

444 *OCCUPATIONAL TUMORS AND ALLIED DISEASES*

by the company's physicians. The following compilation shows the distribution of these deaths based on the different years and age groups.

Num- ber of Miners	Year	Age up to	25	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60 and over	To- tal
595	1879			2	4	2	1	3	2	1	1	16
663	1880				4	1		3	1		1	8
641	1881				1	2	1		3	2	2	9
634	1882		2		4	3		1	1	1	1	9
621	1883					1	1		1	3	3	8
633	1884			1	1	3	6	1		2		12
641	1885			1	1	1	2	2	1	2		10
			2	4	15	13	11	10	9	11	8	72

While, during the subsequent years, the incidence of pulmonary malignancy gradually decreased with the reduction of the number of miners employed, there were still 140 fatalities from this disease among the Schneeberg miners from 1879 to 1915. In the last two years of this period, only one case occurred in each year. A high degree of lung cancer morbidity and mortality seems to have existed, however, among the retired miners, as Arnstein stated that, during 1907 to 1911, one-third of these former miners who had been retired for incapacitation, had lung tumors, whereas 44 per cent of their fatalities were caused by this neoplastic condition.

The next investigation on the occurrence of pulmonary malignancy took place seven years later (1922), and covered the following 3 years and 6 months (Rostoski, Saupe and Schmorl). In a report published in 1926 these authors stated that, of 154 active and retired miners, 21 had died during this period. In thirteen cases, the autopsy showed the presence of a carcinoma of the lung, while of the 8 remaining cases, on whom a postmortem was not performed, two were strongly suspected of having also died from this condition, that is, 62 per cent and possibly even 71 per cent of all fatalities among the miners, were caused by a pulmonary malignancy. During 1926 to 1935, there was a total of 36 cases (Koelsch) of the Schneeberg disease. Hueck added, in 1939, 5 new cases which had occurred during the last three years and were found among 6 autopsies performed on miners in this period. The estimated total fatalities from lung carcinoma among the Schneeberg miners, for 1869 to 1939, are approximately four hundred. There seems to have occurred little change in the relative proportion of this cause of death to the total number of deaths. Three out of every four miners dying during these years were killed by neoplastic disease of the lungs (Weber (1926)).

An analysis of the number of deaths from lung cancer in relation to the number of miners employed and retired, indicates that the incidence during