different states were involved in the death certificate search. No doubt the quality of the records and the diligence with which the search was made differed somewhat from state to state. Diagnostic fashions probably also differ from area to area, so that some of the deviations from nationally derived expected numbers of deaths for specified causes could be due to the fact that diagnostic criteria differed somewhat from place to place.

The mortality experience for the cohorts shown in Table 1 were accumulated starting with entry into the study some time between 1948 and 1951 and ending on June 30, 1963. The number of deaths by cause and by period in which they occurred are shown in Table 2. There were increasing numbers of deaths with time, as would be expected in a population that is aging and which is losing some of its initial advantage of being healthy enough to work. This increase with time is also apparent for most causes except violence, where one might expect not much of a trend. Deaths due to cencer increased for all four industries, although the increase was quite modest for cotton textile products workers. On only one of 1,853 death certificates examined did the term "mesothelioma" appear, and this was for a worker in the asbestos building products industry.

Cancer of the respiratory system increased with time in all industries except among workers in cotton textile products plants. Changes in specific causes of death with time might, of course, be in part an artifact due to changes in diagnostic criteria, even within the same area of the United States. The deaths for which the underlying cause was asbestosis appear to have increased for workers in asbestos building products and asbestos textile products shows little trend for asbestos friction materials.

Person-years experience by age and period appear in Table 3. Use was made of these data in computing expected numbers of deaths by age and cause by applying the white male age-cause specific death rates for the years 1950, 1955, and 1960 to person-years experience accumulated by age in the appropriate time periods. Ratios of observed to expected number of deaths (× 100) are shown on Table 4. These Standardized Mortality Ratios (SMRs) were calculated for each of the causes of death in Table 2, with the exception that ratios are not shown for asbestosis since the overall mortality for this cause in the United States is extremely low. The cohort of 21,755 workers produced 11 deaths with asbestosis listed as the underlying cause at ages under 65 and 50 asbestosis deaths at all ages, while the total number of deaths due to asbestosis recorded among white males at all ages for the entire United States during the 13-year period 1950 to 1962 was 160. Thus, this cohort contained only a tiny fraction of the white male adult population produced nearly a third of the deaths due to asbestosis in the United States during the study period.

For Table 4, death certificates which could not be located were distributed by cause like those which were located within each of the four industrial classifications. It is not known whether any appreciable bias is introduced by this procedure, however, in view of the fact that failure to locate death certificates was probably in most instances due to administrative reasons it might be argued that the unlocated certificates were essentially a sample of the whole.

Table 3.—*Person Years of Experience Through June 30, 1963, for White Males Aged 15 to 64, Who Worked in US Selected US Asbestos and Cotton Textile Plants at Some Time During 1948-1951, by Age Group and Calendar Period*

Age in Calendar Period	Asbestos Building Products			Asbestos Friction Materials			Asbestos Textile Products			Cotton Textile Products		
	1948-1952	1953-1957	1958-1963	1948-1952	1953-1957	1958-1963	1948-1952	1953-1957	1958-1963	1948-1952	1953-1957	1958-196
Total 15-64	51,357	58,934	60,908	29,341	34,902	35,361	7,094	8,605	8,716	25,516	29,258	29,6
15-24	9,692	2,600	13	4,202	1,448	12	969	454	2	5,080	2,249	
25-34	19,308	23,641	14,094	9,636	11,877	7,136	2,287	2,499	1,646	7,057	9,333	7,3
35-44	12,098	17,924	24,817	7,673	10,936	13,334	2,100	2,965	3,173	6,366	7,845	9,2
45-54	6,736	9,968	14,681	4,618	6,785	9,816	1,174	1,827	2,665	4,411	6,423	7,9
55-64	3,523	4,801	7,303	3,212	3,856	5,063	564	860	1,230	2,602	3,408	4,9