

Inverse calculation from formula (9) of various values of p shows that over a considerable range m is closely proportionate to $(n+1)i$ and can be represented with good approximation by $\frac{(n+1)i}{30}$. Thus

$$p = \frac{n+5}{3(n+1)} + \frac{(n+1)i}{30}.$$

It is not, however, convenient to have i in the expression for p , so we replace the rate of interest by its approximate equivalent in terms of formula (8), leading to

$$p = \frac{n+5}{3(n+1)} + \frac{2}{15} \left\{ \left(\frac{n}{a_{\bar{n}}} \right)^{\frac{1}{2}} - 1 \right\} = \frac{1}{5} + \frac{4}{3} \left[\frac{1}{n+1} + \frac{1}{10} \left(\frac{n}{a_{\bar{n}}} \right)^{\frac{1}{2}} \right],$$

the latter expression being slightly simpler for calculation.

A further small addition to p of .001 for every complete 20 years in n makes for greater all-round accuracy.

Adopting the expression for p just given, including the small adjustment referred to, Table 6 gives some values of $100i$ by formula (9).

Table 6

n	2 %	4 %	6 %	8 %	10 %
100	2.001	4.002	—	—	—
80	2.001	4.000	—	—	—
60	2.000	3.998	5.998	—	—
40	2.000	3.998	5.997	8.001	10.006
20	2.000	4.000	6.001	8.002	10.003
10	1.999	4.000	6.000	8.001	10.004

The formula is a simple one to operate because, having determined $1/(n+1)$ and $\log(n/a_{\bar{n}})$ in order to find p , we use the same quantities again in calculating i . Close results are obtained for values of $n/a_{\bar{n}}$ up to about 4.5 and, within this range, errors in excess of one-halfpenny per cent in the rate of interest are likely to be rare.

If $n/a_{\bar{n}} > 4.5$, close approximations to i can be obtained from the formula

$$i = \frac{1 - (1 + 1/a_{\bar{n}})^{-n}}{a_{\bar{n}}}. \quad (10)$$

Formulae (8) and (9) may have other applications, e.g. to the function θ described in J.I.A. Vol. LX, pp. 343-5.

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PERCENTAGE TABLE FOR THE ESTIMATION OF SICKNESS
RATES FOR SPECIAL PERIODS OF SICKNESS

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THE accompanying Percentage Table (see pp. 460-9) provides the means of making existing sickness tables available for different periods of sickness.

Most friendly societies have in recent years sustained higher sickness claims than were provided for when the rates of contribution were fixed. As a result, a valuation often reveals a deficiency; and this is especially so if the sickness table used in the valuation properly takes account of the increased rates of sickness. One of the most convenient ways of restoring solvency is to make the sickness benefits and contributions (but not the funeral or other benefits) cease at age 70, or at age 65, provided that funds will allow of a small bonus being paid to members already over that age and to members attaining that age in the future. This plan fits in well with the Government schemes, and is very effective in disposing of a deficiency; but it is not always acceptable to the members, and it is not available if the sickness benefits already cease at age 65. There remain three other courses: to increase the rates of contribution, to reduce the rates of sick pay, or to reduce the periods during which full and first reduced sick pay are payable. An increase in the contributions is not usually practicable, and there is often strong opposition on the part of the members to any reduction in the rates of benefit. It is found, however, that there is considerably less opposition to reductions in the periods of sick pay; indeed, very often this solution is put forward by the members themselves as being in their view preferable to any other method of meeting the deficiency. It may, therefore, have to be adopted as the line of least resistance; and the appended Percentage Table is designed to provide the means of determining what reduction in the periods of sick pay will be necessary to attain solvency. Later on, the table will afford the means of testing the sickness experience in the reduced periods, and of making valuations on the new basis.

The Percentage Table is to be used as follows. Assuming, as is commonly the case, that the existing sickness table gives separately the sickness in the first 26 weeks and in the second 26 weeks, calculate for each age what percentage the latter is of the former. In the column of the Percentage Table headed with this percentage will then be found the percentage which the sickness in the first x weeks (where x is given in the centre column of the page) bears to that of the first 26 weeks. The table proceeds by consecutive values of x from 2 to 14, and thereafter by even values to 78.

The table can also be used if the periods of full and first reduced sick pay in the existing table are other than 26 weeks. Thus, if they are both 20 weeks, the first operation will be to calculate for each column of the Percentage Table the percentage which the sickness of the second 20 weeks bears to that of the first 20 weeks, and to substitute this percentage in the heading of the column. For example, it will be found that the column headed 16 will have the new heading 17, equal to $(110 - 94) \div 94 \times 100$. If, then, according to the existing sickness table the sickness for the second 20 weeks is, for a particular age, equal to 17% of the sickness for the first 20 weeks, the column with the new heading 17 can be used to calculate the sickness for any other period. For example, the sickness for the first 13 weeks will, for that age, be equal to $81 \div 94 \times 100 = 86\%$ of the sickness for the first 20 weeks as given in the existing sickness table.

CONSTRUCTION OF TABLE

Curves of the type

$$k_x = \left(\frac{x}{26} \right)^\alpha, \quad (1)$$

where k_x equals the ratio of the first x weeks of sickness to the first 26 weeks, were used for values of x between 26 and 52. $k_x = 1$ when $x = 26$, and $k_{52} = 2^\alpha$. Eliminating α we have the following convenient formula for calculation:

$$\log k_x = \frac{\log k_{52}}{\log 2} \log \left(\frac{x}{26} \right). \quad (2)$$

For values of x less than 26 this seems to give too high values to k_x , and for values of x above 52 somewhat too low values for the lower values of k_{52} and too high for the higher values of k_{52} . Accordingly for values of x greater than 52, parabolic curves of the type

$$k_x^2 = k_{52}^2 + B \left(\frac{x}{26} - 2 \right) \quad (3)$$

were used, the constant B , which varies for each value of k_{52} , being determined by equating dk_x/dx in the formulae (2) and (3) for $x = 52$. This gives

$$B = k_{52}^2 \frac{\log k_{52}}{\log 2};$$

and formula (3) reduces to

$$k_x^2 = k_{52}^2 \left\{ 1 + \frac{\log k_{52}}{\log 2} \left(\frac{x}{26} - 2 \right) \right\}. \quad (4)$$

As a matter of fact, for values of k_{52} not greater than 1.6 (and it is only at high ages that k_{52} will be greater than this), the formulae (2) and (4) give identical integral percentages for weeks of sickness between 52 and 64. It may be mentioned here that the necessity for the construction of a table of this character arose out of the varied sickness benefits of the Districts and Tents of the Independent Order of Rechabites; and that it was even necessary to extend the table to 156 weeks. As, however, this involved the addition to formula (3) of a small negative term depending on possible ultimate periods of sickness and ultimate ratios of the sickness after the first 52 weeks to the sickness of the first 26 weeks, factors which might vary considerably in different sickness experiences, it was not thought advisable to reproduce the extended table here. For values of x up to 78 weeks, the additional term makes no difference in the integral percentages; and accordingly formulae (3) and (4) hold. This is, perhaps, as far as it is safe to go without the introduction of sickness after the first 52 weeks.

Various attempts were made to obtain a formula for values of x less than 26 weeks, but no completely satisfactory formula could be found. Resort was therefore had to the graphic method, curves being drawn both for constant values of k_{52} and for constant values of x . The former were made tangential at $x = 26$ to the curves obtained by formula (2).

The percentages at the headings of the table are, of course, equal to $(100k_{52} - 1)$.

An interesting test of the Percentage Table is afforded by the Manchester Unity Experience, 1893-97. The table opposite shows (1) the actual (adjusted) rates of sickness for the first 13 weeks according to the Manchester Unity

Manchester Unity Experience, 1893-97. First 13 weeks of sickness

Age	A.H.J.			B.C.D.			E.F.			Whole Society		
	Actual	By table	Δ	Actual	By table	Δ	Actual	By table	Δ	Actual	By table	Δ
18	.77	.77	—	.87	.89	+.02	1.14	1.14	—	.86	.86	—
23	.64	.65	+.01	.76	.77	+.01	.94	.94	—	.70	.71	+.01
28	.64	.63	-.01	.76	.76	—	.94	.94	—	.70	.70	—
33	.67	.67	—	.83	.83	—	1.01	1.01	—	.74	.74	—
38	.73	.73	—	.92	.92	—	1.09	1.09	—	.81	.80	—
43	.82	.82	—	1.02	1.02	—	1.18	1.19	+.01	.90	.90	—
48	.93	.94	+.01	1.14	1.16	+.02	1.29	1.29	—	1.01	1.01	—
53	1.10	1.11	+.01	1.33	1.34	+.01	1.44	1.44	—	1.17	1.19	+.02
58	1.31	1.31	—	1.58	1.61	+.03	1.78	1.77	—	1.39	1.40	+.01
63	1.59	1.59	—	1.82	1.84	+.02	2.10	2.15	+.05	1.66	1.67	+.01
68	1.89	1.87	-.02	1.96	1.94	-.02	2.20	2.18	-.02	1.93	1.91	-.02
73	1.94	1.93	-.01	2.04	2.04	—	1.98	1.97	-.01	1.94	1.94	—
78	1.82	1.82	—	1.62	1.65	+.03	1.70	1.70	—	1.79	1.79	—
83	1.50	1.51	+.01	1.22	1.19	-.03	1.70	1.68	-.02	1.46	1.48	+.02
Totals of differences			+.00	+.09			.00			+.04		

Experience, (2) the rates of sickness for the first 13 weeks as calculated by the Percentage Table from the ratios of the second 26 weeks to the first 26 weeks, and (3) the differences. The sickness rates have been calculated to two places of decimals. Having regard to the fact that at different times and amongst different sections of the community sickness rates vary much more widely than rates of mortality, any further refinement would appear to be of no practical, and very doubtful academic, interest.

This may be taken as a fair test, although it must not be overlooked that another experience, or even another graduation of the Manchester Unity Experience, might give somewhat different results. The actual experience in the special periods should eventually be tested wherever possible. It would seem, however, that the Percentage Table gives a sufficiently close approximation for all practical purposes, although it may slightly overestimate, rather than underestimate, the sickness for the shorter periods. This is an error, if it exists, in the right direction, for the main use of the table will be to ascertain the effect of passing from longer to shorter periods of sickness, and it is important not to overestimate the financial relief on that account.

INTEREST TABLES

When the rates of sickness in the special periods have been calculated for each age with the aid of the Percentage Table, the interest tables can be prepared in the usual way.

The work may, however, be greatly shortened by the use of the approximate method illustrated in the table opposite. In this example, we have 20 weeks' full pay and 20 weeks' first reduced pay, leaving 12 weeks of the first 52 weeks to be added to the remainder pay. Columns (2), (3) and (13) are obtained from the standard table, which in this case is derived from the experience of the Independent Order of Rechabites during the years 1926-30—Males in Industrial Districts, combined with 3% interest. (It may be mentioned that in constructing this table, the recorded sickness during the 5 years was reduced by 3% to allow for the excessive sickness during 1926, the year of the General Strike, and that the correctness of this deduction was substantiated by subsequent experience.)

Columns (4), (5) and (6) are obtained from column (3) with the aid of the Percentage Table. Columns (7), (8) and (9) are derived from column (2) and columns (4), (5) and (6). Column (17) is the sum of columns (14), (15) and (16), and is compared with column (18), the correct value for the first 52 weeks of sickness in the standard table, which of course was obtained by proceeding according to individual years of age. The method is thus self-checking.

In the example given, the difference between columns (17) and (18) is never more than .1; but in practice it is desirable to adjust the items in column (14) to make the totals for the periods 20, 20 and 12 exactly equal to the values of the sickness benefit for the first 52 weeks as given in the standard table.

When the values for the quinquennial ages have been obtained, the values for intermediate ages may be obtained by interpolation.

The same approximate method can be used if the sickness benefits cease at age 65, or at age 70; but in the former case the last item in column (2) will be $H_{63} + H_{64}$, and in the latter case $H_{68} + H_{69}$. Also, the corresponding percentage in column (3) should be the mean of the percentages for ages 63 and 64 or for ages 68 and 69.

Example of approximate method of calculation of values of sickness benefits in special periods

(I.O.R. 1926-30, Males, Industrial Districts, Interest 3 %)

Percentages of sickness for first 26 weeks

Second 26 weeks per cent of first 26 weeks					Weeks	6	7	8	9	10
1	2	3	4	5		6	7	8	9	10
74	67	61	57	54	2	51	48	46	44	42
79	74	69	65	62	3	59	57	55	53	51
83	79	75	72	69	4	66	63	61	59	57
86	83	79	76	73	5	71	68	66	64	62
89	86	83	80	77	6	75	73	71	69	67
91	88	86	83	80	7	78	76	74	73	71
93	90	88	85	83	8	81	79	77	76	75
94	92	90	87	85	9	84	82	80	79	78
95	93	91	89	87	10	86	84	83	82	80
96	94	92	91	89	11	88	86	85	84	82
97	95	93	92	90	12	89	88	87	85	84
98	96	94	93	92	13	91	90	88	87	86
98	97	95	94	93	14	92	91	90	89	88
99	98	97	96	95	15	94	93	93	92	91
99	99	98	97	97	18	96	95	95	94	94
99	99	99	98	98	20	97	97	97	96	96
100	99	99	99	99	22	98	98	98	98	98
100	100	99	99	99	24	99	99	99	99	99
100	100	100	100	100	26	100	100	100	100	100
100	100	100	100	100	28	101	101	101	101	101
100	100	101	101	101	30	101	101	102	102	102
100	101	101	101	102	32	102	102	102	103	103
100	101	101	102	102	34	102	103	103	103	104
100	101	101	102	102	36	103	103	104	104	105
100	101	102	102	103	38	103	104	104	105	105
101	101	102	102	103	40	104	104	105	106	106
101	101	102	103	103	42	104	105	106	106	107
101	102	102	103	104	44	104	105	106	107	108
101	102	102	103	104	46	105	106	107	107	108
101	102	103	104	104	48	105	106	107	108	109
101	102	103	104	105	50	106	107	108	108	109
101	102	103	104	105	52	106	107	108	109	110
101	102	103	104	105	54	106	107	108	109	111
101	102	103	104	105	56	107	108	109	110	112
101	102	103	104	106	58	107	108	109	110	112
101	102	104	105	106	60	107	109	110	111	112
101	102	104	105	106	62	107	109	110	111	113
101	103	104	106	107	64	108	109	111	112	113
101	103	104	106	107	66	109	110	111	112	114
101	103	104	106	107	68	109	110	112	113	115
101	103	105	106	108	70	110	111	112	113	115
102	103	105	107	108	72	110	112	113	114	116
102	103	105	107	108	74	110	112	113	114	116
102	104	105	107	109	76	111	112	114	115	117
102	104	105	107	109	78	111	112	114	115	117

Percentages of sickness for first 26 weeks

Second 26 weeks per cent of first 26 weeks										
11	12	13	14	15	Weeks	16	17	18	19	20
40	38	37	35	34	2	33	32	31	30	29
49	47	46	44	43	3	42	41	40	39	38
56	54	53	52	50	4	49	48	47	46	45
61	59	58	57	56	5	55	54	53	52	51
65	64	63	62	61	6	60	59	58	57	56
70	68	67	66	65	7	64	63	62	61	60
74	72	71	70	69	8	68	67	66	65	64
77	75	74	73	72	9	71	70	69	68	67
79	78	77	76	75	10	74	73	72	71	70
81	80	80	79	78	11	77	76	75	74	73
83	82	82	81	80	12	79	78	77	77	76
85	84	83	83	82	13	81	80	79	79	79
87	86	85	85	84	14	83	82	82	81	81
90	90	89	88	88	16	87	87	86	85	85
93	93	92	91	91	18	91	90	90	89	89
95	95	95	94	94	20	94	93	93	92	92
97	97	97	96	96	22	96	96	96	95	95
99	99	99	98	98	24	98	98	98	98	98
100	100	100	100	100	26	100	100	100	100	100
101	101	101	101	102	28	102	102	102	102	102
102	102	102	103	103	30	103	103	103	104	104
103	104	104	104	104	32	104	105	105	105	106
104	105	105	105	106	34	106	106	107	107	107
105	106	106	106	107	36	107	108	108	108	109
106	106	107	108	108	38	108	109	110	110	111
107	107	108	109	109	40	110	110	111	111	112
108	108	109	110	110	42	111	112	112	113	113
108	109	110	110	111	44	112	113	113	114	115
110	110	111	111	112	46	113	114	115	115	116
110	111	111	112	113	48	114	115	116	117	118
110	111	112	113	114	50	115	116	117	118	119
111	112	113	114	115	52	116	117	118	119	120
111	112	113	115	116	54	117	118	119	120	121
112	113	114	116	117	56	118	119	120	121	122
112	114	115	117	118	58	119	120	122	123	124
113	115	116	118	119	60	120	121	123	124	125
114	115	116	118	119	62	121	122	124	125	126
114	116	117	119	120	64	122	123	125	126	127
115	116	118	120	121	66	123	124	126	127	128
116	117	119	121	122	68	124	125	127	128	129
116	118	119	121	123	70	125	126	127	129	131
117	119	120	122	123	72	125	126	128	130	132
117	119	121	123	124	74	126	127	129	131	133
118	120	122	124	125	76	127	128	130	132	134
119	121	123	125	126	78	127	129	131	133	135

Percentages of sickness for first 26 weeks

					Second 26 weeks per cent of first 26 weeks	Weeks	26	27	28	29	30
21	22	23	24	25							
28	28	27	27	26		2	25	24	24	23	23
37	36	35	35	34		3	33	32	32	31	31
44	43	42	42	41		4	40	39	39	38	38
50	49	48	47	47		5	46	45	45	44	43
55	54	53	52	52		6	51	50	50	49	48
59	58	57	57	56		7	55	55	54	53	53
63	62	61	61	60		8	59	59	58	57	57
66	65	65	64	64		9	63	62	62	61	60
69	68	68	67	67		10	66	65	65	64	64
72	71	71	70	70		11	69	68	68	67	67
75	74	73	73	72		12	72	71	71	70	70
77	77	76	75	75		13	75	74	74	73	73
80	80	79	78	77		14	77	77	76	76	75
84	84	83	83	82		16	82	81	81	80	80
88	88	88	87	87		18	86	86	86	85	85
92	92	92	91	91		20	90	90	90	89	89
95	95	95	94	94		22	94	94	94	93	93
97	97	97	97	97		24	97	97	97	97	97
100	100	100	100	100		26	100	100	100	100	100
102	102	102	102	102		28	102	103	103	103	103
104	104	104	104	103		30	105	105	105	105	106
106	106	107	107	107		32	107	107	108	108	108
108	108	109	109	109		34	109	110	110	110	111
109	110	111	111	111		36	111	112	112	113	113
111	112	112	112	113		38	114	114	114	115	116
113	113	114	114	115		40	116	116	117	117	118
114	115	115	116	117		42	117	118	119	119	120
116	116	117	118	118		44	119	120	121	121	122
117	118	119	119	120		46	121	122	122	123	124
118	119	120	121	122		48	123	124	124	125	126
120	121	122	122	123		50	124	125	126	127	128
121	122	123	124	125		52	126	127	128	129	130
122	123	125	126	127		54	128	129	130	131	132
123	125	126	127	128		56	129	130	132	133	134
124	126	127	129	130		58	131	132	133	134	136
126	127	128	130	131		60	132	133	135	136	137
127	128	129	131	132		62	134	135	137	138	139
128	130	131	133	134		64	136	137	139	140	141
129	131	132	134	135		66	137	138	140	141	143
130	132	133	135	137		68	139	140	142	143	145
132	133	135	137	138		70	140	141	143	144	146
133	135	136	138	140		72	142	143	145	146	148
134	136	138	140	141		74	143	144	146	148	150
135	137	139	141	143		76	145	146	148	150	152
136	138	140	142	144		78	146	147	149	151	153

Percentages of sickness for first 26 weeks

Second 26 weeks per cent of first 26 weeks										
31	32	33	34	35	Weeks	36	37	38	39	40
23	22	22	21	21	2	21	20	20	20	19
30	30	29	28	28	3	28	27	27	27	26
37	36	36	35	35	4	34	34	33	33	32
42	42	41	41	40	5	40	39	39	38	38
47	47	46	46	45	6	45	44	44	43	43
52	51	51	50	50	7	50	49	48	47	47
56	55	55	54	54	8	54	53	52	51	51
60	59	59	58	58	9	57	57	56	55	55
63	63	62	62	61	10	60	60	59	59	58
66	66	65	65	64	11	64	63	63	62	62
69	69	68	68	67	12	67	66	66	65	65
72	72	71	71	70	13	70	69	69	68	68
75	74	74	73	73	14	73	72	72	71	71
80	80	79	78	78	16	78	77	77	77	77
85	84	84	83	83	18	83	82	82	82	82
89	89	88	88	88	20	88	88	87	87	87
93	93	92	92	92	22	92	92	91	91	91
97	96	96	96	96	24	96	96	96	96	96
100	100	100	100	100	26	100	100	100	100	100
103	103	103	103	103	28	103	103	103	104	104
106	106	106	106	106	30	106	107	107	107	107
108	109	109	109	109	32	110	110	110	110	111
111	111	112	112	112	34	113	113	113	114	114
114	114	114	115	115	36	116	116	116	117	117
116	116	117	117	118	38	118	119	119	120	120
118	119	119	120	120	40	121	122	122	123	123
121	121	122	122	123	42	124	124	125	126	126
123	124	124	125	126	44	126	127	128	128	129
125	126	126	127	128	46	129	130	130	131	132
127	128	129	130	130	48	131	132	133	134	135
129	130	131	132	133	50	134	135	136	136	137
131	132	133	134	135	52	136	137	138	139	140
133	134	135	136	137	54	138	139	140	142	143
135	136	137	138	140	56	141	142	143	144	145
137	138	139	140	142	58	143	144	145	146	148
138	140	141	142	144	60	145	146	147	148	150
140	142	143	144	146	62	147	148	149	151	153
142	144	145	146	148	64	150	151	152	154	155
144	145	146	148	150	66	152	153	154	156	157
146	147	148	150	152	68	154	155	157	158	160
147	149	150	152	154	70	156	157	159	160	162
149	151	152	154	156	72	158	160	161	163	164
151	152	154	156	158	74	160	162	163	165	166
153	154	156	158	160	76	162	164	166	167	169
154	156	158	160	162	78	164	166	168	169	171

Percentages of sickness for first 26 weeks

Second 26 weeks per cent of first 26 weeks					Weeks	46	47	48	49	50
41	42	43	44	45		46	47	48	49	50
19	19	18	18	18	2	18	18	18	17	17
26	26	25	25	24	3	24	24	24	23	23
32	32	31	31	30	4	30	30	29	29	28
37	37	36	36	35	5	35	35	34	34	33
42	42	41	41	40	6	40	40	39	39	38
46	46	45	45	44	7	44	44	43	43	42
50	50	49	49	48	8	48	47	47	47	46
54	54	53	53	52	9	52	51	51	50	50
58	57	57	56	56	10	55	55	55	54	54
61	61	60	60	59	11	59	58	58	57	57
64	64	63	63	62	12	62	61	61	60	60
67	67	66	66	66	13	65	65	65	64	64
70	70	69	69	69	14	68	68	68	67	67
76	76	75	75	75	16	74	74	73	73	73
81	81	80	80	80	18	80	80	79	79	79
86	86	86	86	86	20	85	85	85	85	85
91	91	91	91	91	22	90	90	90	90	90
96	96	96	96	96	24	95	95	95	95	95
100	100	100	100	100	26	100	100	100	100	100
104	104	104	104	104	28	104	104	104	104	104
107	108	108	108	108	30	108	108	108	109	109
111	111	112	112	112	32	112	112	112	113	113
114	114	115	115	116	34	116	116	116	117	117
118	118	118	119	119	36	120	120	120	121	121
121	121	122	122	123	38	123	124	124	124	125
124	124	125	126	126	40	126	127	128	128	129
127	127	128	129	129	42	130	130	131	132	132
130	130	131	132	133	44	133	134	135	136	136
133	133	134	135	136	46	137	137	138	139	140
136	136	137	138	139	48	140	141	141	142	143
138	139	140	141	142	50	143	144	145	146	147
141	142	143	144	145	52	146	147	148	149	150
144	145	146	147	148	54	149	150	151	152	153
146	147	148	150	151	56	152	153	155	156	157
149	150	151	152	154	58	155	156	158	159	160
151	152	153	155	156	60	158	159	161	162	163
154	155	156	158	159	62	161	162	164	165	166
156	158	159	161	162	64	164	165	167	168	169
158	160	161	163	165	66	166	168	170	171	172
161	163	164	166	168	68	169	171	173	174	175
163	165	166	168	170	70	171	173	175	176	178
165	167	169	171	173	72	174	176	178	179	181
167	169	171	173	175	74	176	178	180	182	184
170	172	174	176	178	76	179	181	183	185	187
172	174	176	178	180	78	181	183	185	187	189

Percentages of sickness for first 26 weeks

Second 26 weeks per cent of first 26 weeks					Weeks	56	57	58	59	60
51	52	53	54	55						
17	16	16	16	16	2	15	15	15	15	15
23	22	22	22	22	3	21	21	20	20	20
28	28	27	27	26	4	26	26	25	25	25
33	33	32	32	31	5	31	31	30	30	30
37	37	37	36	36	6	35	35	35	34	34
42	41	41	40	40	7	40	39	39	38	38
46	45	45	44	44	8	44	43	43	42	42
50	49	49	48	48	9	48	47	47	46	46
54	53	53	52	52	10	51	51	50	50	50
57	57	56	56	55	11	55	54	54	54	54
60	60	59	59	58	12	58	57	57	57	57
63	63	62	62	62	13	62	61	60	60	60
67	66	66	66	65	14	65	65	64	64	64
73	72	72	72	72	16	71	71	71	70	70
79	78	78	78	78	18	77	77	77	76	76
85	84	84	84	84	20	84	83	83	83	83
90	90	90	89	89	22	89	89	89	89	89
95	95	95	95	95	24	95	95	95	95	95
100	100	100	100	100	26	100	100	100	100	100
104	105	105	105	105	28	105	105	105	105	105
109	109	109	109	110	30	110	110	110	110	110
113	113	114	114	114	32	114	114	115	115	115
117	118	118	118	118	34	119	119	119	120	120
121	122	122	122	123	36	123	124	124	124	125
125	126	126	127	127	38	128	128	128	129	129
129	130	130	131	131	40	132	132	133	133	134
133	134	134	135	135	42	136	137	137	138	138
137	137	138	139	139	44	140	141	142	142	143
140	141	142	143	143	46	144	145	146	146	147
144	145	146	146	147	48	148	149	150	151	152
148	148	149	150	151	50	152	153	154	155	156
151	152	153	154	155	52	156	157	158	159	160
155	156	157	158	159	54	160	161	162	163	164
158	159	160	161	162	56	164	165	166	167	168
161	163	164	165	166	58	167	168	169	170	172
164	166	167	168	169	60	171	172	173	174	176
167	169	170	171	173	62	174	175	177	178	180
170	172	173	175	177	64	178	179	181	182	184
173	175	176	178	180	66	181	182	184	185	187
176	178	179	181	183	68	184	185	187	189	191
179	181	182	184	186	70	187	188	190	192	194
182	184	185	187	189	72	190	192	194	196	198
185	187	188	190	192	74	193	195	197	199	201
188	190	191	193	195	76	196	198	200	202	204
190	192	194	196	198	78	199	201	203	205	207

Percentages of sickness for first 26 weeks

Second 26 weeks per cent of first 26 weeks						Weeks	66	67	68	69	70
61	62	63	64	65							
15	14	14	14	14	2		14	13	13	13	13
20	19	19	19	19	3		19	18	18	18	18
25	24	24	23	23	4		23	23	22	22	22
30	29	29	28	28	5		28	28	27	27	27
34	33	33	32	32	6		32	32	31	31	31
38	37	37	36	36	7		36	36	35	35	35
42	41	41	40	40	8		40	40	39	39	39
46	45	45	44	44	9		44	44	43	43	43
49	49	49	48	48	10		48	47	47	47	46
53	53	52	52	52	11		52	51	51	51	50
56	56	55	55	55	12		55	54	54	54	54
60	59	59	59	58	13		58	58	57	57	57
64	63	63	63	62	14		62	62	61	61	61
70	70	70	69	69	16		69	68	68	68	68
76	76	76	75	75	18		75	75	75	75	74
83	82	82	82	82	20		82	82	82	82	81
89	88	88	88	88	22		88	88	88	88	88
95	94	94	94	94	24		94	94	94	94	94
100	100	100	100	100	26		100	100	100	100	100
105	105	105	105	106	28		106	106	106	106	106
110	110	111	111	111	30		111	111	111	111	112
115	116	116	116	116	32		116	117	117	117	117
120	120	121	121	121	34		122	122	122	122	123
125	125	126	126	126	36		127	127	128	128	128
130	130	131	131	132	38		132	132	133	133	134
134	135	136	136	136	40		137	138	138	139	139
139	140	140	141	141	42		142	143	143	144	144
144	144	145	146	146	44		147	148	148	149	150
148	149	150	150	151	46		152	152	153	154	155
152	153	154	155	156	48		157	158	158	159	160
157	158	159	160	160	50		161	162	163	164	165
161	162	163	164	165	52		166	167	168	169	170
165	166	167	168	169	54		171	172	173	174	175
169	171	172	173	174	56		175	176	177	178	180
173	175	176	177	178	58		180	181	182	183	184
177	179	180	181	182	60		184	185	186	187	189
181	183	184	185	186	62		188	189	190	191	193
185	187	188	189	190	64		192	193	195	196	198
188	190	192	193	194	66		196	197	199	200	202
192	194	196	197	198	68		200	201	203	204	206
195	197	199	201	202	70		204	205	207	208	210
199	201	203	205	206	72		208	209	211	212	214
202	204	206	208	210	74		212	213	215	216	218
206	208	210	212	214	76		216	217	219	220	222
209	211	213	215	217	78		219	221	223	224	226

Percentages of sickness for first 26 weeks

Second 26 weeks per cent of first 26 weeks										
71	72	73	74	75	Weeks	76	77	78	79	80
12	12	12	12	12	2	11	11	11	11	11
17	17	17	17	17	3	16	16	16	16	15
22	22	22	21	21	4	21	20	20	20	19
26	26	26	25	25	5	25	24	24	24	24
30	30	30	29	29	6	29	28	28	28	28
34	34	34	33	33	7	33	33	32	32	32
38	38	38	37	37	8	37	37	36	36	36
42	42	42	41	41	9	41	41	40	40	40
46	46	45	45	45	10	45	44	44	44	43
50	50	49	49	49	11	49	48	48	48	47
53	53	53	52	52	12	52	52	51	51	51
57	56	56	56	55	13	55	55	55	54	54
61	60	60	60	59	14	59	59	59	58	58
67	67	67	67	67	16	66	66	66	65	65
74	74	74	74	74	18	73	73	73	73	73
81	81	81	81	81	20	80	80	80	80	80
88	88	88	87	87	22	87	87	87	87	87
94	94	94	94	94	24	94	94	94	94	94
100	100	100	100	100	26	100	100	100	100	100
106	106	106	106	106	28	106	106	106	106	106
112	112	112	112	112	30	112	112	113	113	113
117	118	118	118	118	32	118	119	119	119	119
123	123	124	124	124	34	124	125	125	125	126
129	129	129	130	130	36	130	131	131	131	132
134	135	135	136	136	38	136	137	137	138	138
140	140	141	141	142	40	142	143	143	144	144
145	146	146	147	147	42	148	148	149	150	150
150	151	152	152	153	44	154	154	155	156	156
156	156	157	158	158	46	159	160	161	162	162
161	162	162	163	164	48	165	166	166	167	168
166	167	168	169	170	50	171	171	172	173	174
171	172	173	174	175	52	176	177	178	179	180
176	177	178	179	180	54	181	182	183	184	186
181	182	183	184	185	56	187	188	189	190	191
185	186	187	189	190	58	192	193	194	195	197
190	191	192	194	195	60	197	198	199	200	202
194	196	197	199	200	62	202	203	204	206	208
199	201	202	204	205	64	207	208	209	211	213
203	205	206	208	210	66	211	213	214	216	217
207	209	211	213	214	68	216	218	219	221	222
211	213	215	217	218	70	220	222	224	226	227
216	218	219	221	223	72	225	227	229	231	232
220	222	223	225	227	74	229	231	233	235	236
224	226	227	229	231	76	233	235	237	239	241
228	230	231	233	235	78	237	239	241	243	245

Percentages of sickness for first 26 weeks

Second 26 weeks per cent of first 26 weeks					Weeks	86	87	88	89	90
81	82	83	84	85		86	87	88	89	90
11	10	10	10	10	2	10	10	10	9	9
15	15	15	15	14	3	14	14	14	14	13
19	19	19	19	18	4	18	18	18	18	17
23	23	23	23	22	5	22	22	22	22	21
27	27	27	27	26	6	26	26	26	25	25
31	31	31	31	30	7	30	30	30	29	29
35	35	35	35	34	8	34	34	34	33	33
39	39	39	39	38	9	38	38	38	37	37
43	43	43	42	42	10	42	42	41	41	41
47	47	47	46	46	11	46	46	45	45	45
51	50	50	50	49	12	49	49	48	48	48
54	54	54	53	53	13	53	53	52	52	52
58	58	58	57	57	14	57	56	56	56	56
65	65	65	65	64	16	64	64	64	64	64
73	72	72	72	71	18	71	71	71	71	71
80	80	79	79	79	20	79	79	79	79	78
87	87	86	86	86	22	86	86	86	86	86
94	94	93	93	93	24	93	93	93	93	93
100	100	100	100	100	26	100	100	100	100	100
107	107	107	107	107	28	107	107	107	107	107
113	113	114	114	114	30	114	114	114	114	114
120	120	120	120	120	32	120	121	121	121	121
126	126	127	127	127	34	127	128	128	128	128
132	132	133	133	133	36	134	134	134	135	135
139	139	140	140	140	38	140	141	141	142	142
145	145	146	146	147	40	147	148	148	149	149
151	151	152	153	153	42	154	155	155	156	156
157	158	159	159	160	44	160	161	161	162	163
163	164	165	165	166	46	167	168	168	169	170
169	170	171	172	172	48	173	174	175	176	176
175	176	177	178	179	50	180	181	181	182	183
181	182	183	184	185	52	186	187	188	189	190
187	188	189	190	191	54	192	193	194	195	197
192	193	194	196	197	56	198	199	200	201	203
198	199	200	201	203	58	204	205	206	207	209
203	204	205	207	208	60	210	211	212	213	215
209	210	211	213	214	62	215	217	218	220	221
214	215	216	218	220	64	221	223	224	226	227
218	220	221	223	225	66	226	228	229	231	233
223	225	226	228	230	68	231	233	235	237	238
228	230	231	233	235	70	236	238	240	242	244
233	235	236	238	240	72	241	243	245	247	249
237	239	241	243	245	74	246	248	250	252	254
242	244	246	248	250	76	251	253	255	257	259
246	248	250	252	254	78	256	258	260	262	264

Percentages of sickness for first 26 weeks

Second 26 weeks per cent of first 26 weeks										
91	92	93	94	95	Weeks	96	97	98	99	100
9	9	9	9	9	2	8	8	8	8	8
13	13	13	13	13	3	12	12	12	12	12
17	17	17	16	16	4	16	16	16	15	15
21	21	21	20	20	5	20	20	20	19	19
25	25	24	24	24	6	24	24	23	23	23
29	29	28	28	28	7	28	28	27	27	27
33	33	32	32	32	8	32	31	31	31	31
37	37	36	36	36	9	36	35	35	35	35
40	40	40	40	40	10	39	39	39	39	38
44	44	44	44	44	11	43	43	43	43	42
48	48	47	47	47	12	47	46	46	46	46
52	51	51	51	51	13	51	51	50	50	50
56	55	55	55	55	14	55	54	54	54	54
63	63	63	63	63	16	63	62	62	62	62
70	70	70	70	70	18	70	69	69	69	69
78	78	78	78	78	20	78	77	77	77	77
86	86	85	85	85	22	85	85	85	85	85
93	93	93	93	92	24	92	92	92	92	92
100	100	100	100	100	26	100	100	100	100	100
107	107	107	107	107	28	108	108	108	108	108
114	114	115	115	115	30	115	115	115	115	115
121	122	122	122	122	32	122	123	123	123	123
128	129	129	129	130	34	130	130	130	131	131
135	136	136	136	137	36	137	138	138	138	138
142	143	144	144	144	38	145	145	145	146	146
149	150	151	151	151	40	152	153	153	154	154
156	157	158	158	159	42	159	160	160	161	162
163	164	165	165	166	44	167	168	168	169	169
170	171	172	173	173	46	174	175	175	176	177
177	178	179	180	180	48	181	182	183	184	185
184	185	186	187	188	50	189	190	191	192	192
191	192	193	194	195	52	196	197	198	199	200
198	199	200	201	202	54	203	204	205	206	208
204	205	206	207	208	56	210	211	212	213	215
210	212	213	214	215	58	217	218	219	220	222
216	218	219	220	222	60	223	225	226	227	229
222	224	225	226	228	62	230	231	232	234	236
229	230	231	232	234	64	236	237	238	240	242
235	236	237	238	240	66	242	243	244	246	248
240	241	243	244	246	68	248	249	250	252	254
245	247	248	250	252	70	254	255	256	258	260
251	252	254	256	258	72	260	261	262	264	266
256	258	259	261	263	74	265	266	268	270	272
261	263	265	267	268	76	270	272	274	276	278
266	268	270	272	273	78	275	277	279	281	283