

# Vital Statistics

## Poliomyelitis

Poliomyelitis notifications (uncorrected) in the week ending July 6 (27th week of the year) were as follows, with the figures for the previous week in parentheses: paralytic 68 (73), non-paralytic 65 (46), total 113 (119).

The Table below shows the districts with populations of 15,000 or more in which the notification rate per 100,000 in the year to date exceeds 30:

District	Incidence per 100,000 of Population	Total Cases in 27 Weeks	
		Paralytic	Non-paralytic
Barnet U.D. (Herts) ..	70.23	14	4
Colchester M.B. (Essex) ..	75.95	27	20
Tendring R.D. (Essex) ..	52.91	3	10
Harpenden U.D. (Herts) ..	38.37	3	3
Stevenage U.D. (Herts) ..	49.91	4	7
St. Thomas R.D. (Devon) ..	54.36	6	12
Brighton C.B. (Sussex) ..	31.51	18	32
Maidstone M.B. (Kent) ..	45.05	8	17
Redditch U.D. (Worcs) ..	38.23	9	3
Harlow U.D. (Essex) ..	40.23	6	6
Abertillery U.D. (Mon.) ..	33.59	7	2

## Diphtheria and Whooping-cough Immunization

In view of recent reports from the Medical Research Council on neurological lesions in relation to inoculation,<sup>1</sup> and on the efficacy of pertussis vaccine,<sup>2</sup> the Central Health Services Council has given the following advice to the Minister of Health and Secretary of State for Scotland:

(1) Non-alum-precipitated antigens should be recommended for use by local health authorities and general practitioners against diphtheria.

(2) There is a risk of provoking poliomyelitis in using antigens in combination. Some of these risks have been measured; others such as might occur in using combined whooping-cough and tetanus antigens or combined diphtheria and tetanus antigens have not yet been measured. Antigens should, in general, preferably be used separately, though the advantages of this must be weighed against the psychological dangers of giving frequent injections to the child.

(3) If non-alum-precipitated antigens are used singly they may be used throughout the year, subject to the discretion of the medical officer of health.

Because of this advice, some changes will be made in the supply of materials to local health authorities for immunization.

**Diphtheria Prophylactic.**—Hitherto, the materials available have been alum-precipitated toxoid (A.P.T.), purified diphtheria toxoid aluminium phosphate precipitated (P.T.A.P.), formol diphtheria toxoid (F.T.), and diphtheria toxoid antitoxin floccules (T.A.F.). Supplies of alum-containing toxoids will be discontinued and the central supply will consist of F.T. and T.A.F. It is suggested that the primary course of immunization should consist of two injections each of 1 ml. of F.T. at a minimum interval of 28 days and a single injection of 1 ml. should be used for reinforcing doses. T.A.F., which contains antitoxin, is recommended in a 1-ml. dose for the reinforcing dose in the children over 5 years of age who have been primarily immunized with A.P.T., P.T.A.P., or combined diphtheria-pertussis vaccine and who may in consequence be unduly sensitive to F.T. There is no change in the advice that immunization against diphtheria should take place at about 8 or 9 months of age so that protection can be completed before the first birthday, with a reinforcing dose in the fifth or sixth years. Where local health authority arrangements provide for further reinforcing doses, the dose of F.T. should

<sup>1</sup> *Lancet*, 1956, 2, 1223.

<sup>2</sup> *British Medical Journal*, 1956, 2, 454.

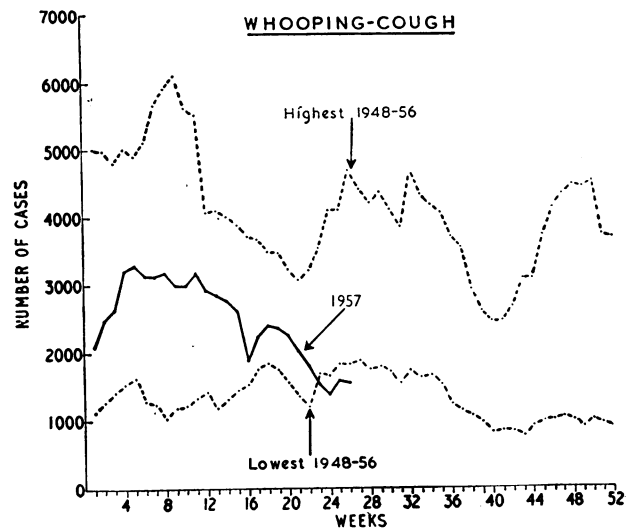
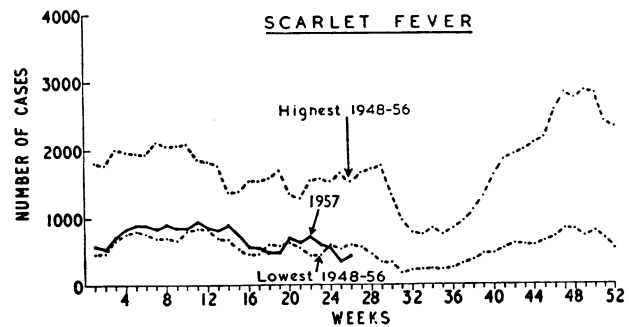
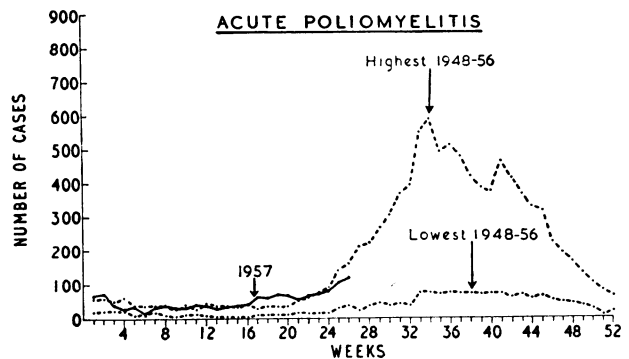
be reduced—e.g., 0.5 ml. at age 10 and 0.25 ml. at age 15—in order to limit the effects of undue sensitivity.

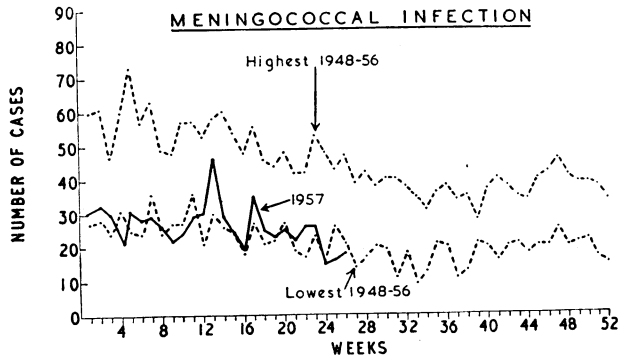
**Whooping-cough Vaccine.**—To provide protection at an age when the disease is most apt to have serious results, the first injection should be given to children before they are 3 months old.

**Combined Antigens.**—If a local health authority considers it expedient to use non-alum-containing combined diphtheria and whooping-cough antigens, it should pay special regard to the prevalence of poliomyelitis infection in the locality and to the period of highest risk of provocation.

## Graphs of Infectious Diseases

The graphs below show the uncorrected numbers of cases of certain diseases notified weekly in England and Wales. Highest and lowest figures reported in each week during the years 1948–56 are shown thus - - - -, the figures for 1957 thus ————. Except for the curves showing notifications in 1957, the graphs were prepared at the Department of Medical Statistics and Epidemiology, London School of Hygiene and Tropical Medicine.





**Infectious Diseases**

The largest falls in the notifications of infectious diseases in England and Wales during the week ending June 29 were 4,727 for measles, from 22,144 to 17,417, 60 for acute pneumonia, from 312 to 252, 38 for whooping-cough, from 1,592 to 1,554, and 25 for dysentery, from 489 to 464, and the only large rise in incidence was 79 for scarlet fever, from 357 to 436.

A fall of 100 or more in the number of notifications of measles was reported from 18 counties; the largest falls were 705 in Yorkshire West Riding, from 2,897 to 2,192, and 565 in Warwickshire, from 1,806 to 1,241. The largest exception to the general fall in measles was a rise of 52 in Somersetshire, from 189 to 241. The largest variations in the trends of scarlet fever were a rise of 28 in Lancashire, from 36 to 64, and a fall of 21 in Essex, from 41 to 20. The largest fluctuation in the returns of whooping-cough was a rise of 36 in Lincolnshire, from 48 to 84. 4 cases of diphtheria were notified, being the same number as in the preceding week.

The largest returns of dysentery were Yorkshire West Riding 93 (Bradford C.B. 35, Leeds C.B. 14), Lancashire 87 (Irlam U.D. 19, Liverpool C.B. 15, Bolton C.B. 12), London 40 (Islington 11), and Surrey 28 (Croydon C.B. 10).

**Scotland in First Quarter**

The birth rate in Scotland for the first quarter of 1957 was 19.5 per 1,000 population and was 1.0 above the average of the five preceding first quarters. The infant mortality rate was 32 per 1,000 registered live births and the neonatal death rate was 19; these rates were respectively 1 above and 1 below the rate for the corresponding quarter of 1956. The death rate was 12.7; this was 2.3 below the rate for the preceding March quarter and 1.8 below the five years' average.

Deaths attributed to the principal epidemic diseases numbered 60 and included 29 from influenza, 17 from whooping-cough, 9 from measles, 4 from meningococcal infections, and 1 from scarlet fever. 203 deaths were ascribed to respiratory tuberculosis and 15 to other forms of tuberculosis. The death rate from respiratory tuberculosis was 16 per 100,000 population and was 12 below the five years' average. Deaths from road accidents numbered 103, and there were 591 deaths from other forms of violence; these were respectively 3 fewer and 19 more than in the first quarter of 1956. Deaths from malignant disease numbered 2,547, and were 104 fewer than in the first quarter of 1956.

**Week Ending July 6**

The notifications of infectious diseases in England and Wales during the week included: scarlet fever 400, whooping-cough 1,631, diphtheria 3, measles 15,510, acute pneumonia 266, acute poliomyelitis 133, dysentery 462, paratyphoid fever 3, typhoid fever 2.

**INFECTIOUS DISEASES AND VITAL STATISTICS**

Summary for British Isles for week ending **June 29** (No. 26) and corresponding week 1956.

Figures of cases are for the countries shown and London administrative county. Figures of deaths and births are for the 160 great towns in England and Wales (London included), London administrative county, the 17 principal towns in Scotland, the 10 principal towns in Northern Ireland, and the 14 principal towns in Eire.

A blank space denotes disease not notifiable or no return available. The table is based on information supplied by the Registrars-General of England and Wales, Scotland, N. Ireland, and Eire, the Ministry of Health and Local Government of N. Ireland, and the Department of Health of Eire.

CASES in Countries and London	1957					1956				
	Eng. & Wales	Lond.	Scot.	N. Ire.	Eire	Eng. & Wales	Lond.	Scot.	N. Ire.	Eire
Diphtheria ..	4	0	2	0	2	8	0	5	0	2
Dysentery ..	464	40	223	8	2	1,466	238	201	10	3
Encephalitis, acute	4	0	0	1		2	0	1	0	
Enteric fever:										
Typhoid ..	3	0	1	0		5	0	1	0	
Paratyphoid ..	2	1	0	0	1	3	2	2	0	
Food-poisoning ..	228	28	73	0		385	18		0	
Infective enteritis or diarrhoea under 2 years ..				23	44				17	
Measles* ..	17,417	584	121	173	108	3,740	374	195	113	293
Meningococcal infection ..	18	3	5	0	2	21	2	11	2	
Ophthalmia neonatorum ..	22	1	8	0		16	0	12	0	
Pneumonia † ..	252	18	123	5	1	267	9	145	3	
Poliomyelitis, acute:										
Paralytic ..	73	8		4	11	47	0		0	4
Non-paralytic ..	46	1				34	5			
Puerperal fever § ..	215	34	6	0		240	26	11	0	
Scarlet fever ..	436	44	59	19	11	642	35	68	22	6
Tuberculosis:										
Respiratory ..	553	51	150	24		746	90	167	27	
Non-respiratory ..	71	8	14	5		106	10	16	3	
Whooping-cough ..	1,554	49	90	5	21	2,372	142	277	61	133

DEATHS in Great Towns	1957					1956				
	Eng. & Wales	Lond.	Scot.	N. Ire.	Eire	Eng. & Wales	Lond.	Scot.	N. Ire.	Eire
Diphtheria ..	0	0	0	0	0	0	0	0		0
Dysentery ..	0	0	1	0		1	0			
Encephalitis, acute		1			0		0			0
Enteric fever ..	1	0	0	0		0	0	0		
Infective enteritis or diarrhoea under 2 years ..	2	0	1	0	1		0	3	0	2
Influenza ..	3	0	0	0	0	6	3	0	0	0
Measles ..		0	1	0	0		0	0		0
Meningococcal infection ..		0	0				0	0		
Pneumonia ..	155	23	11	11	6	164	20	9	5	3
Poliomyelitis, acute	2	0		1	0	3	2			0
Scarlet fever ..		0	0	0	0		0	0		0
Tuberculosis:										
Respiratory ..	52	5	8	2	4	42	7	2	0	6
Non-respiratory ..										
Whooping-cough ..	1	0	0	0	0	2	0	0	0	0
Deaths 0-1 year ..	213	36	27	9	17	189	19	18	6	22
Deaths (excluding stillbirths)	4,753	690	494	107	145	4,719	711	515	74	140
LIVE BIRTHS ..	8,326	1157	1017	230	518	7,944	1186	965	233	458
STILLBIRTHS ..	196	15	25			184	19	32		

\* Measles not notifiable in Scotland, whence returns are approximate.  
 † Includes primary and influenzal pneumonia.  
 § Includes puerperal pyrexia.