 years, from 48 to 66 years. Work life expectancy also rose but only by 10 years, from 32 to 42 years."

Example B. Silicosis prevention.—In the early studies of this Division conducted between 1914 and 1930, silicosis-prevalence rates as high as 75 percent were common in many industries, especially metal mining. A re-evaluation of the silicosis problem in the metal-mining industry between the years 1958 and 1961 demonstrated a prevalence rate of 3.4 percent. The continued application of engineering and medical control procedures could lead to the total elimination of silicosis in the mining industry.

In the mid-1930's this Division made a detailed study of the granite-cutting industry of Vermont and recommended control procedures. A re-evaluation study of the granite-cutting industry in 1955 indicated that not a single case of silicosis had developed in this industry among employees who started work subsequent to the installation of dust control procedures.

Example C. TNT poisoning.—As a result of this Division's work, disability and death rates during World War II from toxic exposure were lowered to a point never before achieved. The progress may be illustrated by comparison of the number of occupational diseases arising from the manufacture of TNT during World Wars I and II. During the 17½ months of World War I, 475 workers in American arsenals died and 17,000 were disabled because of TNT poisoning. In that war, the United States was supplying only 40 percent of the ammunition for its allies. In World War II, when the United States provided 95 percent of the ammunition for its allies, close supervision of TNT operations by industrial hygienists of the Division of Occupational Health succeeded in controlling the hazard so well that there were only 22 deaths in 35 months.

Example D. Lead poisoning.—In 1920 lead poisoning was a serious occupational disease in many major industries, including lead mining and refining, pottery, battery manufacture, tetraethyl lead manufacture, and others. At present, clinical lead poisoning is rare among industrial workers, although some cases of borderline lead intoxication are reported.

Example E. Mercury poisoning.—Disability due to mercury poisoning in the felt hatting industry was extremely high during the 1930's and early 1940's. Mercury causes a severe neurological disability which ultimately leads to death. Through studies of this industry the incidence of mercury poisoning was greatly reduced. Subsequently, through research, a substitute for mercury was found which totally eliminated the problem. At the present time, mercury poisoning is also a clinical rarity in the United States.