

INSTITUTE OF ACTUARIES
VALUATION TABLES
FOR
FRIENDLY SOCIETIES

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THE INSTITUTE OF ACTUARIES

VALUATION TABLES FOR
FRIENDLY SOCIETIES

BASED UPON

SICKNESS EXPERIENCE OF THE
I.O.O.F. MANCHESTER UNITY

During the Five Years 1893-97

(OCCUPATION GROUP)

A.H.J.

Combined with

MORTALITY RATES

OF

(a) Central Counties Rural Districts

(b) Eastern Counties Rural Districts

(1921 CENSUS—MALES)

AT

3, $3\frac{1}{2}$ and 4 per cent. Interest

Compiled by

VICTOR A. BURROWS, F.I.A., F.S.S.

and

GUY WOODROW, F.I.A.

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INTRODUCTION

BY SIR ALFRED WATSON, K.C.B.

ACTUARIES who, whether regularly or occasionally, undertake the valuation of friendly societies, or cognate work, will find the present volume a valuable addition to their mechanical equipment. They will appreciate equally the generosity of the authors in presenting for the use of the profession the tables they have, respectively, compiled and the action of the Council of the Institute in authorising the reproduction of the tables (originally published in the *Journal*, Vol. LXIII, pp. 344-363 and 384-403) in this convenient form.

Regard being had to Mr Burrows's ample references to the effect of reduced mortality rates upon the finance of friendly societies in his paper "On Friendly Societies since the advent of National Health Insurance"—to which his section of the new tables was appended—and in the subsequent discussion, it is unnecessary to enlarge upon the circumstances in which the tables in the present volume will supply a basis for the valuation of sickness liabilities preferable to any of those provided in the tables published by the Manchester Unity in 1903. It will be sufficient to point out that although the new tables have a geographical basis so far as mortality is concerned, it need not be assumed that their employment in practice must be limited by this consideration. In the conditions of the present day many cases will arise in which the liabilities of friendly societies situated remotely from the Rural Districts of either the Central Counties or the Eastern Counties will be suitably measured, so far as the element of vitality is concerned, by valuation factors incorporating the Life Table based on one or the other of these two sets of data.

The two sets of tables have been printed on paper of different tints, a familiar expedient which should facilitate their use, and the book is completed, as a practical instrument, by the addition of the sickness rates incorporated in the monetary tables.

February, 1933

The sickness rates (pp. 6-7) are reproduced from the Report on the Manchester Unity Experience 1893-97 by the permission of the Society and the mortality rates (pp. 8-9 and 30-31) from the Registrar-General's Decennial Supplement, England and Wales, 1921: Part I, Life Tables with the consent of the Controller of H.M. Stationery Office.

SICKNESS RATES OF THE MANCHESTER UNITY
EXPERIENCE 1893-97, OCCUPATION GROUP A.H.J.

COMBINED WITH THE
CENTRAL COUNTIES RURAL DISTRICTS MOR-
TALITY (1921 CENSUS—MALES)

By VICTOR A. BURROWS, F.I.A., F.S.S.

IN the tables included in this section the values of $\bar{a}_x$ were obtained from the formula $\bar{a}_x = a_x + \frac{1}{2} - \frac{1}{1\frac{1}{2}}(\mu_x + \delta)$, whilst μ_x was taken as equal to $(d_{x-1} + d_x) \div 2l_x$. The values of $\bar{A}_x$ were obtained by reference to a Premium Conversion Table. In calculating the sickness factors H_x was taken as equal to $s_x \times D_{x+\frac{1}{2}}$.

*Notes on the following tables and on those compiled
by Mr Guy Woodrow (pp. 30-49)*

Through paucity of data at the higher ages the values of q_x in the official tables (pp. 64-5 of the Registrar-General's Decennial Supplement, England and Wales, 1921: Part I, Life Tables) are not given beyond age 84. In connection with whole life assurances and sickness contracts for the duration of life it is therefore necessary to extend the tables of l_x to the limit of life. Mr Burrows, proceeding on the data described at the foot of his Life Table, has taken the limiting age as 101, while Mr Woodrow, having available the Eastern Counties Rural Life Table extended by Mr Smither (*J.I.A.* Vol. LIX, p. 324), has placed the limiting age at 110, or for sickness rates 109. In connection with the valuation of a friendly society either limit may be regarded as equally suitable, but it should be remembered, in any comparison of the respective valuation factors at very advanced ages, that this point of the difference in the assumed limiting age has become of more importance than that of the difference between the rates of interest on which the tables respectively depend.

SICKNESS RATES (in weeks per annum)

Manchester Unity Experience 1893-97, Occupation Group A.H.f.

Age	First 3 months	Second 3 months	Second 6 months	Second 12 months	After 2 years	All periods	Age
16	·816	·048	·017	·000	·000	·881	16
17	·796	·050	·020	·000	·000	·866	17
18	·766	·054	·024	·004	·000	·848	18
19	·732	·059	·029	·009	·000	·829	19
20	·698	·065	·035	·013	·004	·815	20
21	·670	·071	·041	·019	·009	·810	21
22	·651	·075	·046	·026	·016	·814	22
23	·640	·078	·050	·031	·024	·823	23
24	·635	·080	·053	·034	·032	·834	24
25	·633	·082	·056	·035	·039	·845	25
26	·633	·084	·058	·036	·045	·856	26
27	·635	·085	·060	·038	·049	·867	27
28	·638	·086	·062	·041	·054	·881	28
29	·643	·088	·064	·044	·059	·898	29
30	·649	·090	·066	·048	·065	·918	30
31	·656	·093	·068	·052	·072	·941	31
32	·663	·096	·070	·055	·082	·966	32
33	·670	·100	·073	·055	·093	·991	33
34	·677	·105	·077	·056	·105	1·020	34
35	·685	·110	·081	·058	·118	1·052	35
36	·696	·115	·086	·062	·132	1·091	36
37	·709	·121	·091	·068	·147	1·136	37
38	·726	·128	·096	·074	·166	1·190	38
39	·744	·136	·102	·080	·187	1·249	39
40	·764	·143	·109	·087	·210	1·313	40
41	·784	·151	·116	·092	·235	1·378	41
42	·803	·159	·124	·098	·259	1·443	42
43	·821	·166	·133	·105	·283	1·508	43
44	·839	·174	·141	·112	·308	1·574	44
45	·858	·182	·148	·120	·335	1·643	45
46	·879	·190	·156	·129	·363	1·717	46
47	·904	·201	·165	·138	·396	1·804	47
48	·932	·215	·176	·148	·436	1·907	48
49	·962	·232	·189	·161	·486	2·030	49
50	·994	·249	·206	·177	·551	2·177	50
51	1·027	·268	·225	·196	·631	2·347	51
52	1·061	·288	·247	·219	·724	2·539	52
53	1·096	·309	·272	·244	·829	2·750	53
54	1·134	·330	·300	·275	·939	2·978	54
55	1·175	·353	·332	·310	1·051	3·221	55
56	1·218	·378	·368	·352	1·165	3·481	56
57	1·262	·405	·407	·400	1·285	3·759	57
58	1·308	·435	·449	·455	1·418	4·065	58
59	1·356	·471	·495	·516	1·575	4·413	59
60	1·409	·510	·547	·585	1·770	4·821	60

SICKNESS RATES (in weeks per annum) continued

Age	First 3 months	Second 3 months	Second 6 months	Second 12 months	After 2 years	All periods	Age
61	1·466	·555	·607	·665	2·017	5·310	61
62	1·526	·602	·674	·759	2·332	5·893	62
63	1·587	·653	·747	·865	2·718	6·570	63
64	1·650	·707	·824	·980	3·174	7·335	64
65	1·715	·761	·906	1·106	3·695	8·183	65
66	1·779	·820	·997	1·244	4·277	9·117	66
67	1·841	·882	1·100	1·406	4·924	10·153	67
68	1·893	·945	1·213	1·596	5·655	11·302	68
69	1·929	1·008	1·332	1·803	6·487	12·559	69
70	1·948	1·064	1·449	2·017	7·435	13·913	70
71	1·952	1·110	1·554	2·224	8·506	15·346	71
72	1·947	1·147	1·646	2·427	9·679	16·846	72
73	1·940	1·178	1·725	2·592	10·974	18·409	73
74	1·932	1·205	1·793	2·756	12·350	20·036	74
75	1·921	1·228	1·856	2·906	13·802	21·713	75
76	1·901	1·247	1·913	3·031	15·305	23·397	76
77	1·871	1·260	1·956	3·118	16·856	25·061	77
78	1·824	1·266	1·990	3·180	18·428	26·688	78
79	1·764	1·259	1·973	3·216	20·053	28·265	79
80	1·696	1·238	1·932	3·219	21·692	29·777	80
81	1·625	1·206	1·864	3·193	23·313	31·201	81
82	1·559	1·161	1·784	3·133	24·819	32·456	82
83	1·497	1·107	1·707	3·042	26·134	33·487	83
84	1·436	1·055	1·648	2·926	27·246	34·311	84
85	1·365	1·006	1·607	2·811	28·183	34·972	85
86	1·278	·965	1·580	2·701	29·027	35·551	86
87	1·177	·935	1·560	2·601	29·846	36·119	87
88	1·078	·910	1·544	2·522	30·645	36·699	88
89	1·078	·910	1·544	2·522	31·177	37·231	89
90	1·078	·910	1·544	2·522	31·610	37·664	90
91	1·078	·910	1·544	2·522	31·891	37·945	91
92	1·078	·910	1·544	2·522	31·891	37·945	92
93	1·078	·910	1·544	2·522	31·891	37·945	93
94	1·078	·910	1·544	2·522	31·891	37·945	94
95	1·078	·910	1·544	2·522	31·891	37·945	95
96	1·078	·910	1·544	2·522	31·891	37·945	96
97	1·078	·910	1·544	2·522	31·891	37·945	97
98	1·078	·910	1·544	2·522	31·891	37·945	98
99	1·078	·910	1·544	2·522	31·891	37·945	99
100	1·078	·910	1·544	2·522	31·891	37·945	100

CENTRAL COUNTIES RURAL DISTRICTS MORTALITY
(1921 CENSUS—MALES)

Age	l_x	d_x	q_x	p_x	Age
16	100 000	192	.001 92	.998 08	16
17	99 808	209	.002 09	.997 91	17
18	99 599	230	.002 31	.997 69	18
19	99 369	255	.002 57	.997 43	19
20	99 114	282	.002 85	.997 15	20
21	98 832	306	.003 10	.996 90	21
22	98 526	324	.003 29	.996 71	22
23	98 202	334	.003 40	.996 60	23
24	97 868	339	.003 46	.996 54	24
25	97 529	339	.003 48	.996 52	25
26	97 190	339	.003 49	.996 51	26
27	96 851	340	.003 51	.996 49	27
28	96 511	340	.003 52	.996 48	28
29	96 171	338	.003 51	.996 49	29
30	95 833	336	.003 51	.996 49	30
31	95 497	337	.003 53	.996 47	31
32	95 160	342	.003 59	.996 41	32
33	94 818	352	.003 71	.996 29	33
34	94 466	366	.003 87	.996 13	34
35	94 100	383	.004 07	.995 93	35
36	93 717	400	.004 27	.995 73	36
37	93 317	418	.004 48	.995 52	37
38	92 899	436	.004 69	.995 31	38
39	92 463	454	.004 91	.995 09	39
40	92 009	473	.005 14	.994 86	40
41	91 536	492	.005 38	.994 62	41
42	91 044	512	.005 62	.994 38	42
43	90 532	529	.005 84	.994 16	43
44	90 003	545	.006 05	.993 95	44
45	89 458	561	.006 27	.993 73	45
46	88 897	582	.006 55	.993 45	46
47	88 315	610	.006 91	.993 09	47
48	87 705	646	.007 36	.992 64	48
49	87 059	686	.007 88	.992 12	49
50	86 373	732	.008 47	.991 53	50
51	85 641	782	.009 13	.990 87	51
52	84 859	837	.009 86	.990 14	52
53	84 022	894	.010 64	.989 36	53
54	83 128	953	.011 46	.988 54	54
55	82 175	1 017	.012 37	.987 63	55
56	81 158	1 088	.013 41	.986 59	56
57	80 070	1 172	.014 64	.985 36	57
58	78 898	1 267	.016 06	.983 94	58
59	77 631	1 369	.017 64	.982 36	59
60	76 262	1 479	.019 39	.980 61	60

CENTRAL COUNTIES RURAL DISTRICTS MORTALITY
(1921 CENSUS—MALES) continued

Age	l_x	d_x	q_x	p_x	Age
61	74 783	1 594	·021 32	·978 68	61
62	73 189	1 716	·023 44	·976 56	62
63	71 473	1 838	·025 71	·974 29	63
64	69 635	1 959	·028 13	·971 87	64
65	67 676	2 084	·030 79	·969 21	65
66	65 592	2 216	·033 79	·966 21	66
67	63 376	2 358	·037 20	·962 80	67
68	61 018	2 504	·041 04	·958 96	68
69	58 514	2 650	·045 28	·954 72	69
70	55 864	2 793	·050 00	·950 00	70
71	53 071	2 933	·055 27	·944 73	71
72	50 138	3 068	·061 20	·938 80	72
73	47 070	3 204	·068 07	·931 93	73
74	43 866	3 332	·075 95	·924 05	74
75	40 534	3 428	·084 57	·915 43	75
76	37 106	3 473	·093 61	·906 39	76
77	33 633	3 453	·102 67	·897 33	77
78	30 180	3 361	·111 37	·888 63	78
79	26 819	3 217	·119 94	·880 06	79
80	23 602	3 042	·128 88	·871 12	80
81	20 560	2 853	·138 78	·861 22	81
82	17 707	2 638	·149 0	·851 0	82
83	15 069	2 417	·160 4	·839 6	83
84	12 652	2 184	·172 6	·827 4	84
85	10 468	1 932	·184 6	·815 4	85
86	8 536	1 674	·196 1	·803 9	86
87	6 862	1 421	·207 1	·792 9	87
88	5 441	1 189	·218 6	·781 4	88
89	4 252	983	·231 2	·768 8	89
90	3 269	801	·245 1	·754 9	90
91	2 468	644	·260 8	·739 2	91
92	1 824	506	·277 3	·722 7	92
93	1 318	388	·294 4	·705 6	93
94	930	290	·312 3	·687 7	94
95	640	213	·332 1	·667 9	95
96	427	151	·354 2	·645 8	96
97	276	104	·377 8	·622 2	97
98	172	74	·427 5	·572 5	98
99	98	52	·535 3	·464 7	99
100	46	46	1·000 0	—	100

The published mortality rates of the Central Counties Rural Districts (Males) Experience cease at age 84. In order to effect a smooth junction with the rates employed for the older ages the values of q_x derived from the Central Counties Experience have not been employed beyond age 81. From age 83 onwards the rates are obtained from the 1920-21 Experience of the Hearts of Oak Benefit Society, that for age 82 being fixed arbitrarily.

CENTRAL COUNTIES RURAL DISTRICTS MORTALITY
(1921 CENSUS—MALES)

3 per cent.

3 per cent.

Age	D_x	N_x	$\bar{a}_x$	$\bar{A}_x$	$\bar{a}_{xx}$	$\bar{A}_{xx}$	Age
16	62 317	1 561 146	25.549	.244 80	23.117	.158 35	16
17	60 386	1 500 760	25.350	.250 68	22.886	.161 75	17
18	58 503	1 442 257	25.149	.256 62	22.655	.165 17	18
19	56 669	1 385 588	24.947	.262 59	22.425	.168 57	19
20	54 877	1 330 711	24.747	.268 51	22.199	.171 91	20
21	53 127	1 277 584	24.545	.274 48	21.978	.175 17	21
22	51 420	1 226 164	24.343	.280 45	21.760	.178 40	22
23	49 758	1 176 406	24.139	.286 48	21.543	.181 61	23
24	48 144	1 128 262	23.932	.292 60	21.322	.184 87	24
25	46 581	1 081 681	23.719	.298 89	21.096	.188 21	25
26	45 066	1 036 615	23.499	.305 39	20.863	.191 65	26
27	43 601	993 014	23.272	.312 11	20.621	.195 23	27
28	42 183	950 831	23.037	.319 05	20.371	.198 93	28
29	40 810	910 021	22.796	.326 17	20.112	.202 75	29
30	39 482	870 539	22.546	.333 56	19.843	.206 73	30
31	38 198	832 341	22.287	.341 22	19.564	.210 85	31
32	36 954	795 387	22.021	.349 09	19.276	.215 11	32
33	35 749	759 638	21.746	.357 21	18.979	.219 50	33
34	34 578	725 060	21.466	.365 49	18.676	.223 98	34
35	33 441	691 619	21.178	.374 00	18.367	.228 55	35
36	32 335	659 284	20.886	.382 63	18.054	.233 17	36
37	31 259	628 025	20.588	.391 44	17.736	.237 87	37
38	30 214	597 811	20.283	.400 46	17.412	.242 66	38
39	29 195	568 616	19.973	.409 62	17.085	.247 49	39
40	28 206	540 410	19.656	.418 99	16.751	.252 43	40
41	27 244	513 166	19.333	.428 54	16.412	.257 44	41
42	26 308	486 858	19.003	.438 29	16.068	.262 53	42
43	25 398	461 460	18.666	.448 25	15.717	.267 71	43
44	24 514	436 946	18.321	.458 45	15.359	.273 00	44
45	23 656	413 290	17.968	.468 88	14.991	.278 44	45
46	22 823	390 467	17.605	.479 62	14.614	.284 01	46
47	22 013	368 454	17.235	.490 55	14.230	.289 69	47
48	21 225	347 229	16.856	.501 75	13.839	.295 47	48
49	20 455	326 774	16.472	.513 11	13.444	.301 31	49
50	19 703	307 071	16.082	.524 63	13.045	.307 20	50
51	18 966	288 105	15.688	.536 28	12.644	.313 13	51
52	18 246	269 859	15.287	.548 13	12.240	.319 10	52
53	17 540	252 319	14.882	.560 11	11.834	.325 10	53
54	16 848	235 471	14.473	.572 19	11.427	.331 11	54
55	16 170	219 301	14.059	.584 43	11.017	.337 17	55
56	15 504	203 797	13.641	.596 79	10.605	.343 27	56
57	14 851	188 946	13.219	.609 26	10.194	.349 34	57
58	14 207	174 739	12.796	.621 76	9.784	.355 39	58
59	13 572	161 167	12.371	.634 33	9.377	.361 41	59
60	12 944	148 223	11.947	.646 86	8.974	.367 37	60

CENTRAL COUNTIES RURAL DISTRICTS MORTALITY
(1921 CENSUS—MALES) continued

3 per cent.

3 per cent.

Age	D_x	N_x	$\bar{a}_x$	$\bar{A}_x$	$\bar{a}_{xx}$	$\bar{A}_{xx}^I$	Age
61	12 323	135 900	11·524	·659 36	8·578	·373 22	61
62	11 710	124 190	11·101	·671 87	8·186	·379 01	62
63	11 102	113 088	10·681	·684 28	7·801	·384 71	63
64	10 502	102 586	10·263	·696 64	7·423	·390 29	64
65	9 908·4	92 677·1	9·848	·708 90	7·050	·395 81	65
66	9 323·9	83 353·2	9·435	·721 11	6·682	·401 25	66
67	8 746·5	74 606·7	9·025	·733 23	6·321	·406 58	67
68	8 175·8	66 430·9	8·619	·745 23	5·968	·411 79	68
69	7 612·1	58 818·8	8·221	·757 00	5·624	·416 88	69
70	7 055·6	51 763·2	7·829	·768 58	5·291	·421 80	70
71	6 507·6	45 255·6	7·447	·779 87	4·970	·426 55	71
72	5 968·9	39 286·7	7·075	·790 87	4·659	·431 14	72
73	5 440·4	33 846·3	6·713	·801 57	4·360	·435 56	73
74	4 922·2	28 924·1	6·367	·811 80	4·079	·439 71	74
75	4 416·2	24 507·9	6·041	·821 43	3·820	·443 55	75
76	3 924·7	20 583·2	5·735	·830 48	3·582	·447 06	76
77	3 453·8	17 129·4	5·449	·838 93	3·367	·450 23	77
78	3 008·9	14 120·5	5·181	·846 86	3·172	·453 12	78
79	2 596·1	11 524·4	4·926	·854 39	2·989	·455 82	79
80	2 218·1	9 306·31	4·682	·861 60	2·816	·458 38	80
81	1 875·9	7 430·41	4·447	·868 55	2·651	·460 82	81
82	1 568·5	5 861·91	4·222	·875 20	2·495	·463 13	82
83	1 295·9	4 566·01	4·007	·881 55	2·348	·465 29	83
84	1 056·4	3 509·61	3·804	·887 56	2·210	·467 34	84
85	848·64	2 660·97	3·617	·893 08	2·088	·469 14	85
86	671·78	1 989·19	3·441	·898 29	1·976	·470 79	86
87	524·33	1 464·86	3·273	·903 25	1·873	·472 32	87
88	403·67	1 061·19	3·107	·908 16	1·773	·473 79	88
89	306·27	754·92	2·941	·913 07	1·674	·475 26	89
90	228·60	526·32	2·777	·917 91	1·576	·476 71	90
91	167·55	358·77	2·614	·922 73	1·480	·478 13	91
92	120·22	238·55	2·455	·927 43	1·388	·479 49	92
93	84·34	154·21	2·297	·932 10	1·302	·480 75	93
94	57·78	96·43	2·136	·936 86	1·218	·481 99	94
95	38·60	57·83	1·963	·941 97	1·131	·483 29	95
96	25·01	32·82	1·774	·947 56	1·044	·484 57	96
97	15·69	17·13	1·551	·954 15	·942	·486 08	97
98	9·49	7·64	1·259	·962 78	·794	·488 27	98
99	5·25	2·39	·899	·973 42	·604	·491 07	99
100	2·39	—	·409	·987 91	·320	·495 27	100

MORTALITY RATES OF CENTRAL COUNTIES RURAL DISTRICTS
(1921 CENSUS—MALES)

*Combined with the Sickness Rates of the Manchester Unity
Experience 1893-97, Occupation Group A.H.7.*

3 per cent.

3 per cent.

Commutation Columns K for Sickness Benefit Values

Age	First 3 months	Second 3 months	Second 6 months	Second 12 months	After 2 years	Age
16	1 360 262	318 653	322 559	363 728	1 441 567	16
17	1 319 200	315 709	321 517	363 728	1 441 567	17
18	1 271 882	312 736	320 328	363 728	1 441 567	18
19	1 227 771	309 627	318 945	363 498	1 441 567	19
20	1 186 945	306 336	317 328	362 996	1 441 567	20
21	1 149 252	302 826	315 438	362 294	1 441 351	21
22	1 114 229	299 115	313 295	361 301	1 440 880	22
23	1 081 296	295 320	310 968	359 985	1 440 071	23
24	1 049 967	291 502	308 520	358 468	1 438 896	24
25	1 019 891	287 713	306 010	356 857	1 437 380	25
26	990 885	283 956	303 444	355 254	1 435 593	26
27	962 822	280 232	300 873	353 658	1 433 598	27
28	935 586	276 586	298 299	352 028	1 431 497	28
29	909 111	273 017	295 726	350 326	1 429 256	29
30	883 297	269 484	293 157	348 560	1 426 887	30
31	858 090	265 989	290 594	346 696	1 424 363	31
32	833 440	262 494	288 038	344 742	1 421 657	32
33	809 339	259 004	285 494	342 742	1 418 676	33
34	785 780	255 488	282 927	340 808	1 415 406	34
35	762 756	251 917	280 308	338 904	1 411 835	35
36	740 228	248 299	277 644	336 996	1 407 954	36
37	718 097	244 643	274 910	335 025	1 403 757	37
38	696 304	240 924	272 113	332 935	1 399 239	38
39	674 738	237 121	269 261	330 737	1 394 308	39
40	653 384	233 218	266 333	328 441	1 388 941	40
41	632 202	229 253	263 311	326 028	1 383 119	41
42	611 210	225 210	260 205	323 565	1 376 826	42
43	590 450	221 100	257 000	321 031	1 370 130	43
44	569 961	216 957	253 681	318 411	1 363 068	44
45	549 754	212 766	250 285	315 713	1 355 649	45
46	529 815	208 537	246 845	312 925	1 347 864	46
47	510 110	204 277	243 348	310 033	1 339 727	47
48	490 566	199 932	239 781	307 049	1 331 166	48
49	471 143	195 451	236 113	303 965	1 322 079	49
50	451 827	190 793	232 318	300 733	1 312 321	50
51	432 608	185 979	228 335	297 310	1 301 667	51
52	413 500	180 992	224 149	293 663	1 289 927	52
53	394 516	175 839	219 729	289 745	1 276 972	53
54	375 671	170 526	215 053	285 549	1 262 718	54
55	356 950	165 078	210 100	281 010	1 247 216	55

MORTALITY RATES OF CENTRAL COUNTIES RURAL DISTRICTS
(1921 CENSUS—MALES) continued

3 per cent.

3 per cent.

Commutation Columns K for Sickness Benefit Values

Age	First 3 months	Second 3 months	Second 6 months	Second 12 months	After 2 years	Age
56	338 342	159 487	204 842	276 100	1 230 571	56
57	319 856	153 751	199 257	270 758	1 212 890	57
58	301 520	147 866	193 343	264 946	1 194 220	58
59	283 353	141 825	187 107	258 627	1 174 525	59
60	265 375	135 580	180 545	251 785	1 153 644	60
61	247 575	129 137	173 634	244 395	1 131 284	61
62	229 958	122 468	166 340	236 404	1 107 046	62
63	212 552	115 602	158 652	227 747	1 080 447	63
64	195 409	108 548	150 583	218 403	1 051 087	64
65	178 571	101 333	142 174	208 402	1 018 696	65
66	162 079	94 015·1	133 462	197 767	983 165	66
67	146 005	86 606·2	124 454	186 527	944 521	67
68	130 428	79 143·5	115 147	174 631	902 859	68
69	115 485	71 683·8	105 572	162 032	858 219	69
70	101 338	64 291·2	95 802·8	148 809	810 644	70
71	88 126·7	57 075·6	85 976·3	135 131	760 223	71
72	75 949·7	50 151·1	76 282·0	121 257	707 160	72
73	64 842·7	43 607·8	66 892·1	107 412	651 944	73
74	54 790·7	37 504·2	57 954·4	93 981·7	595 084	74
75	45 769·8	31 877·8	49 582·5	81 113·7	537 419	75
76	37 758·3	26 756·4	41 842·1	68 994·7	479 858	76
77	30 744·9	22 155·8	34 784·5	57 812·7	423 393	77
78	24 699·1	18 084·4	28 464·1	47 737·7	368 926	78
79	19 587·3	14 536·4	22 887·1	38 825·8	317 282	79
80	15 341·2	11 505·9	18 137·9	31 084·6	269 012	80
81	11 869·5	8 971·67	14 183·1	24 495·3	224 608	81
82	9 070·87	6 894·67	10 972·9	18 996·3	184 458	82
83	6 838·07	5 231·87	8 417·87	14 509·2	148 912	83
84	5 077·47	3 929·97	6 410·27	10 931·5	118 176	84
85	3 709·67	2 925·07	4 840·57	8 144·52	92 224·1	85
86	2 671·97	2 160·30	3 618·87	6 007·52	70 799·1	86
87	1 907·66	1 583·18	2 673·95	4 392·22	53 439·1	87
88	1 361·53	1 149·34	1 950·11	3 185·32	39 590·1	88
89	978·87	826·32	1 402·04	2 290·09	28 712·1	89
90	690·58	582·96	989·13	1 615·63	20 374·4	90
91	477·06	402·72	683·31	1 116·10	14 113·4	91
92	321·95	271·78	461·14	753·21	9 524·60	92
93	211·69	178·71	303·22	495·26	6 262·80	93
94	135·09	114·05	193·50	316·05	3 996·60	94
95	83·14	70·20	119·09	194·51	2 459·80	95
96	48·85	41·25	69·98	114·29	1 445·30	96
97	26·91	22·73	38·56	62·97	796·32	97
98	13·34	11·27	19·12	31·22	394·81	98
99	5·40	4·56	7·74	12·63	159·77	99
100	1·28	1·08	1·84	3·00	37·95	100

MORTALITY RATES OF CENTRAL COUNTIES RURAL DISTRICTS
(1921 CENSUS—MALES)

*Combined with the Sickness Rates of the Manchester Unity
Experience 1893-97, Occupation Group A.H.J.*

3 per cent.

3 per cent.

Value of Sickness Benefits of 1 per week for the whole of life, in periods

Age	First 3 months	Second 3 months	Second 6 months	Second 12 months	After 2 years	Age
16	21·973	5·113	5·176	5·837	23·133	16
17	21·846	5·228	5·324	6·023	23·872	17
18	21·740	5·346	5·475	6·217	24·641	18
19	21·665	5·464	5·628	6·414	25·438	19
20	21·630	5·582	5·783	6·615	26·270	20
21	21·632	5·700	5·937	6·819	27·131	21
22	21·670	5·817	6·093	7·027	28·022	22
23	21·731	5·935	6·250	7·235	28·941	23
24	21·809	6·055	6·408	7·446	29·887	24
25	21·895	6·177	6·569	7·661	30·858	25
26	21·988	6·301	6·733	7·883	31·856	26
27	22·082	6·427	6·901	8·111	32·880	27
28	22·179	6·557	7·071	8·345	33·935	28
29	22·277	6·690	7·246	8·584	35·022	29
30	22·372	6·825	7·425	8·828	36·140	30
31	22·464	6·963	7·607	9·076	37·288	31
32	22·554	7·103	7·795	9·329	38·471	32
33	22·640	7·245	7·986	9·588	39·685	33
34	22·725	7·389	8·182	9·856	40·934	34
35	22·809	7·533	8·382	10·134	42·218	35
36	22·892	7·679	8·586	10·422	43·542	36
37	22·973	7·826	8·795	10·718	44·908	37
38	23·046	7·974	9·006	11·019	46·311	38
39	23·111	8·122	9·223	11·328	47·758	39
40	23·164	8·268	9·442	11·644	49·242	40
41	23·205	8·415	9·665	11·967	50·767	41
42	23·233	8·560	9·891	12·299	52·335	42
43	23·248	8·705	10·119	12·640	53·946	43
44	23·250	8·850	10·348	12·989	55·604	44
45	23·240	8·994	10·580	13·346	57·307	45
46	23·214	9·137	10·816	13·711	59·057	46
47	23·173	9·280	11·055	14·084	60·861	47
48	23·113	9·420	11·297	14·466	62·717	48
49	23·033	9·555	11·543	14·860	64·634	49
50	22·932	9·684	11·791	15·263	66·606	50
51	22·810	9·806	12·039	15·676	68·632	51
52	22·663	9·920	12·285	16·095	70·697	52
53	22·493	10·025	12·527	16·519	72·804	53
54	22·298	10·121	12·764	16·948	74·947	54
55	22·075	10·209	12·993	17·379	77·132	55

MORTALITY RATES OF CENTRAL COUNTIES RURAL DISTRICTS
(1921 CENSUS—MALES) continued

3 per cent.

3 per cent.

Value of Sickness Benefits of 1 per week for the whole of life, in periods

Age	First 3 months	Second 3 months	Second 6 months	Second 12 months	After 2 years	Age
56	21·823	10·287	13·212	17·808	79·371	56
57	21·538	10·353	13·417	18·232	81·671	57
58	21·223	10·408	13·609	18·649	84·059	58
59	20·878	10·450	13·786	19·056	86·540	59
60	20·502	10·474	13·948	19·452	89·126	60
61	20·090	10·479	14·090	19·832	91·803	61
62	19·638	10·458	14·205	20·188	94·538	62
63	19·145	10·413	14·290	20·514	97·320	63
64	18·607	10·336	14·339	20·796	100·085	64
65	18·021	10·227	14·348	21·032	102·807	65
66	17·383	10·083	14·314	21·211	105·444	66
67	16·693	9·902	14·229	21·326	107·987	67
68	15·953	9·680	14·084	21·359	110·429	68
69	15·171	9·417	13·869	21·286	112·744	69
70	14·363	9·112	13·578	21·091	114·893	70
71	13·542	8·771	13·212	20·766	116·823	71
72	12·725	8·402	12·780	20·315	118·478	72
73	11·919	8·016	12·295	19·743	119·834	73
74	11·131	7·619	11·774	19·093	120·897	74
75	10·364	7·218	11·227	18·367	121·693	75
76	9·621	6·818	10·661	17·580	122·268	76
77	8·902	6·415	10·072	16·739	122·589	77
78	8·209	6·010	9·460	15·866	122·613	78
79	7·545	5·599	8·816	14·955	122·214	79
80	6·916	5·187	8·177	14·014	121·281	80
81	6·327	4·783	7·561	13·058	119·734	81
82	5·783	4·396	6·996	12·111	117·601	82
83	5·277	4·037	6·496	11·196	114·909	83
84	4·806	3·720	6·068	10·348	111·867	84
85	4·372	3·447	5·704	9·597	108·677	85
86	3·977	3·216	5·387	8·943	105·391	86
87	3·638	3·019	5·100	8·377	101·919	87
88	3·373	2·847	4·831	7·891	98·077	88
89	3·196	2·698	4·578	7·477	93·748	89
90	3·021	2·550	4·327	7·068	89·128	90
91	2·847	2·404	4·078	6·661	84·234	91
92	2·678	2·261	3·836	6·265	79·227	92
93	2·510	2·119	3·595	5·872	74·258	93
94	2·338	1·974	3·349	5·470	69·169	94
95	2·154	1·819	3·085	5·039	63·726	95
96	1·953	1·649	2·798	4·570	57·789	96
97	1·715	1·449	2·458	4·013	50·753	97
98	1·406	1·188	2·015	3·290	41·601	98
99	1·029	·869	1·474	2·406	30·433	99
100	·536	·452	·770	1·255	15·879	100

CENTRAL COUNTIES RURAL DISTRICTS MORTALITY
(1921 CENSUS—MALES)

$3\frac{1}{2}$ per cent.

$3\frac{1}{2}$ per cent.

Age	D_x	N_x	$\bar{a}_x$	$\bar{A}_x$	$\bar{a}_{xx}$	$\bar{A}_{xx}$	Age
16	57 671	1 311 715	23·242	·200 44	21·228	·134 86	16
17	55 613	1 256 102	23·083	·205 92	21·036	·138 17	17
18	53 620	1 202 482	22·923	·211 42	20·844	·141 47	18
19	51 688	1 150 794	22·761	·216 99	20·654	·144 73	19
20	49 812	1 100 982	22·599	·222 56	20·467	·147 95	20
21	47 990	1 052 992	22·439	·228 07	20·284	·151 10	21
22	46 223	1 006 769	22·277	·233 64	20·104	·154 19	22
23	44 514	962 255	22·114	·239 24	19·924	·157 29	23
24	42 862	919 393	21·947	·244 99	19·742	·160 43	24
25	41 269	878 124	21·775	·250 91	19·554	·163 65	25
26	39 735	838 389	21·597	·257 03	19·359	·167 01	26
27	38 257	800 132	21·412	·263 40	19·156	·170 50	27
28	36 833	763 209	21·221	·269 97	18·946	·174 11	28
29	35 463	727 836	21·021	·276 85	18·726	·177 90	29
30	34 143	693 693	20·815	·283 94	18·498	·181 82	30
31	32 873	660 820	20·599	·291 36	18·259	·185 93	31
32	31 649	629 171	20·377	·299 00	18·012	·190 18	32
33	30 469	598 702	20·146	·306 95	17·755	·194 60	33
34	29 330	569 372	19·910	·315 07	17·492	·199 13	34
35	28 228	541 144	19·668	·323 39	17·223	·203 75	35
36	27 162	513 982	19·420	·331 92	16·951	·208 43	36
37	26 132	487 850	19·166	·340 66	16·673	·213 21	37
38	25 135	462 715	18·906	·349 60	16·390	·218 08	38
39	24 171	438 544	18·640	·358 76	16·102	·223 03	39
40	23 239	415 305	18·368	·368 11	15·808	·228 09	40
41	22 338	392 967	18·089	·377 71	15·508	·233 25	41
42	21 466	371 501	17·803	·387 55	15·202	·238 51	42
43	20 624	350 877	17·510	·397 63	14·890	·243 88	43
44	19 810	331 067	17·209	·407 99	14·568	·249 42	44
45	19 024	312 043	16·900	·418 62	14·240	·255 06	45
46	18 266	293 777	16·580	·429 62	13·900	·260 91	46
47	17 532	276 245	16·254	·440 84	13·554	·266 86	47
48	16 823	259 422	15·918	·452 39	13·198	·272 99	48
49	16 134	243 288	15·576	·464 16	12·839	·279 16	49
50	15 465	227 823	15·227	·476 17	12·475	·285 42	50
51	14 816	213 007	14·873	·488 35	12·106	·291 77	51
52	14 184	198 823	14·513	·500 74	11·736	·298 13	52
53	13 570	185 253	14·148	·513 28	11·360	·304 60	53
54	12 970	172 283	13·779	·525 98	10·985	·311 05	54
55	12 389	159 894	13·402	·538 95	10·604	·317 60	55
56	11 821	148 073	13·022	·552 02	10·223	·324 16	56
57	11 268	136 805	12·637	·565 27	9·839	·330 76	57
58	10 729	126 076	12·247	·578 69	9·455	·337 37	58
59	10 199	115 877	11·858	·592 06	9·073	·343 94	59
60	9 679·9	106 197	11·467	·605 52	8·695	·350 44	60

CENTRAL COUNTIES RURAL DISTRICTS MORTALITY
(1921 CENSUS—MALES) continued

 $3\frac{1}{2}$ per cent.

 $3\frac{1}{2}$ per cent.

Age	D_x	N_x	$\bar{a}_x$	$\bar{A}_x$	$\bar{a}_{xx}$	$\bar{A}_{xx}^1$	Age
61	9 171.4	97 025.6	11.074	.619 04	8.321	.356 87	61
62	8 672.2	88 353.4	10.683	.632 49	7.951	.363 24	62
63	8 182.9	80 170.5	10.293	.645 91	7.587	.369 50	63
64	7 703.0	72 467.5	9.903	.659 33	7.228	.375 67	64
65	7 233.2	65 234.3	9.514	.672 70	6.872	.381 79	65
66	6 773.0	58 461.3	9.126	.686 05	6.522	.387 81	66
67	6 323.0	52 138.3	8.740	.699 33	6.176	.393 77	67
68	5 882.1	46 256.2	8.358	.712 47	5.838	.399 58	68
69	5 450.0	40 806.2	7.981	.725 45	5.508	.405 25	69
70	5 027.2	35 779.0	7.610	.738 21	5.187	.410 78	70
71	4 614.0	31 165.0	7.247	.750 69	4.876	.416 13	71
72	4 211.6	26 953.4	6.892	.762 90	4.575	.421 31	72
73	3 820.2	23 133.2	6.548	.774 73	4.287	.426 26	73
74	3 440.0	19 693.2	6.216	.786 16	4.014	.430 95	74
75	3 071.3	16 621.9	5.902	.796 96	3.761	.435 31	75
76	2 716.2	13 905.7	5.609	.807 04	3.531	.439 27	76
77	2 378.9	11 526.8	5.334	.816 50	3.321	.442 88	77
78	2 062.5	9 464.26	5.077	.825 34	3.130	.446 16	78
79	1 770.9	7 693.36	4.831	.833 81	2.952	.449 23	79
80	1 505.6	6 187.76	4.596	.841 89	2.783	.452 13	80
81	1 267.3	4 920.46	4.368	.849 73	2.621	.454 92	81
82	1 054.5	3 865.96	4.150	.857 23	2.468	.457 55	82
83	867.07	2 998.89	3.942	.864 39	2.323	.460 05	83
84	703.32	2 295.57	3.746	.871 13	2.190	.462 33	84
85	562.24	1 733.33	3.564	.877 39	2.069	.464 41	85
86	443.02	1 290.31	3.392	.883 31	1.959	.466 31	86
87	344.06	946.25	3.228	.888 95	1.859	.468 03	87
88	263.62	682.63	3.066	.894 52	1.759	.469 75	88
89	199.04	483.59	2.906	.900 03	1.662	.471 41	89
90	147.82	335.77	2.745	.905 57	1.565	.473 08	90
91	107.83	227.94	2.587	.911 00	1.469	.474 73	91
92	77.01	150.93	2.431	.916 37	1.380	.476 27	92
93	53.76	97.17	2.276	.921 70	1.295	.477 73	93
94	36.65	60.52	2.118	.927 13	1.211	.479 17	94
95	24.37	36.15	1.947	.933 02	1.126	.480 63	95
96	15.71	20.44	1.763	.939 35	1.039	.482 13	96
97	9.81	10.63	1.543	.946 92	.938	.483 87	97
98	5.91	4.72	1.253	.956 90	.792	.486 37	98
99	3.25	1.47	.896	.969 17	.603	.489 63	99
100	1.47	—	.408	.985 96	.320	.494 49	100

MORTALITY RATES OF CENTRAL COUNTIES RURAL DISTRICTS
(1921 CENSUS—MALES)

*Combined with the Sickness Rates of the Manchester Unity
Experience 1893-97, Occupation Group A.H.J.*

$3\frac{1}{2}$ per cent.

$3\frac{1}{2}$ per cent.

Commutation Columns K for Sickness Benefit Values

Age	First 3 months	Second 3 months	Second 6 months	Second 12 months	After 2 years	Age
16	1 126 242	247 456	243 796	267 861	1 032 922	16
17	1 080 022	244 737	242 833	267 861	1 032 922	17
18	1 036 547	242 006	241 741	267 861	1 032 922	18
19	996 214	239 163	240 477	267 651	1 032 922	19
20	959 065	236 169	239 005	267 194	1 032 922	20
21	924 932	232 990	237 294	266 558	1 032 727	21
22	893 370	229 645	235 362	265 663	1 032 303	22
23	863 835	226 243	233 275	264 484	1 031 577	23
24	835 875	222 835	231 091	263 129	1 030 528	24
25	809 164	219 470	228 861	261 699	1 029 182	25
26	783 526	216 149	226 593	260 282	1 027 603	26
27	758 842	212 873	224 332	258 878	1 025 848	27
28	735 001	209 682	222 079	257 451	1 024 008	28
29	711 939	206 573	219 838	255 969	1 022 056	29
30	689 561	203 510	217 610	254 438	1 020 003	30
31	667 814	200 495	215 399	252 829	1 017 825	31
32	646 651	197 494	213 205	251 152	1 015 502	32
33	626 059	194 513	211 031	249 443	1 012 955	33
34	606 027	191 523	208 848	247 799	1 010 175	34
35	586 544	188 501	206 632	246 187	1 007 153	35
36	567 573	185 454	204 389	244 581	1 003 885	36
37	549 027	182 390	202 097	242 929	1 000 367	37
38	530 853	179 288	199 765	241 186	996 599	38
39	512 955	176 133	197 398	239 362	992 507	39
40	495 318	172 909	194 980	237 465	988 074	40
41	477 907	169 650	192 496	235 483	983 288	41
42	460 736	166 343	189 956	233 468	978 141	42
43	443 837	162 997	187 346	231 405	972 691	43
44	427 239	159 641	184 657	229 283	966 969	44
45	410 948	156 262	181 919	227 108	960 989	45
46	394 951	152 869	179 160	224 870	954 743	46
47	379 218	149 468	176 368	222 561	948 245	47
48	363 690	146 015	173 533	220 191	941 443	48
49	348 332	142 472	170 633	217 752	934 259	49
50	333 133	138 807	167 647	215 209	926 580	50
51	318 083	135 037	164 528	212 529	918 237	51
52	303 191	131 151	161 266	209 687	909 088	52
53	288 468	127 154	157 838	206 647	899 041	53
54	273 924	123 054	154 229	203 410	888 040	54
55	259 546	118 870	150 425	199 923	876 134	55

MORTALITY RATES OF CENTRAL COUNTIES RURAL DISTRICTS
(1921 CENSUS—MALES) continued

3½ per cent.

3½ per cent.

Commutation Columns K for Sickness Benefit Values

Age	First 3 months	Second 3 months	Second 6 months	Second 12 months	After 2 years	Age
56	245 323	114 597	146 406	196 170	863 412	56
57	231 261	110 233	142 157	192 107	849 962	57
58	217 380	105 778	137 681	187 707	835 828	58
59	203 693	101 226	132 983	182 946	820 990	59
60	190 215	96 544·6	128 062	177 817	805 335	60
61	176 934	91 737·5	122 907	172 303	788 652	61
62	163 855	86 785·9	117 491	166 370	770 657	62
63	150 995	81 712·5	111 811	159 974	751 004	63
64	138 390	76 525·8	105 878	153 103	729 415	64
65	126 068	71 245·9	99 723·9	145 784	705 711	65
66	114 058	65 916·5	93 379·1	138 039	679 835	66
67	102 409	60 547·1	86 850·7	129 893	651 829	67
68	91 173·9	55 164·7	80 138·0	121 313	621 780	68
69	80 447·9	49 810·2	73 265·0	112 270	589 738	69
70	70 342·9	44 529·7	66 287·2	102 825	555 755	70
71	60 952·4	39 400·6	59 302·2	93 101·5	519 914	71
72	52 338·6	34 502·4	52 444·7	83 287·4	482 379	72
73	44 519·6	29 896·2	45 834·5	73 540·8	443 509	73
74	37 477·2	25 619·9	39 572·6	64 131·6	403 672	74
75	31 187·2	21 696·8	33 735·1	55 158·9	363 464	75
76	25 628·4	18 143·3	28 364·4	46 749·8	323 525	76
77	20 785·6	14 966·6	23 491·0	39 028·3	284 536	77
78	16 630·7	12 168·5	19 147·3	32 104·2	247 104	78
79	13 134·6	9 742·04	15 333·1	26 009·1	211 783	79
80	10 244·6	7 679·44	12 100·7	20 740·3	178 930	80
81	7 893·10	5 962·94	9 422·02	16 277·2	148 854	81
82	6 006·60	4 562·94	7 258·12	12 570·4	121 790	82
83	4 508·70	3 447·44	5 544·12	9 560·22	97 944·1	83
84	3 333·30	2 578·23	4 203·82	7 171·72	77 424·1	84
85	2 424·63	1 910·65	3 161·02	5 320·22	60 183·1	85
86	1 738·54	1 405·00	2 353·29	3 907·32	46 017·1	86
87	1 235·60	1 025·23	1 731·50	2 844·32	34 594·1	87
88	877·98	741·14	1 257·51	2 054·03	25 525·7	88
89	628·61	530·63	900·34	1 470·62	18 436·6	89
90	441·65	372·81	632·56	1 033·23	13 029·6	90
91	303·85	256·48	435·19	710·84	8 988·88	91
92	204·22	172·38	292·49	477·76	6 041·48	92
93	133·73	112·88	191·53	312·85	3 956·08	93
94	84·99	71·74	121·73	198·83	2 514·28	94
95	52·10	43·98	74·62	121·88	1 541·29	95
96	30·50	25·74	43·68	71·34	902·19	96
97	16·74	14·13	23·98	39·16	495·26	97
98	8·27	6·98	11·84	19·34	244·60	98
99	3·33	2·81	4·77	7·79	98·54	99
100	·79	·66	1·13	1·84	23·28	100

MORTALITY RATES OF CENTRAL COUNTIES RURAL DISTRICTS
(1921 CENSUS—MALES)

*Combined with the Sickness Rates of the Manchester Unity
Experience 1893-97, Occupation Group A.H.7.*

$3\frac{1}{2}$ per cent.

$3\frac{1}{2}$ per cent.

Value of Sickness Benefits of 1 per week for the whole of life, in periods

Age	First 3 months	Second 3 months	Second 6 months	Second 12 months	After 2 years	Age
16	19'529	4'291	4'227	4'645	17'911	16
17	19'420	4'401	4'366	4'816	18'573	17
18	19'332	4'513	4'508	4'996	19'264	18
19	19'274	4'627	4'653	5'178	19'984	19
20	19'253	4'741	4'798	5'364	20'736	20
21	19'274	4'855	4'945	5'555	21'520	21
22	19'327	4'968	5'092	5'747	22'333	22
23	19'406	5'083	5'241	5'942	23'174	23
24	19'502	5'199	5'392	6'139	24'043	24
25	19'607	5'318	5'546	6'341	24'938	25
26	19'719	5'440	5'703	6'551	25'862	26
27	19'835	5'564	5'864	6'767	26'815	27
28	19'955	5'693	6'029	6'990	27'802	28
29	20'075	5'825	6'199	7'218	28'820	29
30	20'197	5'961	6'374	7'452	29'875	30
31	20'315	6'099	6'552	7'691	30'962	31
32	20'432	6'240	6'737	7'936	32'087	32
33	20'547	6'384	6'926	8'187	33'245	33
34	20'662	6'530	7'121	8'449	34'442	34
35	20'779	6'678	7'320	8'721	35'679	35
36	20'896	6'828	7'525	9'004	36'959	36
37	21'010	6'980	7'734	9'296	38'281	37
38	21'120	7'133	7'948	9'596	39'650	38
39	21'222	7'287	8'167	9'903	41'062	39
40	21'314	7'440	8'390	10'218	42'518	40
41	21'394	7'595	8'617	10'542	44'019	41
42	21'463	7'749	8'849	10'876	45'567	42
43	21'520	7'903	9'084	11'220	47'163	43
44	21'567	8'059	9'321	11'574	48'813	44
45	21'601	8'214	9'563	11'938	50'514	45
46	21'622	8'369	9'808	12'311	52'269	46
47	21'630	8'525	10'060	12'695	54'087	47
48	21'618	8'679	10'315	13'089	55'961	48
49	21'590	8'831	10'576	13'496	57'906	49
50	21'541	8'976	10'840	13'916	59'915	50
51	21'469	9'114	11'105	14'345	61'976	51
52	21'376	9'246	11'370	14'783	64'093	52
53	21'258	9'370	11'631	15'228	66'252	53
54	21'120	9'488	11'891	15'683	68'469	54
55	20'950	9'595	12'142	16'137	70'719	55

MORTALITY RATES OF CENTRAL COUNTIES RURAL DISTRICTS
(1921 CENSUS—MALES) continued

$3\frac{1}{2}$ per cent.

$3\frac{1}{2}$ per cent.

Value of Sickness Benefits of 1 per week for the whole of life, in periods

Age	First 3 months	Second 3 months	Second 6 months	Second 12 months	After 2 years	Age
56	20.753	9.694	12.385	16.595	73.040	56
57	20.524	9.783	12.616	17.049	75.432	57
58	20.261	9.859	12.833	17.495	77.903	58
59	19.972	9.925	13.039	17.938	80.497	59
60	19.651	9.974	13.230	18.370	83.199	60
61	19.291	10.002	13.400	18.786	85.987	61
62	18.894	10.007	13.548	19.184	88.864	62
63	18.453	9.986	13.664	19.550	91.780	63
64	17.966	9.935	13.745	19.876	94.693	64
65	17.429	9.850	13.787	20.155	97.565	65
66	16.841	9.733	13.787	20.381	100.378	66
67	16.196	9.576	13.735	20.543	103.087	67
68	15.500	9.379	13.624	20.624	105.709	68
69	14.761	9.140	13.443	20.600	108.211	69
70	13.993	8.858	13.186	20.454	110.551	70
71	13.210	8.539	12.853	20.178	112.681	71
72	12.427	8.192	12.452	19.776	114.536	72
73	11.654	7.826	11.998	19.251	116.097	73
74	10.895	7.448	11.504	18.643	117.347	74
75	10.155	7.064	10.984	17.960	118.344	75
76	9.435	6.680	10.443	17.211	119.109	76
77	8.737	6.291	9.875	16.406	119.608	77
78	8.063	5.900	9.284	15.566	119.808	78
79	7.417	5.501	8.658	14.687	119.590	79
80	6.804	5.101	8.037	13.775	118.844	80
81	6.228	4.705	7.435	12.844	117.458	81
82	5.696	4.327	6.883	11.921	115.496	82
83	5.200	3.976	6.394	11.026	112.959	83
84	4.739	3.666	5.977	10.197	110.081	84
85	4.312	3.398	5.622	9.463	107.041	85
86	3.924	3.171	5.312	8.820	103.870	86
87	3.591	2.980	5.033	8.267	100.548	87
88	3.330	2.811	4.770	7.792	96.827	88
89	3.158	2.666	4.523	7.389	92.627	89
90	2.988	2.522	4.279	6.990	88.145	90
91	2.818	2.379	4.036	6.592	83.362	91
92	2.652	2.238	3.798	6.204	78.449	92
93	2.488	2.100	3.563	5.819	73.587	93
94	2.319	1.957	3.321	5.425	68.602	94
95	2.138	1.805	3.062	5.001	63.245	95
96	1.941	1.638	2.780	4.541	57.428	96
97	1.706	1.440	2.445	3.992	50.487	97
98	1.399	1.181	2.003	3.272	41.386	98
99	1.025	.865	1.468	2.397	30.320	99
100	.537	.449	.769	1.252	15.837	100

CENTRAL COUNTIES RURAL DISTRICTS MORTALITY
(1921 CENSUS—MALES)

4 per cent.

4 per cent.

Age	D_x	N_x	$\bar{a}_x$	$\bar{A}_x$	$\bar{a}_{xx}$	$\bar{A}_{xx}^1$	Age
16	53 391	1 108 927	21·267	·165 90	19·585	·115 93	16
17	51 238	1 057 689	21·140	·170 87	19·425	·119 07	17
18	49 165	1 008 524	21·010	·175 97	19·265	·122 21	18
19	47 165	961 359	20·880	·181 07	19·106	·125 32	19
20	45 235	916 124	20·750	·186 17	18·950	·128 39	20
21	43 370	872 754	20·619	·191 31	18·799	·131 35	21
22	41 574	831 180	20·488	·196 45	18·648	·134 31	22
23	39 843	791 337	20·358	·201 55	18·499	·137 23	23
24	38 180	753 157	20·223	·206 84	18·348	·140 19	24
25	36 585	716 572	20·083	·212 33	18·191	·143 27	25
26	35 055	681 517	19·938	·218 02	18·028	·146 47	26
27	33 590	647 927	19·785	·224 01	17·856	·149 83	27
28	32 184	615 743	19·628	·230 18	17·679	·153 31	28
29	30 837	584 906	19·464	·236 60	17·493	·156 95	29
30	29 547	555 359	19·292	·243 35	17·297	·160 80	30
31	28 311	527 048	19·112	·250 41	17·092	·164 82	31
32	27 126	499 922	18·926	·257 70	16·879	·169 00	32
33	25 989	473 933	18·732	·265 32	16·657	·173 35	33
34	24 897	449 036	18·532	·273 16	16·429	·177 83	34
35	23 847	425 189	18·326	·281 24	16·195	·182 41	35
36	22 836	402 353	18·115	·289 51	15·957	·187 08	36
37	21 864	380 489	17·898	·298 03	15·713	·191 86	37
38	20 929	359 560	17·676	·306 73	15·465	·196 73	38
39	20 029	339 531	17·448	·315 68	15·212	·201 69	39
40	19 165	320 366	17·212	·324 93	14·950	·206 83	40
41	18 333	302 033	16·971	·334 38	14·685	·212 02	41
42	17 532	284 501	16·724	·344 07	14·413	·217 35	42
43	16 764	267 737	16·467	·354 16	14·133	·222 85	43
44	16 025	251 712	16·203	·364 50	13·846	·228 47	44
45	15 315	236 397	15·932	·375 13	13·550	·234 28	45
46	14 633	221 764	15·651	·386 16	13·245	·240 26	46
47	13 978	207 786	15·361	·397 53	12·929	·246 46	47
48	13 348	194 438	15·063	·409 22	12·607	·252 77	48
49	12 740	181 698	14·758	·421 18	12·278	·259 23	49
50	12 154	169 544	14·446	·433 41	11·944	·265 77	50
51	11 587	157 957	14·128	·445 89	11·607	·272 39	51
52	11 040	146 917	13·804	·458 59	11·265	·279 09	52
53	10 510	136 407	13·475	·471 50	10·921	·285 83	53
54	9 998·6	126 408	13·138	·484 72	10·572	·292 68	54
55	9 504·4	116 904	12·796	·498 13	10·219	·299 61	55
56	9 025·6	107 878	12·449	·511 74	9·863	·306 58	56
57	8 561·9	99 317·0	12·096	·525 58	9·504	·313 62	57
58	8 112·3	91 204·7	11·738	·539 63	9·145	·320 66	58
59	7 674·6	83 530·1	11·379	·553 71	8·787	·327 69	59
60	7 249·5	76 280·6	11·017	·567 91	8·431	·334 67	60

CENTRAL COUNTIES RURAL DISTRICTS MORTALITY
(1921 CENSUS—MALES) continued

4 per cent.

4 per cent.

Age	D_x	N_x	$\bar{a}_x$	$\bar{A}_x$	$\bar{a}_{xx}$	$\bar{A}_{xx}^1$	Age
61	6 835.2	69 445.4	10.655	.582 10	8.078	.341 59	61
62	6 432.6	63 012.8	10.291	.596 38	7.728	.348 45	62
63	6 040.2	56 972.6	9.927	.610 66	7.383	.355 21	63
64	5 658.5	51 314.1	9.563	.624 93	7.041	.361 93	64
65	5 287.5	46 026.6	9.199	.639 21	6.703	.368 55	65
66	4 927.9	41 098.7	8.834	.653 52	6.367	.375 15	66
67	4 578.3	36 520.4	8.471	.667 76	6.037	.381 61	67
68	4 238.3	32 282.1	8.110	.681 92	5.712	.387 99	68
69	3 908.2	28 373.9	7.753	.695 92	5.395	.394 20	69
70	3 587.6	24 786.3	7.402	.709 69	5.087	.400 25	70
71	3 277.1	21 509.2	7.056	.723 25	4.786	.406 14	71
72	2 976.7	18 532.5	6.718	.736 52	4.496	.411 83	72
73	2 687.2	15 845.3	6.388	.749 46	4.216	.417 32	73
74	2 408.2	13 437.1	6.071	.761 89	3.950	.422 54	74
75	2 139.4	11 297.7	5.771	.773 66	3.705	.427 34	75
76	1 883.1	9 414.62	5.489	.784 72	3.480	.431 75	76
77	1 641.3	7 773.32	5.224	.795 11	3.276	.435 75	77
78	1 416.0	6 357.32	4.977	.804 80	3.090	.439 41	78
79	1 210.1	5 147.22	4.741	.814 05	2.916	.442 81	79
80	1 023.9	4 123.32	4.513	.822 99	2.752	.446 03	80
81	857.76	3 265.52	4.292	.831 66	2.592	.449 17	81
82	710.23	2 555.29	4.082	.839 90	2.443	.452 09	82
83	581.21	1 974.08	3.879	.847 87	2.301	.454 87	83
84	469.26	1 504.82	3.689	.855 32	2.168	.457 49	84
85	373.29	1 131.53	3.511	.862 30	2.050	.459 80	85
86	292.70	838.83	3.345	.868 80	1.943	.461 89	86
87	226.24	612.59	3.186	.875 04	1.843	.463 85	87
88	172.48	440.11	3.029	.881 20	1.746	.465 76	88
89	129.60	310.51	2.871	.887 40	1.649	.467 67	89
90	95.81	214.70	2.715	.893 51	1.554	.469 53	90
91	69.55	145.15	2.559	.899 64	1.460	.471 37	91
92	49.43	95.72	2.407	.905 60	1.371	.473 11	92
93	34.35	61.37	2.255	.911 55	1.287	.474 77	93
94	23.30	38.07	2.100	.917 64	1.205	.476 37	94
95	15.42	22.65	1.933	.924 18	1.119	.478 06	95
96	9.89	12.76	1.751	.931 32	1.035	.479 70	96
97	6.15	6.61	1.533	.939 87	.934	.481 68	97
98	3.68	2.93	1.250	.950 97	.789	.484 53	98
99	2.02	.91	.893	.964 97	.602	.488 19	99
100	.91	—	.408	.984 00	.319	.493 75	100

MORTALITY RATES OF CENTRAL COUNTIES RURAL DISTRICTS
(1921 CENSUS—MALES)

*Combined with the Sickness Rates of the Manchester Unity
Experience 1893-97, Occupation Group A.H.J.*

4 per cent.

4 per cent.

Commutation Columns K for Sickness Benefit Values

Age	First 3 months	Second 3 months	Second 6 months	Second 12 months	After 2 years	Age
16	934 079	193 930	185 831	198 643	744 316	16
17	891 390	191 419	184 942	198 643	744 316	17
18	851 430	188 909	183 938	198 643	744 316	18
19	814 536	186 308	182 782	198 451	744 316	19
20	780 718	183 582	181 442	198 035	744 316	20
21	749 795	180 702	179 891	197 459	744 138	21
22	721 339	177 687	178 150	196 652	743 756	22
23	694 837	174 633	176 277	195 593	743 105	23
24	669 870	171 591	174 327	194 384	742 169	24
25	646 132	168 600	172 345	193 113	740 972	25
26	623 458	165 663	170 340	191 859	739 575	26
27	601 732	162 780	168 349	190 624	738 031	27
28	580 849	159 984	166 376	189 374	736 419	28
29	560 745	157 274	164 422	188 082	734 718	29
30	541 332	154 617	162 490	186 754	732 936	30
31	522 557	152 014	160 580	185 365	731 056	31
32	504 373	149 436	158 695	183 924	729 060	32
33	486 766	146 886	156 837	182 463	726 883	33
34	469 719	144 342	154 979	181 064	724 516	34
35	453 219	141 783	153 103	179 699	721 957	35
36	437 230	139 215	151 212	178 345	719 203	36
37	421 674	136 645	149 290	176 959	716 253	37
38	406 504	134 056	147 343	175 505	713 107	38
39	391 636	131 435	145 377	173 989	709 708	39
40	377 056	128 770	143 378	172 421	706 043	40
41	362 732	126 089	141 334	170 790	702 106	41
42	348 673	123 381	139 254	169 140	697 892	42
43	334 903	120 654	137 128	167 460	693 450	43
44	321 443	117 933	134 947	165 738	688 811	44
45	308 296	115 206	132 738	163 983	683 984	45
46	295 448	112 481	130 521	162 186	678 968	46
47	282 874	109 763	128 290	160 341	673 775	47
48	270 523	107 017	126 035	158 456	668 365	48
49	258 366	104 212	123 740	156 525	662 678	49
50	246 392	101 324	121 387	154 521	656 628	50
51	234 592	98 368.4	118 942	152 420	650 087	51
52	222 974	95 336.5	116 397	150 203	642 949	52
53	211 542	92 233.3	113 735	147 843	635 148	53
54	200 304	89 064.8	110 946	145 341	626 647	54
55	189 246	85 846.8	108 021	142 659	617 491	55

MORTALITY RATES OF CENTRAL COUNTIES RURAL DISTRICTS
(1921 CENSUS—MALES) continued

4 per cent.

4 per cent.

Commutation Columns K for Sickness Benefit Values

Age	First 3 months	Second 3 months	Second 6 months	Second 12 months	After 2 years	Age
56	178 360	82 576.3	104 945	139 787	607 753	56
57	167 649	79 252.3	101 708	136 692	597 508	57
58	157 128	75 875.8	98 315.2	133 357	586 795	58
59	146 803	72 442.1	94 771.0	129 765	575 602	59
60	136 684	68 927.5	91 077.3	125 915	563 849	60
61	126 761	65 335.9	87 225.2	121 795	551 384	61
62	117 036	61 654.1	83 198.4	117 384	538 003	62
63	107 519	57 899.8	78 995.1	112 650	523 460	63
64	98 236.2	54 080.2	74 625.7	107 591	507 562	64
65	89 205.7	50 210.8	70 115.9	102 227	490 191	65
66	80 446.0	46 323.8	65 488.3	96 578.2	471 318	66
67	71 990.2	42 426.3	60 749.5	90 665.3	450 989	67
68	63 874.5	38 538.2	55 900.4	84 467.2	429 283	68
69	56 163.7	34 688.9	50 959.5	77 966.2	406 248	69
70	48 934.0	30 911.0	45 967.3	71 208.7	381 935	70
71	42 247.9	27 259.0	40 993.9	64 285.8	356 416	71
72	36 144.2	23 788.1	36 134.7	57 331.6	329 819	72
73	30 630.5	20 539.9	31 473.4	50 458.6	302 409	73
74	25 688.0	17 538.7	27 078.6	43 855.0	274 451	74
75	21 295.0	14 798.8	23 001.7	37 588.4	246 370	75
76	17 431.3	12 328.9	19 268.7	31 743.6	218 610	76
77	14 081.4	10 131.4	15 897.6	26 402.4	191 640	77
78	11 221.2	8 205.22	12 907.5	21 635.9	165 872	78
79	8 826.10	6 542.82	10 294.4	17 460.2	141 674	79
80	6 855.70	5 136.52	8 090.56	13 867.9	119 275	80
81	5 260.10	3 971.82	6 272.96	10 839.5	98 867.3	81
82	3 986.10	3 026.33	4 811.56	8 336.15	80 590.3	82
83	2 979.40	2 276.65	3 659.56	6 313.15	64 564.3	83
84	2 193.13	1 695.22	2 762.99	4 715.45	50 838.3	84
85	1 588.19	1 250.78	2 068.74	3 482.85	39 360.3	85
86	1 133.66	915.79	1 533.63	2 546.82	29 975.6	86
87	802.06	665.40	1 123.67	1 845.99	22 444.0	87
88	567.41	479.00	812.67	1 327.45	16 493.9	88
89	404.59	341.55	579.46	946.53	11 865.3	89
90	283.09	238.98	405.44	662.28	8 351.32	90
91	193.96	163.74	277.78	453.76	5 737.82	91
92	129.83	109.60	185.93	303.73	3 840.62	92
93	84.67	71.48	121.25	198.08	2 504.72	93
94	53.59	45.24	76.74	125.37	1 585.30	94
95	32.72	27.62	46.85	76.54	967.89	95
96	19.08	16.11	27.32	44.64	564.47	96
97	10.43	8.81	14.94	24.41	308.70	97
98	5.14	4.34	7.36	12.03	152.12	98
99	2.07	1.75	2.96	4.84	61.23	99
100	.49	.41	.69	1.13	14.35	100

MORTALITY RATES OF CENTRAL COUNTIES RURAL DISTRICTS
(1921 CENSUS—MALES)

*Combined with the Sickness Rates of the Manchester Unity
Experience 1893-97, Occupation Group A.H.7.*

4 per cent.

4 per cent.

Value of Sickness Benefits of 1 per week for the whole of life, in periods

Age	First 3 months	Second 3 months	Second 6 months	Second 12 months	After 2 years	Age
16	17.495	3.632	3.481	3.721	13.941	16
17	17.397	3.736	3.610	3.877	14.527	17
18	17.318	3.842	3.741	4.040	15.139	18
19	17.270	3.950	3.875	4.208	15.781	19
20	17.259	4.058	4.011	4.378	16.455	20
21	17.288	4.166	4.148	4.553	17.158	21
22	17.350	4.274	4.285	4.730	17.890	22
23	17.440	4.383	4.424	4.909	18.651	23
24	17.545	4.494	4.566	5.091	19.439	24
25	17.661	4.609	4.711	5.279	20.254	25
26	17.785	4.726	4.859	5.473	21.098	26
27	17.914	4.846	5.012	5.675	21.972	27
28	18.048	4.971	5.169	5.884	22.881	28
29	18.184	5.100	5.332	6.099	23.826	29
30	18.321	5.233	5.499	6.320	24.805	30
31	18.458	5.369	5.672	6.547	25.822	31
32	18.594	5.509	5.850	6.780	26.877	32
33	18.730	5.652	6.035	7.021	27.969	33
34	18.866	5.798	6.225	7.272	29.100	34
35	19.005	5.946	6.420	7.535	30.275	35
36	19.147	6.096	6.622	7.810	31.495	36
37	19.286	6.250	6.828	8.094	32.759	37
38	19.423	6.405	7.040	8.386	34.073	38
39	19.554	6.562	7.258	8.687	35.434	39
40	19.674	6.719	7.481	8.997	36.840	40
41	19.786	6.878	7.709	9.316	38.297	41
42	19.888	7.038	7.943	9.648	39.807	42
43	19.978	7.197	8.180	9.989	41.366	43
44	20.059	7.359	8.421	10.342	42.983	44
45	20.130	7.522	8.667	10.707	44.661	45
46	20.191	7.687	8.920	11.084	46.400	46
47	20.237	7.853	9.178	11.471	48.203	47
48	20.267	8.017	9.442	11.871	50.073	48
49	20.280	8.180	9.713	12.286	52.016	49
50	20.272	8.337	9.987	12.714	54.025	50
51	20.246	8.490	10.265	13.154	56.105	51
52	20.197	8.636	10.543	13.605	58.238	52
53	20.128	8.776	10.822	14.067	60.432	53
54	20.032	8.907	11.096	14.536	62.671	54
55	19.911	9.032	11.365	15.009	64.966	55

MORTALITY RATES OF CENTRAL COUNTIES RURAL DISTRICTS
(1921 CENSUS—MALES) continued

4 per cent.

4 per cent.

Value of Sickness Benefits of 1 per week for the whole of life, in periods

Age	First 3 months	Second 3 months	Second 6 months	Second 12 months	After 2 years	Age
56	19.762	9.149	11.628	15.488	67.339	56
57	19.581	9.257	11.880	15.966	69.789	57
58	19.369	9.353	12.119	16.439	72.334	58
59	19.128	9.439	12.349	16.908	75.001	59
60	18.854	9.508	12.563	17.369	77.777	60
61	18.545	9.559	12.761	17.819	80.667	61
62	18.194	9.585	12.934	18.248	83.638	62
63	17.801	9.586	13.078	18.650	86.664	63
64	17.361	9.558	13.189	19.015	89.701	64
65	16.871	9.496	13.261	19.334	92.710	65
66	16.325	9.400	13.290	19.599	95.645	66
67	15.724	9.267	13.269	19.803	98.505	67
68	15.071	9.093	13.189	19.929	101.285	68
69	14.371	8.876	13.039	19.949	103.947	69
70	13.640	8.616	12.813	19.849	106.461	70
71	12.892	8.318	12.509	19.617	108.760	71
72	12.142	7.991	12.139	19.260	110.799	72
73	11.399	7.644	11.712	18.777	112.535	73
74	10.667	7.283	11.244	18.211	113.966	74
75	9.954	6.917	10.751	17.570	115.158	75
76	9.257	6.547	10.232	16.857	116.091	76
77	8.579	6.173	9.686	16.086	116.761	77
78	7.925	5.795	9.115	15.279	117.140	78
79	7.294	5.407	8.507	14.429	117.077	79
80	6.696	5.017	7.902	13.544	116.491	80
81	6.132	4.630	7.313	12.637	115.259	81
82	5.612	4.261	6.775	11.737	113.471	82
83	5.126	3.917	6.296	10.862	111.082	83
84	4.674	3.613	5.888	10.049	108.336	84
85	4.255	3.351	5.542	9.330	105.442	85
86	3.873	3.129	5.240	8.701	102.412	86
87	3.545	2.941	4.967	8.159	99.205	87
88	3.290	2.777	4.712	7.696	95.628	88
89	3.122	2.635	4.471	7.303	91.553	89
90	2.955	2.494	4.232	6.912	87.163	90
91	2.789	2.354	3.994	6.524	82.498	91
92	2.627	2.217	3.762	6.145	77.699	92
93	2.465	2.081	3.530	5.767	72.917	93
94	2.300	1.942	3.294	5.381	68.038	94
95	2.122	1.791	3.038	4.964	62.769	95
96	1.929	1.629	2.762	4.514	57.074	96
97	1.696	1.433	2.429	3.969	50.195	97
98	1.397	1.179	2.000	3.269	41.337	98
99	1.025	.866	1.465	2.396	30.312	99
100	.538	.451	.758	1.242	15.769	100



SICKNESS RATES OF THE MANCHESTER UNITY EXPERIENCE 1893-97, OCCUPATION GROUP A.H.J.

COMBINED WITH THE EASTERN COUNTIES RURAL DISTRICTS MOR- TALITY (1921 CENSUS—MALES)

By GUY WOODROW, F.I.A.

IN his paper entitled "Friendly Societies since the Advent of National Health Insurance", which was read before the Institute on 25th April 1932, Mr Burrows appended a set of tables combining the Central Counties Rural Districts Male Mortality rates as derived from the 1921 Census with the Manchester Unity A.H.J. sickness rates. It is thought that a similar set of tables combining the even lighter mortality rates of Eastern Counties Rural Districts Males with the same sickness rates may be of some service to the profession.

As the published mortality rates of Eastern Counties Rural Districts Males cease at age 84, the extension given by Mr H. B. Smither on page 324 of Vol. LIX of the *Journal* has been adopted, and as the Manchester Unity A.H.J. sickness rates do not extend beyond age 100 these have been continued at the same figure as was adopted for age 91 and onwards in the published rates.

Mr Smither published certain commutation columns and monetary values for rates of interest of 3 % and 4 % and these have been used where appropriate, but it has been necessary to calculate in full the corresponding functions for $3\frac{1}{2}$ %.

The whole of the work was done by arithmometer or comptometer in duplicate and where possible further checks have been applied at quinquennial ages and on totals. Additional figures to those given in the tables were taken out at the older ages where the magnitude of the functions was small. The values of $\bar{a}_x$ were obtained by the formula

$$\bar{a}_x = a_x + \frac{1}{2} - \frac{1}{12} (\mu_x + \delta),$$

the values of μ_x being calculated by the formula

$$\mu_x = \frac{8(l_{x-1} - l_{x+1}) - (l_{x-2} - l_{x+2})}{12l_x}.$$

The value of $\bar{A}_x$ was derived by means of a Premium Conversion Table. The joint life functions were computed in a similar manner taking $D_{xx} = \nu^x l_x \cdot l_x$ and $\bar{a}_{xx} = a_{xx} + \frac{1}{2} - \frac{1}{12} (\mu_{xx} + \delta)$ and

$$\bar{A}'_{xx} = \frac{1}{2} \bar{A}_{xx}.$$

The sickness values were calculated by the formula

$$\Sigma \nu^{x+\frac{1}{2}} l_{x+\frac{1}{2}} \cdot s_x \div D_x.$$

EASTERN COUNTIES RURAL DISTRICTS MORTALITY
(1921 CENSUS—MALES)

Age	l_x	d_x	q_x	p_x	Age
16	89 472	176	.001 97	.998 03	16
17	89 296	193	.002 16	.997 84	17
18	89 103	208	.002 33	.997 67	18
19	88 895	224	.002 52	.997 48	19
20	88 671	241	.002 72	.997 28	20
21	88 430	257	.002 91	.997 09	21
22	88 173	273	.003 10	.996 90	22
23	87 900	290	.003 30	.996 70	23
24	87 610	308	.003 51	.996 49	24
25	87 302	324	.003 71	.996 29	25
26	86 978	337	.003 87	.996 13	26
27	86 641	343	.003 96	.996 04	27
28	86 298	340	.003 94	.996 06	28
29	85 958	330	.003 84	.996 16	29
30	85 628	318	.003 71	.996 29	30
31	85 310	307	.003 60	.996 40	31
32	85 003	302	.003 56	.996 44	32
33	84 701	307	.003 62	.996 38	33
34	84 394	315	.003 73	.996 27	34
35	84 079	326	.003 88	.996 12	35
36	83 753	338	.004 04	.995 96	36
37	83 415	349	.004 18	.995 82	37
38	83 066	357	.004 30	.995 70	38
39	82 709	365	.004 41	.995 59	39
40	82 344	373	.004 53	.995 47	40
41	81 971	382	.004 66	.995 34	41
42	81 589	394	.004 83	.995 17	42
43	81 195	408	.005 03	.994 97	43
44	80 787	424	.005 25	.994 75	44
45	80 363	442	.005 50	.994 50	45
46	79 921	463	.005 79	.994 21	46
47	79 458	486	.006 11	.993 89	47
48	78 972	509	.006 45	.993 55	48
49	78 463	533	.006 79	.993 21	49
50	77 930	560	.007 18	.992 82	50
51	77 370	593	.007 67	.992 33	51
52	76 777	637	.008 30	.991 70	52
53	76 140	693	.009 10	.990 90	53
54	75 447	758	.010 05	.989 95	54
55	74 689	829	.011 10	.988 90	55
56	73 860	902	.012 21	.987 79	56
57	72 958	973	.013 33	.986 67	57
58	71 985	1 034	.014 36	.985 64	58
59	70 951	1 087	.015 32	.984 68	59
60	69 864	1 144	.016 38	.983 62	60
61	68 720	1 215	.017 68	.982 32	61
62	67 505	1 308	.019 38	.980 62	62
63	66 197	1 429	.021 59	.978 41	63
64	64 768	1 568	.024 21	.975 79	64
65	63 200	1 717	.027 16	.972 84	65

EASTERN COUNTIES RURAL DISTRICTS MORTALITY
(1921 CENSUS—MALES) continued

Age	l_x	d_x	q_x	p_x	Age
66	61 483	1 863	030 31	969 69	66
67	59 620	2 000	033 54	966 46	67
68	57 620	2 112	036 65	963 35	68
69	55 508	2 205	039 72	960 28	69
70	53 303	2 295	043 06	956 94	70
71	51 008	2 398	047 01	952 99	71
72	48 610	2 525	051 94	948 06	72
73	46 085	2 681	058 18	941 82	73
74	43 404	2 850	065 65	934 35	74
75	40 554	3 004	074 08	925 92	75
76	37 550	3 123	083 17	916 83	76
77	34 427	3 184	092 50	907 50	77
78	31 243	3 193	102 19	897 81	78
79	28 050	3 158	112 59	887 41	79
80	24 892	3 075	123 55	876 45	80
81	21 817	2 943	134 89	865 11	81
82	18 874	2 763	146 40	853 60	82
83	16 111	2 546	157 99	842 01	83
84	13 565	2 303	169 77	830 23	84
85	11 262	2 036	180 76	819 24	85
86	9 226	1 776	192 48	807 52	86
87	7 450	1 526	204 85	795 15	87
88	5 924	1 291	217 90	782 10	88
89	4 633	1 073	231 65	768 35	89
90	3 560	876 1	246 12	753 88	90
91	2 683 9	701 4	261 33	738 67	91
92	1 982 5	549 7	277 29	722 71	92
93	1 432 8	421 2	294 01	705 99	93
94	1 011 6	315 1	311 51	688 49	94
95	696 5	229 9	330 15	669 85	95
96	466 6	163 1	349 59	650 41	96
97	303 5	112 3	370 24	629 76	97
98	191 2	74 9	391 73	608 27	98
99	116 3	48 1	414 06	585 94	99
100	68 2	29 8	437 20	562 80	100
101	38 4	17 7	461 12	538 88	101
102	20 7	10 0	485 77	514 23	102
103	10 7	5 5	513 73	486 27	103
104	5 2	2 8	542 56	457 44	104
105	2 4	1 4	572 20	427 80	105
106	1 0	6	612 50	387 50	106
107	4	3	653 50	346 50	107
108	1	1	695 10	304 90	108
109	—	—	737 10	262 90	109
110	—	—	779 70	220 30	110

As the published mortality rates of Eastern Counties, Rural Districts, Males cease at age 84, the rates for subsequent ages are those given by Mr H. B. Smither on page 324 of Vol. LIX of the *Journal*.

EASTERN COUNTIES RURAL DISTRICTS MORTALITY
(1921 CENSUS—MALES)

3 per cent.

3 per cent.

Age	D_x	N_x	$\bar{a}_x$	$\bar{A}_x$	$\bar{a}_{xx}$	$\bar{A}_{xx}^I$	Age
16	55 756	1 409 338	25.774	238 15	23.363	154 71	16
17	54 025	1 355 313	25.584	243 77	23.142	157 97	17
18	52 339	1 302 974	25.392	249 44	22.923	161 21	18
19	50 696	1 252 278	25.199	255 14	22.703	164 47	19
20	49 095	1 203 183	25.004	260 91	22.485	167 69	20
21	47 536	1 155 647	24.808	266 70	22.268	170 89	21
22	46 017	1 109 630	24.611	272 53	22.053	174 07	22
23	44 538	1 065 092	24.411	278 44	21.837	177 26	23
24	43 098	1 021 994	24.210	284 38	21.624	180 41	24
25	41 696	980 298	24.008	290 35	21.411	183 56	25
26	40 331	939 967	23.803	296 41	21.199	186 69	26
27	39 005	900 962	23.596	302 53	20.987	189 83	27
28	37 719	863 243	23.383	308 83	20.769	193 05	28
29	36 476	826 767	23.163	315 33	20.542	196 40	29
30	35 278	791 489	22.933	322 13	20.303	199 93	30
31	34 123	757 366	22.692	329 25	20.050	203 67	31
32	33 010	724 356	22.441	336 67	19.782	207 63	32
33	31 934	692 422	22.180	344 39	19.503	211 75	33
34	30 892	661 530	21.911	352 34	19.217	215 99	34
35	29 880	631 650	21.636	360 46	18.922	220 35	35
36	28 898	602 752	21.355	368 77	18.623	224 77	36
37	27 943	574 809	21.068	377 25	18.319	229 25	37
38	27 015	547 794	20.774	385 94	18.007	233 87	38
39	26 116	521 678	20.473	394 84	17.689	238 57	39
40	25 243	496 435	20.163	404 00	17.361	243 41	40
41	24 397	472 038	19.845	413 40	17.026	248 37	41
42	23 576	448 462	19.519	423 04	16.682	253 45	42
43	22 779	425 683	19.185	432 91	16.330	258 65	43
44	22 004	403 679	18.843	443 02	15.970	263 97	44
45	21 251	382 428	18.493	453 37	15.603	269 39	45
46	20 519	361 909	18.135	463 95	15.228	274 94	46
47	19 806	342 103	17.770	474 74	14.848	280 55	47
48	19 111	322 992	17.398	485 73	14.459	286 31	48
49	18 435	304 557	17.018	496 96	14.066	292 11	49
50	17 776	286 781	16.630	508 44	13.664	298 05	50
51	17 135	269 646	16.234	520 14	13.257	304 07	51
52	16 508	253 138	15.831	532 05	12.844	310 17	52
53	15 894	237 244	15.424	544 08	12.428	316 32	53
54	15 291	221 953	15.012	556 26	12.012	322 47	54
55	14 696	207 257	14.600	568 44	11.599	328 57	55
56	14 110	193 147	14.186	580 68	11.191	334 61	56
57	13 532	179 615	13.770	592 98	10.785	340 61	57
58	12 962	166 653	13.353	605 30	10.382	346 56	58
59	12 404	154 249	12.931	617 77	9.977	352 55	59
60	11 858	142 391	12.504	630 39	9.568	358 59	60
61	11 324	131 067	12.070	643 23	9.154	364 71	61
62	10 800	120 267	11.632	656 17	8.737	370 87	62
63	10 282	109 985	11.192	669 18	8.323	376 99	63
64	9 767.4	100 217.9	10.756	682 06	7.917	382 99	64
65	9 253.3	90 964.6	10.325	694 80	7.523	388 81	65

EASTERN COUNTIES RURAL DISTRICTS MORTALITY
(1921 CENSUS—MALES) continued

3 per cent.

3 per cent

Age	D_x	N_x	$\bar{a}_x$	$\bar{A}_x$	$\bar{a}_{xx}$	$\bar{A}_{xx}^I$	Age
66	8 739.8	82 224.8	9.903	707.28	7.144	394.41	66
67	8 228.0	73 996.8	9.488	719.54	6.778	399.83	67
68	7 720.5	66 276.3	9.079	731.63	6.423	405.07	68
69	7 220.9	59 055.4	8.672	743.67	6.074	410.23	69
70	6 732.1	52 323.3	8.266	755.66	5.727	415.35	70
71	6 254.6	46 068.7	7.860	767.67	5.379	420.50	71
72	5 787.0	40 281.7	7.454	779.67	5.034	425.60	72
73	5 326.6	34 955.1	7.055	791.46	4.696	430.59	73
74	4 870.6	30 084.5	6.669	802.87	4.374	435.35	74
75	4 418.3	25 666.2	6.301	813.75	4.070	439.85	75
76	3 971.8	21 694.4	5.953	824.04	3.792	443.95	76
77	3 535.4	18 159.0	5.626	833.70	3.535	447.75	77
78	3 114.9	15 044.1	5.319	842.77	3.299	451.24	78
79	2 715.2	12 328.9	5.029	851.34	3.081	454.47	79
80	2 339.3	9 989.6	4.757	859.39	2.880	457.43	80
81	1 990.5	7 999.1	4.504	866.87	2.696	460.15	81
82	1 671.9	6 327.2	4.269	873.81	2.530	462.61	82
83	1 385.6	4 941.6	4.050	880.29	2.379	464.84	83
84	1 132.7	3 808.9	3.846	886.31	2.242	466.87	84
85	912.99	2 895.88	3.653	892.02	2.115	468.74	85
86	726.17	2 169.71	3.468	897.49	1.996	470.50	86
87	560.32	1 600.39	3.290	902.75	1.883	472.17	87
88	439.51	1 160.88	3.119	907.80	1.774	473.78	88
89	333.73	827.15	2.955	912.65	1.671	475.30	89
90	248.95	578.20	2.798	917.29	1.573	476.75	90
91	182.21	395.99	2.646	921.78	1.480	478.13	91
92	130.68	265.31	2.501	926.07	1.392	479.43	92
93	91.60	173.62	2.364	930.12	1.309	480.65	93
94	62.85	110.77	2.231	934.05	1.230	481.82	94
95	42.01	68.76	2.102	937.87	1.154	482.95	95
96	27.32	41.44	1.980	941.47	1.082	484.01	96
97	17.25	24.19	1.862	944.96	1.013	485.03	97
98	10.55	13.64	1.751	948.24	.948	485.99	98
99	6.229	7.413	1.645	951.37	.887	486.89	99
100	3.544	3.869	1.543	954.39	.830	487.73	100
101	1.936	1.933					
102	1.013	.920					
103	.506	.414					
104	.239	.175					
105	.106	.069					
106	.044	.025					
107	.017	.008					
108	.006	.002					
109	.002						

EASTERN COUNTIES RURAL DISTRICTS MORTALITY
(1921 CENSUS—MALES)

*Combined with the Sickness Rates of the Manchester Unity
Experience 1893-97, Occupation Group A.H.J.*

3 per cent.

3 per cent.

Commutation Column K for Sickness Benefit Values

Age	First 3 months	Second 3 months	Second 6 months	Second 12 months	After 2 years	Age
16	1 245 197	295 984	303 728	347 744	1 411 394	16
17	1 200 412	293 350	302 795	347 744	1 411 394	17
18	1 158 085	290 691	301 732	347 744	1 411 394	18
19	1 118 628	287 910	300 496	347 538	1 411 394	19
20	1 082 109	284 966	299 049	347 089	1 411 394	20
21	1 048 389	281 826	297 358	346 461	1 411 201	21
22	1 017 053	278 505	295 440	345 572	1 410 780	22
23	987 582	275 110	293 358	344 395	1 410 056	23
24	959 542	271 693	291 167	343 037	1 409 004	24
25	932 624	268 301	288 920	341 596	1 407 648	25
26	906 666	264 939	286 624	340 161	1 406 049	26
27	881 560	261 607	284 324	338 733	1 404 264	27
28	857 203	258 347	282 022	337 275	1 402 384	28
29	833 538	255 157	279 722	335 754	1 400 381	29
30	810 472	252 000	277 427	334 176	1 398 265	30
31	787 954	248 877	275 137	332 511	1 396 010	31
32	765 937	245 756	272 854	330 765	1 393 593	32
33	744 411	242 639	270 582	328 980	1 390 931	33
34	723 367	239 498	268 289	327 252	1 388 010	34
35	702 798	236 308	265 949	325 551	1 384 820	35
36	682 669	233 076	263 569	323 846	1 381 352	36
37	662 891	229 808	261 125	322 085	1 377 601	37
38	643 411	226 484	258 625	320 216	1 373 563	38
39	624 127	223 084	256 075	318 251	1 369 153	39
40	605 024	219 592	253 456	316 197	1 364 352	40
41	586 065	216 043	250 751	314 038	1 359 140	41
42	567 262	212 422	247 969	311 831	1 353 504	42
43	548 653	208 737	245 096	309 560	1 347 502	43
44	530 272	205 021	242 118	307 209	1 341 167	44
45	512 129	201 258	239 069	304 788	1 334 506	45
46	494 212	197 458	235 979	302 282	1 327 511	46
47	476 492	193 627	232 834	299 681	1 320 193	47
48	458 905	189 717	229 624	296 996	1 312 489	48
49	441 411	185 681	226 320	294 218	1 304 305	49
50	423 996	181 481	222 899	291 304	1 295 507	50
51	406 648	177 136	219 303	288 215	1 285 891	51
52	389 376	172 629	215 519	284 918	1 275 279	52
53	372 189	167 903	211 518	281 371	1 263 551	53
54	355 102	163 146	207 278	277 567	1 250 627	54
55	338 102	158 199	202 780	273 444	1 236 550	55
56	321 182	153 116	197 999	268 980	1 221 416	56
57	304 350	147 892	192 914	264 116	1 205 317	57
58	287 636	142 528	187 524	258 818	1 188 298	58
59	271 049	137 012	181 830	253 048	1 170 316	59
60	254 602	131 299	175 826	246 790	1 151 213	60

EASTERN COUNTIES RURAL DISTRICTS MORTALITY
(1921 CENSUS—MALES) continued

3 per cent.

3 per cent.

Commutation Column K for Sickness Benefit Values

Age	First 3 months	Second 3 months	Second 6 months	Second 12 months	After 2 years	Age
61	238 275	125 389	169 487	240 011	1 130 702	61
62	222 061	119 251	162 774	232 656	1 108 394	62
63	205 980	112 907	155 671	224 658	1 083 819	63
64	190 075	106 363	148 185	215 989	1 056 579	64
65	174 387	99 640.6	140 350	206 671	1 026 401	65
66	158 963	92 796.7	132 203	196 724	993 171	66
67	143 876	85 842.4	123 747	186 174	956 899	67
68	129 200	78 811.4	114 978	174 966	917 646	68
69	115 064	71 754.5	105 920	163 048	875 417	69
70	101 612	64 725.1	96 631.3	150 475	830 179	70
71	88 967.8	57 819.0	87 226.3	137 383	781 921	71
72	77 220.8	51 139.1	77 874.5	123 999	730 733	72
73	66 407.8	44 768.9	68 732.9	110 520	676 978	73
74	56 522.3	38 766.3	59 943.0	97 312.3	621 059	74
75	47 555.5	33 173.7	51 621.3	84 521.3	563 740	75
76	39 502.3	28 025.7	43 840.6	72 338.3	505 879	76
77	32 372.0	23 348.5	36 665.3	60 969.3	448 473	77
78	26 156.2	19 162.5	30 167.1	50 610.3	392 474	78
79	20 843.8	15 475.3	24 371.2	41 348.6	338 802	79
80	16 390.1	12 296.6	19 389.8	33 228.8	288 172	80
81	12 722.2	9 619.2	15 211.5	26 267.1	241 259	81
82	9 750.1	7 413.4	11 802.2	20 427.1	198 620	82
83	7 369.8	5 640.8	9 078.4	15 643.6	160 726	83
84	5 487.5	4 248.9	6 932.0	11 818.6	127 865	84
85	4 020.9	3 171.4	5 248.9	8 830.3	100 039	85
86	2 903.9	2 348.2	3 933.9	6 530.1	76 976.5	86
87	2 077.5	1 724.3	2 912.3	4 783.6	58 207.5	87
88	1 485.0	1 253.5	2 126.9	3 474.1	43 181.5	88
89	1 069.0	902.39	1 531.1	2 500.9	31 356.5	89
90	755.59	637.83	1 082.2	1 767.7	22 292.4	90
91	523.71	442.09	750.10	1 225.2	15 493.1	91
92	355.47	300.07	509.13	831.62	10 515.9	92
93	235.92	199.15	337.90	551.93	6 979.2	93
94	152.85	129.02	218.92	357.58	4 521.7	94
95	96.48	81.44	138.19	225.72	2 854.3	95
96	59.22	49.99	84.82	138.55	1 751.9	96
97	35.27	29.77	50.52	82.51	1 043.4	97
98	20.33	17.16	29.12	47.56	601.43	98
99	11.31	9.55	16.21	26.47	334.74	99
100	6.06	5.12	8.69	14.19	179.41	100
101	3.12	2.63	4.47	7.30	92.26	101
102	1.53	1.29	2.19	3.59	45.36	102
103	.71	.60	1.02	1.67	21.16	103
104	.31	.26	.45	.73	9.27	104
105	.13	.11	.18	.30	3.75	105
106	.05	.04	.07	.11	1.35	106
107	.01	.01	.02	.03	.40	107
108	—	—	—	—	.06	108

EASTERN COUNTIES RURAL DISTRICTS MORTALITY
(1921 CENSUS—MALES)

*Combined with the Sickness Rates of the Manchester Unity
Experience 1893-97, Occupation Group A.H.J.*

3 per cent.

3 per cent.

Value of Sickness Benefits of 1 per week for the whole of life, in periods

Age	First 3 months	Second 3 months	Second 6 months	Second 12 months	After 2 years	Age
16	22·333	5·309	5·447	6·237	25·314	16
17	22·220	5·430	5·605	6·437	26·125	17
18	22·127	5·554	5·765	6·644	26·966	18
19	22·065	5·679	5·927	6·855	27·840	19
20	22·041	5·804	6·091	7·070	28·748	20
21	22·055	5·929	6·255	7·288	29·687	21
22	22·102	6·052	6·420	7·510	30·658	22
23	22·174	6·177	6·587	7·733	31·660	23
24	22·264	6·304	6·756	7·959	32·693	24
25	22·367	6·435	6·929	8·193	33·760	25
26	22·481	6·569	7·107	8·434	34·863	26
27	22·601	6·707	7·289	8·684	36·002	27
28	22·726	6·840	7·477	8·942	37·180	28
29	22·852	6·995	7·669	9·205	38·392	29
30	22·974	7·143	7·864	9·473	39·636	30
31	23·092	7·294	8·063	9·744	40·911	31
32	23·203	7·445	8·266	10·020	42·217	32
33	23·311	7·598	8·473	10·302	43·556	33
34	23·416	7·753	8·685	10·593	44·931	34
35	23·521	7·909	8·901	10·895	46·346	35
36	23·623	8·065	9·121	11·207	47·801	36
37	23·723	8·224	9·345	11·527	49·300	37
38	23·817	8·384	9·573	11·853	50·844	38
39	23·898	8·542	9·805	12·186	52·426	39
40	23·968	8·699	10·041	12·526	54·049	40
41	24·022	8·855	10·278	12·872	55·709	41
42	24·061	9·010	10·518	13·227	57·410	42
43	24·086	9·164	10·760	13·590	59·155	43
44	24·099	9·317	11·003	13·962	60·951	44
45	24·099	9·471	11·250	14·342	62·797	45
46	24·086	9·623	11·501	14·732	64·697	46
47	24·058	9·776	11·756	15·131	66·656	47
48	24·013	9·927	12·015	15·541	68·677	48
49	23·944	10·072	12·277	15·960	70·752	49
50	23·852	10·209	12·539	16·387	72·880	50
51	23·732	10·338	12·799	16·820	75·045	51
52	23·587	10·457	13·055	17·259	77·252	52
53	23·417	10·568	13·308	17·703	79·499	53
54	23·223	10·669	13·556	18·152	81·788	54
55	23·006	10·765	13·798	18·607	84·142	55
56	22·763	10·852	14·033	19·063	86·564	56
57	22·491	10·929	14·256	19·518	89·072	57
58	22·191	10·996	14·467	19·967	91·676	58
59	21·852	11·046	14·659	20·401	94·350	59
60	21·471	11·073	14·828	20·812	97·083	60

EASTERN COUNTIES RURAL DISTRICTS MORTALITY
(1921 CENSUS—MALES) continued

3 per cent.

3 per cent.

Value of Sickness Benefits of 1 per week for the whole of life, in periods

Age	First 3 months	Second 3 months	Second 6 months	Second 12 months	After 2 years	Age
61	21·042	11·073	14·967	21·195	99·850	61
62	20·561	11·042	15·072	21·542	102·629	62
63	20·033	10·981	15·140	21·850	105·409	63
64	19·460	10·890	15·171	22·113	108·174	64
65	18·846	10·768	15·168	22·335	110·923	65
66	18·188	10·618	15·127	22·509	113·638	66
67	17·486	10·433	15·040	22·627	116·298	67
68	16·735	10·208	14·893	22·663	118·858	68
69	15·935	9·937	14·669	22·580	121·234	69
70	15·094	9·614	14·354	22·352	123·316	70
71	14·224	9·244	13·946	21·965	125·015	71
72	13·344	8·837	13·457	21·427	126·271	72
73	12·467	8·405	12·904	20·749	127·094	73
74	11·605	7·959	12·307	19·980	127·512	74
75	10·763	7·508	11·684	19·130	127·592	75
76	9·946	7·056	11·038	18·213	127·368	76
77	9·157	6·604	10·371	17·245	126·852	77
78	8·397	6·152	9·685	16·248	125·999	78
79	7·677	5·700	8·976	15·229	124·780	79
80	7·006	5·257	8·289	14·205	123·187	80
81	6·391	4·833	7·642	13·196	121·205	81
82	5·832	4·434	7·059	12·218	118·799	82
83	5·319	4·071	6·552	11·290	115·997	83
84	4·845	3·751	6·120	10·434	112·885	84
85	4·404	3·474	5·749	9·672	109·573	85
86	3·999	3·234	5·417	8·993	106·003	86
87	3·649	3·029	5·115	8·402	102·240	87
88	3·379	2·852	4·839	7·904	98·249	88
89	3·203	2·704	4·588	7·494	93·958	89
90	3·035	2·562	4·347	7·101	89·546	90
91	2·874	2·426	4·117	6·724	85·029	91
92	2·720	2·296	3·896	6·364	80·471	92
93	2·573	2·172	3·685	6·020	76·118	93
94	2·432	2·053	3·483	5·690	71·949	94
95	2·297	1·939	3·290	5·373	67·945	95
96	2·168	1·830	3·105	5·071	64·126	96
97	2·044	1·726	2·928	4·783	60·481	97
98	1·927	1·627	2·761	4·509	57·018	98
99	1·816	1·533	2·602	4·250	53·738	99
100	1·711	1·444	2·451	4·004	50·628	100

EASTERN COUNTIES RURAL DISTRICTS MORTALITY
(1921 CENSUS—MALES)

$3\frac{1}{2}$ per cent.

$3\frac{1}{2}$ per cent.

Age	D_x	N_x	$\bar{a}_x$	$\bar{A}_x$	$\bar{a}_{xx}$	$\bar{A}_{xx}^1$	Age
16	51 599	1 182 592	23·416	·194 45	21·422	·131 53	16
17	49 756	1 132 836	23·265	·199 65	21·240	·134 65	17
18	47 969	1 084 867	23·113	·204 88	21·059	·137 77	18
19	46 240	1 038 627	22·959	·210 18	20·877	·140 90	19
20	44 563	994 064	22·804	·215 51	20·697	·143 99	20
21	42 939	951 125	22·648	·220 87	20·519	·147 06	21
22	41 366	909 759	22·490	·226 31	20·340	·150 13	22
23	39 844	869 915	22·330	·231 82	20·162	·153 20	23
24	38 370	831 545	22·169	·237 35	19·986	·156 23	24
25	36 942	794 603	22·006	·242 96	19·810	·159 25	25
26	35 560	759 043	21·842	·248 60	19·634	·162 28	26
27	34 224	724 819	21·676	·254 31	19·459	·165 29	27
28	32 936	691 883	21·504	·260 23	19·279	·168 39	28
29	31 697	660 186	21·325	·266 39	19·090	·171 64	29
30	30 508	629 678	21·137	·272 86	18·891	·175 07	30
31	29 366	600 312	20·939	·279 67	18·676	·178 76	31
32	28 271	572 041	20·731	·286 83	18·449	·182 67	32
33	27 218	544 823	20·514	·294 29	18·210	·186 77	33
34	26 203	518 620	20·289	·302 03	17·964	·191 01	34
35	25 222	493 398	20·059	·309 94	17·710	·195 37	35
36	24 274	469 124	19·823	·318 06	17·452	·199 81	36
37	23 359	445 765	19·580	·326 42	17·188	·204 35	37
38	22 474	423 291	19·332	·334 95	16·917	·209 01	38
39	21 621	401 670	19·075	·343 79	16·639	·213 79	39
40	20 798	380 872	18·810	·352 91	16·352	·218 73	40
41	20 003	360 869	18·538	·362 26	16·057	·223 81	41
42	19 237	341 632	18·256	·371 96	15·753	·229 04	42
43	18 497	323 135	17·967	·381 91	15·440	·234 42	43
44	17 781	305 354	17·670	·392 13	15·120	·239 93	44
45	17 090	288 264	17·364	·402 65	14·792	·245 57	45
46	16 421	271 843	17·052	·413 39	14·457	·251 33	46
47	15 774	256 069	16·731	·424 43	14·114	·257 23	47
48	15 148	240 921	16·401	·435 79	13·764	·263 25	48
49	14 541	226 380	16·065	·447 34	13·408	·269 37	49
50	13 953	212 427	15·721	·459 18	13·043	·275 65	50
51	13 385	199 042	15·368	·471 31	12·671	·282 05	51
52	12 833	186 209	15·006	·483 77	12·292	·288 57	52
53	12 297	173 912	14·639	·496 40	11·910	·295 14	53
54	11 772	162 140	14·269	·509 13	11·528	·301 71	54
55	11 260	150 880	13·896	·521 95	11·145	·308 30	55
56	10 758	140 122	13·521	·534 86	10·767	·314 80	56
57	10 267	129 855·0	13·144	·547 83	10·392	·321 25	57
58	9 788·5	120 066·5	12·762	·560 97	10·016	·327 72	58
59	9 321·5	110 745·0	12·377	·574 21	9·638	·334 21	59
60	8 867·8	101 877·2	11·984	·587 73	9·255	·340 81	60
61	8 427·8	93 449·4	11·584	·601 49	8·866	·347 49	61
62	7 998·7	85 450·7	11·179	·615 43	8·474	·354 24	62
63	7 578·9	77 871·8	10·770	·629 50	8·082	·360 99	63
64	7 164·6	70 707·2	10·364	·643 46	7·697	·367 61	64
65	6 754·8	63 952·4	9·963	·657 26	7·324	·374 02	65

EASTERN COUNTIES RURAL DISTRICTS MORTALITY
(1921 CENSUS—MALES) continued

$3\frac{1}{2}$ per cent.

$3\frac{1}{2}$ per cent.

Age	D_x	N_x	$\bar{a}_x$	$\bar{A}_x$	$\bar{a}_{xx}$	$\bar{A}_{xx}^1$	Age
66	6 348.7	57 603.7	9.568	670.84	6.962	380.25	66
67	5 948.3	51 655.4	9.178	684.26	6.614	386.23	67
68	5 554.6	46 100.8	8.794	697.47	6.274	392.08	68
69	5 170.0	40 930.8	8.411	710.65	5.941	397.81	69
70	4 796.7	36 134.1	8.027	723.86	5.607	403.55	70
71	4 434.6	31 699.5	7.641	737.14	5.273	409.30	71
72	4 083.2	27 616.3	7.256	750.38	4.941	415.01	72
73	3 740.3	23 876.0	6.875	763.49	4.614	420.63	73
74	3 403.7	20 472.3	6.507	776.15	4.301	426.02	74
75	3 072.8	17 399.5	6.153	788.33	4.007	431.07	75
76	2 748.7	14 650.8	5.820	799.78	3.736	435.73	76
77	2 435.0	12 215.8	5.506	810.58	3.486	440.03	77
78	2 135.1	10 080.7	5.210	820.77	3.255	444.01	78
79	1 852.1	8 228.6	4.931	830.37	3.041	447.69	79
80	1 587.9	6 640.7	4.669	839.38	2.845	451.07	80
81	1 344.8	5 295.9	4.424	847.81	2.666	454.14	81
82	1 123.9	4 172.0	4.197	855.62	2.503	456.95	82
83	927.03	3 244.93	3.983	862.98	2.355	459.49	83
84	754.08	2 490.85	3.785	869.79	2.220	461.81	84
85	604.88	1 885.97	3.599	876.19	2.097	463.93	85
86	478.83	1 407.14	3.419	882.38	1.979	465.96	86
87	373.54	1 033.60	3.246	888.33	1.867	467.89	87
88	287.02	746.58	3.078	894.11	1.760	469.73	88
89	216.87	529.71	2.919	899.58	1.658	471.48	89
90	160.98	368.73	2.765	904.88	1.562	473.13	90
91	117.26	251.47	2.618	909.93	1.470	474.71	91
92	83.70	167.77	2.475	914.86	1.383	476.21	92
93	58.44	109.33	2.340	919.50	1.301	477.63	93
94	39.87	69.46	2.209	924.01	1.222	478.98	94
95	26.52	42.94	2.084	928.31	1.147	480.27	95
96	17.17	25.77	1.964	932.43	1.076	481.49	96
97	10.79	14.98	1.848	936.42	1.008	482.66	97
98	6.566	8.414	1.738	940.21	.944	483.77	98
99	3.859	4.555	1.634	943.79	.884	484.79	99
100	2.186	2.369	1.534	947.23	.827	485.77	100
101	1.190	1.179					
102	.620	.559					
103	.309	.250					
104	.145	.105					
105	.065	.040					
106	.026	.014					
107	.010	.004					
108	.003	.001					
109	.001						

EASTERN COUNTIES RURAL DISTRICTS MORTALITY
(1921 CENSUS—MALES)

*Combined with the Sickness Rates of the Manchester Unity
Experience 1893-97, Occupation Group A.H.7.*

$3\frac{1}{2}$ per cent.

$3\frac{1}{2}$ per cent.

Commutation Column K for Sickness Benefit Values

Age	First 3 months	Second 3 months	Second 6 months	Second 12 months	After 2 years	Age
16	1 021 908	229 042	228 695	255 161	1 007 585	16
17	980 562	226 610	227 833	255 161	1 007 585	17
18	941 674	224 167	226 856	255 161	1 007 585	18
19	905 598	221 624	225 726	254 973	1 007 585	19
20	872 370	218 946	224 409	254 564	1 007 585	20
21	841 837	216 102	222 878	253 996	1 007 410	21
22	813 600	213 110	221 150	253 195	1 007 031	22
23	787 171	210 065	219 283	252 139	1 006 381	23
24	762 147	207 015	217 328	250 927	1 005 443	24
25	738 240	204 003	215 333	249 647	1 004 238	25
26	715 298	201 031	213 303	248 379	1 002 825	26
27	693 215	198 101	211 279	247 123	1 001 255	27
28	671 896	195 247	209 265	245 847	999 610	28
29	651 282	192 468	207 262	244 522	997 865	29
30	631 287	189 732	205 272	243 154	996 030	30
31	611 862	187 038	203 296	241 717	994 085	31
32	592 960	184 358	201 337	240 219	992 010	32
33	574 568	181 695	199 395	238 693	989 735	33
34	556 676	179 025	197 445	237 224	987 252	34
35	539 272	176 326	195 466	235 785	984 553	35
36	522 322	173 604	193 462	234 349	981 633	36
37	505 749	170 865	191 414	232 873	978 490	37
38	489 504	168 093	189 329	231 315	975 121	38
39	473 500	165 271	187 213	229 684	971 462	39
40	457 723	162 387	185 050	227 987	967 497	40
41	442 140	159 471	182 826	226 213	963 213	41
42	426 760	156 508	180 551	224 408	958 603	42
43	411 613	153 509	178 212	222 559	953 718	43
44	396 723	150 499	175 800	220 655	948 585	44
45	382 098	147 405	173 342	218 703	943 216	45
46	367 725	144 416	170 862	216 692	937 604	46
47	353 578	141 359	168 352	214 616	931 762	47
48	339 604	138 251	165 801	212 483	925 641	48
49	325 772	135 061	163 189	210 287	919 170	49
50	312 069	131 756	160 497	207 993	912 247	50
51	298 485	128 353	157 682	205 574	904 717	51
52	285 025	124 841	154 733	203 006	896 447	52
53	271 697	121 223	151 630	200 255	887 353	53
54	258 510	117 505	148 357	197 319	877 378	54
55	245 454	113 706	144 903	194 153	866 567	55
56	232 521	109 820	141 249	190 740	854 999	56
57	219 720	105 847	137 381	187 041	842 755	57
58	207 068	101 787	133 301	183 031	829 873	58
59	194 574	97 632.1	129 012	178 685	816 328	59
60	182 245	93 349.7	124 512	173 993	802 008	60

EASTERN COUNTIES RURAL DISTRICTS MORTALITY
(1921 CENSUS—MALES) continued

3½ per cent.

3½ per cent.

Commutation Column K for Sickness Benefit Values

Age	First 3 months	Second 3 months	Second 6 months	Second 12 months	After 2 years	Age
61	170 064	88 940.5	119 783	168 936	786 706	61
62	158 027	84 383.3	114 799	163 475	770 144	62
63	146 145	79 695.9	109 551	157 565	751 986	63
64	134 450	74 883.9	104 046	151 191	731 957	64
65	122 971	69 965.3	98 313.4	144 373	709 875	65
66	111 739	64 981.5	92 380.0	137 130	685 676	66
67	100 805	59 941.9	86 252.5	129 484	659 390	67
68	90 221.9	54 871.5	79 928.9	121 402	631 083	68
69	80 075.9	49 806.8	73 427.8	112 848	600 775	69
70	70 468.1	44 786.3	66 793.5	103 868	568 465	70
71	61 481.6	39 877.9	60 109.0	94 563.0	534 166	71
72	53 172.5	35 153.0	53 494.1	85 096.1	497 959	72
73	45 560.9	30 668.9	47 059.2	75 608.0	460 120	73
74	38 635.7	26 463.8	40 901.5	66 355.3	420 946	74
75	32 384.1	22 564.7	35 099.7	57 437.4	380 984	75
76	26 797.1	18 993.2	29 701.7	48 985.6	340 842	76
77	21 874.3	15 764.0	24 747.8	41 136.5	301 208	77
78	17 603.2	12 887.7	20 282.6	34 018.7	262 729	78
79	13 970.9	10 366.6	16 319.7	27 686.0	226 031	79
80	10 940.3	8 203.6	12 930.1	22 160.9	191 580	80
81	8 456.5	6 390.5	10 100.7	17 446.7	159 812	81
82	6 453.5	4 904.0	7 803.1	13 511.0	131 076	82
83	4 857.1	3 715.1	5 976.3	10 302.8	105 661	83
84	3 600.8	2 786.2	4 543.8	7 750.0	83 730.7	84
85	2 626.7	2 070.5	3 426.0	5 765.3	65 249.7	85
86	1 888.5	1 526.5	2 556.9	4 245.0	50 007.2	86
87	1 344.9	1 116.0	1 884.8	3 096.2	37 661.1	87
88	957.00	807.86	1 370.7	2 238.9	27 824.5	88
89	686.03	579.12	982.59	1 605.0	20 121.6	89
90	482.85	407.60	691.58	1 129.6	14 245.4	90
91	333.25	281.31	477.30	779.64	9 858.6	91
92	225.22	190.12	322.58	526.91	6 662.8	92
93	148.83	125.63	213.17	348.19	4 402.9	93
94	96.01	81.04	137.51	224.61	2 840.2	94
95	60.34	50.94	86.43	141.17	1 785.1	95
96	36.88	31.13	52.82	86.27	1 090.9	96
97	21.87	18.46	31.32	51.15	646.85	97
98	12.55	10.59	17.97	29.36	371.24	98
99	6.95	5.87	9.96	16.27	205.72	99
100	3.71	3.13	5.31	8.68	109.77	100
101	1.90	1.60	2.72	4.45	56.20	101
102	.93	.79	1.33	2.18	27.51	102
103	.43	.37	.62	1.01	12.78	103
104	.19	.16	.27	.44	5.57	104
105	.08	.06	.11	.18	2.25	105
106	.03	.02	.04	.06	.81	106
107	.01	.01	.01	.02	.23	107
108	—	—	—	—	.04	108

EASTERN COUNTIES RURAL DISTRICTS MORTALITY
(1921 CENSUS—MALES)

*Combined with the Sickness Rates of the Manchester Unity
Experience 1893-97, Occupation Group A.H.7.*

$3\frac{1}{2}$ per cent.

$3\frac{1}{2}$ per cent.

Value of Sickness Benefits of 1 per week for the whole of life, in periods

Age	First 3 months	Second 3 months	Second 6 months	Second 12 months	After 2 years	Age
16	19.805	4.439	4.432	4.945	19.527	16
17	19.707	4.554	4.579	5.128	20.251	17
18	19.631	4.673	4.729	5.319	21.005	18
19	19.585	4.793	4.882	5.514	21.790	19
20	19.576	4.913	5.036	5.712	22.610	20
21	19.605	5.033	5.191	5.915	23.461	21
22	19.668	5.152	5.346	6.121	24.344	22
23	19.756	5.272	5.504	6.328	25.258	23
24	19.863	5.395	5.664	6.540	26.204	24
25	19.984	5.522	5.829	6.758	27.184	25
26	20.115	5.653	5.998	6.985	28.201	26
27	20.255	5.788	6.173	7.221	29.256	27
28	20.400	5.928	6.354	7.464	30.350	28
29	20.547	6.072	6.539	7.714	31.481	29
30	20.693	6.219	6.728	7.970	32.648	30
31	20.836	6.369	6.923	8.231	33.852	31
32	20.974	6.521	7.122	8.497	35.089	32
33	21.110	6.676	7.326	8.770	36.363	33
34	21.245	6.832	7.535	9.053	37.677	34
35	21.381	6.991	7.750	9.348	39.035	35
36	21.518	7.152	7.970	9.654	40.440	36
37	21.651	7.315	8.194	9.969	41.889	37
38	21.781	7.479	8.424	10.293	43.380	38
39	21.900	7.644	8.659	10.623	44.931	39
40	22.008	7.808	8.897	10.962	46.519	40
41	22.104	7.972	9.140	11.309	48.153	41
42	22.184	8.136	9.386	11.665	49.831	42
43	22.253	8.299	9.635	12.032	51.561	43
44	22.312	8.464	9.887	12.410	53.348	44
45	22.358	8.629	10.143	12.797	55.191	45
46	22.394	8.795	10.405	13.196	57.098	46
47	22.415	8.962	10.673	13.606	59.069	47
48	22.419	9.127	10.945	14.027	61.106	48
49	22.404	9.288	11.223	14.462	63.212	49
50	22.366	9.443	11.503	14.907	65.380	50
51	22.300	9.589	11.781	15.359	67.592	51
52	22.210	9.728	12.057	15.819	69.855	52
53	22.095	9.858	12.331	16.285	72.160	53
54	21.960	9.982	12.603	16.762	74.531	54
55	21.799	10.098	12.869	17.243	76.960	55

EASTERN COUNTIES RURAL DISTRICTS MORTALITY
(1921 CENSUS—MALES) continued

$3\frac{1}{2}$ per cent.

$3\frac{1}{2}$ per cent.

Value of Sickness Benefit of 1 per week for the whole of life, in periods

Age	First 3 months	Second 3 months	Second 6 months	Second 12 months	After 2 years	Age
56	21·614	10·208	13·130	17·730	79·476	56
57	21·401	10·309	13·381	18·218	82·084	57
58	21·154	10·399	13·618	18·699	84·780	58
59	20·874	10·474	13·840	19·169	87·575	59
60	20·551	10·527	14·041	19·621	90·440	60
61	20·179	10·553	14·213	20·045	93·347	61
62	19·757	10·550	14·352	20·438	96·284	62
63	19·283	10·515	14·455	20·790	99·221	63
64	18·766	10·452	14·522	21·103	102·163	64
65	18·205	10·358	14·555	21·373	105·092	65
66	17·600	10·235	14·551	21·600	108·003	66
67	16·947	10·077	14·500	21·768	110·854	67
68	16·243	9·879	14·390	21·856	113·614	68
69	15·489	9·634	14·203	21·827	116·204	69
70	14·691	9·337	13·925	21·654	118·512	70
71	13·864	8·992	13·555	21·324	120·454	71
72	13·022	8·609	13·101	20·841	121·953	72
73	12·181	8·200	12·582	20·214	123·017	73
74	11·351	7·775	12·017	19·495	123·673	74
75	10·539	7·343	11·423	18·692	123·986	75
76	9·749	6·910	10·806	17·821	124·001	76
77	8·983	6·474	10·163	16·894	123·699	77
78	8·245	6·036	9·500	15·933	123·052	78
79	7·543	5·597	8·811	14·948	122·040	79
80	6·890	5·166	8·143	13·956	120·650	80
81	6·288	4·752	7·511	12·973	118·837	81
82	5·742	4·363	6·943	12·022	116·626	82
83	5·239	4·008	6·447	11·114	113·978	83
84	4·775	3·695	6·026	10·277	111·036	84
85	4·343	3·423	5·664	9·531	107·871	85
86	3·944	3·188	5·340	8·865	104·436	86
87	3·600	2·988	5·046	8·289	100·822	87
88	3·334	2·815	4·776	7·801	96·943	88
89	3·163	2·670	4·531	7·401	92·782	89
90	2·999	2·532	4·296	7·017	88·492	90
91	2·842	2·399	4·070	6·649	84·075	91
92	2·691	2·271	3·854	6·295	79·603	92
93	2·547	2·150	3·648	5·958	75·340	93
94	2·408	2·033	3·449	5·633	71·236	94
95	2·275	1·921	3·259	5·323	67·310	95
96	2·148	1·813	3·076	5·025	63·537	96
97	2·027	1·711	2·903	4·741	59·949	97
98	1·911	1·613	2·738	4·471	56·540	98
99	1·802	1·521	2·581	4·216	53·309	99
100	1·698	1·433	2·431	3·971	50·214	100

EASTERN COUNTIES RURAL DISTRICTS MORTALITY
(1921 CENSUS—MALES)

4 per cent.

4 per cent.

Age	D_x	N_x	$\bar{a}_x$	$\bar{A}_x$	$\bar{a}_{xx}$	$\bar{A}_{xx}^1$	Age
16	477 70	998 625	21.402	160 60	19.738	112 93	16
17	458 42	952 783	21.281	165 34	19.587	115 89	17
18	439 84	908 799	21.159	170 13	19.436	118 85	18
19	421 94	866 605	21.036	174 95	19.286	121 79	19
20	404 68	826 137	20.911	179 85	19.136	124 73	20
21	388 06	787 331	20.785	184 79	18.988	127 64	21
22	372 05	750 126	20.658	189 78	18.840	130 54	22
23	356 63	714 463	20.530	194 80	18.692	133 44	23
24	341 78	680 285	20.400	199 90	18.545	136 33	24
25	327 48	647 537	20.269	205 04	18.400	139 17	25
26	313 72	616 165	20.137	210 22	18.255	142 01	26
27	300 49	586 116	20.002	215 51	18.109	144 88	27
28	287 78	557 338	19.862	221 00	17.959	147 82	28
29	275 63	529 775	19.717	226 69	17.802	150 89	29
30	264 01	503 374	19.563	232 72	17.633	154 21	30
31	252 91	478 083	19.399	239 16	17.452	157 76	31
32	242 31	453 852	19.226	245 94	17.258	161 57	32
33	232 16	430 636	19.045	253 04	17.053	165 59	33
34	222 42	408 394	18.857	260 42	16.841	169 74	34
35	213 07	387 087	18.663	268 02	16.622	174 03	35
36	204 08	366 679	18.463	275 87	16.399	178 41	36
37	195 44	347 135	18.258	283 91	16.168	182 94	37
38	187 14	328 421	18.046	292 22	15.932	187 57	38
39	179 17	310 504	17.827	300 82	15.689	192 33	39
40	171 51	293 353	17.600	309 72	15.437	197 27	40
41	164 17	276 936	17.365	318 93	15.177	202 37	41
42	157 12	261 224	17.122	328 46	14.908	207 65	42
43	150 35	246 189	16.871	338 31	14.629	213 12	43
44	143 84	231 805	16.612	348 46	14.344	218 71	44
45	137 58	218 047	16.345	358 93	14.050	224 47	45
46	131 56	204 891	16.070	369 72	13.749	230 38	46
47	125 77	192 314	15.787	380 83	13.440	236 43	47
48	120 19	180 295	15.497	392 20	13.124	242 63	48
49	114 82	168 813	15.198	403 93	12.800	248 99	49
50	109 66	157 847	14.891	415 96	12.468	255 50	50
51	104 68	147 379	14.575	428 35	12.126	262 20	51
52	99 88.5	137 390.4	14.251	441 06	11.779	269 01	52
53	95 24.6	127 865.8	13.921	454 01	11.428	275 89	53
54	90 74.9	118 790.9	13.586	467 14	11.075	282 81	54
55	86 38.2	110 152.7	13.248	480 41	10.722	289 73	55
56	82 13.8	101 938.9	12.907	493 78	10.371	296 62	56
57	78 01.4	94 137.5	12.563	507 27	10.022	303 47	57
58	74 01.4	86 736.1	12.215	520 92	9.671	310 35	58
59	70 14.5	79 721.6	11.860	534 84	9.319	317 25	59
60	66 41.4	73 080.2	11.499	549 00	8.959	324 31	60
61	62 81.3	66 798.9	11.129	563 52	8.594	331 47	61
62	59 33.0	60 865.9	10.754	578 22	8.224	338 73	62
63	55 94.2	55 271.7	10.375	593 08	7.853	346 00	63
64	52 62.9	50 008.8	9.997	607 92	7.488	353 16	64
65	49 38.0	45 070.8	9.622	622 62	7.133	360 12	65

EASTERN COUNTIES RURAL DISTRICTS MORTALITY
(1921 CENSUS—MALES) continued

4 per cent.

4 per cent.

Age	D_x	N_x	$\bar{a}_x$	$\bar{A}_x$	$\bar{a}_{xx}$	$\bar{A}_{xx}^1$	Age
66	46 19.1	40 451.7	9.251	.637 17	6.789	.366 87	66
67	43 06.8	36 144.9	8.886	.651 48	6.456	.373 39	67
68	40 02.3	32 142.6	8.525	.665 64	6.133	.379 73	68
69	37 07.3	28 435.3	8.163	.679 84	5.812	.386 03	69
70	34 23.1	25 012.2	7.800	.694 08	5.493	.392 28	70
71	31 49.8	21 862.4	7.434	.708 43	5.171	.398 59	71
72	28 86.2	18 976.2	7.068	.722 79	4.849	.404 91	72
73	26 31.1	16 345.1	6.704	.737 06	4.533	.411 11	73
74	23 82.7	13 962.4	6.351	.750 91	4.230	.417 05	74
75	21 40.6	11 821.8	6.014	.764 12	3.945	.422 63	75
76	19 05.8	9 916.0	5.693	.776 71	3.681	.427 81	76
77	16 80.1	8 235.9	5.391	.788 56	3.437	.432 60	77
78	14 66.1	6 769.8	5.106	.799 73	3.213	.436 99	78
79	12 65.6	5 504.2	4.836	.810 32	3.004	.441 09	79
80	10 79.93	4 424.23	4.583	.820 25	2.812	.444 85	80
81	9 10.10	3 514.13	4.346	.829 54	2.637	.448 29	81
82	7 57.05	2 757.08	4.126	.838 17	2.477	.451 43	82
83	6 21.37	2 135.71	3.920	.846 25	2.331	.454 29	83
84	5 03.08	1 632.63	3.727	.853 83	2.199	.456 88	84
85	4 01.60	1 231.03	3.546	.860 92	2.078	.459 25	85
86	3 16.36	914.67	3.371	.867 79	1.962	.461 53	86
87	2 45.64	669.03	3.202	.874 41	1.852	.463 68	87
88	1 87.81	481.22	3.039	.880 81	1.746	.465 76	88
89	1 41.23	339.99	2.883	.886 92	1.646	.467 72	89
90	1 04.34	235.65	2.732	.892 85	1.551	.469 59	90
91	75.64	160.01	2.588	.898 50	1.461	.471 35	91
92	53.72	106.29	2.450	.903 91	1.375	.473 03	92
93	37.33	68.96	2.316	.909 16	1.293	.474 65	93
94	25.34	43.62	2.188	.914 19	1.216	.476 15	94
95	16.78	26.84	2.065	.919 01	1.142	.477 61	95
96	10.806	16.036	1.946	.923 67	1.071	.478 99	96
97	6.758	9.278	1.833	.928 11	1.004	.480 31	97
98	4.092	5.186	1.725	.932 34	.940	.481 57	98
99	2.393	2.793	1.621	.936 42	.880	.482 75	99
100	1.348	1.445	1.523	.940 26	.824	.483 84	100
101	.730	.715					
102	.378	.337					
103	.187	.150					
104	.087	.063					
105	.038	.025					
106	.016	.009					
107	.006	.003					
108	.002	.001					
109	.001						

EASTERN COUNTIES RURAL DISTRICTS MORTALITY
(1921 CENSUS—MALES)

*Combined with the Sickness Rates of the Manchester Unity
Experience 1893-97, Occupation Group A.H.7.*

4 per cent.

4 per cent.

Commutation Column K for Sickness Benefit Values

Age	First 3 months	Second 3 months	Second 6 months	Second 12 months	After 2 years	Age
16	845 850	178 891	173 667	188 530	723 336	16
17	807 664	176 644	172 872	188 530	723 336	17
18	771 921	174 399	171 974	188 530	723 336	18
19	738 922	172 073	170 940	188 358	723 336	19
20	708 675	169 635	169 741	187 986	723 336	20
21	681 014	167 059	168 354	187 470	723 177	21
22	655 556	164 361	166 796	186 749	722 835	22
23	631 842	161 629	165 121	185 801	722 252	23
24	609 498	158 906	163 375	184 719	721 414	24
25	588 254	156 230	161 602	183 582	720 344	25
26	567 964	153 601	159 807	182 460	719 094	26
27	548 529	151 022	158 026	181 354	717 712	27
28	529 856	148 523	156 262	180 237	716 271	28
29	511 887	146 101	154 516	179 082	714 750	29
30	494 542	143 727	152 789	177 895	713 159	30
31	477 772	141 401	151 084	176 655	711 479	31
32	461 533	139 099	149 401	175 368	709 697	32
33	445 808	136 822	147 740	174 063	707 752	33
34	430 583	134 550	146 081	172 814	705 639	34
35	415 845	132 264	144 405	171 594	703 353	35
36	401 561	129 970	142 716	170 385	700 892	36
37	387 660	127 674	140 998	169 147	698 256	37
38	374 100	125 359	139 258	167 846	695 444	38
39	360 806	123 016	137 500	166 491	692 405	39
40	347 764	120 632	135 712	165 089	689 127	40
41	334 943	118 232	133 883	163 629	685 603	41
42	322 351	115 807	132 020	162 151	681 828	42
43	310 010	113 363	130 114	160 645	677 848	43
44	297 936	110 922	128 158	159 101	673 686	44
45	286 133	108 474	126 175	157 525	669 353	45
46	274 589	106 025	124 183	155 911	664 846	46
47	263 282	103 581	122 177	154 252	660 177	47
48	252 167	101 110	120 148	152 555	655 308	48
49	241 219	98 584.5	118 081	150 816	650 186	49
50	230 424	95 981.2	115 960	149 010	644 733	50
51	219 774	93 313.4	113 753	147 113	638 829	51
52	209 273	90 573.1	111 452	145 109	632 377	52
53	198 924	87 764.0	109 043	142 973	625 316	53
54	188 735	84 891.3	106 514	140 705	617 609	54
55	178 695	81 969.6	103 858	138 270	609 295	55
56	168 798	78 996.1	101 061	135 659	600 442	56
57	159 047	75 970.1	98 115.4	132 841	591 116	57
58	149 458	72 892.7	95 022.8	129 801	581 352	58
59	140 033	69 758.4	91 787.6	126 523	571 135	59
60	130 778	66 543.7	88 409.1	123 001	560 385	60

EASTERN COUNTIES RURAL DISTRICTS MORTALITY
(1921 CENSUS—MALES) continued

4 per cent.

4 per cent.

Commutation Column K for Sickness Benefit Values

Age	First 3 months	Second 3 months	Second 6 months	Second 12 months	After 2 years	Age
61	121 678	63 249.8	84 876.2	119 223	548 953	61
62	112 728	59 861.5	81 170.5	115 163	536 039	62
63	103 936	56 393.3	77 287.5	110 790	523 204	63
64	95 324.1	52 849.7	73 233.8	106 096	508 455	64
65	86 912.1	49 245.3	69 032.9	101 100	492 273	65
66	78 721.4	45 610.8	64 705.9	95 817.7	474 626	66
67	70 785.6	41 952.9	60 258.5	90 268.5	455 547	67
68	63 140.7	38 290.3	55 690.6	84 420.9	435 100	68
69	55 847.7	34 649.6	51 017.4	78 281.2	413 314	69
70	48 974.7	31 058.1	46 271.5	71 857.1	390 201	70
71	42 577.1	27 563.7	41 512.7	65 232.9	365 783	71
72	36 690.1	24 216.1	36 826.0	58 525.5	340 130	72
73	31 323.2	21 054.4	32 288.8	51 835.5	313 450	73
74	26 463.9	18 103.7	27 968.0	45 343.1	285 962	74
75	22 098.2	15 380.8	23 916.4	39 115.4	258 055	75
76	18 216.1	12 899.1	20 165.6	33 242.7	230 163	76
77	14 811.8	10 666.0	16 739.8	27 814.8	202 755	77
78	11 872.1	8 686.3	13 666.5	22 915.8	176 271	78
79	9 384.0	6 959.3	10 951.9	18 578.0	151 133	79
80	7 318.2	5 484.9	8 641.3	14 811.7	127 649	80
81	5 633.2	4 254.9	6 721.8	11 613.6	106 098	81
82	4 280.7	3 251.1	5 170.4	8 956.0	86 694.4	82
83	3 208.1	2 452.3	3 943.0	6 800.5	69 618.9	83
84	2 368.1	1 831.1	2 985.1	5 093.4	54 953.3	84
85	1 719.8	1 354.8	2 241.1	3 772.4	42 652.8	85
86	1 230.8	994.39	1 665.4	2 765.4	32 556.8	86
87	872.53	723.88	1 222.5	2 008.3	24 420.0	87
88	618.07	521.74	885.25	1 446.0	17 967.6	88
89	441.21	372.45	631.94	1 032.2	12 940.0	89
90	309.23	261.03	442.89	723.43	9 122.7	90
91	212.50	179.39	304.36	497.15	6 286.6	91
92	143.01	120.72	204.83	334.57	4 230.7	92
93	94.10	79.43	134.77	220.14	2 783.7	93
94	60.43	51.01	86.56	141.38	1 787.8	94
95	37.82	31.93	54.17	88.48	1 118.9	95
96	23.02	19.43	32.96	53.84	680.85	96
97	13.59	11.47	19.46	31.79	401.97	97
98	7.77	6.55	11.12	18.16	229.69	98
99	4.29	3.62	6.14	10.02	126.73	99
100	2.28	1.92	3.26	5.32	67.33	100
101	1.16	.98	1.66	2.71	34.32	101
102	.57	.48	.81	1.32	16.72	102
103	.26	.22	.37	.61	7.74	103
104	.11	.10	.16	.27	3.36	104
105	.05	.04	.07	.11	1.35	105
106	.02	.01	.02	.04	.48	106
107	.01	—	.01	.01	.14	107
108	—	—	—	—	.02	108

EASTERN COUNTIES RURAL DISTRICTS MORTALITY
(1921 CENSUS—MALES)

*Combined with the Sickness Rates of the Manchester Unity
Experience 1893-97, Occupation Group A.H.J.*

4 per cent.

4 per cent.

Value of Sickness Benefits of 1 per week for the whole of life, in periods

Age	First 3 months	Second 3 months	Second 6 months	Second 12 months	After 2 years	Age
16	17.707	3.745	3.635	3.947	15.142	16
17	17.618	3.853	3.771	4.113	15.779	17
18	17.550	3.965	3.910	4.286	16.445	18
19	17.512	4.078	4.051	4.464	17.143	19
20	17.512	4.192	4.194	4.645	17.874	20
21	17.549	4.305	4.338	4.831	18.636	21
22	17.620	4.418	4.483	5.019	19.428	22
23	17.717	4.532	4.630	5.210	20.252	23
24	17.833	4.649	4.780	5.405	21.108	24
25	17.963	4.771	4.935	5.606	21.997	25
26	18.104	4.896	5.094	5.816	22.922	26
27	18.254	5.026	5.259	6.035	23.885	27
28	18.412	5.161	5.430	6.263	24.890	28
29	18.572	5.301	5.606	6.497	25.932	29
30	18.732	5.444	5.787	6.738	27.013	30
31	18.891	5.591	5.974	6.985	28.132	31
32	19.047	5.741	6.166	7.237	29.289	32
33	19.203	5.893	6.364	7.498	30.486	33
34	19.359	6.049	6.568	7.770	31.726	34
35	19.517	6.208	6.777	8.053	33.010	35
36	19.677	6.369	6.993	8.349	34.344	36
37	19.835	6.533	7.214	8.655	35.727	37
38	19.990	6.699	7.441	8.969	37.162	38
39	20.138	6.866	7.674	9.292	38.645	39
40	20.277	7.034	7.913	9.626	40.180	40
41	20.402	7.202	8.155	9.967	41.762	41
42	20.516	7.371	8.402	10.320	43.395	42
43	20.619	7.540	8.654	10.685	45.085	43
44	20.713	7.711	8.910	11.061	46.836	44
45	20.798	7.884	9.171	11.450	48.652	45
46	20.872	8.059	9.439	11.851	50.536	46
47	20.934	8.236	9.714	12.265	52.491	47
48	20.981	8.413	9.997	12.693	54.523	48
49	21.008	8.586	10.284	13.135	56.627	49
50	21.013	8.753	10.575	13.589	58.795	50
51	20.994	8.914	10.866	14.053	61.025	51
52	20.951	9.068	11.158	14.528	63.311	52
53	20.885	9.214	11.449	15.011	65.653	53
54	20.797	9.355	11.737	15.505	68.057	54
55	20.687	9.489	12.023	16.007	70.535	55

EASTERN COUNTIES RURAL DISTRICTS MORTALITY
(1921 CENSUS—MALES) continued

4 per cent.

4 per cent.

Value of Sickness Benefits of 1 per week for the whole of life, in periods

Age	First 3 months	Second 3 months	Second 6 months	Second 12 months	After 2 years	Age
56	20·551	9·617	12·304	16·516	73·102	56
57	20·387	9·738	12·577	17·028	75·771	57
58	20·193	9·849	12·838	17·537	78·546	58
59	19·963	9·945	13·085	18·037	81·422	59
60	19·691	10·020	13·312	18·520	84·378	60
61	19·371	10·070	13·513	18·981	87·395	61
62	19·000	10·090	13·681	19·411	90·450	62
63	18·579	10·081	13·816	19·804	93·526	63
64	18·112	10·042	13·915	20·159	96·611	64
65	17·601	9·973	13·980	20·474	99·691	65
66	17·043	9·874	14·008	20·744	102·753	66
67	16·436	9·741	13·991	20·960	105·774	67
68	15·776	9·567	13·915	21·095	108·712	68
69	15·064	9·346	13·761	21·115	111·487	69
70	14·307	9·073	13·517	20·992	113·991	70
71	13·517	8·751	13·179	20·710	116·129	71
72	12·712	8·390	12·759	20·278	117·847	72
73	11·905	8·002	12·272	19·701	119·133	73
74	11·107	7·598	11·738	19·030	120·016	74
75	10·323	7·185	11·173	18·273	120·553	75
76	9·558	6·768	10·581	17·443	120·770	76
77	8·816	6·348	9·964	16·555	120·680	77
78	8·098	5·925	9·322	15·630	120·231	78
79	7·415	5·499	8·654	14·679	119·416	79
80	6·777	5·079	8·002	13·715	118·201	80
81	6·190	4·675	7·386	12·761	116·578	81
82	5·654	4·294	6·830	11·830	114·516	82
83	5·163	3·947	6·346	10·944	112·041	83
84	4·707	3·640	5·934	10·124	109·234	84
85	4·282	3·373	5·580	9·393	106·207	85
86	3·890	3·143	5·264	8·741	102·911	86
87	3·552	2·947	4·977	8·176	99·414	87
88	3·291	2·778	4·714	7·699	95·669	88
89	3·124	2·637	4·475	7·309	91·624	89
90	2·964	2·502	4·245	6·933	87·432	90
91	2·810	2·372	4·024	6·573	83·115	91
92	2·662	2·247	3·813	6·228	78·752	92
93	2·521	2·128	3·610	5·897	74·565	93
94	2·385	2·013	3·416	5·579	70·547	94
95	2·254	1·903	3·229	5·274	66·692	95
96	2·130	1·798	3·051	4·983	63·007	96
97	2·011	1·697	2·880	4·704	59·481	97
98	1·898	1·602	2·718	4·439	56·131	98
99	1·791	1·511	2·564	4·188	52·957	99
100	1·689	1·425	2·418	3·950	49·947	100

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