

Table 2. Observed and Expected Exposures to Wells G and H for 20 Childhood Leukemia Cases

Case	Year of diagnosis	Year of birth	Period of residency	Observed cumulative exposure	Size of risk set sample	Expected cumulative exposure (var)	Proportion of risk set exposed
1	1966	1959	1959–1966	1.26	218	.31 (.26)	.33
2	1969	1957	1968–1969	0	290	.34 (.36)	.26
3	1969	1964	1969	.75	265	.17 (.10)	.25
4	1972	1965	1965–1972	4.30	182	.90 (2.23)	.36
5	1972	1968	1968–1972	2.76	183	.58 (.88)	.32
6	1973	1970	1970–1973	.94	170	.20 (.20)	.19
7	1974	1965	1968–1974	0	213	.56 (1.04)	.29
8	1975	1964	1965–1975	0	239	.99 (2.78)	.38
9	1975	1975	1975	0	115	.09 (.03)	.25
10	1976	1963	1963–1976	.37	219	1.18 (3.87)	.40
11	1976	1972	1972–1976	0	132	.24 (.32)	.18
12	1978	1963	1963–1978	7.88	219	1.41 (6.23)	.40
13	1979	1969	1969–1979	2.41	164	.73 (2.56)	.31
14	1980	1966	1966–1980	0	199	1.38 (6.00)	.39
15	1981	1968	1968–1981	0	187	1.14 (4.20)	.35
16	1982	1979	1979–1982	.39	154	.08 (.02)	.23
17	1983	1974	1974–77, 1980–83	0	84	.25 (.45)	.23
18	1982	1981	1981–1983	0	—	0 (0)	0
19	1983	1980	1980–1982	0	—	0 (0)	0
20	1983	1980	1981–1983	0	—	0 (0)	0
Totals				21.06		10.55 (31.52)	5.12
Score test statistic:						1.87	2.08
Significance level:						$P = .03$	$P = .02$

NOTE: Risk set for a case consists of children born in the same year as the case and who were residents of Woburn when the case was. Variance of proportion, say  $p$ , of risk set exposed equals  $p(1 - p)$ . Cases 18–20 do not contribute to the test statistic because birth occurred after closure of wells G and H.