

Bigger, Joseph W./ O'Meara, Robert A.Q. (1930) : Irish Life Tables, Nos. 1 and 2, for the years 1911 and 1926, and some of the more important deductions from them, In: American Journal of Epidemiology, Jan. 1932, 15: 138 – 162.

IRISH LIFE TABLE NO. 2.

Males (1926)

Age	l_x	d_x	p_x	q_x	L_x	T_x	e_x°	Age
0	100000	8135	.91865	.08135	93839	5674147	56.75	0
1	91865	1915	.97915	.02085	90908	5580308	60.74	1
2	89950	853	.99052	.00948	89524	5489400	61.03	2
3	89097	538	.99396	.00604	88828	5399876	60.61	3
4	88559	376	.99575	.00425	88371	5311048	59.97	4
5	88183	317	.99641	.00359	88025	5222677	59.23	5
6	87866	263	.99701	.00299	87735	5134652	58.44	6
7	87603	216	.99753	.00247	87495	5046917	57.61	7
8	87387	178	.99796	.00204	87298	4959422	56.75	8
9	87209	151	.99827	.00173	87134	4872124	55.87	9
10	87058	134	.99846	.00154	86991	4784990	54.96	10
11	86924	131	.99849	.00151	86859	4697999	54.05	11
12	86793	143	.99835	.00165	86722	4611140	53.13	12
13	86650	172	.99802	.00198	86564	4524418	52.21	13
14	86478	199	.99770	.00230	86379	4437854	51.32	14
15	86279	225	.99739	.00261	86167	4351475	50.43	15
16	86054	250	.99709	.00291	85929	4265308	49.57	16
17	85804	275	.99680	.00320	85667	4179379	48.71	17
18	85529	298	.99652	.00348	85380	4093712	47.86	18
19	85231	320	.99624	.00376	85071	4008332	47.03	19
20	84911	341	.99598	.00402	84741	3923261	46.20	20
21	84570	359	.99575	.00425	84391	3838520	45.39	21
22	84211	374	.99556	.00444	84024	3754129	44.58	22
23	83837	384	.99542	.00458	83645	3670105	43.78	23
24	83453	389	.99534	.00466	83259	3586460	42.98	24
25	83064	393	.99527	.00473	82868	3503201	42.17	25
26	82671	396	.99521	.00479	82473	3420333	41.37	26
27	82275	401	.99513	.00487	82075	3337860	40.57	27
28	81874	407	.99503	.00497	81671	3255785	39.77	28
29	81467	414	.99492	.00508	81260	3174114	38.96	29
30	81053	421	.99480	.00520	80843	3092854	38.16	30
31	80632	429	.99468	.00532	80418	3012011	37.36	31
32	80203	436	.99456	.00544	79985	2931593	36.55	32
33	79767	444	.99444	.00556	79545	2851608	35.75	33
34	79323	450	.99433	.00567	79098	2772063	34.95	34
35	78873	457	.99421	.00579	78645	2692965	34.14	35
36	78416	465	.99407	.00593	78184	2614320	33.34	36
37	77951	477	.99388	.00612	77713	2536136	32.53	37
38	77474	493	.99364	.00636	77228	2458423	31.73	38
39	76981	510	.99337	.00663	76726	2381195	30.93	39
40	76471	531	.99306	.00694	76206	2304469	30.14	40
41	75940	552	.99273	.00727	75664	2228263	29.34	41
42	75388	574	.99238	.00762	75101	2152599	28.55	42

IRISH LIFE TABLE NO. 2. *Males (1926)—Continued*

Age	l_x	d_x	p_x	q_x	L_x	T_x	e_x^o	Age
43	74814	596	.99203	.00797	74516	2077498	27.77	43
44	74218	617	.99168	.00832	73910	2002982	26.99	44
45	73601	641	.99129	.00871	73281	1929072	26.21	45
46	72960	668	.99084	.00916	72626	1855791	25.44	46
47	72292	701	.99031	.00969	71942	1783165	24.67	47
48	71591	739	.98968	.01032	71222	1711223	23.90	48
49	70852	781	.98897	.01103	70462	1640001	23.15	49
50	70071	828	.98818	.01182	69657	1569539	22.40	50
51	69243	876	.98735	.01265	68805	1499882	21.66	51
52	68367	924	.98648	.01352	67905	1431077	20.93	52
53	67443	967	.98566	.01434	66960	1363172	20.21	53
54	66476	1006	.98487	.01513	65973	1296212	19.50	54
55	65470	1049	.98398	.01602	64946	1230239	18.79	55
56	64421	1103	.98288	.01712	63870	1165293	18.09	56
57	63318	1176	.98142	.01858	62730	1101423	17.40	57
58	62142	1281	.97938	.02062	61502	1038693	16.71	58
59	60861	1410	.97683	.02317	60156	977191	16.06	59
60	59451	1543	.97405	.02595	58680	917035	15.43	60
61	57908	1658	.97137	.02863	57079	858355	14.82	61
62	56250	1737	.96912	.03088	55382	801276	14.24	62
63	54513	1758	.96775	.03225	53634	745894	13.68	63
64	52755	1738	.96705	.03295	51886	692260	13.12	64
65	51017	1713	.96642	.03358	50161	640374	12.55	65
66	49304	1714	.96523	.03477	48447	590213	11.97	66
67	47590	1770	.96281	.03719	46705	541766	11.38	67
68	45820	1893	.95868	.04132	44874	495061	10.80	68
69	43927	2059	.95313	.04687	42898	450187	10.25	69
70	41868	2230	.94673	.05327	40753	407289	9.73	70
71	39638	2374	.94011	.05989	38451	366536	9.25	71
72	37264	2458	.93403	.06597	36035	328085	8.80	72
73	34806	2476	.92887	.07113	33568	292050	8.39	73
74	32330	2451	.92418	.07582	31105	258482	8.00	74
75	29879	2404	.91955	.08045	28677	227377	7.61	75
76	27475	2348	.91454	.08546	26301	198700	7.23	76
77	25127	2296	.90862	.09138	23979	172399	6.86	77
78	22831	2249	.90149	.09851	21707	148420	6.50	78
79	20582	2195	.89336	.10664	19485	126713	6.16	79
80	18387	2123	.88454	.11546	17326	107228	5.83	80
81	16264	2027	.87537	.12463	15251	89902	5.53	81
82	14237	1904	.86625	.13375	13285	74651	5.24	82
83	12333	1757	.85752	.14248	11455	61366	4.98	83
84	10576	1598	.84894	.15106	9777	49911	4.72	84
85	8978	1436	.84008	.15992	8260	40134	4.47	85
86	7542	1279	.83044	.16956	6903	31874	4.23	86
87	6263	1131	.81947	.18053	5698	24971	3.99	87

IRISH LIFE TABLE NO. 2. *Males (1926)*—Continued

Age	l_x	d_x	p_x	q_x	L_x	T_x	e_x^o	Age
88	5132	994	.80622	.19378	4635	19273	3.76	88
89	4138	865.7	.79080	.20920	3705.2	14638.3	3.54	89
90	3272.3	738.7	.77425	.22575	2903.0	10933.1	3.34	90
91	2533.6	613.4	.75789	.24211	2226.9	8030.1	3.17	91
92	1920.2	492.9	.74329	.25671	1673.8	5803.2	3.02	92
93	1427.3	383.7	.73113	.26887	1235.5	4129.4	2.89	93
94	1043.6	290.8	.72130	.27870	898.2	2893.9	2.77	94
95	752.8	216.1	.71294	.28706	644.8	1995.7	2.65	95
96	536.7	158.6	.70452	.29548	457.4	1350.9	2.52	96
97	378.1	115.7	.69384	.30616	320.3	893.5	2.36	97
98	262.4	84.4	.67812	.32188	220.2	573.2	2.18	98
99	178.0	61.5	.65424	.34576	147.3	353.0	1.98	99
100	116.5	44.3	.61915	.38085	94.4	205.7	1.76	100
101	72.2	30.9	.57051	.42949	56.7	111.3	1.54	101
102	41.1	20.2	.50753	.49247	31.0	54.6	1.33	102
103	20.9	11.9	.43178	.56822	15.0	23.6	1.13	103
104	9.0	5.9	.34760	.65240	6.1	8.6	0.96	104
105	3.1	2.3	.26172	.73828	2.0	2.5	0.81	105
106	0.8	0.7	.18198	.81802	0.5	0.5	0.69	106

given in the census reports. The births in each quarter for the years 1920–1927 were also available for calculating the values of q_x at low ages.

Deaths: The deaths for each sex in five-year age-groups from age 5 to age 99 were obtainable for Northern Ireland for the years 1925–26–27. For the Irish Free State they were available in five-year age-groups to age 74 and again over age 95. From age 75 to age 94, however, they were given only in ten-year groups and were, in consequence, subdivided by the method already referred to before being used. Detailed figures for the deaths from ages 0–4 for the necessary years were available, as before, for calculating the values of q_x at low ages.

(b) *Preparation of the Life Table.*

Since the census was taken on April 18th in both parts of the country, it was first necessary to determine the central population. Owing to the long time which had elapsed since the previous census and the many crises with which this period was associated, there could be no justification for using the figures of the census of 1911 in conjunction with those of 1926 to determine the central population for the latter year. Recourse was therefore had to direct adjustment of the census figures for each age by allowing for emigration, deaths and increase

IRISH LIFE TABLE NO. 2.

Females (1926)

Age	l_x	d_x	p_x	q_x	L_x	T_x	e_x°	Age
0	100000	6635	.93365	.06635	94883	5736855	57.37	0
1	93365	1823	.98047	.01953	92454	5641972	60.43	1
2	91542	886	.99032	.00968	91099	5549518	60.62	2
3	90656	532	.99413	.00587	90390	5458419	60.21	3
4	90124	399	.99557	.00443	89925	5368029	59.56	4
5	89725	333	.99629	.00371	89559	5278104	58.83	5
6	89392	276	.99691	.00309	89254	5188545	58.04	6
7	89116	230	.99742	.00258	89001	5099291	57.22	7
8	88886	195	.99781	.00219	88789	5010290	56.37	8
9	88691	172	.99806	.00194	88605	4921501	55.49	9
10	88519	161	.99818	.00182	88439	4832896	54.60	10
11	88358	164	.99814	.00186	88276	4744457	53.70	11
12	88194	183	.99793	.00207	88103	4656181	52.79	12
13	88011	216	.99755	.00245	87903	4568078	51.90	13
14	87795	246	.99720	.00280	87672	4480175	51.03	14
15	87549	277	.99684	.00316	87411	4392503	50.17	15
16	87272	304	.99652	.00348	87120	4305092	49.33	16
17	86968	329	.99622	.00378	86804	4217972	48.50	17
18	86639	352	.99594	.00406	86463	4131168	47.68	18
19	86287	373	.99568	.00432	86101	4044705	46.88	19
20	85914	392	.99544	.00456	85718	3958604	46.08	20
21	85522	409	.99522	.00478	85318	3872886	45.29	21
22	85113	424	.99502	.00498	84901	3787568	44.50	22
23	84689	435	.99486	.00514	84472	3702667	43.72	23
24	84254	445	.99472	.00528	84032	3618195	42.94	24
25	83809	452	.99461	.00539	83583	3534163	42.17	25
26	83357	458	.99450	.00550	83128	3450580	41.40	26
27	82899	466	.99438	.00562	82666	3367452	40.62	27
28	82433	474	.99425	.00575	82196	3284786	39.85	28
29	81959	482	.99412	.00588	81718	3202590	39.08	29
30	81477	490	.99399	.00601	81232	3120872	38.30	30
31	80987	497	.99386	.00614	80739	3039640	37.53	31
32	80490	505	.99372	.00628	80238	2958901	36.76	32
33	79985	513	.99359	.00641	79729	2878663	35.99	33
34	79472	520	.99346	.00654	79212	2798934	35.22	34
35	78952	527	.99333	.00667	78689	2719722	34.45	35
36	78425	534	.99319	.00681	78158	2641033	33.68	36
37	77891	543	.99303	.00697	77620	2562875	32.90	37
38	77348	552	.99286	.00714	77072	2485255	32.13	38
39	76796	563	.99267	.00733	76515	2408183	31.36	39
40	76233	574	.99247	.00753	75946	2331668	30.59	40
41	75659	586	.99225	.00775	75366	2255722	29.81	41
42	75073	601	.99199	.00801	74773	2180356	29.04	42

IRISH LIFE TABLE NO. 2. *Females (1926)—Continued*

Age	l_x	d_x	p_x	q_x	L_x	T_x	e_x°	Age
43	74472	616	.99173	.00827	74164	2105583	28.27	43
44	73856	630	.99147	.00853	73541	2031419	27.51	44
45	73226	647	.99117	.00883	72903	1957878	26.74	45
46	72579	669	.99078	.00922	72245	1884975	25.97	46
47	71910	700	.99027	.00973	71560	1812730	25.21	47
48	71210	741	.98959	.01041	70840	1741170	24.45	48
49	70469	791	.98878	.01122	70074	1670330	23.70	49
50	69678	844	.98788	.01212	69256	1600256	22.97	50
51	68834	899	.98694	.01306	68385	1531000	22.24	51
52	67935	950	.98601	.01398	67460	1462615	21.53	52
53	66985	991	.98520	.01480	66490	1395155	20.83	53
54	65994	1027	.98444	.01556	65481	1328665	20.13	54
55	64967	1064	.98363	.01637	64435	1263184	19.44	55
56	63903	1110	.98263	.01737	63348	1198750	18.76	56
57	62793	1174	.98131	.01869	62206	1135402	18.08	57
58	61619	1264	.97948	.02052	60987	1073195	17.42	58
59	60355	1375	.97721	.02279	59668	1012208	16.77	59
60	58980	1489	.97476	.02524	58236	952540	16.15	60
61	57491	1587	.97239	.02761	56698	894304	15.56	61
62	55904	1654	.97041	.02959	55077	837606	14.98	62
63	54250	1671	.96920	.03080	53415	782529	14.42	63
64	52579	1651	.96860	.03140	51754	729114	13.87	64
65	50928	1627	.96805	.03195	50115	677360	13.30	65
66	49301	1627	.96700	.03300	48488	627245	12.72	66
67	47674	1675	.96487	.03513	46837	578757	12.14	67
68	45999	1784	.96121	.03879	45107	531920	11.56	68
69	44215	1932	.95631	.04369	43249	486813	11.01	69
70	42283	2085	.95068	.04932	41241	443564	10.49	70
71	40198	2214	.94492	.05508	39091	402323	10.01	71
72	37984	2289	.93973	.06027	36840	363232	9.56	72
73	35695	2302	.93550	.06450	34544	326392	9.14	73
74	33393	2277	.93182	.06818	32255	291849	8.74	74
75	31116	2233	.92824	.07176	30000	259593	8.34	75
76	28883	2188	.92426	.07574	27789	229593	7.95	76
77	26695	2154	.91931	.08069	25618	201804	7.56	77
78	24541	2136	.91295	.08705	23473	176186	7.18	78
79	22405	2119	.90542	.09458	21346	152713	6.82	79
80	20286	2085	.89721	.10279	19244	131367	6.48	80
81	18201	2022	.88890	.11110	17190	112123	6.16	81
82	16179	1923	.88116	.11884	15218	94933	5.87	82
83	14256	1785	.87481	.12519	13364	79715	5.59	83
84	12471	1627	.86953	.13047	11658	66351	5.32	84
85	10844	1472	.86425	.13575	10108	54693	5.04	85
86	9372	1333	.85781	.14219	8706	44585	4.76	86

IRISH LIFE TABLE NO. 2. *Females (1926)—Continued*

Age	l_x	d_x	p_x	q_x	L_x	T_x	e_x°	Age
87	8039	1215	.84888	.15112	7432	35879	4.46	87
88	6824	1119	.83607	.16393	6265	28447	4.17	88
89	5705	1028.5	.81972	.18028	5190.8	22182.3	3.89	89
90	4676.5	929.5	.80124	.19876	4211.8	16991.5	3.63	90
91	3747.0	815.3	.78241	.21759	3339.4	12779.7	3.41	91
92	2931.7	687.4	.76552	.23448	2588.0	9440.3	3.22	92
93	2244.3	557.6	.75156	.24844	1965.5	6852.3	3.05	93
94	1686.7	437.9	.74035	.25965	1467.8	4886.8	2.90	94
95	1248.8	336.3	.73069	.26931	1080.7	3419.0	2.74	95
96	912.5	255.2	.72035	.27965	784.9	2338.3	2.56	96
97	657.3	193.1	.70621	.29379	560.8	1553.4	2.36	97
98	464.2	146.5	.68441	.31559	391.0	992.6	2.14	98
99	317.7	110.9	.65083	.34917	262.3	601.6	1.89	99
100	206.8	82.3	.60189	.39811	165.7	339.3	1.64	100
101	124.5	57.8	.53572	.46428	95.6	173.6	1.39	101
102	66.7	36.4	.45351	.54649	48.5	78.0	1.17	102
103	30.3	19.4	.36030	.63970	20.6	29.5	0.97	103
104	10.9	8.0	.26467	.73533	6.9	8.9	0.81	104
105	2.9	2.4	.17687	.82313	1.7	2.0	0.69	105

in age during the period intervening between the census and the middle of the year. When the central population for each year of age had thus been obtained, the figures were taken in five-year age-groups from age 5 upwards and quinquennial pivotal values of q_x for ages 12, 17, etc. to 97 were calculated as before, the intervening values being then filled in by osculatory interpolation. The values of q_x for ages 0-4 were obtained as in the previous table and for the great ages a constant fourth difference of $\log p_x$ was used. The method of completing the curve between the ages 4 and 17 differed somewhat from that previously employed. A number of methods including Lagrange's interpolation were tried before it was ultimately decided to join the curve as follows. By graduating the populations and deaths in the age-groups 2-4, 5-9 and 10-14, the value of q_7 was obtained. q_{18} , q_{17} and q_{12} were then united by a second difference formula, and the formula used by Watson was applied to the values of q_4 , q_7 , q_{12} and q_{18} . In this way a complete series of values for q_x was obtained and the tables were completed in the customary manner, the usual allowance being made for the relatively heavy mortality in the first six months of the first year of life.

Before proceeding to touch briefly on the more important deductions to be made from the annexed National Life Tables, it may be well to