

TABLE 2 Employment Statistics for Identified but Unmeasured Dial Workers

Employment Period	Number of Females	Number of Males	Total Number
Before 1915	11	3	14
1915-1919	297	111	408
1920-1924	221	33	254
1925-1929	177	11	188
1930-1934	30	2	32
1935-1939	31	4	35
1940-1944	761	43	804
1945-1949	181	46	227
1950-1954	108	16	124
1955-1959	27	6	33
After 1959	26	17	43
Date unknown	40	23	63
Total	1,910	315	2,225

Workers who started painting after 1950 are poorly represented in the measured population, because of the time period in which these employees were identified. Most of the postwar employees of the U.S. Radium Corporation in Bloomsburg, Pennsylvania, were identified in the late 1970s, and thus only a few of them were measured before budget restrictions stopped the recruitment of new cases. The files list 1,533 unmeasured employees from this plant.

### Early Findings on Health Effects of Radium

The early studies of the effects of internally deposited radium reflect the pioneering efforts of many individuals, but the role of Dr. Harrison S. Martland is preeminent. Martland was the chief medical examiner of Essex County, New Jersey, putting him in an excellent position to investigate the problems at the dial painting plant in Orange, New Jersey. The published record, however, was started by a dentist, Dr. Theodor Blum (1924), who described an unusual mandibular osteomyelitis in a dial painter, a condition he called "radium jaw." Next came the report by Dr. Frederick L. Hoffman (1925), a statistician for the Prudential Insurance Company, whose attention had been drawn to the dial painters by the New Jersey Consumer's League.