

III.

Analysis of the results of a Block Census undertaken in Manchester in December 1918,

By

T. Carnwath, D.S.O., M.B.

The method of enquiry is described by Dr. Niven in Appendix IV.

The results are briefly as follows :—The inquiry covered 1,018 houses with a population of 4,666. 500 households or almost exactly one half were invaded in either one or other epidemic: the total number of cases was 1,100 or 25 per cent of the population. 14• 8 per cent of the population were attacked in summer and 10• 3 per cent in winter. There is record of only two deaths among the summer cases, but 14 deaths occurred in the autumn ; the case mortality in the autumn epidemic was therefore 2• 9 per cent. Of these 14 only one had the disease in the summer. One of the most noteworthy facts elicited by inquiry into deaths from the disease in Manchester is the small proportion of fatal cases which suffered from previous attack.

The autumn epidemic affected 268 households with a population of 1,358. 480 persons were attacked including 73 who had had the disease in the summer. 102 households suffered in both epidemics. The history of these 102 households throws some light on the question of immunity. They comprised a population of 553 persons—of whom 199 had suffered in summer and 354 had escaped. In the autumn epidemic 73 (or 37 per cent.) of the presumably " protected " persons succumbed again whereas only 115 (or 32• 5 per cent.) of the " unprotected " suffered. Of the former, however, only one died while three of the latter terminated fatally.

The age period most heavily affected in the summer epidemic was from 15 to 45 years, whereas in the autumn there is evident a considerable shifting towards the extremes of life and particularly towards the younger years. At first sight this would seem to argue a certain degree of immunity following a previous attack in summer, but this conclusion is not borne out by closer analysis, as the autumn diminution in the middle-age period affected equally those who suffered in summer and those who escaped.

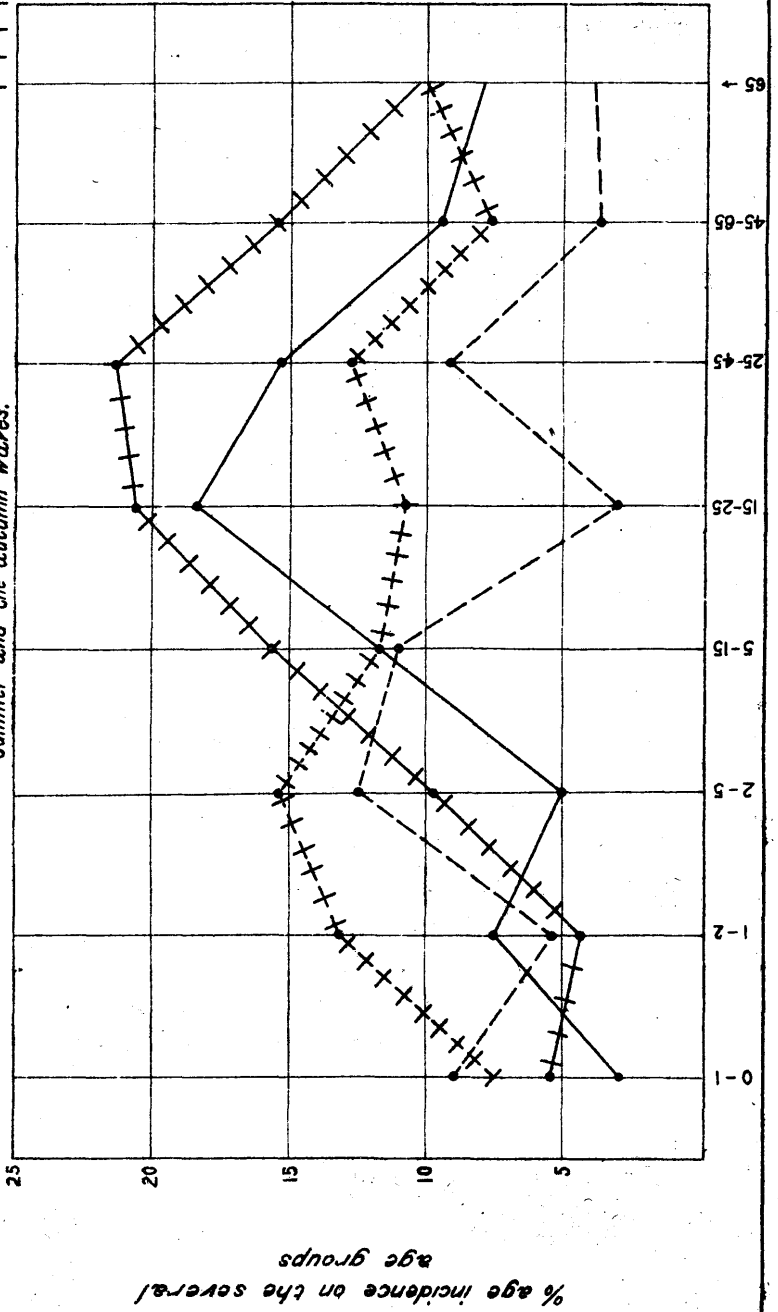
INFLUENZA-MANCHESTER

RESULT OF BLOCK CENSUS

Curves showing percentage incidence of the disease on the several periods during the summer and the autumn waves.

M } Summer
 F }

 M } Autumn
 F }



H.S.C. GRAHAM LTD LONDON, S.E.

INFLUENZA.

Result of Block Census in Manchester (Summer and Autumn Epidemics).

Age and Sex Incidence.

Summer.

District.		Total Number Persons con- cerned.	Affected.									Escaped.								
			0-1.	1-2.	2-5.	5-15.	15-25.	25-45.	45-65.	65 and over.	Total.	0-1.	1-2.	2-5.	5-15.	15-25.	25-45.	45-65.	65 and over.	Total.
Ancoats, C. - -	M.	82	-	-	-	5	1	8	1	-	15	5	3	6	26	3	15	9	-	67
	F.	89	-	-	1	4	6	6	4	-	21	1	3	12	15	10	20	4	3	68
„ E. - -	M.	51	-	-	-	2	-	2	1	-	5	3	1	4	10	3	20	4	1	46
	F.	83	1	-	2	4	-	7	4	-	18	1	3	8	19	9	20	4	1	65
„ N. - -	M.	38	-	-	1	2	-	2	1	-	6	2	2	3	14	3	6	2	-	32
	F.	58	-	-	-	-	3	9	3	-	15	1	3	2	14	5	9	9	-	43
„ S. - -	M.	78	-	-	-	-	-	-	-	-	-	8	2	6	28	8	16	8	2	78
	F.	95	-	-	-	4	3	4	-	-	11	-	2	7	19	15	27	12	2	84
„ W. - -	M.	90	-	-	1	-	1	-	1	-	3	-	3	10	24	14	13	17	6	87
	F.	134	-	-	-	2	1	1	-	-	4	6	5	10	28	26	37	13	5	130
Ardwick, E. - -	M.	65	-	-	1	4	1	3	3	-	12	1	2	6	18	3	18	3	2	53
	F.	70	-	-	2	6	4	6	-	1	19	-	2	9	10	3	19	6	2	51

Result of Block Census in Manchester (Summer and Autumn Epidemics)— continued.
Age and Sex Incidence.
Summer—continued.

District.		Total Number Persons con- cerned.	Affected.									Escaped.								
			0-1.	1-2.	2-5.	5-15.	15-25.	25-45.	45-65.	65 and over.	Total.	0-1.	1-2.	2-5.	5-15.	15-25.	25-45.	45-65.	65 and over.	Total.
Ardwick, N. -	M.	59	-	-	-	2	1	2	-	-	5	1	1	7	24	4	12	5	-	54
	F.	74	-	1	1	2	3	6	1	1	15	3	1	12	11	9	19	4	-	59
,, S. -	M.	90	-	-	1	1	-	2	-	-	4	3	3	9	25	10	20	14	2	86
	F.	91	-	-	-	1	1	2	-	-	4	-	2	3	20	16	24	18	4	87
Beswick -	M.	74	-	-	-	-	1	4	1	1	7	2	1	6	30	9	13	6	-	67
	F.	97	-	-	1	6	2	9	1	-	19	2	3	8	19	10	27	9	-	78
Blackley -	M.	51	-	1	1	1	1	1	2	-	7	-	-	3	12	1	15	9	4	44
	F.	71	-	-	-	1	7	4	4	1	17	-	1	3	13	4	19	9	5	54
Bradford -	M.	71	1	-	-	1	1	2	1	-	6	5	1	4	26	6	15	8	-	65
	F.	101	-	-	-	4	1	5	-	-	10	5	3	14	25	10	27	7	-	91
,, No. 1 -	M.	71	-	-	-	1	1	2	1	1	6	-	3	3	22	7	15	12	3	65
	F.	75	-	-	1	1	-	2	-	1	5	1	2	3	10	17	19	15	3	70
Chorlton-on-Med- lock, E.	M.	87	-	-	-	3	2	1	1	-	7	1	2	5	27	8	15	16	6	80
	F.	118	-	-	-	1	2	2	4	-	9	-	2	6	20	22	34	17	8	109
Chorlton-on-Med- lock, S.	M.	66	-	-	-	3	2	1	-	-	6	2	1	7	17	2	18	12	1	60
	F.	76	-	-	2	1	1	7	1	-	12	2	2	3	8	9	26	13	1	64

Gorton -	M. F.	74	-	1	-	4	3	3	5	-	13	1	-	4	18	7	21	8	2	61
"	M. F.	108	-	-	-	5	3	3	-	-	17	2	-	8	28	14	28	6	5	91
"	M. F.	88	-	-	-	-	1	-	1	-	2	5	5	9	28	8	27	4	-	86
"	M. F.	85	-	-	-	-	-	-	-	-	5	2	5	12	22	10	25	3	1	80
"	M. F.	75	-	1	-	2	4	3	3	-	14	-	1	5	15	5	20	11	4	61
"	M. F.	95	-	-	-	5	3	3	-	-	14	-	4	5	11	17	28	15	1	81
Harpurhey	M. F.	56	-	-	-	1	6	1	1	-	10	2	1	6	9	4	18	6	-	46
"	M. F.	74	-	-	-	-	8	1	1	-	15	-	3	6	10	8	28	2	2	59
Hulme, C.	M. F.	81	-	-	-	1	4	3	3	-	9	2	3	10	21	9	11	15	1	72
"	M. F.	110	-	-	-	3	6	-	-	-	10	3	2	10	22	23	22	15	3	100
"	M. F.	34	-	-	-	2	2	2	2	-	6	-	2	3	12	4	2	5	-	28
"	M. F.	59	-	-	-	4	3	3	2	1	13	1	1	4	12	9	13	4	2	46
"	M. F.	78	-	-	-	1	1	1	1	-	1	1	-	4	22	18	16	13	3	77
"	M. F.	69	-	-	-	2	1	1	1	2	8	-	-	1	12	13	23	9	3	61
"	M. F.	68	-	-	-	3	1	6	1	-	11	3	-	9	19	4	12	9	1	57
"	M. F.	82	-	-	-	2	5	6	1	-	16	3	1	4	13	9	22	13	1	66
"	M. F.	79	-	-	-	4	1	1	1	-	8	-	-	10	28	5	14	13	1	71
"	M. F.	90	-	-	-	6	6	6	2	-	16	1	1	5	26	10	18	9	4	74
London Road	M. F.	85	-	1	2	4	-	-	1	-	9	3	6	11	23	8	17	7	1	76
"	M. F.	90	-	1	2	6	3	1	1	-	18	3	3	7	18	10	23	6	2	72
Newton	M. F.	63	-	-	1	3	7	-	-	-	16	1	-	6	7	6	14	11	2	47
"	M. F.	92	-	-	1	4	15	1	1	-	30	3	1	7	8	7	21	12	3	62

Result of Block Census in Manchester (Summer and Autumn Epidemics)—continued.

Age and Sex Incidence.

Summer—continued.

District.		Total Number Persons con- cerned.	Affected.									Escaped.								
			0-1.	1-2.	2-5.	5-15.	15-25.	25-45.	45-65.	65 and over.	Total.	0-1.	1-2.	2-5.	5-15.	15-25.	25-45.	45-65.	65 and over.	Total.
Newton, E. -	M.	31	-	-	-	3	4	-	1	-	8	2	-	2	4	3	7	5	-	23
	F.	33	-	-	-	6	2	3	2	-	13	-	-	4	5	2	5	4	-	20
St. George's, C. -	M.	91	-	-	1	11	3	3	-	18	2	3	9	27	6	15	8	3	73	
	F.	118	-	-	1	11	6	13	1	1	33	5	4	8	21	14	23	8	2	85
,, E. -	M.	66	-	-	-	-	-	5	-	5	2	1	8	21	7	13	9	-	61	
	F.	83	-	-	1	-	1	4	2	8	-	2	4	27	11	19	8	4	75	
,, N. -	M.	56	-	-	1	5	4	4	1	15	3	3	6	14	3	7	5	-	41	
	F.	79	-	1	2	5	4	20	2	34	3	2	7	16	5	7	5	-	45	
St. George's, Monsall	M.	68	-	-	-	5	-	5	-	12	3	-	4	16	7	16	9	1	56	
	F.	101	-	-	-	2	3	10	3	1	19	1	3	9	22	22	9	4	82	
Totals -	M.	2,066	2	4	10	77	41	80	28	4	246	63	50	185	587	185	441	263	46	1,820
	F.	2,600	3	3	22	95	88	179	49	9	448	49	66	201	504	339	654	268	71	2,152
Grand Totals -		4,666	5	7	32	172	129	259	77	13	694	112	116	386	1,091	524	1,095	531	117	3,972

Autumn.

Ancoats, C.	-	-	82	-	-	1	1	2	6	1	3	-	1	13	5	2	4	25	3	20	10	-	69
"	E.	-	89	-	-	1	1	1	3	2	6	-	1	15	1	2	12	16	14	20	7	2	74
"	N.	-	51	-	-	-	-	-	1	1	2	-	-	4	3	1	4	11	3	19	5	1	47
"	F.	-	83	-	-	-	-	-	4	1	2	-	-	9	2	3	8	19	8	25	8	1	74
"	M.	-	38	-	-	-	-	-	-	-	1	-	-	1	2	2	4	16	3	7	3	-	37
"	F.	-	58	-	-	-	-	-	-	-	1	-	-	2	1	3	2	14	8	17	11	-	56
"	M.	-	78	-	1	1	1	1	4	2	1	-	-	8	8	1	5	24	8	14	8	2	70
"	F.	-	95	-	-	-	-	-	-	2	1	-	-	5	-	2	6	23	16	30	11	2	90
"	M.	-	90	-	-	-	-	-	1	2	-	-	-	4	-	3	11	23	15	13	15	6	86
"	F.	-	134	-	-	-	-	-	-	-	-	-	-	2	6	5	10	30	25	38	13	5	132
Ardwick, E.	-	-	65	-	-	-	-	-	-	-	1	-	-	1	1	2	7	22	4	20	6	2	64
"	F.	-	70	-	-	-	-	-	-	-	1	-	-	2	-	2	11	15	7	24	6	3	68
"	M.	-	59	-	-	-	-	2	4	-	2	-	-	8	1	1	5	22	5	12	5	-	51
"	F.	-	74	-	-	-	-	1	1	-	5	-	-	7	3	2	12	12	12	20	5	1	67
"	M.	-	90	-	-	-	-	-	2	1	-	-	-	2	3	3	10	24	10	22	14	2	88
"	F.	-	91	-	-	-	-	1	2	-	-	-	-	5	-	2	19	19	16	26	18	3	86
Beswick	-	-	74	-	1	1	1	1	1	5	5	-	1	3	2	1	5	29	10	17	7	-	71
"	F.	-	97	-	2	1	1	1	5	1	5	-	-	15	2	1	8	20	11	31	9	-	82
Blackley	-	-	51	-	-	-	-	1	3	2	2	-	-	6	-	1	3	10	2	14	11	4	45
"	F.	-	71	-	-	-	-	2	2	4	4	-	1	11	-	1	3	12	9	19	11	5	60

Result of Block Census in Manchester (Summer and Autumn Epidemics)—continued.
 Age and Sex Incidence.
 Autumn—continued.

District.		Total Number Persons concerned.	Affected.									Escaped.								
			0-1.	1-2.	2-5.	5-15.	15-25.	25-45.	45-65.	65 and over.	Total.	0-1.	1-2.	2-5.	5-15.	15-25.	25-45.	45-65.	65 and over.	Total.
Bradford	M.	71	1	-	-	3	-	2	-	-	6	5	1	4	24	7	15	9	-	65
	F.	101	-	1	5	5	3	5	-	-	19	5	2	9	24	8	27	7	-	82
,, No. 1	M.	71	-	-	-	-	-	1	-	1	2	-	3	3	23	8	16	13	3	69
	F.	75	-	-	1	-	2	1	3	1	8	1	2	3	11	15	20	12	3	67
Chorlton-on-Medlock, E.	M.	87	-	-	2	4	1	2	-	-	9	1	2	3	26	9	14	17	6	78
	F.	118	-	1	2	4	5	4	4	-	20	-	1	4	17	19	32	17	8	98
Chorlton-on-Medlock, S.	M.	66	1	-	1	2	-	2	-	-	6	1	1	6	18	4	17	12	1	60
	F.	76	-	-	-	3	1	5	1	-	10	2	2	5	6	9	28	13	1	66
Gorton	M.	74	-	-	-	4	1	3	-	-	8	1	1	4	16	-	21	11	2	66
	F.	108	1	-	1	5	3	7	2	1	20	1	-	7	27	16	24	9	4	88
,, S.	M.	88	1	-	4	5	-	4	1	-	15	4	5	5	24	8	23	4	-	73
	F.	85	1	1	5	4	-	4	1	-	16	1	4	8	19	10	24	2	1	69
,, W.	M.	75	-	-	3	2	-	2	-	-	7	-	2	2	17	7	22	14	4	68
	F.	95	-	1	-	1	3	5	2	1	13	-	3	5	11	19	27	16	-	81
Harpurhey	M.	56	-	-	-	2	-	1	-	-	3	2	1	6	10	5	23	6	-	53
	F.	74	-	-	1	2	1	9	-	-	13	-	3	5	14	7	27	3	2	61

Hulme, C.	-	M. F.	81	-	-	-	1	1	2	-	1	2	-	1	2	-	1	1	2	3	1	3	9	20	10	14	18	1	77
"	E.	M. F.	34	-	1	-	-	1	1	-	-	1	-	1	-	3	9	10	19	14	16	3	14	6	25	26	15	2	101
"	N.	M. F.	59	-	1	-	-	-	-	-	-	1	3	-	1	3	3	16	11	15	-	3	14	11	6	4	3	33	56
"	S.	M. F.	78	-	-	5	-	1	1	1	1	5	-	7	7	-	4	18	13	19	10	3	4	18	15	12	3	71	62
"	W.	M. F.	69	-	-	1	-	1	1	1	1	1	3	7	3	-	2	13	19	10	5	4	14	13	10	14	1	61	79
London Road		M. F.	68	-	-	2	-	1	1	3	2	1	1	3	7	-	9	20	4	15	3	6	14	13	9	14	1	72	71.
Newton		M. F.	82	-	-	3	-	3	6	1	3	6	1	3	3	-	10	27	7	14	1	1	27	7	13	8	4	81	
"	E.	M. F.	79	-	-	3	-	3	3	1	4	1	1	10	2	-	5	21	8	18	8	10	23	10	8	8	1	75	
"		M. F.	90	-	-	4	-	2	3	3	3	3	1	9	4	-	10	20	13	23	7	9	20	13	7	7	2	81	
St George's, C.		M. F.	85	-	-	1	-	1	1	4	1	6	1	6	1	-	6	11	9	17	8	6	11	9	17	10	2	55	78
"	E.	M. F.	90	-	-	3	-	3	1	-	1	1	1	14	4	-	6	12	10	30	12	6	12	10	30	12	3	82	
"		M. F.	31	-	-	1	-	1	1	-	1	1	8	1	2	-	2	5	7	7	6	2	5	7	7	6	-	29	33
"		M. F.	33	-	-	1	-	1	1	-	1	-	1	1	-	-	4	11	4	8	6	-	11	4	8	6	-	33	
"		M. F.	91	-	-	5	-	1	1	4	5	-	9	9	12	3	10	33	9	14	8	3	33	9	14	8	3	82	
"	E.	M. F.	118	-	-	2	-	1	1	6	1	6	1	12	4	4	7	31	19	30	9	2	31	19	30	9	2	106	
"		M. F.	66	-	-	1	-	1	2	-	3	2	4	4	2	1	6	20	7	18	8	-	20	7	18	8	-	62	75
"		M. F.	83	-	-	1	-	3	2	-	1	-	8	8	0	2	5	24	9	21	10	4	24	9	21	10	4		
"	N.	M. F.	56	-	-	2	-	1	1	3	1	1	2	2	3	3	7	19	7	11	5	-	19	7	11	5	-	54	71
"		M. F.	79	-	-	1	-	1	3	1	1	3	8	8	3	3	7	20	8	24	6	-	20	8	24	6	-		

Result of Block Census in Manchester (Summer and Autumn Epidemics)—continued.

Age and Sex Incidence.

Autumn—continued.

District.		Total Number Persons concerned.	Affected.									Escaped.								
			0-1.	1-2.	2-5.	5-15.	15-25.	25-45.	45-65.	65 and over.	Total.	0-1.	1-2.	2-5.	5-15.	15-25.	25-45.	45-65.	65 and over.	Total.
St. George's, Monsall	M.	68	-	-	-	5	2	2	-	-	9	3	-	4	16	5	19	9	3	59
	F.	101	-	1	4	5	2	8	1	-	21	1	2	5	19	13	24	11	5	80
Totals - -	M.	2,066	6	3	24	73	8	48	11	2	175	59	51	171	590	218	473	280	48	1,890
	F.	2,600	4	9	34	70	47	108	25	8	305	48	60	189	529	380	724	292	72	2,294
Grand Total -	—	4,666	10	12	58	143	55	156	36	10	480	107	111	360	1,119	598	1,197	572	120	4,184

Summer and Autumn.

Ancoats, C. - -	M.	82	-	-	-	-	-	-	-	-	-	5	2	4	20	2	12	9	-	54
	F.	89	-	-	-	-	1	1	1	-	3	1	2	11	12	9	15	4	2	56
,, E. - -	M.	51	-	-	-	-	-	-	-	-	-	3	1	4	9	3	17	4	1	42
	F.	83	-	-	1	2	-	-	-	-	3	1	3	7	17	8	18	4	1	59
,, N. - -	M.	38	-	-	-	-	-	-	-	-	-	2	2	3	14	3	5	2	-	31
	F.	58	-	-	-	-	-	-	-	-	-	1	3	2	14	5	8	8	-	41
,, S. - -	M.	78	-	-	-	-	-	-	-	-	-	8	1	5	24	8	14	8	2	70
	F.	95	-	-	-	-	-	-	-	-	-	-	2	6	19	12	27	11	2	79

"	W.-	90	1	1	3	10	23	14	13	15	6	84
		134	-	-	5	10	28	24	37	13	5	128
Ardwick, E.	M. F.	65	-	-	2	6	18	3	17	3	2	52
		70	-	-	2	9	10	3	18	6	2	50
"	N.-	59	-	-	1	5	20	4	10	5	-	46
		74	-	-	3	11	10	10	15	4	-	54
"	M. F.	90	-	-	3	9	24	10	20	14	2	85
		91	-	-	2	2	18	16	24	18	3	83
Beswick	M. F.	74	-	-	1	5	29	9	13	6	-	65
		97	-	-	1	8	14	9	23	8	-	65
Blackley	M. F.	51	-	-	-	2	9	1	13	9	4	38
		71	-	-	-	3	11	2	15	7	4	43
Bradford	M. F.	71	-	-	1	4	23	6	14	8	-	60
		101	-	-	2	9	22	7	24	7	-	76
"	M. F.	71	-	-	3	3	22	7	14	12	2	63
		75	-	-	2	2	10	15	18	12	2	62
Chorlton-on-Medlock, E.	M. F.	87	-	-	1	3	24	7	13	16	6	72
		118	-	-	1	4	16	18	30	14	8	91
Chorlton-on-Medlock, S.	M. F.	66	-	-	1	6	15	2	16	12	1	54
		76	-	-	2	3	5	8	23	12	1	56
Gorton	M. F.	74	-	-	1	4	14	6	19	8	2	54
		108	-	-	1	7	23	11	21	5	4	72

Result of Block Census in Manchester (Summer and Autumn Epidemics)—continued.

Autumn—continued.

District.		Total Number Persons concerned.	Affected.									Escaped.								
			0-1.	1-2.	2-5.	5-15.	15-25.	25-45.	45-65.	65 and over.	Total.	0-1.	1-2.	2-5.	5-15.	15-25.	25-45.	45-65.	65 and over.	Total.
Gorton, S.	M.	88	-	-	-	-	-	-	-	-	-	4	5	5	23	8	23	3	-	71
	F.	85	-	-	-	-	-	-	-	-	-	1	4	7	18	10	21	2	1	64
" W.	M.	75	-	-	-	-	-	-	-	-	-	-	1	2	13	5	18	11	4	54
	F.	95	-	-	-	-	-	-	1	-	1	-	3	5	10	14	23	14	-	69
Harpurhey	M.	56	-	-	-	1	-	-	-	-	1	2	1	6	8	4	17	6	1	44
	F.	74	-	-	1	1	-	2	-	-	4	-	3	6	9	7	21	2	2	50
Hulme, C.	M.	81	-	-	-	-	-	-	-	-	-	2	3	9	19	9	11	14	1	68
	F.	110	-	-	-	-	1	-	-	-	1	3	1	10	18	22	21	15	2	92
" E.	M.	34	-	-	-	-	-	-	-	-	-	-	2	3	12	4	1	5	-	27
	F.	59	-	-	-	-	1	-	-	-	1	1	1	3	12	9	12	4	2	44
" N.	M.	78	-	-	-	1	-	-	-	-	1	1	-	4	18	18	15	12	3	71
	F.	69	-	-	-	-	-	1	-	-	1	-	-	1	11	12	19	9	3	55
" S.	M.	68	-	-	-	-	-	2	-	-	2	3	-	9	17	3	11	8	1	52
	F.	82	-	-	-	-	-	-	-	-	-	3	1	4	12	8	21	13	1	63
" W.	M.	79	-	-	-	-	-	-	-	-	-	-	-	10	25	3	13	12	1	64
	F.	90	-	-	-	2	3	2	-	-	7	1	1	5	21	10	14	6	4	62

London Road -	M.	85	1	-	2	2	-	1	-	-	6	2	6	10	21	8	17	7	1	72
	F.	90	1	-	-	-	2	-	-	-	5	5	3	7	16	9	20	6	2	66
Newton - -	M.	63	-	-	-	1	-	1	-	-	2	-	-	5	7	6	11	10	2	41
	F.	92	-	-	-	1	-	1	-	-	2	3	1	4	6	6	16	11	3	50
,, E. - -	M.	31	-	-	-	-	-	-	-	-	-	2	-	2	3	3	7	5	-	22
	F.	33	-	-	-	-	-	-	-	-	-	-	-	4	5	2	5	4	-	20
St. George's, C. -	M.	91	-	-	-	1	-	-	-	-	1	2	3	9	23	6	11	8	3	65
	F.	118	-	-	-	1	1	2	-	-	4	4	4	6	21	14	19	8	1	77
,, E. - -	M.	66	-	-	-	-	-	-	-	-	-	2	1	6	20	7	13	8	-	57
	F.	83	-	-	-	-	1	2	-	-	3	-	2	4	24	9	19	8	4	70
,, N. - -	M.	56	-	-	-	-	-	-	-	-	-	3	2	6	14	3	7	4	-	39
	F.	79	-	-	-	-	-	1	-	-	1	3	2	5	15	4	5	4	-	38
St. George's, Monsall	M.	68	-	-	-	2	-	-	-	-	2	3	-	4	13	5	14	9	1	49
	F.	101	-	-	-	-	-	3	-	-	3	1	2	5	17	10	17	8	4	64
Totals - -	M.	2,066	1	-	2	10	-	6	1	1	21	58	47	163	523	177	400	253	45	1,666
	F.	2,600	1	-	3	10	13	21	4	-	52	46	57	170	444	304	569	247	63	1,899
Grand Total -	—	4,666	2	-	5	20	13	27	5	1	73	104	104	333	967	481	969	500	108	3,565

INFLUENZA.

Results of Block Census in Manchester. (Summer and Autumn Epidemics.)

Household Incidence.

District.	Total number Households concerned	Summer.		Autumn.		Summer and Autumn.	
		Affected.	Escaped.	Affected.	Escaped.	Affected.	Escaped.
Ancoats, C. - - -	36	17	19	12	24	3	10
" E. - - -	33	12	21	10	23	5	16
" N. - - -	21	11	10	3	18	0	7
" S. - - -	37	5	32	8	29	2	26
" W. - - -	47	2	45	6	41	1	40
Ardwick, E. - - -	31	12	19	2	29	1	18
" N. - - -	30	10	20	9	21	3	14
" S. - - -	40	8	32	6	34	3	29
Beswick - - -	37	12	25	10	27	5	20
Blackley - - -	35	10	25	9	26	0	16
Bradford, No. 1 - - -	32	7	25	8	24	1	18
" - - -	32	9	23	10	22	4	17
C/M, E. - - -	42	11	31	14	28	5	22
" S. - - -	35	11	24	9	26	5	20
Gorton - - -	36	14	22	14	22	4	12
" S. - - -	33	4	29	12	21	1	18
" W. - - -	38	14	24	10	28	4	18
Harpurhey - - -	36	15	21	9	27	4	16
Hulme, C. - - -	37	10	27	9	28	5	23
" E. - - -	22	10	12	4	18	2	10
" N. - - -	38	5	33	8	30	1	26
" S. - - -	35	15	20	7	28	4	17
" W. - - -	36	13	23	16	20	9	16
London Road - - -	36	9	27	8	28	4	23
Newton - - -	36	18	18	11	25	4	11
" E. - - -	12	6	6	1	11	0	5
St. Georges, C. - - -	36	20	16	12	24	6	10
" E. - - -	34	10	24	8	26	6	22
" N. - - -	28	22	6	7	21	3	2
" Monsall - - -	37	16	21	16	21	7	12
Totals - - -	1,018	338	680	268	750	102	514

INFLUENZA.

Results of Block Census in Manchester. Summer and Autumn Epidemics. Incidence in Households affected by both Epidemics.

District.	Households affected in both Epidemics.				Summer.						Affected in Autumn.					
	No. of Households.	Members of Households.			Affected.			Escaped.			Affected in Summer.			Escaped in Summer.		
		M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.
Ancoats, C. - - - - -	3	8	11	19	1	7	8	7	4	11	—	3	3	3	2	5
" E. - - - - -	5	10	17	27	3	9	12	7	8	15	—	3	3	2	3	5
" N. - - - - -	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
" S. - - - - -	2	5	3	8	—	2	2	5	1	6	—	—	—	2	—	2
" W. - - - - -	1	2	4	6	1	—	1	1	4	5	1	—	1	—	—	—
Ardwick, E. - - - - -	1	3	3	6	—	1	1	3	2	5	—	1	1	—	—	—
" N. - - - - -	3	8	3	11	1	2	3	7	1	8	—	2	2	—	1	1
" S. - - - - -	3	8	6	14	1	2	3	7	4	11	1	1	2	1	2	3
Beswick - - - - -	5	11	13	24	2	5	7	9	8	17	1	2	3	1	5	6
Blackley - - - - -	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Bradford - - - - -	4	9	13	22	3	5	8	6	8	14	1	4	5	2	5	7
" No. 1 - - - - -	1	4	3	7	1	—	1	3	3	6	—	—	—	—	1	1
Chorlton-on-Medlock, E. - - - - -	5	14	15	29	4	2	6	10	13	23	1	2	3	4	7	11
" " " S. - - - - -	5	12	14	26	3	4	7	9	10	19	—	2	2	3	5	8
Gorton - - - - -	4	10	16	26	2	6	8	8	10	18	1	1	2	1	5	6
" S. - - - - -	1	4	1	5	—	1	1	4	—	4	—	—	—	2	—	2
" W. - - - - -	4	12	11	23	1	3	4	11	8	19	—	1	1	3	4	7
Harpurhey - - - - -	4	7	10	17	4	5	9	3	5	8	1	4	5	1	2	3
Hulme C. - - - - -	5	10	14	24	7	4	11	3	10	13	—	1	1	1	5	6
" E. - - - - -	2	1	4	5	—	2	2	1	2	3	—	1	1	1	—	1
" N. - - - - -	1	3	2	5	1	2	3	2	—	2	1	1	2	—	—	—
" S. - - - - -	4	8	11	19	3	2	5	5	9	14	2	—	2	4	1	5
" W. - - - - -	9	20	29	49	6	13	19	14	16	30	—	7	7	5	6	11
London Road - - - - -	4	11	6	17	5	4	9	6	2	8	5	4	9	—	—	—
Newton - - - - -	4	11	16	27	6	9	15	5	7	12	2	2	4	3	4	7
" E. - - - - -	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
St. George's, C. - - - - -	6	23	24	47	12	13	25	11	11	22	1	4	5	2	3	5
" E. - - - - -	6	13	18	31	4	4	8	9	14	23	—	3	3	1	4	5
" N. - - - - -	3	9	10	19	4	4	8	5	6	11	—	1	1	—	2	2
" Monsall - - - - -	7	16	24	40	4	9	13	12	15	27	2	3	5	2	4	6
Totals - - - - -	102	252	301	553	79	120	199	173	181	354	20	53	73	44	71	115

INFLUENZA—MANCHESTER.

Results of Block Census.

Figures showing susceptibility during the autumn wave of persons who were attacked in summer.

A—Compared with the sample population as a whole (1,018 households = 4,666 total population):—

		Attacked in Autumn.	
694 attacked in summer.	}	Males, 246	21 (8·5 per cent.).
		Females, 448	52 (11·6 „).
3,972 escaped in summer.	}	Males, 1,820	154 (7·8 „).
		Females, 2,152	253 (11·7 „).

B—Compared with other members of the same households (102 households invaded in both summer and autumn epidemics = 553 total population of these households):—

		Attacked in Autumn.	
199 attacked in summer.	}	Males, 79	21 (25·4 per cent.).
		Females, 120	52 (44 „).
354 escaped in summer.	}	Males, 173	44 (25·2 „).
		Females, 181	71 (39 „).

INFLUENZA—MANCHESTER.

Results of Block Census. Age Incidence in Summer and Autumn Waves.

	Summer.		Winter. <i>Autumn</i>	
	Males.	Females.	Males.	Females.
0—1 - - -	·3	5·7	9·0	7·7
1—2 - - -	7·4	4·3	5·5	13·0
2—5 - - -	5·0	9·8	12·3	15·2
5—15 - - -	11·6	15·8	11·0	11·6
15—25 - - -	18·1	20·6	3·1	11·0
25—45 - - -	15·3	21·4	9·2	12·9
45—65 - - -	9·6	15·4	3·9	7·9
65 and over - -	8·0	11·2	4·0	10·0
Totals - -	11·9	17·2	8·4	11·7