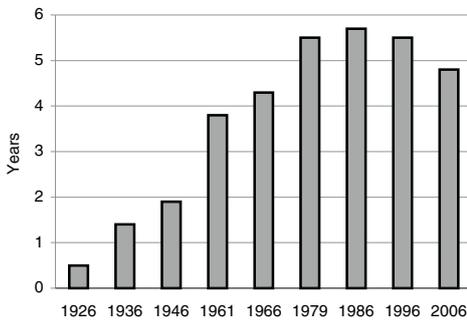


Central Statistics Office, Irish Life Tables No. 15, 2005-2007, 29. January 2009,
downloaded from
http://www.cso.ie/releasespublications/documents/births_d_m/current/irishlife.pdf,
06.03.2009.

Significant improvements in life expectancy for both males and females over the past 80 years

Fig. 2 Gap in period life expectancy between males and females by year



* Female period life expectancy higher than males in all periods

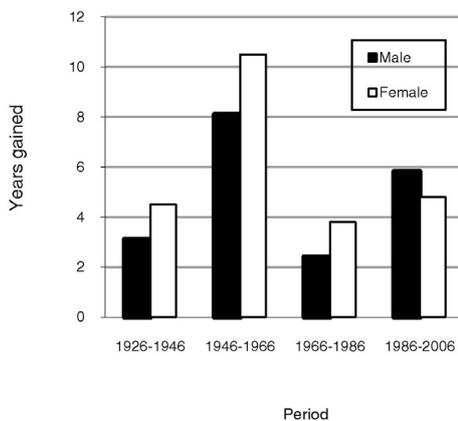
Table 1.2 Period life expectancy at birth by sex and year

Year	Years	
	Males	Females
1926	57.4	57.9
1946	60.5	62.4
1966	68.6	72.9
1986	71.0	76.7
2006	76.8	81.6

Life expectancy at birth has increased significantly for both men and women since the first official life table was compiled in 1926. Over the 80 year period to 2006, male life expectancy increased by 19.4 years (33.8%), while female life expectancy increased by 23.7 years (40.8%). (See table 1.2 above and table 3)

The improvements have been as a direct result of decreasing mortality rates, particularly infant mortality rates over the period. While there has been a continual increase in life expectancy for both males and females, with increases occurring between each set of life tables, the greatest rate of improvement occurred in the 20 year period between 1946 and 1966 (8.1 years for males and 10.5 years for females). Strong gains have also been seen over the last two decades with increases of 5.8 years for males and 4.9 years for females. (See table 3 and fig. 3)

Fig. 3 Gains in period life expectancy



Life expectancy increases in all regions

In the four year period between 2002 and 2006, life expectancy at birth increased across all regions in Ireland. Life expectancy at birth was longest in the Mid-East and Midlands for males at 77.2 years and the West for females at 82.7 years. The shortest life expectancy was recorded in the Mid-West region at 76.3 years for males and 80.4 years for females. (See table 4)

The largest improvement in life expectancy over the four year period for males occurred in the Midlands with a gain of 2.4 years, while for females the largest gains were in the Midlands and the West (1.8 years). (See table 4)

Tables

Table 1 Irish Life Table No. 15, male period life expectancy by age, 2005-2007

Age x	l_x^1	d_x^1	p_x^1	q_x^1	L_x^1	T_x^1	$e_x^{0,1,2}$	Age x
0	100,000	404	0.99596	0.00404	99,649	7,680,895	76.81	0
1	99,596	29	0.99971	0.00029	99,581	7,581,246	76.12	1
2	99,567	26	0.99974	0.00026	99,554	7,481,665	75.14	2
3	99,541	14	0.99986	0.00014	99,534	7,382,111	74.16	3
4	99,527	16	0.99984	0.00016	99,519	7,282,577	73.17	4
5	99,511	11	0.99989	0.00011	99,505	7,183,059	72.18	5
6	99,500	8	0.99992	0.00008	99,496	7,083,553	71.19	6
7	99,492	14	0.99985	0.00015	99,485	6,984,057	70.20	7
8	99,478	12	0.99988	0.00012	99,472	6,884,572	69.21	8
9	99,466	10	0.99990	0.00010	99,461	6,785,100	68.22	9
10	99,456	8	0.99992	0.00008	99,452	6,685,640	67.22	10
11	99,448	8	0.99992	0.00008	99,444	6,586,188	66.23	11
12	99,440	12	0.99988	0.00012	99,434	6,486,744	65.23	12
13	99,429	20	0.99980	0.00020	99,419	6,387,309	64.24	13
14	99,408	33	0.99967	0.00033	99,392	6,287,891	63.25	14
15	99,376	47	0.99953	0.00047	99,352	6,188,498	62.27	15
16	99,329	61	0.99938	0.00062	99,298	6,089,146	61.30	16
17	99,267	73	0.99926	0.00074	99,231	5,989,848	60.34	17
18	99,194	83	0.99916	0.00084	99,153	5,890,617	59.38	18
19	99,111	93	0.99906	0.00094	99,065	5,791,465	58.43	19
20	99,018	102	0.99897	0.00103	98,967	5,692,400	57.49	20
21	98,916	108	0.99891	0.00109	98,862	5,593,433	56.55	21
22	98,808	111	0.99887	0.00113	98,753	5,494,570	55.61	22
23	98,697	110	0.99888	0.00112	98,642	5,395,818	54.67	23
24	98,586	106	0.99893	0.00107	98,534	5,297,176	53.73	24
25	98,481	99	0.99899	0.00101	98,431	5,198,643	52.79	25
26	98,382	93	0.99905	0.00095	98,335	5,100,211	51.84	26
27	98,289	90	0.99908	0.00092	98,244	5,001,876	50.89	27
28	98,199	90	0.99908	0.00092	98,153	4,903,633	49.94	28
29	98,108	92	0.99906	0.00094	98,062	4,805,479	48.98	29
30	98,016	95	0.99903	0.00097	97,968	4,707,417	48.03	30
31	97,920	99	0.99899	0.00101	97,871	4,609,449	47.07	31
32	97,822	101	0.99896	0.00104	97,771	4,511,578	46.12	32
33	97,720	102	0.99895	0.00105	97,669	4,413,807	45.17	33
34	97,618	102	0.99895	0.00105	97,567	4,316,138	44.21	34
35	97,516	103	0.99895	0.00105	97,464	4,218,571	43.26	35
36	97,413	105	0.99893	0.00107	97,361	4,121,107	42.31	36
37	97,308	109	0.99888	0.00112	97,253	4,023,747	41.35	37
38	97,199	117	0.99879	0.00121	97,140	3,926,493	40.40	38
39	97,082	128	0.99869	0.00131	97,018	3,829,353	39.44	39
40	96,954	140	0.99856	0.00144	96,884	3,732,335	38.50	40
41	96,814	153	0.99842	0.00158	96,738	3,635,451	37.55	41
42	96,662	167	0.99827	0.00173	96,578	3,538,713	36.61	42
43	96,495	182	0.99812	0.00188	96,404	3,442,135	35.67	43
44	96,313	197	0.99796	0.00204	96,215	3,345,731	34.74	44
45	96,116	213	0.99778	0.00222	96,010	3,249,516	33.81	45
46	95,903	232	0.99758	0.00242	95,787	3,153,507	32.88	46
47	95,672	253	0.99735	0.00265	95,545	3,057,719	31.96	47
48	95,418	278	0.99709	0.00291	95,279	2,962,174	31.04	48
49	95,141	304	0.99680	0.00320	94,989	2,866,895	30.13	49
50	94,837	333	0.99649	0.00351	94,670	2,771,906	29.23	50
51	94,504	364	0.99614	0.00386	94,322	2,677,236	28.33	51
52	94,139	399	0.99576	0.00424	93,940	2,582,914	27.44	52
53	93,741	434	0.99537	0.00463	93,524	2,488,974	26.55	53
54	93,306	471	0.99495	0.00505	93,071	2,395,451	25.67	54

¹ See background notes

² e_x^0 is the remaining life expectancy of a person at age x

Table 1 Irish Life Table No. 15, male period life expectancy by age, 2005-2007 (contd.)

Age x	l_x^1	d_x^1	p_x^1	q_x^1	L_x^1	T_x^1	$e_x^{o,1,2}$	Age x
55	92,835	511	0.99449	0.00551	92,579	2,302,380	24.80	55
56	92,324	557	0.99397	0.00603	92,045	2,209,801	23.94	56
57	91,767	611	0.99335	0.00665	91,462	2,117,755	23.08	57
58	91,156	671	0.99264	0.00736	90,821	2,026,294	22.23	58
59	90,485	737	0.99185	0.00815	90,116	1,935,473	21.39	59
60	89,748	810	0.99098	0.00902	89,343	1,845,357	20.56	60
61	88,938	888	0.99001	0.00999	88,494	1,756,014	19.74	61
62	88,050	974	0.98893	0.01107	87,563	1,667,520	18.94	62
63	87,075	1064	0.98778	0.01222	86,544	1,579,957	18.14	63
64	86,012	1155	0.98657	0.01343	85,434	1,493,414	17.36	64
65	84,856	1254	0.98522	0.01478	84,229	1,407,980	16.59	65
66	83,602	1365	0.98367	0.01633	82,919	1,323,751	15.83	66
67	82,237	1493	0.98185	0.01815	81,490	1,240,831	15.09	67
68	80,744	1634	0.97977	0.02023	79,927	1,159,341	14.36	68
69	79,110	1783	0.97746	0.02254	78,219	1,079,414	13.64	69
70	77,327	1943	0.97487	0.02513	76,355	1,001,195	12.95	70
71	75,384	2114	0.97196	0.02804	74,327	924,840	12.27	71
72	73,270	2296	0.96867	0.03133	72,122	850,513	11.61	72
73	70,974	2484	0.96500	0.03500	69,732	778,391	10.97	73
74	68,490	2673	0.96097	0.03903	67,154	708,659	10.35	74
75	65,817	2864	0.95648	0.04352	64,385	641,505	9.75	75
76	62,952	3058	0.95143	0.04857	61,424	577,120	9.17	76
77	59,895	3252	0.94571	0.05429	58,269	515,697	8.61	77
78	56,643	3447	0.93915	0.06085	54,920	457,427	8.08	78
79	53,196	3634	0.93169	0.06831	51,379	402,508	7.57	79
80	49,562	3795	0.92344	0.07656	47,665	351,128	7.08	80
81	45,768	3913	0.91450	0.08550	43,811	303,463	6.63	81
82	41,855	3974	0.90504	0.09496	39,867	259,652	6.20	82
83	37,880	3980	0.89492	0.10508	35,890	219,785	5.80	83
84	33,900	3934	0.88395	0.11605	31,933	183,895	5.42	84
85	29,966	3830	0.87217	0.12783	28,050	151,962	5.07	85
86	26,135	3667	0.85970	0.14030	24,302	123,911	4.74	86
87	22,469	3446	0.84665	0.15335	20,746	99,610	4.43	87
88	19,023	3180	0.83285	0.16715	17,433	78,864	4.15	88
89	15,843	2878	0.81833	0.18167	14,404	61,431	3.88	89
90	12,965	2553	0.80311	0.19689	11,689	47,027	3.63	90
91	10,412	2216	0.78718	0.21282	9,304	35,338	3.39	91
92	8,196	1881	0.77054	0.22946	7,256	26,033	3.18	92
93	6,316	1559	0.75320	0.24680	5,536	18,777	2.97	93
94	4,757	1260	0.73514	0.26486	4,127	13,241	2.78	94
95	3,497	992	0.71637	0.28363	3,001	9,114	2.61	95
96	2,505	759	0.69690	0.30310	2,126	6,113	2.44	96
97	1,746	564	0.67672	0.32328	1,464	3,987	2.28	97
98	1,181	407	0.65583	0.34417	978	2,524	2.14	98
99	775	283	0.63423	0.36577	633	1,546	1.99	99
100	491	191	0.61192	0.38808	396	912	1.86	100
101	301	124	0.58890	0.41110	239	516	1.72	101
102	177	77	0.56517	0.43483	139	277	1.57	102
103	100	46	0.54074	0.45926	77	139	1.39	103
104	54	26	0.51559	0.48441	41	62	1.14	104
105	28	14	0.48974	0.51026	21	21	0.74	105

¹ See background notes

² e_x^o is the remaining life expectancy of a person at age x

Table 2 Irish Life Table No. 15, female period life expectancy by age, 2005-2007

Age x	l_x^1	d_x^1	p_x^1	q_x^1	L_x^1	T_x^1	$e_x^{0,1,2}$	Age x
0	100,000	358	0.99642	0.00358	99,685	8,156,652	81.57	0
1	99,642	39	0.99961	0.00039	99,622	8,056,967	80.86	1
2	99,603	20	0.99979	0.00021	99,592	7,957,345	79.89	2
3	99,582	17	0.99983	0.00017	99,574	7,857,753	78.91	3
4	99,566	13	0.99987	0.00013	99,559	7,758,179	77.92	4
5	99,553	7	0.99993	0.00007	99,550	7,658,620	76.93	5
6	99,547	7	0.99993	0.00007	99,543	7,559,070	75.94	6
7	99,539	7	0.99993	0.00007	99,536	7,459,527	74.94	7
8	99,532	7	0.99993	0.00007	99,529	7,359,991	73.95	8
9	99,525	8	0.99992	0.00008	99,521	7,260,462	72.95	9
10	99,517	9	0.99991	0.00009	99,513	7,160,941	71.96	10
11	99,508	11	0.99989	0.00011	99,503	7,061,428	70.96	11
12	99,497	14	0.99986	0.00014	99,490	6,961,925	69.97	12
13	99,483	17	0.99983	0.00017	99,474	6,862,435	68.98	13
14	99,466	22	0.99978	0.00022	99,455	6,762,961	67.99	14
15	99,444	27	0.99973	0.00027	99,430	6,663,506	67.01	15
16	99,416	32	0.99968	0.00032	99,401	6,564,076	66.03	16
17	99,385	34	0.99965	0.00035	99,368	6,464,676	65.05	17
18	99,350	35	0.99965	0.00035	99,333	6,365,308	64.07	18
19	99,315	34	0.99966	0.00034	99,298	6,265,975	63.09	19
20	99,281	33	0.99967	0.00033	99,265	6,166,677	62.11	20
21	99,249	31	0.99969	0.00031	99,233	6,067,412	61.13	21
22	99,218	30	0.99970	0.00030	99,203	5,968,178	60.15	22
23	99,188	30	0.99970	0.00030	99,173	5,868,976	59.17	23
24	99,158	30	0.99969	0.00031	99,142	5,769,803	58.19	24
25	99,127	31	0.99969	0.00031	99,112	5,670,661	57.21	25
26	99,096	32	0.99968	0.00032	99,081	5,571,549	56.22	26
27	99,065	32	0.99967	0.00033	99,049	5,472,468	55.24	27
28	99,032	33	0.99966	0.00034	99,016	5,373,419	54.26	28
29	98,999	35	0.99965	0.00035	98,982	5,274,404	53.28	29
30	98,965	36	0.99964	0.00036	98,947	5,175,422	52.30	30
31	98,929	38	0.99962	0.00038	98,910	5,076,475	51.31	31
32	98,891	40	0.99960	0.00040	98,871	4,977,565	50.33	32
33	98,851	43	0.99957	0.00043	98,830	4,878,694	49.35	33
34	98,809	45	0.99954	0.00046	98,786	4,779,864	48.37	34
35	98,763	49	0.99951	0.00049	98,739	4,681,078	47.40	35
36	98,715	53	0.99946	0.00054	98,688	4,582,340	46.42	36
37	98,662	58	0.99941	0.00059	98,633	4,483,651	45.44	37
38	98,604	64	0.99935	0.00065	98,571	4,385,019	44.47	38
39	98,539	71	0.99928	0.00072	98,504	4,286,447	43.50	39
40	98,469	78	0.99920	0.00080	98,429	4,187,943	42.53	40
41	98,390	88	0.99911	0.00089	98,347	4,089,514	41.56	41
42	98,303	99	0.99899	0.00101	98,253	3,991,167	40.60	42
43	98,204	113	0.99885	0.00115	98,147	3,892,914	39.64	43
44	98,091	129	0.99868	0.00132	98,026	3,794,767	38.69	44
45	97,962	147	0.99850	0.00150	97,888	3,696,740	37.74	45
46	97,815	165	0.99831	0.00169	97,732	3,598,852	36.79	46
47	97,649	182	0.99813	0.00187	97,558	3,501,120	35.85	47
48	97,467	197	0.99798	0.00202	97,368	3,403,562	34.92	48
49	97,270	211	0.99783	0.00217	97,164	3,306,193	33.99	49
50	97,059	225	0.99768	0.00232	96,946	3,209,029	33.06	50
51	96,833	241	0.99751	0.00249	96,713	3,112,083	32.14	51
52	96,592	261	0.99729	0.00271	96,461	3,015,370	31.22	52
53	96,331	285	0.99705	0.00295	96,188	2,918,909	30.30	53
54	96,046	310	0.99677	0.00323	95,891	2,822,721	29.39	54

¹ See background notes

² e_x^0 is the remaining life expectancy of a person at age x

Table 2 Irish Life Table No. 15, female period life expectancy by age, 2005-2007 (contd.)

Age x	l_x^1	d_x^1	p_x^1	q_x^1	L_x^1	T_x^1	$e_x^{0,1,2}$	Age x
55	95,736	338	0.99647	0.00353	95,567	2,726,830	28.48	55
56	95,398	370	0.99612	0.00388	95,213	2,631,263	27.58	56
57	95,028	405	0.99574	0.00426	94,825	2,536,050	26.69	57
58	94,623	443	0.99532	0.00468	94,401	2,441,225	25.80	58
59	94,179	484	0.99486	0.00514	93,937	2,346,824	24.92	59
60	93,695	529	0.99436	0.00564	93,431	2,252,887	24.04	60
61	93,166	577	0.99380	0.00620	92,878	2,159,456	23.18	61
62	92,589	631	0.99319	0.00681	92,274	2,066,578	22.32	62
63	91,958	686	0.99255	0.00745	91,616	1,974,305	21.47	63
64	91,273	741	0.99188	0.00812	90,902	1,882,689	20.63	64
65	90,532	803	0.99113	0.00887	90,130	1,791,787	19.79	65
66	89,729	873	0.99027	0.00973	89,292	1,701,657	18.96	66
67	88,856	958	0.98922	0.01078	88,376	1,612,364	18.15	67
68	87,897	1,056	0.98799	0.01201	87,369	1,523,988	17.34	68
69	86,842	1,162	0.98662	0.01338	86,261	1,436,619	16.54	69
70	85,680	1,278	0.98508	0.01492	85,040	1,350,358	15.76	70
71	84,401	1,405	0.98335	0.01665	83,699	1,265,317	14.99	71
72	82,996	1,543	0.98141	0.01859	82,225	1,181,619	14.24	72
73	81,453	1,679	0.97939	0.02061	80,614	1,099,394	13.50	73
74	79,774	1,811	0.97730	0.02270	78,869	1,018,780	12.77	74
75	77,964	1,956	0.97491	0.02509	76,986	939,911	12.06	75
76	76,008	2,130	0.97198	0.02802	74,943	862,926	11.35	76
77	73,878	2,348	0.96822	0.03178	72,704	787,983	10.67	77
78	71,530	2,615	0.96345	0.03655	70,223	715,279	10.00	78
79	68,916	2,914	0.95772	0.04228	67,459	645,056	9.36	79
80	66,002	3,224	0.95115	0.04885	64,390	577,597	8.75	80
81	62,778	3,524	0.94387	0.05613	61,016	513,207	8.18	81
82	59,254	3,789	0.93605	0.06395	57,359	452,192	7.63	82
83	55,465	4,020	0.92751	0.07249	53,454	394,832	7.12	83
84	51,444	4,217	0.91802	0.08198	49,336	341,378	6.64	84
85	47,227	4,361	0.90767	0.09233	45,047	292,042	6.18	85
86	42,866	4,434	0.89657	0.10343	40,650	246,996	5.76	86
87	38,433	4,424	0.88488	0.11512	36,221	206,346	5.37	87
88	34,008	4,340	0.87237	0.12763	31,838	170,125	5.00	88
89	29,668	4,180	0.85910	0.14090	27,578	138,287	4.66	89
90	25,488	3,949	0.84507	0.15493	23,513	110,709	4.34	90
91	21,539	3,656	0.83028	0.16972	19,711	87,196	4.05	91
92	17,883	3,313	0.81473	0.18527	16,227	67,485	3.77	92
93	14,570	2,937	0.79842	0.20158	13,102	51,258	3.52	93
94	11,633	2,544	0.78135	0.21865	10,361	38,157	3.28	94
95	9,089	2,149	0.76352	0.23648	8,015	27,795	3.06	95
96	6,940	1,770	0.74493	0.25507	6,055	19,781	2.85	96
97	5,170	1,419	0.72559	0.27441	4,460	13,726	2.65	97
98	3,751	1,105	0.70548	0.29452	3,199	9,265	2.47	98
99	2,646	835	0.68461	0.31539	2,229	6,067	2.29	99
100	1,812	611	0.66298	0.33702	1,506	3,838	2.12	100
101	1,201	432	0.64060	0.35940	985	2,331	1.94	101
102	769	294	0.61745	0.38255	622	1,346	1.75	102
103	475	193	0.59355	0.40645	379	724	1.52	103
104	282	122	0.56888	0.43112	221	345	1.22	104
105	160	73	0.54346	0.45654	124	124	0.77	105

¹ See background notes

² e_x^0 is the remaining life expectancy of a person at age x

Table 3 Period life expectancy at various ages, 1871-2006

		Years										
		Age in years										
Irish Life Table No.	Period	0	5	10	15	20	25	35	45	55	65	75
Males												
	1870-72	49.6			46.8		39.0	31.8	24.4	17.5	11.1	6.5
	1881-83	49.4			46.0		38.1	30.7	23.4	16.7	10.8	6.3
	1890-92	49.1			45.8		37.8	30.6	23.4	16.5	10.5	5.8
	1900-02	49.3			46.2		38.2	31.0	23.8	16.9	10.8	5.8
	1910-12	53.6			49.2		41.0	33.5	25.9	18.9	13.0	8.0
1	1925-27	57.4	59.5	55.2	50.7	46.4	42.4	34.4	26.5	19.1	12.8	7.7
2	1935-37	58.2	60.1	55.8	51.2	46.8	42.7	34.4	26.3	18.8	12.5	7.9
3	1940-42	59.0	60.7	56.3	51.6	47.2	43.1	34.8	26.5	18.8	12.3	7.3
4	1945-47	60.5	61.5	56.9	52.2	47.8	43.5	34.9	26.4	18.6	12.0	6.9
5	1950-52	64.5	63.6	58.8	54.0	49.3	44.8	35.8	27.0	19.0	12.1	6.8
6	1960-62	68.1	65.7	60.8	56.0	51.1	46.4	37.0	27.8	19.5	12.6	7.1
7	1965-67	68.6	65.7	60.8	56.0	51.2	46.4	36.9	27.7	19.3	12.4	7.3
8	1970-72	68.8	65.5	60.6	55.7	51.0	46.3	36.8	27.6	19.3	12.4	7.3
9	1978-80	69.5	65.7	60.8	55.9	51.1	46.4	36.9	27.7	19.3	12.4	7.1
10	1980-82	70.1	66.1	61.3	56.4	51.6	46.9	37.3	28.1	19.6	12.6	7.3
11	1985-87	71.0	66.8	61.9	57.0	52.2	47.4	37.9	28.5	19.8	12.6	7.3
12	1990-92	72.3	68.0	63.1	58.2	53.4	48.6	39.2	29.7	20.9	13.4	7.8
13	1995-97	73.0	68.6	63.6	58.7	53.9	49.3	39.8	30.4	21.5	13.8	8.0
14	2001-03	75.1	70.7	65.7	60.8	56.0	51.3	41.8	32.3	23.4	15.4	8.9
15	2005-07	76.8	72.2	67.2	62.3	57.5	52.8	43.3	33.8	24.8	16.6	9.8
Females												
	1870-72	50.9			47.7		39.8	32.4	25.0	17.7	11.2	6.6
	1881-83	49.9			46.2		38.3	31.0	23.7	16.7	10.7	6.3
	1890-92	49.2			45.5		37.7	30.5	23.2	16.2	10.3	5.9
	1900-02	49.6			46.2		38.3	30.9	23.7	16.7	10.6	5.9
	1910-12	54.1			49.4		41.4	33.8	26.4	19.2	13.4	8.2
1	1925-27	57.9	59.2	54.9	50.5	46.4	42.4	34.7	27.0	19.6	13.4	8.4
2	1935-37	59.6	60.4	56.1	51.6	47.3	43.2	35.2	27.2	19.6	13.1	8.4
3	1940-42	61.0	61.4	56.9	52.4	48.0	44.0	35.8	27.6	19.8	13.2	8.1
4	1945-47	62.4	62.5	57.9	53.2	48.8	44.7	36.3	28.0	20.1	13.1	7.7
5	1950-52	67.1	65.4	60.6	55.8	51.2	46.6	37.7	28.9	20.6	13.3	7.6
6	1960-62	71.9	69.0	64.1	59.2	54.3	49.5	39.9	30.7	22.1	14.4	8.1
7	1965-67	72.9	69.6	64.8	59.8	54.9	50.1	40.4	31.1	22.4	14.7	8.4
8	1970-72	73.5	70.0	65.1	60.2	55.3	50.5	40.8	31.4	22.7	15.0	8.5
9	1978-80	75.0	71.0	66.1	61.1	56.2	51.4	41.6	32.1	23.3	15.4	8.8
10	1980-82	75.6	71.5	66.6	61.7	56.8	51.9	42.1	32.6	23.7	15.7	9.1
11	1985-87	76.7	72.4	67.5	62.5	57.6	52.7	42.9	33.3	24.3	16.2	9.5
12	1990-92	77.9	73.5	68.6	63.6	58.7	53.8	44.0	34.5	25.4	17.1	10.2
13	1995-97	78.5	74.1	69.1	64.2	59.3	54.4	44.6	35.0	25.8	17.4	10.4
14	2001-03	80.3	75.7	70.8	65.8	60.9	56.0	46.2	36.6	27.4	18.7	11.2
15	2005-07	81.6	76.9	72.0	67.0	62.1	57.2	47.4	37.7	28.5	19.8	12.1

1871-1911 data from the Report on the Commission on Emigration and other Population Problems 1948-1954

Table 4 Period life expectancy by sex, age, NUTS3 region and year

	Years			
	Age = 0		Age = 65	
	2002	2006	2002	2006
Males				
Region				
Border	74.8	77.0	15.3	16.5
Midland	74.8	77.2	15.3	16.8
West	75.5	77.1	15.6	16.8
Dublin	75.2	76.7	15.5	16.9
Mid-East	75.9	77.2	15.5	16.6
Mid-West	74.4	76.3	15.3	16.1
South-East	75.3	76.8	15.4	16.7
South-West	75.2	76.5	15.3	16.4
Females				
Region				
Border	80.9	81.7	19.2	19.8
Midland	79.7	81.5	18.5	19.3
West	80.9	82.7	19.0	20.6
Dublin	80.2	81.2	18.9	19.7
Mid-East	80.5	81.4	18.8	19.5
Mid-West	79.8	80.4	18.6	18.7
South-East	80.3	81.7	18.6	19.9
South-West	80.5	81.6	18.8	20.0

Table 5 Period life expectancy in 2006 by sex, age and country

Years

	Age							
	0	15	30	45	55	65	75	85
	Males							
BE Belgium	76.6	62.1	47.7	33.6	24.8	17.0	10.2	5.5
DK Denmark	76.1	61.5	47.0	32.8	24.1	16.2	9.6	4.9
DE Germany (including ex-GDR from 1991)	77.2	62.7	48.1	33.8	25.1	17.2	10.6	6.1
GR Greece	77.2	62.6	48.4	34.3	25.5	17.5	10.6	5.5
ES Spain	77.7	63.2	48.7	34.6	25.8	17.9	11.0	6.3
FR France	77.3	62.8	48.4	34.4	25.9	18.2	11.3	6.3
IE Ireland	76.8	62.3	48.0	33.8	24.8	16.6	9.8	5.1
IT Italy*	78.1	63.5	49.1	34.8	25.7	17.5	10.5	5.4
LU Luxembourg (Grand-Duché)	76.8	62.2	47.6	33.5	24.8	17.0	10.4	5.3
NL Netherlands	77.7	63.2	48.6	34.2	25.1	16.8	9.9	5.3
AT Austria	77.2	62.7	48.3	34.0	25.2	17.3	10.5	5.5
PT Portugal	75.5	61.0	46.7	32.9	24.5	16.6	9.9	5.3
FI Finland	75.9	61.3	47.0	33.1	24.5	16.9	10.2	5.5
SE Sweden	78.8	64.2	49.6	35.2	26.1	17.7	10.6	5.5
UK United Kingdom	77.2	62.8	48.3	34.2	25.3	17.2	10.4	5.6
BG Bulgaria	69.2	55.3	41.0	27.3	19.5	13.2	7.9	4.4
CY Cyprus	78.8	64.3	49.9	35.4	26.2	17.7	10.5	5.2
CZ Czech Republic	73.5	58.9	44.5	30.4	22.0	14.8	8.9	4.6
EE Estonia	67.4	53.0	39.3	26.3	19.1	13.2	8.3	4.5
HU Hungary	69.2	54.8	40.4	26.8	19.7	13.6	8.7	5.3
LT Lithuania	65.3	51.1	37.4	25.1	18.3	13.0	8.3	4.6
LV Latvia	65.4	51.3	37.3	24.9	18.1	12.7	8.3	5.0
MT Malta	77.0	62.5	47.9	33.6	24.5	16.1	9.4	4.8
PL Poland	70.9	56.6	42.3	28.8	21.1	14.5	9.1	5.3
RO Romania	69.2	55.7	41.3	27.7	20.1	13.6	8.3	4.6
SI Slovenia	74.5	59.8	45.6	31.6	23.2	15.8	9.6	5.3
SK Slovak Republic	70.4	56.2	41.8	28.0	20.1	13.3	8.1	4.6
	Females							
BE Belgium	82.3	67.7	53.0	38.5	29.3	20.6	12.7	6.5
DK Denmark	80.7	66.1	51.3	36.8	27.6	19.2	11.8	6.2
DE Germany (including ex-GDR from 1991)	82.4	67.8	53.0	38.5	29.2	20.5	12.5	6.5
GR Greece	81.9	67.3	52.6	37.9	28.5	19.4	11.0	4.5
ES Spain	84.4	69.8	55.0	40.4	31.1	22.0	13.7	7.3
FR France	84.4	69.8	55.0	40.6	31.4	22.6	14.4	7.8
IE Ireland	81.6	67.0	52.3	37.7	28.5	19.8	12.1	6.2
IT Italy*	83.7	69.1	54.3	39.6	30.2	21.3	13.1	6.7
LU Luxembourg (Grand-Duché)	81.9	67.1	52.5	38.0	28.9	20.3	12.3	6.1
NL Netherlands	82.0	67.5	52.7	38.1	28.9	20.3	12.4	6.5
AT Austria	82.8	68.2	53.5	38.9	29.5	20.7	12.7	6.5
PT Portugal	82.3	67.7	52.9	38.5	29.1	20.2	12.1	6.1
FI Finland	83.1	68.4	53.7	39.2	30.0	21.2	13.1	6.9
SE Sweden	83.1	68.4	53.6	39.0	29.6	20.9	13.0	6.7
UK United Kingdom	81.5	67.0	52.2	37.7	28.5	19.9	12.3	6.5
BG Bulgaria	76.3	62.4	47.7	33.5	24.6	16.3	9.3	4.9
CY Cyprus	82.4	67.7	53.0	38.3	28.9	19.7	11.6	6.1
CZ Czech Republic	79.9	65.3	50.5	36.0	26.8	18.3	10.8	5.5
EE Estonia	78.6	64.0	49.4	35.1	26.3	18.3	10.9	5.6
HU Hungary	77.8	63.3	48.6	34.3	25.7	17.7	10.7	5.9
LT Lithuania	77.0	62.8	48.2	34.2	25.6	17.6	10.4	5.1
LV Latvia	76.3	62.1	47.5	33.5	25.0	17.3	10.3	5.4
MT Malta	81.9	67.3	52.4	37.7	28.3	19.5	11.7	5.9
PL Poland	79.7	65.3	50.5	36.1	27.1	18.8	11.4	6.1
RO Romania	76.2	62.5	47.8	33.5	24.6	16.5	9.5	4.8
SI Slovenia	82.0	67.4	52.6	37.9	28.7	20.0	12.2	6.5
SK Slovak Republic	78.4	64.1	49.3	34.8	25.7	17.3	10.2	5.3

Source : Eurostat New Cronos Database

* Figures for Italy relate to 2005

Table 6 Period life expectancy by sex, age, country and year

Years

	Age = 0					Age = 65				
	1970	1980	1990	2002	2006	1970	1980	1990	2002	2006
	Males									
EU15 European Union (15 countries)	68.4	70.5	72.8	75.8	:	12.6	13.4	14.6	16.3	:
BE Belgium	67.8	69.9	72.7	75.1	76.6	12.2	12.9	14.3	15.8	17.0
DK Denmark	70.7	71.2	72.0	74.8	76.1	13.7	13.6	14.0	15.4	16.2
DE Germany ¹	67.5	69.6	72.0	75.7	77.2	11.9	12.8	14.0	16.2	17.2
GR Greece	71.6	73.0	74.7	76.2	77.2	15.0	15.2	15.7	16.6	17.5
ES Spain	69.2	72.3	73.4	76.3	77.7	13.3	14.6	15.5	16.9	17.9
FR France	68.4	70.2	72.8	75.7	77.3	13.0	14.0	15.5	17.0	18.2
IE Ireland	68.8	70.1	72.3	75.1	76.8	12.4	12.6	13.4	15.4	16.6
IT Italy	69.0	70.6	73.9	77.4	78.1*	13.3	13.3	15.1	17.0	17.5*
LU Luxembourg (Grand-Duché)	67.1	69.1	72.4	74.6	76.8	12.1	12.3	14.3	15.9	17.0
NL Netherlands	70.7	72.7	73.8	76.0	77.7	13.6	14.0	14.4	15.6	16.8
AT Austria	66.5	69.0	72.3	75.8	77.2	11.7	12.9	14.4	16.3	17.3
PT Portugal	63.6	67.9	70.6	73.8	75.5	12.2	13.1	14.0	15.7	16.6
FI Finland	66.5	69.2	71.0	74.9	75.9	:	12.5	13.8	15.8	16.9
SE Sweden	72.3	72.8	74.8	77.7	78.8	14.3	14.3	15.3	16.9	17.7
UK United Kingdom	68.7	70.2	72.9	76.0	77.2	12.0	12.6	14.0	16.2	17.2
BG Bulgaria	69.1	68.4	68.0	68.8	69.2	13.3	12.6	12.7	13.0	13.2
CY Cyprus	:	72.3	74.1	76.4	78.8	:	14.5	15.8	16.3	17.7
CZ Czech Republic	66.1	66.9	67.6	72.1	73.5	11.0	11.2	11.7	13.9	14.8
EE Estonia	65.5	64.1	64.7	65.3	67.4	12.1	11.4	12.0	12.8	13.2
HU Hungary	66.3	65.5	65.2	68.3	69.2	12.0	11.6	12.1	13.2	13.6
LT Lithuania	66.8	65.4	66.5	66.2	65.3	13.6	13.4	13.3	13.3	13.0
LV Latvia	66.0	63.6	64.3	64.7	65.4	:	:	12.1	12.5	12.7
MT Malta	68.4	68.0	73.7	76.3	77.0	12.1	10.7	15.4	15.3	16.1
PL Poland	66.6	66.9	66.3	70.3	70.9	12.5	12.4	12.4	13.9	14.5
RO Romania	65.8	66.6	66.7	67.3	69.2	12.7	12.5	13.2	12.9	13.6
SI Slovenia	65.0	67.4	69.8	72.6	74.5	11.3	12.6	13.3	14.5	15.8
SK Slovak Republic	66.8	66.7	66.7	69.8	70.4	12.3	12.0	12.3	13.2	13.3
Females										
EU15 European Union (15 countries)	74.7	77.2	79.4	81.6	:	15.9	17.1	18.4	19.9	:
BE Belgium	74.2	76.7	79.5	81.2	82.3	15.4	16.8	18.8	19.7	20.6
DK Denmark	75.9	77.3	77.8	79.4	80.7	16.7	17.6	17.9	18.2	19.2
DE Germany ¹	73.6	76.2	78.5	81.3	82.4	14.9	16.3	17.7	19.6	20.5
GR Greece	76.0	77.5	79.5	81.1	81.9	16.9	17.0	18.0	18.7	19.4
ES Spain	74.8	78.4	80.6	83.2	84.4	16.0	17.8	19.3	21.0	22.0
FR France	75.9	78.4	80.9	83.0	84.4	16.8	18.2	19.8	21.3	22.6
IE Ireland	73.5	75.6	77.9	80.3	81.6	15.0	15.7	17.1	18.7	19.8
IT Italy	74.9	77.4	80.4	83.2	83.7*	16.2	17.1	18.9	21.0	21.3*
LU Luxembourg (Grand-Duché)	73.4	75.9	78.7	81.5	81.9	14.9	16.0	18.5	20.0	20.3
NL Netherlands	76.5	79.3	80.2	80.7	82.0	16.5	18.5	19.1	19.3	20.3
AT Austria	73.5	76.1	79.0	81.7	82.8	14.9	16.3	18.1	19.8	20.7
PT Portugal	69.6	74.9	77.5	80.6	82.3	14.6	16.1	17.1	19.2	20.2
FI Finland	75.0	77.6	79.0	81.6	83.1	:	16.5	17.8	19.8	21.2
SE Sweden	77.3	79.0	80.5	82.1	83.1	17.1	18.1	19.1	20.1	20.9
UK United Kingdom	75.0	76.2	78.5	80.6	81.5	16.0	16.6	17.9	19.2	19.9
BG Bulgaria	73.5	73.9	74.7	75.5	76.3	14.9	14.6	15.2	15.7	16.3
CY Cyprus	:	77.0	78.6	81.0	82.4	:	16.5	17.5	19.0	19.7
CZ Czech Republic	73.1	74.0	75.5	78.7	79.9	14.3	14.4	15.3	17.3	18.3
EE Estonia	74.1	74.1	75.0	77.0	78.6	15.4	15.6	15.8	17.3	18.3
HU Hungary	72.1	72.8	73.8	76.7	77.8	14.4	14.7	15.4	17.0	17.7
LT Lithuania	75.0	75.4	76.3	77.5	77.0	16.4	16.6	17.0	17.8	17.6
LV Latvia	74.4	74.2	74.6	76.0	76.3	:	:	15.8	17.0	17.3
MT Malta	72.6	72.8	78.1	81.3	81.9	:	12.8	18.0	19.1	19.5
PL Poland	73.3	75.4	75.3	78.8	79.7	15.3	16.4	16.2	18.0	18.8
RO Romania	70.4	71.9	73.1	74.7	76.2	14.3	14.2	15.2	15.7	16.5
SI Slovenia	72.4	75.2	77.8	80.5	82.0	14.2	15.9	17.1	19.0	20.0
SK Slovak Republic	73.0	74.4	75.7	77.7	78.4	14.6	15.2	16.0	16.9	17.3

Source : Eurostat New Cronos Database

¹ DEW Federal Republic of Germany (excluding ex-GDR) for 1970 & 1980

* Figures relate to 2005

Background Notes

Life Tables presented here are period life expectancies. Period expectation of life at a given age for 2005-07 is the average number of years a person would live if he or she experienced age-specific mortality rates for that time period throughout his or her life. It is therefore not the number of years someone of that age could actually expect to live because death rates are likely to change in the future.

The basic assumption is that a given cohort of births, (100,000), start in a given year. The mortality rates for each age are used to calculate how many of the cohort will reach each year of age until eventually all members of the cohort have died. This enables the total number of years lived by the cohort to be calculated. When this total is divided by the number of persons in the cohort, (100,000) the result is the average number of years lived in the cohort, or the mean expectation of life at birth. The total number of years lived by the cohort from any given age can also be calculated and, when divided by the number of survivors in the cohort entering upon that year of age, the figure obtained is the expectation of life in years for those persons.

Life tables were constructed for males and females which are representative of the mortality experience in Ireland in 2006 by using the 2005, 2006 and 2007 estimates and census of population (usually resident) and deaths registered in the three years. The life table should reflect the normal mortality conditions at about the time of the Census. The Irish Statistical Bulletin, Sept. – Dec. 1985, contains further detail on the construction of Life Tables. References to previous Life Tables are given on page 15.

Glossary of technical terms

x	the exact age of the person, that is, on his or her birthday.
l_x	the number of persons surviving to exact age x out of the original 100,000 aged 0.
d_x	the number of deaths in the year of age x to $x+1$ out of l_x persons who enter that year.
p_x	the probability of surviving a year, or the ratio of the number completing the year of age x to $x+1$ to the number entering on the year.
q_x	the rate of mortality, the probability of dying in a year, or the ratio of the number of deaths in the year of age x to $x+1$ to the number entering on the year.
L_x	the population to be expected according to the Life Table aged between x and $x+1$ years, assuming deaths occur evenly over year (see page 13).
T_x	the expected number of person years to be lived by the survivors at age x .
e_x^o	life expectancy at age x for each person surviving, or the total future life time in years which will on average be passed through by persons aged exactly x .

Examples Figures from the Male Irish Life Table No. 15 are used in the examples below. Please note that totals may not add up due to rounding.

The first column of the life table, l_x equals the number of persons surviving in the life table at each exact age x , in other words the January population. l_0 represents the life table population of new born children or those aged exactly zero. If we let l_0 equal 100,000 then for example, l_5 is the number of persons surviving on their fifth birthday, which in this case equals 99,511.

The second column of the life table, d_x equals the expected number of deaths of persons aged age x in the life table.

$$d_x = l_x - l_{x+1} \quad \text{equation 1}$$

Equation 1 tells us that the number of deaths equals the number of persons surviving at age x less the number of persons surviving at age $x+1$.

e.g. for males aged 5

$$\begin{aligned} d_5 &= l_5 - l_6 \\ &= 99,511 - 99,500 \\ &= 11 \end{aligned}$$

The third column of the life table, p_x equals the probability of surviving from exact age x to $x+1$. This is simply the ratio of those completing the year of age x to $x+1$ to the number entering the year. For example, p_5 is the probability of surviving ones fifth year, which in this case equals 0.99989.

$$p_x = \frac{l_{x+1}}{l_x} \quad \text{equation 2}$$

Rewriting equation 2 where age $x = 10$, we see the number of persons surviving to their eleventh birthday equals the number of persons at their tenth birthday multiplied by the probability of their surviving to their eleventh, the remainder having of course died. Migration is ignored in a life table as the population is closed.

$$\begin{aligned} l_{11} &= l_{10} \cdot p_{10} \\ &= 99,456 \times 0.99992 \\ &= 99,448 \end{aligned}$$

The fourth column of the life table, q_x equals the probability of dying between one birthday and the next. This may also be called the risk of dying in a life table year, in other words the risk of dying at a particular age. The probability of dying and the probability of survival equal unity. In other words one can only be alive or dead.

$$p_x + q_x = 1 \quad \text{equation 3}$$

From equations 1, 2 and 3:

$$q_x = \frac{d_x}{l_x} \quad \text{equation 4}$$

So the probability of dying is the ratio of the number of deaths at exact age x divided by the number of persons surviving at that exact age. Hence we say the life table is based on ‘current mortality rates only and that no assumptions are made about future changes’.

The fifth column of the life table, L_x equals the number of years survived by the life table cohort between the ages x and $x+1$, in other words the July population. Assuming a uniform distribution of deaths over a year of age and using equation 1 we find:

$$\begin{aligned} L_x &= l_x - \frac{d_x}{2} \\ &= l_x - \frac{l_x - l_{x+1}}{2} \\ &= \frac{l_x + l_{x+1}}{2} \quad (x > 0) \end{aligned} \quad \text{equation 5}$$

e.g. for age 1 this means

$$\begin{aligned} L_1 &= l_1 - \frac{d_1}{2} = 99596 - \frac{29}{2} = 99582 \\ \text{or} \\ L_1 &= \frac{l_1 + l_2}{2} = \frac{99596 + 99567}{2} = 99582 \end{aligned}$$

This cannot be used at age 0 as infant deaths are not evenly distributed (i.e. they are non-linear over a year). For example, in 2006 36% of all infant deaths occurred on their first day of life.

The sixth column of the life table, T_x equals the total number of years which will be survived at age x , l_x . So if L_x is person years, then T_x is cumulated person years, i.e.

$$T_x = \sum_x^{105} L_x \quad \text{equation 6}$$

e.g.

$$T_{102} = L_{102} + L_{103} + L_{104} + L_{105}$$

The final column of the life table, e_x^0 is the life expectancy in years

$$e_x^0 = \frac{T_x}{l_x} \quad \text{equation 7}$$

e_0^0 represents life expectancy at birth and it is broadly used to express the level of mortality. Life expectancy is the average number of additional years a person would live if current mortality trends were to continue. The expectation of life at birth represents the mean length of life of individuals who are subjected since birth to current mortality trends. Life expectancy is usually compiled on the basis of a life table showing the probability of dying at each age for a given population according to the age specific death rates prevailing in a given period.

Further information From equation 3 we see the link between the probability of surviving with that of dying, therefore we can make assumptions on the probability of surviving from the probability of dying. This is what is referred to in population projections as the mortality assumption.

$$S_x = \frac{L_x}{L_{x-1}}$$

The survivorship ratio at age x , S_x , equals the ratio of those surviving between ages x and $x+1$ and those surviving between the ages $x-1$ and x , e.g. the ratio of those aged 5-9 surviving to age 10-14 is calculated as follows:

$$S_{10-14} = \frac{\sum_9^{14} L_x}{\sum_5^9 L_x}$$

Similarly, the probability of a man aged 20 dying before his 50th birthday is calculated as follows:

$$\begin{aligned} q_x &= 1 - p_x \\ &= 1 - \frac{l_{x+1}}{l_x} \\ &= \frac{l_x - l_{x+1}}{l_x} \end{aligned}$$

therefore

$$\begin{aligned} q_{20-50} &= \frac{l_{20} - l_{50}}{l_{20}} \\ &= \frac{99018 - 94837}{99018} = 0.042 = 4.2\% \end{aligned}$$

Publications containing Life Tables Nos. 1 - 14

<i>LIFE TABLE</i>	<i>PUBLICATION</i>
No. 1	Census of Population of Ireland, 1926 – Vol. V (Part 1).
No. 2	Census of Population of Ireland, 1936 – Vol. V (Part 1).
No. 3	Register of Population of Ireland, 1941.
No. 4	Census of Population of Ireland, 1946 – Vol. (Part 1).
No. 5	Census of Population of Ireland – General Report 1946 and 1951.
No. 6	Irish Statistical Bulletin – June, 1965.
No. 7	Census of Population of Ireland, 1971 – Vol. II. Irish Statistical Bulletin – March, 1972.
No. 8	Irish Statistical Bulletin – March, 1976.
No. 9	Census of Population of Ireland, 1981 – Vol. II. Irish Statistical Bulletin – June, 1984.
No. 10	Irish Statistical Bulletin – September – December, 1985.
No. 11	Irish Statistical Bulletin – December, 1995.
No. 12	Irish Statistical Bulletin – December, 1995.
No. 13	Irish Statistical Bulletin – December, 2001
No. 14	Irish Statistical Bulletin – September - December, 2004