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Contributors

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MINISTRY OF PUBLIC HEALTH, EGYPT

ANNUAL REPORT
ON THE WORK OF THE
Ministry of Public Health
for the Year 1949



Government Press, Cairo.

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CHAPTER I

OF THE

ORIGIN AND PROGRESS OF THE

REVOLUTION

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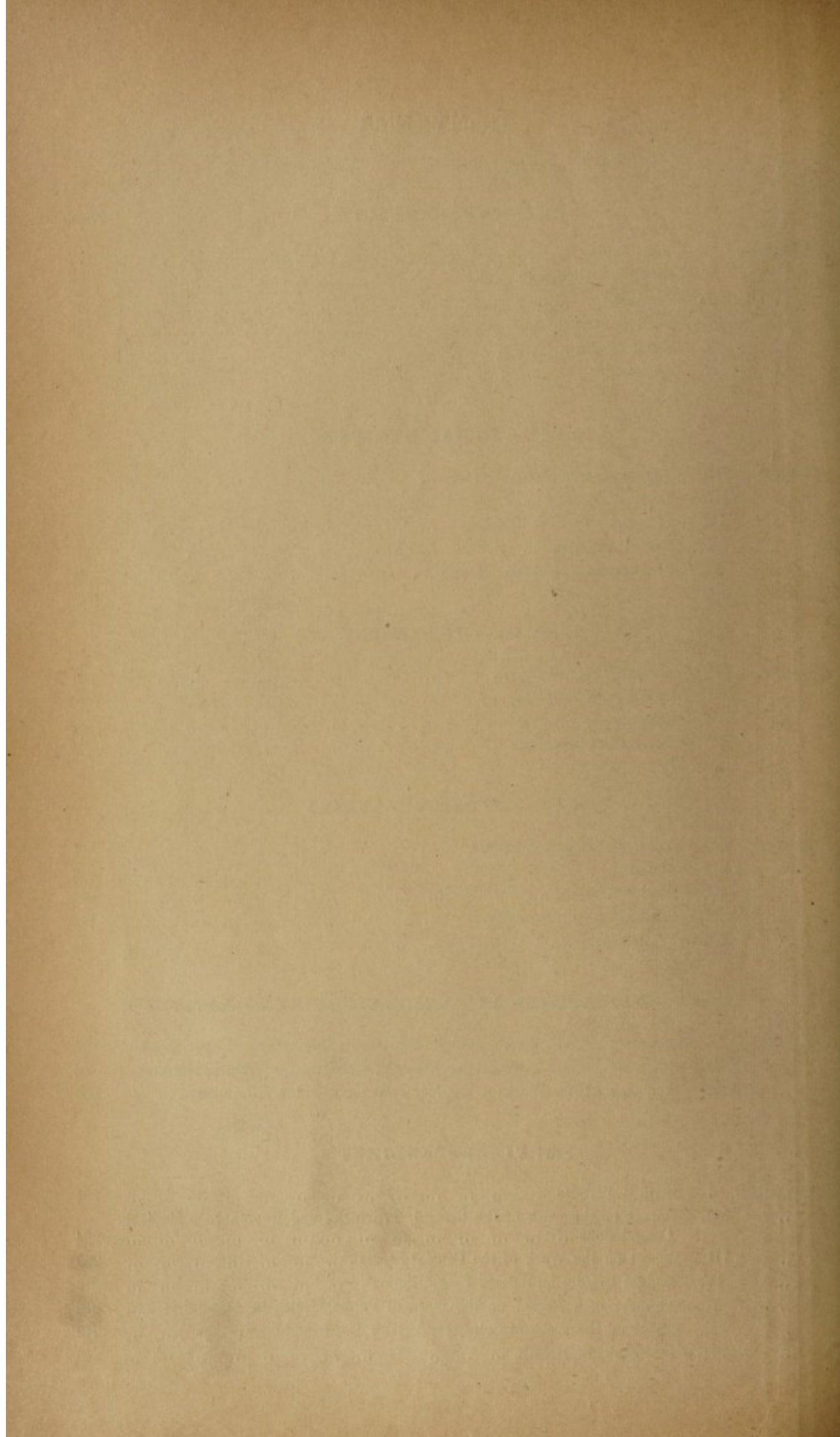
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MINISTRY OF PUBLIC HEALTH

ANNUAL REPORT FOR THE YEAR 1949

Part I—PUBLIC HEALTH

Chapter I—VITAL STATISTICS

A.—Population :

The estimated population of Egypt in mid year 1949 was 19,948,600 as compared with 19,554,800 in mid 1948. Table No. 1 shows the age and sex distribution of the estimated population of Egypt in mid-year 1949 and proportion per thousand in all ages.

B.—Births :

The total number of births for all Egypt during 1949 was 836,516 *i.e.* a birth rate of 41.9 per thousand of the total estimated population as against 42.5 in 1948. The highest birth-rate was 63.5 recorded in Ismailia. The lowest was 28.7 recorded in Qena province. During the previous ten years (1940–1949) the birth rate ranged between 38.2 in 1942 and 43.9 in 1945 with a mean rate of 41.6 (table No. 7). From table No. 4 it will be noticed that the highest monthly birth-rate in 1949 was in December (*i.e.* 46.2 per thousand), and the lowest was during the month of May (*i.e.* 38.3). It will be seen from the same table that there were more male than female births in 1949, the ratio being 91.34 females per 100 males.

C.—Deaths :

A total of 410,524 deaths were recorded during 1949 in all Egypt, or a rate of 20.6 per thousand of the population as against 20.3 in 1948. The highest death-rate was 28.3 in Menoufia province while the lowest was 11.8 recorded in Qena province. Tables Nos. 6 and 7 show the deaths and death-rates for governorates and provinces in 1940–1949. It will be seen from table No. 4 that the death rate in 1949 was highest during the second and third quarters of the year, reaching its maximum in June, whilst the lowest rate was during the last quarter of the year reaching its minimum in November.

D.—Age and Sex Distribution of Deaths :

Table No. 9 gives the number and rate of deaths by sex in the different age periods in 1949. It can be seen from this table that more than half the number of deaths, 57.3 per cent, occurred in the first age group (*i.e.* 0–4). There were more male than female deaths, the ratio being 88.23 females per 100 males. The preponderance of male mortality was common in all age groups except in those above 85 years of age.

E.—Infantile mortality :

The total number of infantile deaths in all Egypt in 1949 was 112,641 or 135 per thousand live births as against 139 in 1948. In localities having health offices, 64,914 infantile deaths were recorded or 174.7 per thousand live births (table No. 10) as against 175.1 in 1948.

Table No. 11 shows that diarrhoea and enteritis continued to be the main causes of infantile deaths, congenital debility and bronchitis came next in importance.

Table No. 11 gives the infantile deaths at different age periods in all localities having health offices. A study of this table shows that most of the deaths occurred in the first month of life.

Table No. 8 shows that the highest infantile mortality rate in 1949 was in the governorates, being 179, while the lowest was in Upper Egypt provinces, being 117. In Lower Egypt provinces the rate was 127.

F.—*Still-births* (Table 12):

The still birth-rate for all Egypt in 1949 was 7 per thousand births. This rate was 17 in the Governorates, 4.3 in Lower Egypt provinces and 4.1 in Upper Egypt provinces. In 1948 these rates were 6.9 for all Egypt, 16.4 for the Governorates, 4.6 for Lower Egypt provinces and 6.9 for Upper Egypt provinces.

The higher death rates in governorates may be due to: (1) more accurate registration of deaths; (2) the prevalence of venereal diseases, especially syphilis, in the governorates which consist of ports and large towns.

TABLE NO. 1.—ESTIMATED POPULATION OF EGYPT BY AGE AND SEX 1949

	Males	Females	TOTAL	Rate per thousand of Population
0- 4	1,345,800	1,372,800	2,718,600	136.3
5- 9	1,271,400	1,252,900	2,524,300	126.5
10-14	1,201,500	1,126,600	2,328,100	116.7
15-19	1,034,900	964,900	1,999,800	100.2
20-24	712,800	742,600	1,455,400	73.0
25-29	721,200	827,300	1,548,500	77.6
30-34	652,200	725,200	1,339,700	69.0
35-39	693,400	887,500	1,380,900	69.2
40-44	598,500	595,600	1,194,100	59.9
45-49	450,700	436,700	887,400	44.5
50-54	443,000	471,700	917,700	45.9
55-59	180,000	182,000	362,000	18.1
60-64	265,100	314,300	579,200	29.0
65-69	88,100	86,400	174,500	8.8
70-74	113,400	143,800	257,200	12.9
75-79	24,700	25,300	50,000	2.5
80-84	36,600	55,400	92,000	4.6
85 and over	18,200	24,700	5,400	2.2
Not stated	26,400	35,000	61,400	3.1
TOTAL	9,877,900	10,070,700	19,948,600	

TABLE NO. 2.—BIRTHS, DEATHS AND RATES PER 1,000 POPULATION
AND INFANTILE MORTALITY RATES

Years	Live Births	Deaths	Natural Increase	Birth-Rate Per 1,000 Pop.	Death-Rate Per 1,000 Pop.	Infantile Mortality Rate Per 1,000 Live Births
1938	704,376	429,248	275,128	43·4	26·4	163
1939	696,746	429,033	267,713	42·2	26·0	161
1940	697,700	444,448	253,252	41·6	26·5	162
1941	695,016	440,981	254,035	40·8	25·9	150
1942	658,324	494,358	163,966	38·2	28·7	168
1943	689,771	492,644	197,127	39·6	28·3	160
1944	722,166	472,234	249,932	41·0	26·8	152
1945	787,502	512,003	275,499	43·9	28·6	153
1946	774,152	469,382	304,770	42·6	25·8	141
1947	834,557	408,577	425,980	43·5	21·3	127
1948	832,728	397,976	434,752	42·5	20·3	139
1949	836,516	410,524	425,992	41·9	20·6	135

TABLE No. 3.— QUARTERLY DISTRIBUTION OF DEATHS BY SEX AND DEATH RATES 1940-1949

Years	Quarter Ended				Quarter Ended			
	March	June	September	December	March	June	September	December
	Male Deaths				Female Deaths			
1940	51,095	57,263	64,498	57,148	43,357	57,799	56,326	46,962
1941	48,979	63,062	68,650	58,503	40,231	59,768	59,361	47,427
1942	57,024	78,544	70,071	62,740	47,208	68,590	51,874	50,307
1943	58,690	69,137	71,461	70,096	47,015	58,712	61,239	56,294
1944	61,059	69,029	70,457	57,025	48,733	59,308	60,175	46,448
1945	55,687	69,307	85,914	66,032	44,935	60,612	75,509	54,007
1946	71,014	72,047	64,521	53,089	51,415	61,661	55,845	44,790
1947	43,030	49,577	60,302	67,938	35,468	42,657	52,105	57,500
1948	42,411	52,638	66,696	50,473	36,494	47,616	60,151	41,497
1949	48,324	62,098	63,321	44,358	41,159	56,776	56,896	37,592
	Total of Deaths				Annual Death rate per 1,000 Persons Living			
1940	94,452	125,062	120,824	104,110	22·6		28·6	24·6
1941	89,210	117,830	128,011	105,930	21·1	27·8	29·8	24·7
1942	104,232	147,134	129,945	113,047	24·5	34·3	29·9	26·0
1943	105,705	127,849	132,700	126,390	24·6	29·4	30·2	28·8
1944	109,793	128,337	130,632	103,473	25·0	29·2	29·4	23·3
1945	100,622	129,919	161,423	120,039	22·8	29·1	35·7	26·6
1946	117,429	133,708	120,366	97,879	26·3	31·3	26·3	21·4
1947	78,498	92,234	112,407	125,438	16·6	19·3	23·3	26·0
1948	78,905	100,254	126,847	91,970	16·2	20·6	25·6	18·6
1949	89,483	118,874	120,217	81,950	18·2	23·9	23·9	16·3

**TABLE NO. 4.—MONTHLY DISTRIBUTION OF BIRTHS AND DEATHS BY SEX AND RATES
PER 1,000 OF POPULATION 1949.**

Months	Births			Birth Rate Per 1000 Pop.
	Males	Females	TOTAL	
January	40,521	35,530	76,051	44·9
February	35,784	32,573	68,357	44·7
March	36,659	33,824	70,483	41·7
April	34,778	31,917	66,695	40·7
May	34,111	30,762	64,873	38·3
June	33,025	29,943	62,968	38·4
July	36,734	33,019	69,753	41·2
August	37,808	34,575	72,383	42·8
September	34,405	31,047	65,452	39·9
October	36,095	33,636	69,731	41·2
November	37,017	34,534	71,551	43·6
December	40,244	37,975	78,219	46·2
TOTAL	437,181	399,335	836,516	41·9

Months	Deaths			Death Rate Per 1000 Pop.
	Males	Females	TOTAL	
January	17,238	14,660	31,898	18·9
February	15,294	12,971	28,265	18·5
March	15,792	13,528	29,320	17·3
April	16,217	14,017	30,234	18·4
May	21,436	19,783	41,219	24·4
June	24,445	22,976	47,421	28·9
July	24,207	21,854	46,061	27·2
August	22,015	19,846	41,861	24·7
September	17,099	15,196	32,295	19·7
October	15,292	12,966	28,258	16·7
November	13,951	11,836	25,787	15·7
December	15,115	12,790	27,905	16·5
TOTAL	218,101	192,423	410,524	20·6

TABLE No. 5.—MONTHLY DEATH RATE PER 1,000 OF POPULATION 1940—1949

Months	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949
January	25·8	33·3	24·6	26·0	23·0	23·6	25·8	19·0	15·9	18·9
February	19·9	19·1	24·1	21·7	23·2	20·9	24·5	15·9	16·4	18·5
March	21·8	20·6	23·8	25·1	24·3	22·8	27·3	14·8	16·2	17·3
April	25·5	22·6	27·8	26·0	25·3	21·9	27·1	16·3	15·4	18·4
May	31·8	29·4	34·2	30·3	29·2	29·1	30·3	18·8	20·0	24·4
June	32·1	31·1	39·5	31·8	32·8	36·1	30·9	22·9	26·2	28·9
July	32·7	32·3	33·9	33·8	33·7	39·1	29·0	25·5	27·4	27·2
August	29·0	31·8	28·1	31·3	29·9	37·3	26·5	23·3	27·0	24·7
September	24·7	26·1	24·8	26·3	25·2	31·5	24·1	21·0	22·7	19·7
October	24·0	24·7	25·1	29·5	24·3	27·7	22·6	38·2	19·2	16·7
November	24·2	24·5	25·4	27·5	23·3	25·0	20·1	22·9	18·2	15·7
December	26·3	25·4	25·6	30·0	22·8	27·7	22·0	16·7	18·6	16·5
TOTAL	26·5	25·9	28·7	28·3	26·8	28·6	25·8	21·3	20·3	20·6

TABLE No. 6.—BIRTHS, DEATHS AND INFANT MORTALITY BY GOVERNORATES AND PROVINCES 1940-1949

Total Egypt.

Localities	1940			1941			1942			1943			1944		
	B.	D.	In. M.	B.	D.	In. M.	B.	D.	In. M.	B.	D.	In. M.	B.	D.	In. M.
Cairo ...	59,427	36,859	11,685	62,774	40,165	12,441	65,231	52,081	16,159	76,148	54,065	18,023	85,788	53,583	18,420
Alexandria ...	27,293	16,321	5,930	20,414	16,972	3,945	25,205	18,475	5,149	32,986	24,313	8,259	39,846	22,487	8,661
Ismailia ...	2,909	1,464	502	2,303	2,208	443	2,412	2,086	473	3,605	2,411	678	4,250	2,632	780
Port Said ...	5,090	2,389	663	4,243	2,905	739	5,173	3,561	952	6,207	3,393	1,132	7,852	4,075	1,456
Damietta ...	1,942	951	287	2,057	1,018	286	1,853	1,291	322	1,833	977	276	2,365	971	348
Suez ...	3,046	1,578	588	2,585	2,258	615	3,544	2,982	895	4,756	4,118	1,251	5,112	4,439	1,447
Frontiers ...	4,460	2,491	605	3,890	3,746	825	3,829	2,757	631	4,232	2,783	738	5,283	2,796	716
Behera...	41,084	26,352	5,191	42,770	28,744	5,206	40,592	28,479	4,898	41,465	26,182	4,507	44,383	26,396	4,728
Dakahlia ...	59,350	39,385	9,684	60,776	40,318	9,527	54,709	45,622	9,357	55,825	41,245	8,242	60,961	35,227	8,644
Gharbia ...	89,384	59,254	13,457	92,553	56,442	11,761	83,155	63,456	12,139	85,688	60,778	11,703	91,008	54,444	11,753
Menoufia ...	52,616	38,975	9,747	54,362	35,898	8,442	48,233	40,580	9,389	50,660	37,976	8,375	49,801	38,515	8,513
Kalubia ...	27,964	20,523	5,091	28,911	19,681	4,634	27,391	21,929	4,902	29,800	19,589	4,813	29,331	19,785	4,759
Sharkia ...	48,523	29,565	6,507	48,703	31,501	6,603	48,171	32,808	6,536	49,840	31,438	6,288	50,957	32,430	5,641
Aswan ...	10,897	7,752	1,572	11,167	7,731	1,482	9,915	10,963	1,558	6,456	14,943	1,386	5,696	9,243	769
Assiut ...	54,731	34,380	8,994	52,986	33,410	8,186	49,279	36,790	8,164	47,866	33,789	7,098	48,917	32,957	6,814
Beni-Suef ...	22,859	12,788	3,148	22,292	11,862	2,657	21,282	14,144	3,070	22,175	14,000	3,070	22,402	13,112	2,807
Fayoum ...	26,661	18,743	5,700	26,451	17,818	5,353	25,955	18,405	5,097	26,041	18,132	4,926	26,227	19,787	5,021
Gerga ...	49,927	28,128	6,584	47,968	25,480	5,611	42,963	28,445	5,255	41,319	27,901	4,690	42,667	23,566	3,981
Giza ...	34,133	21,275	6,067	33,981	20,796	5,363	32,277	25,353	6,327	34,145	24,230	5,882	35,793	22,766	6,012
Minia ...	39,676	26,113	7,315	39,503	23,316	6,312	36,697	25,484	6,207	38,104	25,944	6,269	39,394	26,636	6,199
Qena ...	35,728	19,162	4,393	34,013	18,717	3,969	30,459	18,668	3,357	30,630	24,377	2,914	24,399	26,395	2,551
TOTAL ...	697,700	444,448	112,910	695,016	440,981	104,402	658,324	494,358	110,847	689,771	492,644	110,520	722,166	472,234	110,020

TABLE No. 6.—BIRTHS, DEATHS AND INFANT MORTALITY BY GOVERNORATES AND PROVINCES (contd.)

Localities	1945			1946			1947			1948			1949		
	B.	D.	In. M.	B.	D.	In. M.	B.	D.	In. M.	B.	D.	In. M.	B.	D.	In. M.
Cairo ...	90,467	50,559	18,749	94,831	52,511	19,005	99,866	44,196	17,213	100,005	52,672	19,940	104,047	50,338	19,099
Alexandria ...	42,816	26,764	10,355	44,860	29,540	8,391	46,231	22,380	8,860	48,374	20,435	8,472	49,187	22,849	9,061
Ismailia ...	4,562	2,344	766	4,579	2,255	745	5,119	2,597	771	5,701	2,534	914	7,285	3,068	1,083
Port Said ...	7,723	3,972	1,445	7,608	3,388	1,217	8,594	3,165	110	8,070	3,513	1,116	8,952	3,416	1,195
Damietta ...	2,610	1,270	481	2,580	1,001	353	2,798	1,103	367	2,803	991	305	2,714	1,037	373
Suez ...	5,635	3,612	1,372	5,546	3,255	1,166	5,757	2,624	1,023	6,183	3,054	1,156	6,493	3,139	1,155
Frontiers ...	5,990	2,757	779	6,411	3,075	995	7,177	2,675	855	6,800	2,733	927	7,495	2,790	915
Behera ...	50,709	28,886	5,300	49,091	25,743	4,753	49,796	25,861	5,515	50,776	21,285	4,955	50,146	21,931	4,937
Dakahlia ...	65,092	43,323	10,333	63,683	37,106	8,625	67,008	38,385	8,258	69,363	31,981	9,421	68,767	33,666	9,023
Gharbia ...	96,485	65,376	13,254	98,428	56,573	11,797	102,185	57,732	11,070	107,125	46,709	13,116	108,265	48,951	12,286
Menoufia ...	52,051	39,751	8,512	50,115	38,966	7,885	55,843	32,727	7,926	56,025	31,605	9,216	54,988	34,444	9,021
Kaliubia ...	32,324	21,199	5,023	31,974	20,980	4,690	34,093	17,475	4,526	34,919	19,467	5,808	33,796	18,239	5,112
Sharkia ...	53,844	35,354	6,715	53,377	32,647	6,406	52,557	32,073	6,070	55,424	28,320	7,016	55,417	28,251	6,657
Aswan ...	12,461	6,054	1,272	10,635	5,225	1,173	11,343	5,188	1,255	10,734	5,012	1,246	15,913	5,074	1,243
Assiut ...	53,322	41,841	7,455	52,048	35,562	6,753	55,386	25,426	6,557	53,562	26,343	6,098	52,981	28,193	6,461
Beni Suef ...	22,069	17,436	3,128	24,071	13,698	2,586	26,010	11,465	2,607	24,780	11,329	2,746	24,218	12,311	3,015
Fayoum ...	27,582	19,465	5,156	25,930	18,926	4,326	31,665	14,975	4,388	27,994	16,425	4,255	28,914	17,003	4,635
Gerga ...	44,217	24,560	3,946	41,809	25,952	3,900	46,602	16,975	3,397	43,335	18,008	3,439	40,716	19,336	3,127
Giza ...	38,838	24,827	6,312	36,274	27,016	6,368	43,682	19,799	5,943	41,165	21,180	6,465	38,888	21,256	5,763
Minia ...	42,202	36,006	7,193	36,519	26,938	4,847	47,085	18,921	5,332	44,530	20,897	5,696	44,284	21,748	5,769
Qena ...	36,501	16,647	2,819	33,778	18,025	3,041	35,760	12,830	2,782	34,060	13,432	3,115	33,049	13,525	2,710
TOTAL ...	787,592	512,003	120,366	774,152	469,382	109,023	834,557	408,577	105,821	832,728	397,976	115,422	836,516	419,524	112,641

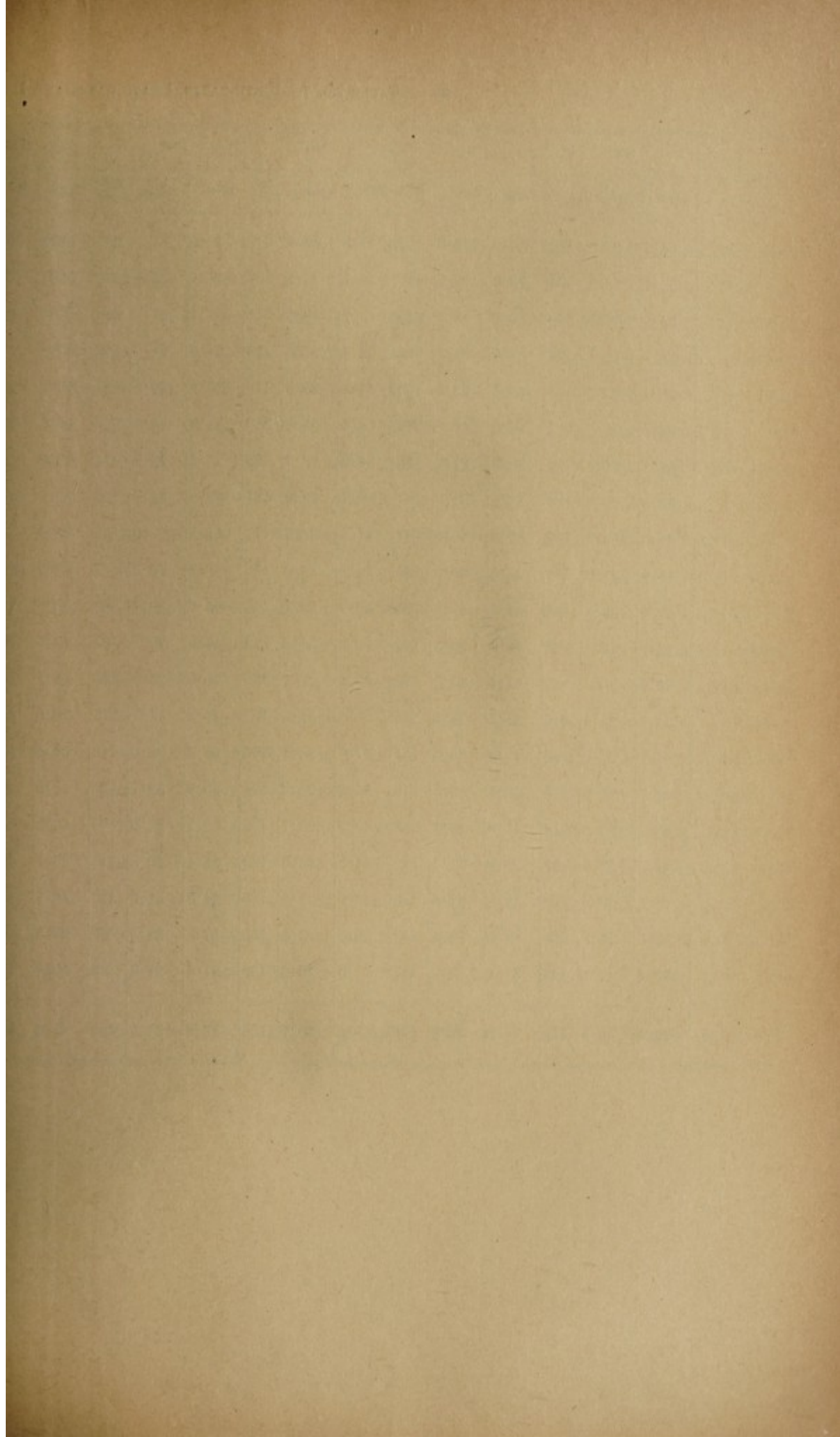


TABLE NO. 7.—BIRTH-RATES, DEATH-RATES AND INFANTILE

Localities	1940			1941			1942			1943			1944		
	Birth	Death	Inf. Mort.	Birth	Death	Inf. Mort.	Birth	Death	Inf. Mort.	Birth	Death	Inf. Mort.	Birth	Death	Inf. Mort.
Cairo ...	43.3	26.8	197	45.0	28.8	198	46.3	36.9	247	53.1	37.7	237	58.9	36.8	211
Alexandria ...	37.7	22.3	188	28.0	23.3	193	34.4	25.2	204	44.4	32.7	250	52.7	29.7	211
Ismailia ...	53.2	26.9	186	68.6	42.9	235	44.7	38.5	214	61.4	41.1	188	70.9	43.9	189
Port-Said ...	38.7	18.1	131	31.5	21.6	169	38.3	26.5	183	44.9	24.6	182	53.8	28.9	196
Damiatta ...	45.1	22.2	148	46.5	23.0	139	41.1	28.8	174	40.1	21.4	151	50.8	20.9	147
Suez ...	57.7	30.5	204	47.3	44.0	254	66.1	58.1	288	84.9	73.5	263	90.6	78.7	243
Frontier Dist.	38.1	31.3	136	35.6	37.6	176	32.2	23.3	165	35.3	23.2	174	43.2	22.8	132
Behera...	36.9	23.6	126	37.9	25.5	122	30.7	25.0	121	35.9	22.7	109	37.9	22.5	107
Dakahlia ...	46.0	30.5	163	46.4	30.8	157	41.3	34.5	171	41.8	31.9	148	45.0	26.0	142
Gharbia ...	43.9	28.6	151	43.9	36.3	127	39.1	32.9	146	39.7	28.2	137	41.6	24.9	128
Menoufia ...	43.6	32.3	185	44.4	29.3	155	38.9	29.7	195	40.6	30.4	165	39.6	30.6	171
Kaliubia ...	43.7	32.1	182	44.5	30.3	160	41.8	33.5	119	44.8	29.5	162	43.6	29.4	162
Sharkia ...	41.6	35.3	134	41.1	26.6	136	40.1	27.3	136	40.9	25.8	126	41.2	26.2	111
Aswan ...	54.5	24.6	144	35.1	24.3	133	30.8	34.1	157	20.3	47.1	215	18.6	30.1	143
Assiut ...	43.1	27.0	164	41.0	25.9	154	37.7	28.1	166	36.2	25.6	148	36.6	24.7	139
Beni Suef ...	38.7	21.6	138	37.1	19.7	119	34.9	23.2	144	35.9	22.7	138	35.8	20.9	125
Fayoum ...	42.7	30.0	214	41.8	28.1	202	40.5	28.7	196	40.1	27.9	189	40.0	30.1	191
Gerga ...	41.8	23.5	132	39.4	21.9	117	34.8	23.0	122	33.1	22.3	114	33.7	18.6	93
Giza ...	46.4	28.9	178	45.4	27.8	158	42.6	33.5	196	44.5	31.6	172	46.1	29.2	168
Minia ...	40.8	26.8	184	40.0	23.6	160	36.6	25.4	169	37.5	25.6	165	38.3	25.9	157
Qena ...	33.3	17.9	123	31.2	17.2	117	27.6	16.9	110	27.5	21.9	95	22.0	23.8	105
TOTAL ...	41.6	26.5	162	40.8	25.9	150	38.2	28.7	168	39.6	28.3	160	41.0	26.8	152

MORTALITY RATES BY GOVERNORATES AND PROVINCES 1940—1949.

1945			1946			1947			1948			1949		
Birth	Death	Inf. Mort.	Birth	Death	Inf. Mort.	Birth	Death	Inf. Mort.	Birth	Death	Inf. Mort.	Birth	Death	Inf. Mort.
60.5	33.8	207	61.9	34.3	200	47.5	21.0	172	46.8	24.7	199	47.8	23.1	184
55.5	34.7	242	66.6	25.9	187	49.8	24.1	192	50.7	21.4	175	50.2	23.3	184
73.7	37.9	168	71.2	35.0	162	74.9	38.0	151	50.9	23.1	160	63.5	26.7	149
53.4	27.5	187	51.1	22.7	159	48.1	17.7	129	43.1	19.1	138	47.4	18.1	133
54.3	26.4	184	52.1	20.2	136	52.1	20.5	131	50.3	17.8	109	47.3	18.4	137
97.3	63.4	244	92.4	54.2	210	53.1	24.2	178	55.1	27.2	187	56.4	27.3	178
48.0	22.1	130	50.0	23.9	155	42.8	15.9	119	39.3	15.8	136	42.3	15.4	122
42.6	24.2	105	40.6	21.3	97	40.0	20.8	111	39.7	16.6	98	38.3	16.8	98
47.1	31.4	159	45.5	26.5	135	47.3	27.1	123	47.7	22.0	136	46.2	22.6	131
43.4	29.4	137	43.7	25.1	119	43.7	24.7	108	44.6	19.5	122	44.1	19.9	113
40.9	31.2	164	39.2	30.5	175	47.7	28.0	142	46.7	26.4	164	45.1	28.3	164
47.2	30.4	100	46.1	30.3	146	49.6	25.4	133	48.9	27.3	166	46.5	25.1	151
42.8	28.1	125	42.0	25.7	120	38.7	23.6	115	41.9	21.0	124	40.4	20.6	120
40.0	19.5	102	33.7	16.5	110	39.6	18.1	111	36.1	16.9	116	52.1	16.6	78
39.4	30.9	140	38.3	26.2	129	40.1	18.4	118	38.0	18.7	113	37.0	19.7	122
34.8	27.5	142	37.7	41.4	107	42.4	18.6	100	39.4	18.0	111	37.7	19.2	124
41.5	29.3	187	38.8	28.3	166	47.1	22.2	139	40.6	23.8	152	41.3	24.3	160
34.3	19.1	89	32.1	19.9	93	36.1	13.1	73	32.7	13.6	79	30.2	14.4	77
48.9	31.3	163	45.2	33.7	175	53.1	24.1	136	46.8	24.1	157	43.4	23.7	148
40.6	34.6	170	35.2	25.9	132	44.3	17.8	113	41.4	19.4	128	40.3	19.8	130
32.5	14.8	77	29.7	15.8	90	32.5	11.5	78	30.1	11.9	91	28.7	11.8	82
43.9	28.6	153	42.6	25.8	141	43.5	21.3	127	42.5	20.3	139	41.9	20.6	135

TABLE No. 8.—BIRTHS, DEATHS, INFANT MORTALITY AND RATES
BY GOVERNORATES AND PROVINCES 1949.

Localities	Births	Birth Rate Per 1000 Pop.	Deaths	Death Rate Per 1000 Pop.	Infantile Mortality	Inf. Mortali- ty Rate per 1000 Births
Cairo	104,047	47·8	50,338	23·1	19,099	184
Alexandria	49,187	50·2	22,849	23·3	9,061	184
Ismailia	7,285	63·5	3,068	26·7	1,083	149
Port Said	8,952	47·4	3,416	18·1	1,195	133
Damietta	2,714	47·3	1,057	18·4	373	137
Suez	6,493	56·3	3,139	27·3	1,155	178
GOVERNORATES : TOTAL	178,678	49·2	83,867	23·1	31,966	179
Frontier Districts	7,496	42·3	2,730	15·4	915	122
Behera	50,146	38·3	21,931	16·8	4,937	98
Dakahlia	68,767	46·2	33,666	22·8	9,024	131
Gharbia	108,265	44·1	48,951	19·9	12,286	113
Menoufia	54,988	45·1	34,444	28·3	9,021	164
Kaliubia	33,796	46·5	18,239	25·1	5,112	151
Sharkia	55,417	40·4	28,250	20·6	6,657	120
LOWER EGYPT : TOTAL	371,379	43·3	185,481	21·6	47,037	127
Aswan	15,913	52·1	5,074	16·6	1,243	78
Assiut	52,981	37·0	28,193	19·7	6,461	122
Beni Suef	24,218	37·7	12,311	19·2	3,015	124
Fayoum	28,914	41·3	17,003	24·3	4,635	160
Gerga	40,716	30·2	19,336	14·4	3,127	77
Giza	38,888	43·4	21,256	23·7	5,763	148
Minia	44,284	40·3	21,748	19·8	5,769	130
Qena	33,049	28·7	13,525	11·8	2,710	82
UPPER EGYPT : TOTAL	278,963	36·9	138,446	18·3	32,723	117
GRAND TOTAL	836,516	41·9	410,524	20·6	112,641	135

TABLE No. 9.—AGE AND SEX DISTRIBUTION OF DEATHS AND RATES
PER 1000 POPULATION 1949.

Age Groups	Deaths						Males prop Per cent	Female prop Per cent	Prop. Per cent
	Males	Rate	Females	rate	TOTAL	Rate			
0-4 Years	121,983	90·6	113,079	89·8	235,062	86·5	55·9	58·8	57·3
5-9 „	5,534	4·4	4,522	3·6	10,056	4·0	2·5	2·4	2·4
10-14 „	4,028	3·4	2,700	2·4	6,728	2·9	1·8	1·4	1·6
15-19 „	3,578	3·5	2,328	2·4	5,906	2·9	1·6	1·3	1·4
20-24 „	3,677	5·2	2,116	2·8	5,793	4·0	1·7	1·1	1·4
25-29 „	4,233	5·9	2,969	3·6	7,202	4·8	1·9	1·5	1·8
30-34 „	4,643	7·1	3,628	5·0	8,262	6·0	2·2	1·9	2·0
35-39 „	5,272	7·6	3,664	5·3	8,936	6·5	2·4	1·9	2·2
40-44 „	6,150	10·3	3,991	6·7	10,141	8·5	2·8	2·1	2·4
45-49 „	5,470	12·1	3,056	7·0	8,526	9·5	2·5	1·6	2·0
50-54 „	7,631	17·2	4,633	9·8	12,264	13·4	3·5	2·4	3·0
55-59 „	4,035	22·4	1,934	10·6	5,969	16·5	1·9	1·0	1·4
60-64 „	7,606	28·7	5,004	15·9	12,610	21·8	3·5	2·6	3·1
65-69 „	4,670	53·0	2,973	34·4	7,643	43·7	2·2	1·5	1·8
70-74 „	7,682	67·7	6,510	45·6	14,192	55·2	3·5	3·4	3·5
75-79 „	3,469	140·4	2,975	117·6	6,444	128·9	1·6	1·5	1·6
80-84 „	6,622	180·9	7,777	104·4	14,399	156·5	3·0	4·0	3·5
85 and over	11,386	625·6	18,338	742·4	29,724	692·9	5·3	9·5	7·4
Not stated	441	16·7	226	6·5	667	10·9	0·2	0·1	0·2
TOTAL	218,101	22·1	192,423	19·1	410,524	20·6	—	—	—

TABLE No. 10.—INFANTILE MORTALITY BY CAUSES

Diseases of Infancy	Infantile deaths under one year									
	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949
Measles	278	228	395	99	262	151	360	200	338	314
Whooping Cough	14	22	28	43	32	28	13	18	11	21
Diphtheria	37	70	68	81	59	85	59	57	67	55
Tuberculous diseases	12	5	13	19	24	11	23	14	18	20
Syphilis	240	161	150	234	165	130	135	121	147	131
Rickets and Osteomalacia... ..	227	189	189	183	180	176	128	132	221	165
Convulsions	154	173	198	200	252	213	134	98	80	70
Bronchitis	3,089	3,195	3,636	3,522	3,705	4,211	3,742	3,947	5,574	4,768
Broncho-Pneumonia	1,749	794	936	1,036	1,095	959	1,145	950	874	1,095
Pneumonia	645	200	277	301	347	393	497	536	606	621
Diarrhoea and Enteritis	25,279	25,325	31,099	33,230	33,647	37,173	34,086	33,030	32,460	35,083
Congenital Defects of Conformation	71	73	81	78	137	199	150	91	164	64
Congenital Debility	13,107	13,007	14,773	16,895	17,881	20,318	18,786	18,191	21,344	20,902
Premature Birth	234	165	168	195	151	138	167	123	152	168
Consequences of Delivery	63	66	47	80	74	113	132	138	115	140
Infanticide	133	168	161	126	119	86	100	72	82	60
Accidents	106	152	109	96	122	113	88	109	59	100
Other Causes	1,652	1,546	1,585	1,841	1,983	1,909	1,475	1,553	1,205	1,137
TOTAL	47,090	45,539	53,913	58,259	60,235	66,396	61,220	59,380	63,516	64,914

FOR LOCALITIES HAVING HEALTH OFFICES 1940—1949

Infantile Mortality rates per 1,000 live births.

1940	1941	1942	1943	1944	1945	1946	1947	1948	1949
1.2	0.981	1.6	0.365	0.877	0.468	1.1	0.566	0.933	0.845
0.059	0.095	0.115	0.159	0.107	0.087	0.04	0.051	0.03	0.057
0.156	0.301	0.279	0.299	0.198	0.264	0.180	0.161	0.185	0.148
0.051	0.022	0.053	0.070	0.080	0.034	0.070	0.04	0.05	0.054
1.0	0.693	.616	0.664	0.652	0.453	0.413	0.343	0.406	0.353
0.958	0.814	0.776	0.676	0.603	0.546	0.391	0.374	0.610	0.444
0.65	0.745	0.813	0.738	0.844	0.660	0.410	0.277	0.221	0.188
13.0	13.8	14.9	13.0	12.4	13.1	11.4	11.2	15.4	12.8
7.4	3.4	3.8	3.8	3.7	3.0	3.5	2.7	2.4	2.9
2.7	0.861	1.1	1.1	1.2	1.2	1.5	1.5	1.7	1.7
106.4	109.0	127.6	122.7	112.6	115.2	104.2	93.5	89.6	94.4
.300	.314	.332	.288	.459	.617	.458	.258	.453	0.172
55.3	56.0	60.6	62.4	59.6	63.0	57.4	51.5	58.9	56.3
.988	.710	.690	.720	.505	.397	.510	.348	.420	0.452
.266	.284	.192	.295	.248	.350	.403	.391	.318	0.377
.561	.723	.661	.465	.398	.267	.306	.204	.226	0.161
.447	.654	.447	.354	.408	.350	.269	.309	.163	0.269
7.0	6.7	6.5	6.8	6.6	5.9	4.5	4.4	3.3	3.1
198.8	196.0	221.3	215.1	201.6	205.8	187.1	168.1	175.1	174.7

TABLE NO. 11.—INFANTILE MORTALITY BY AGE AND CAUSE

Diseases of Infancy	Weeks				
	Below 1 week	1-2	2-3	3-4	4-month
Measles	2	—	1	—	—
Whooping Cough	—	—	—	—	—
Diphtheria	—	—	—	—	—
Tuberculous diseases	—	—	—	—	—
Syphilis	40	12	13	4	—
Rickets and Osteomalacia	—	1	1	—	—
Convulsions	4	10	—	1	—
Bronchitis	34	46	32	26	1
Broncho-Pneumonia	12	11	18	9	4
Pneumonia	34	19	10	9	2
Diarrhoea and Enteritis	137	200	195	144	22
Congenital Defects of Conformation	34	7	—	3	—
Congenital Debility	5,275	2,968	1,906	839	99
Premature Birth	137	11	7	1	—
Consequences of Delivery	116	11	—	—	—
Infanticide	54	2	—	—	—
Accidents	8	3	1	1	—
Other Causes	150	53	32	25	1
TOTAL	6,037	3,354	2,216	1,062	129

FOR LOCALITIES HAVING HEALTH OFFICES, 1949.

Months											TOTAL
1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	
2	13	8	8	14	36	33	69	43	47	38	314
—	—	1	2	3	5	4	1	—	4	1	21
1	2	1	1	3	4	9	13	7	9	5	55
1	—	—	—	—	2	4	3	3	3	4	20
6	10	7	6	7	5	3	6	5	6	1	131
4	10	12	7	9	17	14	32	19	25	14	165
2	—	6	9	6	9	9	5	4	4	1	70
189	249	368	445	428	613	275	646	451	487	278	4768
37	55	63	79	88	150	118	151	116	125	59	1095
32	35	36	63	48	60	63	72	60	46	32	621
1,525	2,130	2,961	3,613	3,547	4,387	3,514	4,329	3,405	3,177	1,797	35,083
6	2	2	2	—	2	1	2	1	1	1	64
2,664	2,232	1,594	1,175	615	552	255	316	170	179	63	20,902
5	—	—	—	2	1	2	—	2	—	—	168
1	1	2	1	—	1	2	—	5	—	—	140
—	1	—	—	—	—	—	—	2	1	—	60
5	6	5	7	7	9	11	19	7	7	4	100
82	64	94	86	78	124	80	96	72	54	46	1,137
4,562	4,810	5,160	5,504	4,855	5,977	4,597	5,760	4,372	4,175	2,344	64,914

**TABLE No. 12.—STILL BIRTHS AND RATES FOR THE TWO SEXES
BY GOVERNORATES AND PROVINCES 1949.**

LOCALITIES	Still Births			Still Birth-rate Per 1000 Live Births		
	Males	Females	TOTAL	Males	Females	TOTAL
Cairo	975	780	1,755	17·9	15·2	16·6
Alexandria	466	356	822	18·2	14·6	16·4
Ismailia	53	21	74	13·8	6·0	9·8
Port-Said	118	105	223	25·4	23·2	24·3
Damietta	71	34	105	48·7	25·0	37·2
Suez... ..	56	64	120	16·5	19·9	18·1
TOTAL GOVERNORATES	1,739	1,360	3,099	18·6	15·4	17·0
FRONTIER DISTRICTS	40	27	67	10·5	7·2	8·9
Behera	70	35	105	2·7	1·4	2·1
Dakahlia	194	140	334	5·5	4·2	4·8
Gharbia	291	158	449	5·2	2·9	4·1
Menoufia	168	100	268	5·9	3·7	4·9
Kaliubia	85	69	154	4·9	4·2	4·5
Sharkia	169	109	278	5·8	4·1	5·0
TOTAL LOWER EGYPT	977	611	1,588	5·1	3·4	4·3
Aswan	28	14	42	5·0	2·7	3·9
Assiut	104	83	187	3·6	3·4	3·5
Beni Suef	90	60	150	6·9	5·3	6·2
Fayoum	114	58	172	7·4	4·2	5·9
Gerga	76	54	130	3·3	3·1	3·2
Giza	125	92	217	6·1	5·0	5·5
Minia	105	48	153	4·6	2·2	3·4
Qena	51	31	82	2·7	2·2	2·5
TOTAL UPPER EGYPT	693	440	1,133	4·7	3·5	4·1
GENERAL TOTAL	3,449	2,438	5,887	7·9	6·1	7·0

Chapter II.—INFECTIOUS DISEASES CONTROL

A total of 54,937 cases with 13,730 deaths of infectious diseases were notified throughout Egypt during the year 1949 or a case-rate of 275.4 and a death-rate of 68.8 per 100,000 of the population as compared with 44,522 cases with 12,150 deaths notified during 1948 or a case-rate of 228 and a death-rate of 62.1.

The increase in the case incidence was due to a higher number of notified cases of typhoid fever, cerebro spinal fever, measles, pulmonary tuberculosis, pneumonia, influenza, whooping cough and mumps.

The following is a detailed study of the most important diseases:

Typhus:

Table No. 13 shows that the case rate in 1949 dropped to 0.9 per 100,000 of the population *i.e.* the same rate as 1947. This drop may be attributed to the resumption of routine dusting of the population with insecticides in the second half of 1948 which had been stopped since the last quarter of 1947 following the outbreak of the overwhelming cholera epidemic and the various precautionary measures taken against it.

Small pox:

Only three cases were notified throughout the country during the year 1949, two in Cairo and one in Giza province.

Table No. 13 shows that there has been a steady fall in the incidence of small pox since 1945. This may be due to the routine measure adopted by the health authorities since 1945 of vaccinating one quarter of the population every year.

Plague:

No cases of plague were notified during 1949.

Cerebro spinal meningitis (Tables 13-14):

205 cases with 57 deaths were reported during the year, or a case-rate of 1.0 and a death rate of 0.3 per 100,000 of the population, and a case-fatality-rate of 27.8 per cent as against 133 cases with 37 deaths in 1948 or a case-rate of 0.7 and a death-rate of 0.189 per 100,000 of the population and a case-fatality rate of 27.8 per cent. The highest case rate of 16.4 per 100,000 of the population was recorded in Port Said (Table No. 15).

Diphtheria:

1,683 cases of diphtheria with 603 deaths were reported during the year or a case-rate of 8.4 and a death-rate of 3.0 per 100,000 of the population and a case-fatality-rate of 35.8 per cent as compared with 1,835 cases with 659 deaths in 1948 or a case-rate of 9.4 and a death-rate of 3.4 per 100,000 and a case-fatality-rate of 35.9 per cent. In Port Said, Damietta and Suez notifications were markedly greater in 1949 than in 1948, while in other localities these were more or less the same.

Typhoid and Paratyphoid fever:

A total of 7,110 cases with 814 deaths were reported from all Egypt during the year or a case rate of 35.6, a death rate of 4.1 per 100,000 of the population and a case-fatality-rate of 11.4 per cent. In 1948, the total number of cases notified was 5,513 with 814 deaths, or a case-rate of 28.3, a death rate of 4.1 per 100,000 of the population and a case-fatality-rate of 14.7 per cent.

The rise in the case incidence is explained by the restriction of the sale of chloromycin for treatment to patients notified to health authorities only.

TABLE NO. 13.—INFECTIOUS DISEASES CASES AND DEATHS AND

Diseases		1940	1941	1942	1943	1944	1945	1946	1947	1948	1949
Plague	C	1,491	14	15	163	644	218	211	15	0	0
	D	238	6	10	111	393	108	57	5	0	0
Typhus	C	4,416	9,414	22,045	40,182	18,477	18,283	1,548	173	325	180
	D	863	1,751	4,411	8,252	4,043	3,627	337	53	71	53
Small Pox	C	2	0	0	4,138	11,194	1,355	416	170	16	3
	D	0	0	0	384	1,016	115	50	18	4	1
Typhoid fever	C	4,841	5,758	6,814	4,431	5,019	5,286	4,584	4,601	55,13	7,110
	D	934	1,179	1,257	790	790	833	637	685	814	814
Scarlet Fever... ..	C	105	91	39	54	30	12	11	10	9	18
	D	3	0	2	3	0	1	0	2	0	1
Cesebro Spinal Feyer	C	191	159	212	114	174	65	88	94	133	205
	D	96	94	101	57	75	49	44	32	37	57
Diphtheris	C	2,433	4,037	3,950	4,143	3,326	3,130	2,047	1,809	1,835	1,683
	D	1,178	1,932	1,882	1,595	1,264	1,159	823	591	659	603
Measles	C	14,697	9,769	9,764	4,249	7,274	5,444	6,968	6,886	6,485	11,311
	D	3,581	2,870	3,654	1,022	2,475	1,413	1,826	1,336	2,408	2,603
Pulmonary T.B.	C	6,236	6,296	6,608	6,770	6,950	6,819	6,407	6,523	6,614	7,219
	D	2,786	3,021	3,472	3,647	3,803	3,681	3,671	3,581	3,718	3,812
Acute Pneumonia... ..	C	3,545	5,414	6,215	6,935	6,929	5,805	5,420	5,797	5,074	7,458
	D	4,939	4,843	5,296	5,762	5,242	4,848	4,432	3,948	3,561	4,898
Chicken Pox	C	1,351	1,862	870	1,238	1,057	1,338	873	1,755	1,722	1,611
	D	15	15	8	21	15	12	11	7	1	6
Puerperal Septicaemia... ..	C	489	461	332	375	375	387	266	310	296	291
	D	340	344	208	187	158	178	145	101	94	71
Dysentery	C	2,205	3,447	3,553	1,872	1,672	1,217	1,130	1,359	1,249	1,130
	D	385	509	577	604	537	384	329	245	228	208
Influenza	C	9,763	11,120	12,965	14,056	11,203	14,642	17,570	5,711	5,136	6,330
	D	180	178	218	219	204	152	67	42	38	86
Malaria New	C	0	0	0	0	37,847	5,887	9,262	6,747	4,445	2,817
	D	13,444	9,320	20,937	16,530	1,867	56	22	31	23	17
,, Recurrent	C	68	104	394	1,341	218,231	141,557	5,686	3,365	1,493	1,392
	D	0	0	0	0	14	19	4	1	1	0
Anthrax	C	22	22	21	15	13	4	6	9	2	1
	D	5	5	4	9	2	2	1	1	0	1
Whooping Cough	C	3,238	2,923	2,257	2,054	1,208	1,856	904	2,189	770	1,385
	D	172	173	142	105	105	92	54	63	27	74
Parotitis (Mumps)... ..	C	1,704	1,755	1,453	1,449	1,063	1,743	1,290	1,880	1,389	2,628
	D	27	19	30	31	30	27	13	9	8	7
Undulant Fever	C	27	20	9	6	20	15	22	14	28	78
	D	2	0	2	4	3	2	2	1	6	4
Leprosy	C	545	511	520	393	224	332	124	162	149	198
	D	69	79	82	68	58	53	55	51	61	69
Tetanus	C	476	433	459	442	544	439	435	443	414	418
	D	310	314	313	294	331	303	354	309	309	272
Acute Poliomyelitis	C	16	16	5	7	11	7	2	11	6	13
	D	6	9	1	2	4	6	6	14	8	9
Erysipelas	C	4,827	4,502	3,100	1,956	1,671	1,551	1,181	1,460	1,413	1,458
	D	466	468	312	209	156	146	88	91	75	64
Relapsing Fever	C	1	0	0	0	10	18,126	110,405	229	6	0
	D	0	0	0	0	0	880	2,414	30	0	0

RATES PER 100,000 POPULATION 1940—1949.

1940	1941	1942	1943	1944	1945	1946	1947	1948	1949
2.9	.082	.087	.093	3.7	1.2	1.2	.078	—	—
1.4	.035	.058	.637	2.2	.603	.314	.026	—	—
26.3	55.3	128.0	230.7	104.8	102.0	8.5	.904	1.3	0.9
5.1	10.3	25.6	47.4	22.9	20.2	1.9	.277	.363	.3
.012	—	—	23.8	63.5	7.6	2.2	.887	.082	.051
—	—	—	2.2	5.8	.642	.276	.094	.020	.005
28.9	33.8	39.6	25.4	28.5	29.5	25.2	24.0	28.3	35.6
5.6	6.9	7.3	4.5	4.5	4.6	3.5	3.6	4.1	4.1
.626	.534	.256	.310	.17	.067	.06	.052	.046	.09
.018	—	.012	.017	—	.006	—	.01	—	.005
1.1	.934	1.2	.654	.834	.363	.48	.491	.680	1.0
.572	.552	.586	.327	.426	.273	.243	.167	.189	.3
14.5	23.5	22.9	23.8	18.9	17.5	11.2	9.5	9.4	8.4
7.0	11.3	10.9	1.2	7.2	6.5	4.5	3.1	3.4	3.0
89.3	57.4	56.7	24.4	41.3	30.4	38.4	36.0	33.2	56.7
21.3	16.9	21.2	5.9	14.0	7.9	9.5	7.0	12.3	13.0
37.2	36.9	18.4	38.9	39.4	38.1	35.3	34.0	33.8	36.2
16.6	17.8	20.2	20.9	21.6	20.5	20.2	18.7	19.0	19.1
21.1	31.8	36.0	39.8	39.3	12.4	29.9	30.2	25.9	37.4
21.4	28.4	30.7	33.1	29.7	27.0	24.4	20.6	18.2	24.6
8.0	10.9	5.1	7.1	6.0	7.5	4.8	9.2	8.8	8.1
.089	.088	.046	.12	.085	.067	.061	.037	.005	.005
2.9	2.7	1.9	2.2	20.3	2.2	1.5	1.6	1.5	1.5
2.0	2.0	1.2	1.1	.896	.993	.799	.725	.481	.4
13.2	20.2	20.6	10.7	9.5	6.8	6.2	7.1	6.4	5.7
2.3	3.0	3.3	3.5	3.0	2.1	1.8	1.3	1.2	1.0
54.2	65.3	75.3	80.7	63.6	81.7	96.8	29.8	26.3	31.7
1.1	1.1	1.3	1.3	1.2	.848	.369	.214	.194	.4
—	—	—	—	214.7	32.9	51.1	35.2	22.7	14.1
80.2	54.7	121.5	94.9	10.6	.312	.121	.172	.118	.09
.405	.611	2.3	7.7	1238.2	789.8	31.3	17.6	7.6	7.0
—	—	—	—	.079	.106	.022	.005	—	—
.131	.129	.122	.086	.074	.022	.03	.047	.01	.005
.03	.03	.023	.052	.011	.011	.006	.005	—	.005
19.3	17.2	13.1	11.8	6.9	10.4	5.0	11.4	3.9	6.9
1.0	1.02	.824	.603	.596	.513	.298	.329	.138	.4
10.2	10.3	8.4	8.3	6.03	9.7	7.1	9.8	7.1	13.2
.16	.112	.174	.178	.17	.151	.072	.047	.041	.04
.161	.117	.052	.034	.113	.084	.12	.06	.143	.4
.012	0	.012	.023	.017	.011	.011	.005	.031	.02
3.3	3.0	3.0	2.3	1.3	1.9	.68	.845	.762	1.0
.411	.464	.476	.39	.329	.296	.303	.266	.311	.3
2.8	2.5	2.7	2.5	3.1	2.5	2.4	2.3	2.1	2.1
1.8	1.8	1.8	1.7	1.9	1.7	2.5	1.6	1.6	1.4
.095	.094	.029	.04	.062	.039	.01	.058	.031	.07
.036	.053	.006	.011	.027	.033	.033	.073	.141	.05
28.8	26.4	18.5	11.2	9.5	8.7	6.5	7.6	7.2	7.3
2.8	2.7	1.8	1.2	.885	.815	.485	.474	.383	.3
—	—	—	—	.057	95.6	6.08	1.2	.031	—
—	—	—	—	—	4.9	1.3	.156	—	—

TABLE NO. 14.—INFECTIOUS DISEASES

Localities	Plague		Typhus		Small Pox		Relapsing fever		Typhoid fever		Scarlet fever	
	48	49	48	49	48	49	48	49	48	49	48	49
Cairo	—	—	31	14	1	2	—	—	2,578	4,091	4	8
Alexandria	—	—	9	11	—	—	—	—	1,111	743	4	5
Ismailia	—	—	—	—	4	—	—	—	30	33	—	—
Port Said	—	—	7	—	1	—	—	—	537	671	1	4
Damietta	—	—	—	—	—	—	—	—	34	23	—	—
Suez	—	—	1	2	3	—	—	—	98	132	—	—
Frontier Districts	—	—	1	—	1	—	—	—	57	36	—	—
Behera	—	—	149	13	—	—	6	—	171	173	—	—
Dakahlia	—	—	39	75	—	—	—	—	110	103	—	—
Gharbia	—	—	46	7	—	—	—	—	121	206	—	—
Menoufia	—	—	4	16	—	—	—	—	56	77	—	1
Kaliubia	—	—	11	—	1	—	—	—	76	127	—	—
Sharkia	—	—	11	3	1	—	—	—	54	93	—	—
Aswan	—	—	—	—	—	—	—	—	2	6	—	—
Assiut	—	—	4	—	1	—	—	—	88	77	—	—
Beni Suef	—	—	1	—	—	—	—	—	21	15	—	—
Fayoum	—	—	—	—	—	—	—	—	36	71	—	—
Gerga	—	—	1	1	—	—	—	—	50	61	—	—
Giza	—	—	7	36	2	1	—	—	217	284	—	—
Minia	—	—	2	—	1	—	—	—	35	56	—	—
Qena	—	—	1	2	—	—	—	—	30	32	—	—
TOTAL	—	—	325	180	16	3	6	—	5,513	7,110	9	18

CASES 1948—1949

C.S.M.		Diphtheria		Measles		Pulmonary Tuberculosis		Acute Pneumonia		Chicken Pox		Puerperal Sep.	
48	49	48	49	48	49	48	49	48	49	48	49	48	49
48	133	950	809	1,988	1,815	3,508	3,599	2,097	2,457	641	661	114	118
8	9	223	191	694	3,631	1,000	1,087	1,936	3,587	516	269	91	84
—	—	8	8	19	1	3	1	—	38	1	4	—	—
51	31	49	83	144	71	245	212	212	284	57	109	—	4
—	—	3	11	7	22	5	20	19	15	27	2	—	1
—	1	33	62	69	64	67	138	111	177	19	54	4	2
7	—	—	6	203	153	15	15	35	6	40	57	3	2
1	—	31	16	97	517	119	89	53	89	45	60	2	6
6	2	43	49	634	534	215	301	49	67	48	48	5	8
2	10	77	130	79	511	291	410	59	128	70	65	5	6
—	1	56	46	390	490	104	141	28	18	47	36	8	10
—	—	63	43	487	168	136	133	42	81	33	39	5	5
7	7	54	44	280	531	166	131	32	31	52	59	5	1
—	—	14	17	3	6	34	91	7	8	32	7	1	6
—	3	45	42	286	63·9	112	163	77	126	9	15	19	10
1	—	11	4	3	164	72	139	5	5	8	9	4	6
—	—	7	13	158	134	158	160	89	45	3	5	5	2
—	—	18	9	25	396	58	80	40	46	1	6	4	1
—	6	105	55	470	803	90	129	119	162	40	66	11	7
1	1	16	29	298	496	132	49	31	34	18	31	6	8
1	1	29	16	153	165	82	131	33	58	15	9	4	4
133	205	1,835	1,683	6,485	11,311	6,614	7,219	5,074	2,458	1,722	1,611	296	291

TABLE NO. 14.—INFECTIOUS DISEASES

Localities	Dysentery		Influenza		Malaria New		Malaria Recurrent		Anthrax	
	48	49	48	49	48	49	48	49	48	49
Cairo	169	160	1,348	2,139	546	607	17	34	—	—
Alexandria	396	259	1,671	1,457	241	204	—	—	—	—
Ismailia	1	3	28	21	48	52	2	—	—	—
Port Said	37	17	452	484	106	104	—	—	—	—
Damietta	—	—	36	40	59	4	—	—	—	—
Suez... ..	57	58	180	136	87	23	33	8	—	—
Frontier Districts	62	80	85	55	260	18	—	2	—	—
Behera	3	11	124	168	679	30	1	—	—	—
Dakahlia	5	9	94	187	209	107	7	6	1	—
Gharbia	13	76	144	378	224	575	1	599	1	1
Menoufia	17	13	95	139	45	87	6	36	—	—
Kaliubia	7	8	173	231	1,068	230	4	16	—	—
Sharkia	57	34	53	57	478	110	—	16	—	—
Aswan	17	14	23	55	29	4	3	15	—	—
Assiut	79	53	126	137	10	32	—	—	—	—
Beni Suef	5	11	51	60	26	50	1	6	—	—
Fayoum	18	45	31	23	120	82	1,398	611	—	—
Gerga	9	5	45	71	2	7	—	—	—	—
Giza	20	15	196	244	105	249	—	—	—	—
Minia	102	106	94	138	126	29	—	8	—	—
Qena	175	153	77	110	7	13	20	25	0	—
TOTAL	1,249	1,130	5,136	6,330	4,445	2,817	1,493	1,392	2	1

CASES 1948—1949 (*Contd.*)

Whooping Cough		Parotitis		Undulant fever		Leprosy		Tetanus		Acute Poliomyelitis		Erysipelas		TOTAL	
48	49	48	49	48	49	48	49	48	49	48	49	48	49	48	49
102	328	297	1,079	18	31	5	10	73	63	—	1	308	305	148,43	18,460
86	149	598	395	—	2	4	19	44	54	3	9	583	516	9,218	12,681
—	—	1	3	—	—	—	—	6	9	—	—	6	2	157	175
—	9	12	46	—	1	2	1	9	18	—	2	69	75	1,991	2,225
—	1	2	1	—	—	—	2	2	1	—	—	3	8	197	152
5	3	18	24	—	1	—	2	2	4	—	—	4	14	791	905
45	10	6	244	—	—	—	1	—	—	—	—	2	7	802	692
9	10	17	24	—	—	4	17	45	37	—	—	38	43	1,594	1,303
82	126	9	7	—	1	25	16	22	24	—	—	75	77	1,678	1,747
50	42	56	126	1	4	8	8	38	55	3	1	106	131	1,395	3,469
57	31	14	151	1	3	17	32	26	24	—	—	68	73	1,039	1,425
18	9	9	200	—	3	12	5	18	11	—	—	32	37	2,195	1,346
6	35	112	34	—	—	19	14	28	14	—	—	29	37	1,444	1,251
1	—	82	33	—	—	1	1	5	—	—	—	1	10	255	273
14	20	2	64	—	—	7	9	29	25	—	—	19	19	928	1,434
3	22	2	1	—	—	3	1	5	5	—	—	5	7	227	505
96	400	3	21	2	1	2	3	9	4	—	—	7	24	2,142	1,644
40	32	3	4	—	—	16	16	9	12	—	—	6	8	327	755
60	99	34	133	5	31	10	7	15	16	—	—	25	18	1,531	2,361
10	55	99	7	1	—	7	18	27	29	—	—	19	37	1,025	1,341
86	4	13	31	0	—	7	16	2	13	—	—	8	10	743	793
770	1,385	1,389	2,628	28	78	149	198	414	418	6	13	1,413	1,458	44,522	54,937

TABLE NO. 15. — INFECTIOUS DISEASES CASE

Localities	Plague		Typhus		Small-Pox		Relapsing fever		Typhoid fever	
	48	49	48	49	48	49	48	49	48	49
Cairo	—	—	1·5	·6	·047	·1	—	—	120·9	187·9
Alexandria	—	—	·945	1·1	—	—	—	—	116·6	75·9
Ismailia	—	—	—	—	3·6	—	—	—	26·8	28·7
Port Said	—	—	3·8	—	·543	—	—	—	291·5	335·0
Damietta	—	—	—	—	—	—	—	—	61·1	40·1
Suez	—	—	·891	1·7	2·7	—	—	—	87·3	114·7
Frontier Districts	—	—	·578	—	·578	—	·469	—	32·9	20·3
Behera... ..	—	—	11·6	1	—	—	—	—	13·4	13·2
Dakahlia	—	—	2·7	5·0	—	—	—	—	7·6	6·9
Gharbia	—	—	1·9	·28	—	—	—	—	5·0	8·4
Menoufia	—	—	·334	1·3	—	—	—	—	4·7	6·3
Kaliubia	—	—	1·5	—	·140	—	—	—	10·7	17·5
Sharkia	—	—	·817	·22	·074	—	—	—	4·0	6·9
Aswan	—	—	—	—	—	—	—	—	·672	2·0
Assiut	—	—	·284	—	·071	—	—	—	6·3	5·4
Beni Suef	—	—	·159	—	—	—	—	—	3·3	2·3
Fayoum	—	—	—	—	—	—	—	—	5·2	10·1
Gerga	—	—	·075	·07	—	—	—	—	3·8	4·5
Giza	—	—	1·0	4·0	·227	·11	—	—	24·7	31·7
Minia	—	—	186	—	·093	—	—	—	3·3	5·1
Qena	—	—	·088	·17	—	—	—	—	2·6	2·8
TOTAL	—	—	1·3	0·9	·082	·015	·031	—	28·2	35·6

RATES PER 100,000 POPULATION 1948 AND 1949.

Scarlet fever		C.S.M.		Diphtheria		Measles		Pulmonary T.B.		Acute Pneumonia		Chicken Pox		Puerperal Sep.	
48	49	48	49	48	49	48	49	48	49	48	49	48	49	48	49
·184	·4	2·2	6·1	44·5	37·1	93·2	83·3	161·1	165·2	96·5	112·6	29·4	30·3	7·8	5·4
·420	·5	·84	·9	23·4	19·5	72·8	37·1	105·0	111·1	203·3	366·5	54·1	27·5	9·5	8·6
—	—	—	—	7·1	7·0	17·0	·9	2·7	·09	—	33·1	·894	3·5	—	—
·543	2·1	27·7	16·4	26·6	44·4	78·1	37·6	133·0	112·2	115·1	150·3	30·9	57·7	—	2·1
—	—	—	—	5·4	19·2	12·6	38·4	9·0	35·1	34·1	26·1	48·5	3·5	—	1·8
2	—	—	·8	29·4	53·9	61·5	55·6	59·7	119·9	98·9	153·8	16·9	46·9	3·7	1·7
—	—	4·0	—	—	3·4	116·2	86·3	8·7	8·5	20·2	3·4	23·1	32·3	1·7	1·1
—	—	·78	—	2·4	1·2	7·6	39·5	9·3	6·8	4·1	6·8	3·5	4·6	·156	·5
—	—	·412	·13	3·0	3·3	43·6	35·9	14·8	20·2	3·4	4·5	3·3	3·2	·344	·5
—	—	·083	·4	3·2	5·3	3·35	20·8	12·1	16·7	2·5	5·2	2·9	2·6	·208	·24
—	·08	—	·08	4·7	3·8	32·5	40·2	8·7	11·6	2·3	1·5	3·9	3·0	·667	·82
—	—	—	—	8·8	5·9	68·3	23·1	19·1	18·3	5·9	11·1	4·6	5·4	·701	·69
—	—	·52	·51	4·0	3·2	20·8	38·7	12·3	9·6	23·8	2·3	3·9	4·3	·372	·07
—	—	—	—	4·7	5·6	1·0	2·0	11·4	29·8	2·4	2·6	10·8	2·3	·336	2·0
—	—	—	·21	3·2	2·9	20·3	44·6	8·0	11·4	5·5	8·8	·639	1·0	1·3	·7
—	—	1·59	—	1·7	·6	·477	25·6	11·5	21·7	·795	·8	1·3	1·4	·636	·9
—	—	—	—	1·2	1·9	22·9	19·2	22·5	22·9	12·9	6·4	·435	·72	·725	29
—	—	—	—	1·4	·67	1·9	29·4	4·4	5·9	3·0	3·4	·075	·45	·302	·07
—	—	—	·67	11·9	6·1	53·4	89·6	10·2	14·4	13·5	18·1	4·5	7·4	1·3	·78
—	—	·093	·09	1·5	2·6	27·7	15·2	12·3	4·5	2·9	3·1	1·7	2·8	·558	·73
—	—	·088	·08	3·6	1·4	17·5	14·3	7·2	11·4	2·9	5·0	1·3	·78	·353	·03
·046	·09	·680	1·0	9·4	8·4	33·2	56·7	33·8	36·2	25·9	37·4	8·8	8·1	1·5	1·5

TABLE No. 15. — INFECTIOUS DISEASES CASE

Localities	Dysentery		Influenza		Malaria New		Malaria Recurrent		Anthrax	
	48	49	48	49	48	49	48	49	48	49
Cairo	7·8	7·3	61·9	98·2	25·1	27·9	·78	1·6	—	—
Alexandria	41·5	26·5	175·3	148·9	25·3	30·8	—	—	—	—
Ismailia	·894	2·6	25·0	18·3	42·9	45·3	1·8	—	—	—
Port Said	20·1	9·0	245·4	256·1	57·5	55·0	—	—	—	—
Damietta	—	—	64·6	7·0	105·9	·7	—	—	—	—
Suez	50·8	50·4	160·4	118·2	77·5	20·0	29·4	7·0	—	—
Frontier Districts	35·8	45·2	54·9	31·0	13·3	10·2	—	1·1	—	—
Behera... ..	·234	·8	9·7	12·8	53·1	2·3	·078	—	—	—
Dakahlia	·344	·6	6·5	12·6	14·4	·72	·482	·4	·069	—
Gharbia	·542	3·1	6·0	15·4	9·3	23·4	·042	24·4	·062	·04
Menoufia..... ..	1·4	1·1	7·9	11·4	3·8	7·1	·5	3·0	—	—
Kaliubia	·981	1·1	24·2	31·8	149·7	31·8	·561	2·2	—	—
Sharkia	4·2	2·5	3·9	4·2	35·5	8·0	—	1·2	—	—
Aswan	5·7	4·6	7·7	18·0	9·7	1·3	1·0	4·6	—	—
Assiut	5·6	3·7	8·9	9·6	7·1	2·2	—	—	—	—
Beai Suef	·795	1·7	8·1	9·3	4·1	7·8	·159	·9	—	—
Fayoum	2·6	6·4	4·5	3·3	17·4	11·7	202·8	87·3	—	—
Gerga	·678	·4	3·4	5·3	·151	·5	—	—	—	—
Giza	2·3	1·7	22·3	27·2	11·9	27·8	—	—	—	—
Minia	9·5	9·6	8·7	12·6	11·7	2·6	—	·73	—	—
Qena	15·4	13·3	6·8	9·6	·618	1·1	·177	2·2	—	—
TOTAL	6·4	5·7	26·3	31·7	22·7	14·1	7·6	7·6	·01	·005

RATES PER 100,000 POPULATION 1948 AND 1949 (contd.)

Whooping cough		Parotitis		Undulant fever		Leprosy		Tetanus		Acute Poliomyelitis		Erysipelas		TOTAL	
48	49	48	49	48	49	48	49	48	49	48	49	48	49	48	49
4.7	15.1	13.6	49.5	.826	1.4	.229	.5	3.3	2.9	—	.05	14.1	14.0	—	847.3
9.0	15.2	62.7	40.4	—	.2	.42	1.9	4.6	5.5	.315	.9	61.2	52.7	—	1295.8
—	—	.894	2.6	—	—	—	—	5.4	7.8	—	—	5.4	1.7	—	152.4
—	4.8	6.5	24.3	—	.5	1.1	.5	4.9	9.6	—	1.0	37.5	39.7	—	1177.2
—	1.7	3.6	1.7	—	—	—	2.4	3.6	1.7	—	—	5.4	13.9	—	264.8
4.5	2.6	16.0	20.9	—	.8	—	1.7	1.8	3.4	—	—	3.6	12.3	—	786.3
26.0	5.6	3.4	137.7	—	—	—	.6	—	—	—	—	1.2	4.0	—	390.5
.703	.8	1.3	1.8	—	—	.313	1.3	3.5	2.8	—	—	3.0	3.3	—	99.6
5.6	8.5	.618	.5	—	.07	1.7	1.0	1.5	1.6	—	—	5.2	5.2	—	111.4
2.1	1.7	2.3	5.1	.069	.2	.333	.4	1.6	2.2	.125	.04	4.4	5.3	—	141.3
4.8	2.5	2.1	12.4	.042	.2	1.4	2.5	2.2	2.0	—	—	5.7	6.0	—	117.0
2.5	1.0	1.3	27.5	—	.4	1.7	6.9	2.5	1.5	—	—	4.5	7.1	—	185.3
.446	2.5	8.3	2.5	—	—	1.4	1.0	2.1	1.0	—	—	2.2	2.7	—	91.3
.336	—	27.6	10.8	—	—	.336	.3	1.7	—	—	—	.336	3.3	—	89.3
.099	1.4	.142	4.5	—	—	.497	.6	2.1	1.7	—	—	1.3	1.3	—	100.2
.477	3.4	.318	.2	—	—	.318	.2	.795	.8	—	—	.795	1.1	—	78.7
13.9	57.2	.435	3.0	.290	.1	.291	.4	1.3	.6	—	—	1.0	3.4	—	235.0
3.0	2.4	.226	.3	—	—	1.2	1.2	.679	.9	—	—	.453	.6	—	56.1
6.8	11.0	3.9	14.8	.569	3.5	1.1	.78	1.7	1.8	—	—	2.8	2.0	—	263.5
.930	5.0	9.2	.64	.093	—	.651	9.8	2.5	2.6	—	—	1.8	3.4	—	122.1
7.6	.03	1.9	2.7	—	—	.618	1.4	.177	1.1	—	—	.706	.9	—	68.9
3.9	6.9	7.1	1.32	.143	.4	.762	1.0	2.1	2.1	.031	0.7	7.2	7.3	—	275.4

TABLE No. 16.—INFECTIOUS DISEASES

Localities	Plague		Typhus		Small Pox		Relapsing fever		Typhoid fever	
	48	49	48	49	48	49	48	49	48	49
Cairo	—	—	1	2	—	—	—	—	310	35
Alexandria	—	—	3	5	—	—	—	—	155	9
Ismailia	—	—	—	—	—	—	—	—	6	—
Port Said	—	—	—	—	—	—	—	—	34	2
Damietta	—	—	—	—	—	—	—	—	14	—
Suez... ..	—	—	—	—	1	—	—	—	13	2
Frontier Districts	—	—	—	—	—	—	—	—	4	—
Behera	—	—	35	9	—	—	—	—	26	3
Dakahlia	—	—	9	20	—	—	—	—	20	1
Gharbia	—	—	7	1	—	—	—	—	32	4
Menoufia	—	—	1	5	—	—	—	—	19	2
Kaliubia... ..	—	—	5	—	—	—	—	—	17	2
Sharkia	—	—	5	3	—	—	—	—	11	2
Aswan	—	—	—	—	—	—	—	—	3	—
Assiut	—	—	—	—	1	—	—	—	21	16
Beni-Suef	—	—	2	—	—	—	—	—	8	—
Fayoum	—	—	—	—	—	—	—	—	7	—
Gerga	—	—	—	—	—	—	—	—	6	20
Giza	—	—	3	7	—	—	—	—	83	72
Minia	—	—	—	—	1	1	—	—	12	8
Qena	—	—	—	1	1	—	—	—	13	13
TOTAL	—	—	71	53	4	1	—	—	814	814

DEATHS 1948—1949

Scarlet fever		C.S.M.		Diphtheria		Measles		Pulmonary T.B.		Acute Pneumonia		Chicken pox		Puerperal fever	
48	49	48	49	48	49	48	49	48	49	48	49	48	49	48	49
—	—	7	30	188	151	1,250	771	1,480	1,455	1,734	1,736	—	1	31	19
—	—	7	4	50	53	47	513	627	614	859	1,697	—	3	9	8
—	—	—	—	—	3	39	14	42	44	83	205	—	—	3	—
—	—	9	3	10	19	187	16	129	131	66	45	—	—	2	—
—	—	—	—	4	3	—	1	20	22	4	4	—	—	—	—
—	—	—	—	21	19	2	3	21	31	25	31	—	—	—	—
—	—	2	—	—	2	58	33	2	10	4	4	—	—	—	1
—	—	—	—	22	14	23	86	140	165	25	44	—	—	4	4
—	—	4	—	32	19	145	105	173	152	41	43	—	—	2	5
—	—	3	4	51	80	34	76	197	203	99	247	—	—	3	4
—	1	1	—	55	38	31	56	77	97	48	53	—	1	5	3
—	—	—	—	33	27	57	14	70	96	60	62	1	—	2	1
—	—	3	3	27	22	127	77	96	97	82	104	—	—	3	2
—	—	—	—	16	16	1	5	38	42	34	58	—	—	2	1
—	—	—	—	27	24	95	227	72	128	34	76	—	—	6	9
—	—	—	1	11	8	12	39	37	68	88	171	—	—	4	2
—	—	—	1	7	10	21	29	80	100	24	14	—	—	3	3
—	—	—	—	18	12	8	248	86	44	33	49	—	—	—	1
—	—	1	11	51	37	142	128	209	159	121	110	—	—	—	3
—	—	—	—	13	30	42	68	87	81	86	44	—	1	2	2
—	—	—	—	23	16	87	94	85	46	71	101	—	—	3	3
—	1	37	57	659	603	2,408	2,603	3,718	3,812	3,561	4,898	1	6	94	71

TABLE NO. 16. — INFECTIOUS DISEASES

Localities	Dysentery		Influenza		Malaria New-Cases		Malaria Recurrent		Anthrax	
	48	49	48	49	48	49	48	49	48	49
Cairo	103	66	2	14	4	3	—	—	—	1
Alexandria	51	48	1	—	1	1	—	—	—	—
Ismailia	4	4	—	1	—	1	—	—	—	—
Port Said	5	4	1	1	—	1	—	—	—	—
Damietta	—	1	1	—	1	—	—	—	—	—
Suez... ..	1	—	1	—	—	1	—	—	—	—
Frontier Districts... ..	—	—	2	—	—	—	—	—	—	—
Behera	7	10	4	13	—	—	—	—	—	—
Dakahlia	5	6	—	6	—	1	—	—	—	—
Gharbia	7	19	3	7	3	3	—	—	—	—
Menoufia	4	4	1	5	1	—	—	—	—	—
Kaliubia	6	3	3	2	—	1	—	—	—	—
Sharkia	6	10	1	—	4	1	—	—	—	—
Aswan	1	4	0	8	2	—	—	—	—	—
Assiut	15	10	3	2	—	—	—	—	—	—
Beni Suef	1	1	1	13	1	—	—	—	—	—
Fayoum	2	1	—	—	1	—	—	—	—	—
Gerga	1	6	1	—	1	—	—	—	—	—
Giza	4	3	4	3	—	3	—	—	—	—
Minia	2	5	3	8	—	—	—	—	—	—
Qena	3	3	6	3	3	1	—	—	—	—
TOTAL	228	208	308	86	23	17	—	—	—	1

DEATHS 1948 — 1949 (*contd.*)

Whooping Cough		Parotitis		Undulant fever		Leprosy		Tetanus		Poliomyelitis		Erysipelas		TOTAL	
48	49	48	49	48	49	48	49	48	49	48	49	48	49	48	49
8	19	2	3	1	—	8	7	32	25	1	—	20	17	5,182	4,678
4	7	1	—	—	—	—	—	24	2	2	2	7	10	1,848	3,116
—	1	1	—	—	—	—	—	3	8	1	—	1	—	183	287
—	3	—	—	—	—	—	—	3	3	—	2	4	2	450	253
—	—	—	—	—	—	—	—	2	3	—	—	—	1	47	38
—	—	—	—	—	—	—	—	1	1	1	—	1	0	88	108
3	—	—	—	—	—	—	—	—	—	—	—	1	1	76	54
1	4	—	—	—	—	4	1	32	32	—	—	5	2	327	420
4	11	—	2	—	—	4	2	14	16	—	—	6	1	459	405
—	3	1	—	1	—	5	1	40	43	3	1	3	6	489	734
1	—	—	1	—	—	1	9	26	14	—	1	4	6	283	314
—	—	—	—	—	1	2	6	14	10	—	—	6	1	278	245
2	4	—	—	—	—	—	—	24	15	—	—	2	2	394	363
1	—	—	—	—	—	2	1	3	0	—	1	—	—	102	138
2	2	—	—	—	—	8	4	19	14	—	—	7	4	314	516
—	4	—	—	—	—	1	1	9	4	—	—	—	—	175	315
—	7	1	—	—	—	—	3	13	3	—	—	3	4	162	183
—	—	—	1	—	—	5	2	4	13	—	—	1	1	119	397
—	9	—	—	2	3	1	17	22	16	—	1	1	2	152	585
—	—	—	—	2	—	5	9	21	17	—	—	2	4	216	277
1	—	2	—	—	—	5	6	4	7	—	1	1	0	306	295
27	74	8	7	6	4	51	69	309	272	8	9	75	64	12,150	13,730

TABLE NO. 17. —INFECTIOUS DISEASES DEATH

Localities	Plague		Typhus		Small Pox		Relapsing fever		Typhoid fever	
	48	49	48	49	48	49	48	49	48	49
Cairo	—	—	·047	·1	—	—	—	—	14·5	16·4
Alexandria	—	—	·315	·5	—	—	—	—	16·5	9·9
Ismailia	—	—	—	—	—	—	—	—	·536	5·2
Port Said	—	—	—	—	—	—	—	—	18·5	12·2
Damietta	—	—	—	—	—	—	—	—	25·3	5·2
Suez	—	—	—	—	·891	—	—	—	11·6	19·1
Frontier Districts	—	—	—	—	—	—	—	—	2·3	1·7
Behera... ..	—	—	2·7	·7	—	—	—	—	2·0	2·8
Dakahlia	—	—	·618	·13	—	—	—	—	1·4	1·1
Gharbia	—	—	·292	0·4	—	—	—	—	1·3	1·8
Meroufia	—	—	·083	—	—	—	—	—	1·6	1·6
Kaliubia	—	—	·701	—	—	—	—	—	2·4	2·9
Sharkia	—	—	·371	·2	—	—	—	—	·817	1·7
Aswan	—	—	—	—	—	—	—	—	1·0	·7
Assiut	—	—	—	—	·071	—	—	—	1·5	1·1
Beni Suef	—	—	·318	—	—	—	—	—	1·3	·5
Fayoum	—	—	—	—	—	—	—	—	1·0	1·1
Gerga	—	—	—	—	—	—	—	—	·453	1·5
Giza	—	—	·341	·8	—	·1	—	—	9·4	8·0
Minia	—	—	—	—	·093	—	—	—	1·1	·7
Qena	—	—	—	·09	·088	—	—	—	1·1	1·1
TOTAL	—	—	·363	·3	·02	·005	—	—	4·1	4·1

RATES PER 100,000 POPULATION 1948—1949

Scarlet fever		C.S.M.		Diphtheria		Measles		Pulmonary T.B.		Acute Pneumonia		Chicken Pox		Puerperal fever	
48	49	48	49	48	49	48	49	48	49	48	49	48	49	48	49
—	—	·328	1·4	8·8	6·9	58·6	35·4	69·4	66·8	81·2	79·7	—	·05	1·5	·87
—	—	·734	·4	5·2	5·4	4·9	52·4	65·8	62·7	90·1	173·4	—	·3	·944	·8
—	—	—	—	—	2·6	3·5	12·2	3·8	38·3	7·4	178·6	—	—	·268	—
—	—	4·8	1·6	5·0	10·0	101·5	8·5	70·0	69·3	35·8	23·8	—	—	1·1	—
—	—	—	—	·718	5·2	—	1·7	3·6	38·3	18·8	7·0	—	—	—	—
—	—	—	—	18·7	16·5	1·8	2·6	18·7	26·9	22·3	26·9	—	—	—	—
—	—	1·2	—	—	1·1	33·5	18·6	1·2	5·6	2·3	2·2	—	—	—	·6
—	—	—	—	1·7	1·1	1·8	6·6	10·9	12·6	2·0	3·4	—	—	·313	·3
—	—	·275	—	2·2	1·3	10·0	7·1	11·9	10·2	2·8	2·9	—	—	·137	·3
—	—	·125	·16	2·1	3·3	1·4	3·1	8·2	8·3	4·1	10·1	—	—	·125	·16
—	·08	—	—	·083	3·1	4·6	4·6	2·6	8·0	6·4	4·4	—	·08	·417	·2
—	—	—	—	4·6	3·7	8·0	1·9	9·8	13·2	8·4	8·5	14·0	—	·280	·14
—	—	·223	·2	2·0	1·6	9·4	5·6	7·1	7·1	6·1	7·6	—	—	·223	·15
—	—	—	—	5·4	5·2	·336	1·6	12·8	13·8	11·4	19·0	—	—	·716	·4
—	—	—	—	1·9	1·7	6·7	15·8	5·1	8·9	2·4	5·3	—	—	·426	·6
—	—	—	·2	1·7	1·2	1·9	6·1	5·9	10·6	14·0	26·6	—	—	·636	·4
—	—	—	·14	1·0	1·4	3·0	4·1	1·2	14·3	3·5	2·0	—	—	·435	·4
—	—	—	—	1·4	·9	·603	18·4	3·7	3·3	2·5	3·6	—	—	·377	·07
—	—	·114	1·2	5·8	4·1	16·1	14·2	23·8	17·7	13·8	12·2	—	—	·568	·03
—	—	—	—	1·2	2·7	3·9	6·2	8·1	7·4	2·4	4·0	—	·09	·186	·2
—	—	—	—	2·0	1·4	7·7	8·2	7·5	4·0	6·3	8·8	—	—	·265	·3
—	·005	·189	3	3·4	3·0	12·3	13 0	19·0	19·1	8·2	24·6	·005	·03	·481	·4

TABLE NO. 17.—INFECTIOUS DISEASES DEATH

Localities	Dysentery		Influenza		Malaria New		Malaria Recurrent		Anthrax	
	48	49	48	49	48	49	48	49	48	49
Cairo	4·8	3·0	·094	·06	·188	·1	—	—	—	·06
Alexandria	5·3	4·9	·105	—	·105	·1	—	—	—	—
Ismailia	·357	3·5	—	·9	—	·9	—	—	—	—
Port Said	2·7	2·1	·543	·5	—	·5	—	—	—	—
Damietta	—	1·7	1·8	—	1·8	—	—	—	—	—
Suez... ..	·891	—	·891	—	—	·9	—	—	—	—
Frontier Districts... ..	—	—	1·2	—	—	—	—	—	—	—
Behera	·546	·8	·313	1·0	—	—	—	—	—	—
Dakahlia	·344	·4	—	·4	—	·07	—	—	—	—
Gharbia	·292	·8	·125	·2	·125	·1	—	—	—	—
Menoufia... ..	·334	·3	·083	·4	—	—	—	—	—	—
Kaliubia	·841	·4	·421	·3	·140	·14	—	—	—	—
Sharkia	·420	·7	·074	—	·297	·07	—	—	—	—
Aswan	·336	1·3	—	2·6	·672	—	—	—	—	—
Assiut	1·1	·7	·213	·1	—	—	—	—	—	—
Bien Suef	·159	·2	·155	2·0	·159	—	—	—	—	—
Fayoum	·290	·14	—	—	·145	—	—	—	—	—
Gerga	·075	·4	·075	—	·75	—	—	—	—	—
Giza	·455	·03	·455	·03	—	·03	—	—	—	—
Minia	·186	·5	·279	·7	—	—	—	—	—	—
Qena	·265	·3	·53	·4	·265	·09	—	—	—	—
TOTAL	1·2	1·0	·194	·4	·118	·09	—	—	—	·005

RATES PER 100,000 POPULATION 1948—1949 (*contd.*)

Whooping C.		Parotitis		Undulant fever		Leprosy		Tetanus		Acute Poliomyelitis		Erysipelas		TOTAL	
48	49	48	49	48	49	48	49	48	49	48	49	48	49	48	49
·376	·05	·094	·9	·047	—	·376	·3	6.2	1.1	·047	—	·094	·8	—	214.7
·420	·7	·105	—	—	—	—	—	2.5	·2	·21	·2	·734	1.0	—	318.4
—	·9	·894	—	—	—	—	—	2.7	2.6	·894	—	·894	—	—	250.0
—	—	—	—	—	—	—	—	1.6	1.6	—	1.0	2.2	1.0	—	133.9
—	—	—	—	—	—	—	—	1.8	5.2	3.6	—	—	1.7	—	662.0
—	—	—	—	—	—	—	—	·891	·9	·891	—	·891	—	—	93.8
1.7	—	—	—	—	—	—	—	—	—	—	—	·578	·6	—	30.5
·161	·3	—	—	—	—	·234	·08	2.5	2.4	—	—	·391	·2	—	32.1
·275	·7	—	·1	—	—	·275	·1	·962	1.1	—	—	·412	·07	—	27.2
—	·1	·041	—	—	—	·125	·04	1.7	1.8	·125	·04	·125	·2	—	30.3
·083	—	—	·08	·083	—	·667	·7	2.2	1.1	—	·08	·334	·4	—	25.8
—	—	—	—	—	·14	·421	·8	2.0	1.4	—	—	·842	·14	—	33.7
·148	·3	—	—	—	—	·42	—	1.8	1.1	—	—	·148	·15	—	26.5
·336	—	—	—	—	—	·336	·4	1.0	—	—	—	—	—	—	45.2
·142	·1	—	—	—	—	·802	·2	1.3	·1	—	—	·497	·2	—	36.1
—	·8	—	—	—	—	·159	·2	1.4	·4	—	—	—	—	—	49.1
—	1.0	·145	—	—	—	·145	·4	1.7	·4	—	—	·435	·14	—	56.8
—	—	—	07	—	—	·377	·01	·302	·1	—	—	·075	·07	—	29.5
—	·06	—	—	·227	·03	·455	1.9	2.5	1.8	—	·1	·114	·2	—	65.3
—	—	—	—	·186	—	·279	·8	2.0	1.5	—	—	·186	·4	—	25.2
·088	—	·171	—	—	—	·265	·6	·353	·6	—	·09	·088	—	—	25.6
·138	·4	·041	·04	·031	·02	·311	·3	1.61	1.4	·141	·05	·383	·3	62.1	68.8

TYPHUS

TABLE NO. 18. — QUARTERLY CASES AND DEATHS IN EGYPT AND CASE RATES
PER 100,000 POPULATION 1949

Localities	First quarter		Second quarter		Third quarter		Fourth quarter		TOTAL		Case rates per 100,000 Pop.
	C	D	C	D	C	D	C	D	C	D	
Cairo	4	2	8	—	1	—	1	—	14	2	0·6
Alexandria	4	3	5	2	1	—	1	—	11	5	1·1
Ismailia	—	—	—	—	—	—	—	—	—	—	—
Port-Said	—	—	—	—	—	—	—	—	—	—	—
Damietta	—	—	—	—	—	—	—	—	—	—	—
Suez... ..	2	—	—	—	—	—	—	—	2	—	1·7
Frontier Districts...	—	—	—	—	—	—	—	—	—	—	—
TOTAL Governorates	10	5	13	2	2	—	2	—	27	7	0·7
Behera	10	7	3	2	—	—	—	—	13	9	1·0
Dakahlia	40	7	35	13	—	—	—	—	75	20	5·0
Gharbia	—	—	6	1	1	—	—	—	7	1	·28
Menoufia	12	3	1	1	—	—	3	1	16	5	1·3
Kaliubia	—	—	—	—	—	—	—	—	—	—	—
Sharkia	3	1	—	—	—	2	—	—	3	3	0·22
TOTAL Lower Egypt	65	18	45	17	1	2	3	1	114	38	1·3
Aswan	—	—	—	—	—	—	—	—	—	—	—
Assiut	—	—	—	—	—	—	—	—	—	—	—
Beni Suef	—	—	—	—	—	—	—	—	—	—	—
Fayoum	—	—	—	—	—	—	—	—	—	—	—
Gerga	1	—	—	—	—	—	—	—	1	—	·07
Giza... ..	25	2	11	5	—	—	—	—	36	7	4·0
Minia	—	—	—	—	—	—	—	—	—	—	—
Qena	2	—	—	1	—	—	—	—	2	1	17
TOTAL Upper Egypt	28	2	11	6	—	—	—	—	39	8	2·4
GRAND TOTAL...	103	25	69	24	3	3	5	1	180	53	0·9

TYPHOID FEVER

TABLE NO. 19.—QUARTERLY CASES AND DEATHS IN EGYPT AND CASE RATES PER 100,000
POPULATION 1949.

Localities	First quarter		Second quarter		Third quarter		Fourth quarter		TOTAL		Case rate Per 100000 Pop.
	C	D	C	D	C	D	C	D	C	D	
Cairo	243	27	759	67	1869	180	1220	84	4,091	358	187.9
Alexandria	81	16	192	25	261	35	209	20	743	96	75.9
Ismailia	—	—	8	3	21	3	4	—	33	6	28.7
Port Said	50	2	151	8	306	7	164	6	671	23	355.0
Damietta	2	—	2	1	11	2	8	—	23	3	40.1
Suez... ..	14	1	22	3	62	13	34	5	132	22	114.7
Frontier Districts	7	—	4	—	15	3	10	—	36	3	20.3
TOTAL Governorates	390	46	1134	107	2530	240	1639	115	5,693	508	15.7
Behera	35	9	40	10	58	10	40	7	173	36	13.2
Dakahlia	9	1	24	6	35	5	35	4	103	16	6.9
Gharbia	10	3	40	9	93	26	63	7	206	45	7.4
Menoufia	9	4	17	6	23	4	28	6	77	20	6.3
Kaliubia	10	2	34	2	51	12	32	5	127	21	17.5
Sharkia	6	2	23	5	35	9	29	7	93	23	6.9
TOTAL Lower Egypt	79	21	178	38	295	66	227	36	779	161	9.1
Aswan	—	—	3	—	2	2	1	—	6	2	2.0
Assiut	10	8	9	2	32	3	26	3	77	16	5.4
Beni Suef	3	—	4	2	6	1	2	—	15	3	2.3
Fayoum	10	3	18	4	30	1	13	—	71	8	10.1
Gerga	6	1	13	6	23	8	19	5	61	20	4.5
Giza	38	2	57	14	108	41	81	15	284	72	31.7
Minia	5	1	7	1	28	3	16	3	56	8	5.1
Qena	6	4	7	3	8	4	11	2	32	13	2.8
TOTAL Upper Egypt	78	19	118	32	237	63	169	28	602	142	8.0
GRAND TOTAL ...	554	86	1434	177	3077	372	2045	179	7,110	814	35.6

CEREBRO SPINAL FEVER

**TABLE No. 20 — QUARTERLY CASES AND DEATHS IN EGYPT AND CASE RATES
PER 100,000 POPULATION, 1949**

Localities	First quarter		Second quarter		Third quarter		Fourth quarter		TOTAL		Case rate per 100,000 Pop.
	C	D	C	D	C	D	C	D	C	D	
Cairo	24	11	43	5	24	7	42	7	133	30	6.1
Alexandria	1	—	2	2	2	1	4	1	9	4	0.09
Ismailia	—	—	—	—	—	—	—	—	—	—	—
Port Said	7	1	21	1	2	—	1	1	31	3	16.4
Damietta	—	—	—	—	—	—	—	—	—	—	—
Suez	—	—	1	—	—	—	—	—	1	—	0.8
Frontier Districts	—	—	—	—	—	—	—	—	—	—	—
TOTAL Governorates	32	12	57	8	28	8	47	9	174	37	4.8
Behera	—	—	—	—	—	—	—	—	—	—	—
Dakahlia	—	—	2	—	—	—	—	—	2	—	0.13
Gharbia	1	—	2	—	3	2	4	2	10	4	0.4
Menoufia	—	—	—	—	—	—	1	—	1	—	0.08
Kaliubia	—	—	—	—	—	—	—	—	—	—	—
Sharkia	1	1	5	1	1	1	—	—	7	3	.51
TOTAL Lower Egypt	2	1	9	1	4	3	5	2	20	7	0.2
Aswan	—	—	—	—	—	—	—	—	—	—	—
Assiut	—	—	1	—	—	—	2	—	3	—	0.21
Beni Suef	—	—	—	—	—	1	—	—	—	1	—
Fayoum	—	1	—	—	—	—	—	—	—	1	—
Gerga	—	—	—	—	—	—	—	—	—	—	—
Giza	—	1	5	2	1	4	—	4	6	11	6.7
Minia	—	—	1	—	—	—	—	—	1	—	0.09
Qena	1	—	—	—	—	—	—	—	1	—	0.08
TOTAL Upper Egypt	1	1	7	2	1	5	2	4	11	13	0.1
GRAND TOTAL ...	35	15	83	11	33	16	54	15	205	57	1.0

DIPHTHERIA

**TABLE NO. 21.—QUARTERLY CASES AND DEATHS IN EGYPT AND CASE-RATES
PER 100,000 OF POPULATION, 1949**

Localities	First quarter		Second quarter		Third quarter		Fourth quarter		TOTAL		Case rate per 100,000 pop.
	C	D	C	D	C	D	C	D	C	D	
Cairo	247	50	180	25	207	41	175	35	809	151	37.1
Alexandria	23	12	36	5	43	12	49	24	191	53	19.5
Ismailia	—	—	3	1	3	2	2	—	8	3	7.0
Port Said	21	5	19	3	18	6	25	5	83	19	44.4
Damietta	8	—	—	1	—	—	3	2	11	3	19.2
Suez	6	2	17	4	20	6	19	7	62	19	53.9
Frontier Districts ...	—	—	1	1	1	—	4	1	6	2	3.4
TOTAL Governorates	315	69	255	39	291	67	303	73	1,164	248	32.0
Behera	3	4	3	2	7	6	3	2	16	14	1.2
Dakahlia	5	2	6	5	17	7	21	5	49	19	3.3
Gharbia... ..	7	7	23	8	33	27	67	38	130	80	5.3
Menoufia	13	4	2	2	18	20	13	12	46	38	3.8
Kaliubia	5	9	9	3	8	6	21	9	43	27	5.9
Sharkia	5	5	20	2	9	11	10	4	44	22	3.2
TOTAL Lower Egypt	38	31	63	22	92	77	135	70	328	200	3.8
Aswan	4	3	3	5	6	4	4	4	17	16	5.6
Assiut	4	1	12	8	15	7	11	8	42	24	2.9
Beni Suef	—	2	—	—	1	1	3	5	4	8	0.6
Fayoum	1	—	3	—	2	3	7	7	13	10	1.9
Gerga	—	1	1	—	5	5	3	6	9	12	.67
Giza	15	7	6	4	16	17	18	9	55	37	6.1
Minia	1	1	6	6	11	11	11	12	29	30	2.6
Qena	2	3	7	6	3	3	4	4	16	16	1.4
TOTAL Upper Egypt	27	18	38	29	59	51	61	55	185	153	2.4
GRAND TOTAL ...	380	118	357	91	443	195	503	119	1,683	603	8.4

MEASLES

TABLE NO. 22.—QUARTERLY CASES AND DEATHS IN EGYPT
AND CASE RATES PER 100,000 POPULATION, 1949

Localities	First quarter		Second quarter		Third quarter		Fourth quarter		TOTAL		Case rate per 100,000 pop.
	C	D	C	D	C	D	C	D	C	D	
Cairo	646	157	997	484	160	127	12	3	1,815	771	83.3
Alexandria	2,088	217	1,295	247	216	48	32	1	3,631	531	37.1
Ismailia	—	—	—	11	1	3	—	—	1	14	.9
Port Said	10	1	37	6	24	9	—	—	71	16	37.6
Damietta	21	1	1	—	—	—	—	—	22	1	38.4
Suez	27	2	34	1	3	—	—	—	64	3	55.7
Frontier Districts	74	19	77	13	1	—	1	1	153	33	86.3
TOTAL Governorates	2,792	378	2,364	749	404	187	44	4	5,604	1,318	154.2
Behera	156	23	256	42	100	21	5	—	517	86	39.5
Dakahlia	234	42	266	43	33	20	1	—	534	105	35.9
Gharbia	96	9	302	65	111	2	2	—	511	76	20.8
Menoufia	251	19	201	22	24	15	14	—	490	56	40.2
Kaliubia	42	4	109	4	11	6	6	—	168	14	23.1
Sharkia	157	10	311	45	63	22	—	—	531	77	38.7
TOTAL Lower Egypt	936	107	1,445	221	342	86	28	—	2,751	414	32.1
Aswan	6	4	—	—	—	1	—	—	6	5	2.0
Assiut	121	52	374	129	141	43	3	3	639	227	44.6
Beni Suef	—	3	146	35	13	1	5	—	164	39	25.6
Fayoum	44	10	62	10	20	8	8	1	134	29	19.2
Gerga	43	7	274	214	61	15	18	12	396	248	29.4
Giza	203	26	506	94	84	7	10	1	803	128	89.6
Minia	120	7	292	38	77	20	7	3	497	68	45.2
Qena	61	28	45	50	1	1	58	15	165	94	14.3
TOTAL Upper Egypt	598	137	1,699	570	397	96	109	35	2,803	838	37.0
GRAND TOTAL ...	4,400	641	5,585	1,553	1,144	369	182	40	11,311	2,603	56.7

INFLUENZA

TABLE NO. 23.— QUARTERLY CASES AND DEATHS IN EGYPT AND CASE-RATES
PER 100,000 POPULATION, 1949

Localities	First quarter		Second quarter		Third quarter		Fourth quarter		TOTAL		Case rate per 100,000 pop.
	C	D	C	D	C	D	C	D	C	D	
Cairo	302	9	685	5	767	—	385	—	2,139	14	98·2
Alexandria	202	—	438	—	481	—	336	—	1,457	—	148·9
Ismailia	3	1	6	—	10	—	2	—	21	—	18·3
Port Said	92	1	147	—	153	—	92	—	484	1	256·1
Damietta	7	—	13	—	14	—	6	—	40	—	7·0
Suez... ..	39	—	48	—	33	—	16	—	136	—	118·2
Frontier Districts ...	35	—	13	—	4	—	3	—	55	—	31·0
TOTAL Governorates	645	11	1337	5	1458	—	837	—	4,277	16	117·7
Behera	70	7	50	3	25	2	23	1	168	13	12·8
Dakahlia	25	1	72	3	61	1	29	1	187	6	12·6
Gharbia	84	3	111	4	116	—	67	—	378	7	15·4
Menoufia	24	1	70	3	27	—	18	1	139	5	11·4
Kaliubia	19	—	73	—	90	2	49	—	231	2	31·8
Sharkia	9	—	17	—	19	—	12	—	57	—	4·2
TOTAL Lower Egypt	231	23	393	13	338	5	198	3	1160	33	13·5
Aswan	15	4	14	3	11	—	15	1	55	8	18·0
Assint	14	—	40	2	39	—	44	—	137	2	9·6
Beni Suef	10	4	19	4	25	5	6	—	60	13	9·3
Fayoum	1	—	4	—	12	—	6	—	23	—	3·3
Gerga	5	—	33	—	17	—	16	—	71	—	5·3
Giza... ..	43	1	95	1	60	1	46	—	244	3	27·2
Minia	19	1	36	3	54	3	29	1	138	8	12·6
Qena	25	—	3	—	39	2	16	1	110	3	9·6
TOTAL Upper Egypt	132	10	271	13	257	11	178	3	838	37	11·1
GRAND TOTAL ...	1,043	33	2,014	31	2,057	16	1,216	6	6,330	86	31·7

WHOOPIING COUGH

**TABLE No. 24.— QUARTERLY CASES AND DEATHS IN EGYPT AND CASE
RATES PER 100,000 OF POPULATION, 1949**

Localities	First quarter		Second quarter		Third quarter		Fourth quarter		TOTAL		Case rate per 100,000 pop.
	C	D	C	D	C	D	C	D	C	D	
Cairo	146	7	136	10	29	2	17	—	328	19	15·1
Alexandria	36	1	34	2	47	2	32	2	149	7	15·2
Ismailia	—	—	—	1	—	—	—	—	—	1	—
Port-Said	1	—	2	1	3	2	3	—	9	3	4·8
Damietta	—	—	1	—	—	—	—	—	1	—	1·7
Suez... ..	—	—	2	—	—	—	1	—	3	—	2·6
Frontier Districts ...	—	—	10	—	—	—	—	—	10	—	5·6
TOTAL Governorates	183	8	175	14	79	6	53	2	490	30	13·5
Behera	3	1	3	2	3	1	10	—	10	4	0·8
Dakahlia	37	5	34	1	35	2	20	3	126	11	8·5
Gharbia	10	1	25	2	4	—	3	—	42	3	1·7
Menoufia	15	—	15	—	1	—	—	—	31	—	2·5
Kaliubia	—	—	6	—	2	—	1	—	9	—	1·0
Sharkia... ..	17	2	13	1	3	1	2	—	35	4	2·5
TOTAL Lower Egypt	82	9	96	6	48	4	36	3	253	22	4·0
Aswan	—	—	—	—	—	—	—	—	—	—	—
Assiut	2	—	14	—	1	—	3	2	20	2	1·4
Beni Suef	11	2	5	2	6	—	—	—	22	4	3·4
Fayoum	136	1	234	5	30	1	—	—	400	7	57·2
Gerga	1	—	25	—	3	—	3	—	32	—	2·4
Giza	17	5	34	2	13	1	35	1	99	9	11·0
Minia	18	—	36	—	1	—	—	—	55	—	5·0
Qena	1	—	—	—	1	—	2	—	4	—	0·03
TOTAL Upper Egypt	186	8	348	9	55	2	43	3	632	22	8·3
GRAND TOTAL ...	451	25	629	29	182	12	123	8	1385	74	6·9

PAROTITIS (MUMPS)

TABLE No. 25.— QUARTERLY CASES AND DEATHS IN EGYPT AND CASE-RATES
PER 100,000 POPULATION, 1949.

Localities	First Quarter		Second Quarter		Third Quarter		Fourth Quarter		TOTAL		Case rate per 100,000 pop.
	C	D	C	D	C	D	C	D	C	D	
Cairo	455	—	478	1	89	1	57	1	1,079	3	49·5
Alexandria	135	—	160	—	48	—	52	—	395	—	40·4
Ismailia	1	—	1	—	—	—	1	—	3	—	2·6
Port Said	1	—	6	—	12	—	27	—	46	—	24·3
Damietta	—	—	—	—	1	—	—	—	1	—	1·7
Suez... ..	17	—	6	—	1	—	—	—	24	—	20·9
Frontier Districts ...	—	—	9	—	10	—	225	—	244	—	137·7
TOTAL Governorates	609	—	651	1	151	1	137	1	1,548	3	42·6
Behera	9	—	11	—	3	—	1	—	24	—	1·8
Dakahlia	4	1	2	1	1	—	—	—	7	2	0·5
Gharbia	54	—	58	—	8	—	6	—	126	—	5·1
Menoufia	126	—	16	—	7	1	2	—	151	1	12·4
Kaliubia	101	—	79	—	15	—	5	—	200	—	27·5
Sharkia	12	—	15	—	3	—	4	—	34	—	2·5
TOTAL Lower Egypt	306	1	181	1	37	1	18	—	542	3	6·3
Aswan	27	—	5	—	—	—	1	—	33	—	10·8
Assiut	—	—	6	—	2	—	56	—	64	—	4·5
Beni Suef	—	—	—	—	1	—	—	—	1	—	0·2
Fayoum	1	—	5	—	12	—	3	—	21	—	3·0
Gerga	2	—	1	—	1	1	—	—	4	1	0·3
Giza... ..	81	—	44	—	6	—	2	—	133	—	14·8
Minia	1	—	3	—	1	—	2	—	7	—	0·64
Qena	25	—	4	—	1	—	1	—	31	—	2·7
TOTAL Upper Egypt	137	—	68	—	24	1	65	—	294	1	3·9
GRAND TOTAL ...	1,052	1	909	2	222	3	445	1	2,628	7	13·2

DYSENTERY

TABLE NO. 26.—QUARTERLY CASES AND DEATHS
IN EGYPT AND CASE-RATES PER 100,000 POPULATION, 1949.

Localities	First quarter		Second quarter		Third quarter		Fourth quarter		TOTAL		Case rate per 100,000 Pop.
	C	D	C	D	C	D	C	D	C	D	
Cairo	20	11	54	23	53	24	33	8	160	66	7.3
Alexandria	42	9	90	11	79	13	48	15	259	48	26.5
Ismailia	1	1	—	2	1	1	1	—	3	4	2.6
Port Said	3	1	7	1	2	1	5	1	17	4	9.0
Damietta	—	1	—	—	—	—	—	—	—	1	—
Suez... ..	13	—	21	—	20	—	4	—	58	—	50.4
Frontier Districts	13	—	56	—	5	—	6	—	80	—	45.2
TOTAL Governorates	79	23	172	37	155	39	91	24	497	123	13.7
Behera	1	3	2	3	4	3	4	1	11	10	0.8
Dakahlia	2	1	5	—	2	3	—	2	9	6	0.6
Gharbia	3	1	50	5	8	9	15	4	76	19	3.1
Menoufia	1	—	7	1	4	3	1	—	13	4	1.1
Kaliubia	1	1	5	1	—	1	2	—	8	3	1.1
Sharkia	5	2	23	1	6	6	—	1	34	10	2.5
TOTAL Lower Egypt	13	8	92	11	24	25	22	8	151	52	1.8
Aswan	7	1	1	—	2	1	4	2	14	4	4.6
Assiut	6	1	24	3	6	2	17	4	53	10	3.7
Beni Suef	2	—	4	—	1	—	4	1	11	1	1.7
Fayoum	1	1	21	—	10	—	13	—	45	1	6.4
Gerga	—	1	3	2	1	2	1	1	5	6	0.4
Giza	2	2	4	—	5	—	4	1	15	3	1.7
Minia	17	3	41	1	14	—	34	1	106	5	9.6
Qena	56	1	70	1	18	—	9	1	153	3	13.3
TOTAL Upper Egypt	91	10	168	7	57	5	86	11	402	33	5.3
GRAND TOTAL...	196	41	488	55	241	69	205	43	1130	208	5.7

Chapter III — PERMITS

(1) *Applications for New Permits :*

The number of applications received during the year for new permits for unhealthy, inconvenient and dangerous establishments of the first class was 1,825 as against 1,795 in 1948.

(2) *Establishments Licensed :*

The number of permits issued during the year to establishments of the first class was 1,018 as against 966 in the previous year.

(3) *Inward correspondence :*

The number of correspondence received by the department during the year was 21,399 as against 19,917 in 1948.

(4) *Outward correspondence :*

The number of correspondence sent out by the department during the year was 24,229 as against 21,785 in 1948.

The above shows that the activities of the Permits Department are on the increase as a result of the expansion of commerce and industry following World War II.

Chapter IV — Food Control

TABLE No. 27.—QUANTITIES OF FOODSTUFFS CONDEMNED AND NUMBER OF SAMPLES TAKEN AND THE RESULTS OF THEIR ANALYSIS DURING 1949

Name of Article	Foodstuffs Condemned					Samples taken				Percentage		
	Number	Bottles	Cans	Lbs.	Okes	No. of Samples	Genuine	Adulterated	Unfit	Adulteration	Unfitness	
										%	%	
A.—FRESH FOODS												
Fruits and Vegetables	53,242	26	22	21,937	38,759	52	48	4	—	7.7	—	
Fish	319	—	15	2,021	5,428	—	—	—	—	—	—	
Meat	—	—	—	1,960	346	—	—	—	—	—	—	
Other Fresh Foods	2,666	—	—	245	525	—	—	—	—	—	—	
B.—COOKED FOODS	43,573	18	65	2,197	2,957	4	1	2	1	50	25	
C.—CANNED FOODS:												
Jams	549	310	323	15	252	48	46	—	2	—	4.16	
Milk and its products	47	60	480	35	54	34	30	—	4	—	7.11	
Fruits and Vegetables	461	169	39,912	962	2,744	107	81	1	25	93.0	23.36	
Meat	39	39	155,642	436	99	28	18	3	7	10.7	25	
Fish	1,456	—	236,409	598	193	117	84	4	29	3.42	2.4	
Other Canned Foods	15	21	90,292	1,333	533	70	60	—	10	—	14.3	
D.—OILS:												
Olive oil	—	—	—	—	35	114	112	1	1	9.0	9.0	
Sesame oil	—	—	—	15	12	379	370	3	6	8.0	1.6	
Linseed oil	—	—	—	255	12	186	151	18	17	97.0	91.0	
Lettuce oil	—	—	—	—	—	15	15	—	—	—	—	
Sunflower oil	—	—	—	—	15	12	9	2	1	16.6	8.3	
Cotton seed oil	—	—	—	85	86	199	194	3	2	1.5	1	
Other oils	—	—	—	21	—	76	63	10	3	13	4	

**TABLE NO. 28.—WORK DONE BY FOOD CONTROL SQUADS
IN CUSTOMS HOUSES DURING 1949**

1—Consignments examined and Results of samples taken therefrom

No. of Consignments examined	No. of Samples taken	Results of Analysis		
		Genuine	Unfit	Adulterated
26,308	1,121	1,007	78	36

2—Imported foodstuffs condemned or refused entry into the country.

Kind of Food	Kilogrammes	Cans or Bottles	Boxes, Sacks or Drums.
(a) Fresh Foods :			
Vegetables	5,948	2,972	2,901
Fruits	13,474	214	1,471
Meat	9,340	—	—
(b) Canned Foods :			
Jams and dried fruits	5,708	109,408	91
Milk	1,323	4,335	—
Meat	119,110	6,314	42
Fish	4,260	10,472	740
Vegetables and Sauce	1,210	325,078	177
(c) Oils :			
Olive oil	1,328	—	1
Cotton-seed oil	13	—	3
Butter and Masli	14,145	191	1
Fat and Margarine	618	721	—
Cocoa-nut oil... ..	11,447	—	—
Other oils	24,827	—	—
(d) Other Foods :			
Cheese	213	696	9
Flour	32,397	—	3
Flour products	2,532	13,918	—
Seeds and Corns	837,401	567	154
Nuts and Almonds	1,045	1,165	—
Spices	687	5,467	—
Sweets and Chocolate	7,154	2,717	274
Honey	129	—	1
Tea	123,158	679	321
Coffee	7,057	2	16
Cocoa	24	3,934	—
Alcoholic Liquors	—	143	99
Other Kinds	18,777	148,765	302
TOTAL	1,243,352	637,758	6,606

TABLE No. 29.— VARIOUS STATISTICS

P.V. drawn up Art. II of law No. (48) of 1941	No. of P.V. drawn up against Itinerant Vendors	No. of P.V. drawn up against Milk Vendors	Bandars to which itinerant ven- dors regulations were applied	Bandars to which milk Vendors regulations were applied	No. of itinerant vendors licensed during 1949	No. of milk vendors licensed during 1949
1,837	7,860	6,798	5	4	962	207

TABLE No. 30. — SHOWING NUMBER OF SAMPLES OF MILK TAKEN AND THE
RESULTS OF THEIR ANALYSIS, 1949

No. of samples	Result of Analysis				
	Genuine	Adulterated by removal of fat	Adulterated by addition of water	Adulterated by both	Percentage
13,068	12,062	553	412	62	7.85%

Chapter V.—RURAL

TABLE NO. 31.—ACTIVITIES

Province	Total number of Rural Health Centres	Preventive							
		Population Served By the health centres	Number of Births	Number of Deaths		Vaccination against Sm. pox	Diphth Inoculations		
				Children 0—5 years	Adults Above 5 years		1st Injection	2nd Injection	3rd Injection
Dakahlia	14	323,277	12,712	4,261	2,307	11,545	345	286	192
Gharbia	10	154,257	6,937	2,145	1,269	5,356	38	34	53
Behera... ..	13	239,376	11,016	2,624	2,683	10,000	864	562	361
Menoufia	30	545,911	21,525	5,067	4,390	17,473	672	557	510
Kaliubia	12	173,734	8,364	2,923	1,767	19,754	347	299	288
Sharkia	10	183,308	7,427	1,759	1,484	6,246	166	126	99
Giza	9	233,067	8,912	3,543	2,480	5,265	438	436	283
Fayoum	3	73,901	3,281	1,422	593	2,192	373	360	353
Beni Suef	5	95,105	2,659	733	745	2,421	160	143	37
Minia	11	226,979	9,043	2,253	1,748	8,905	853	399	269
Assiut	15	232,157	9,944	2,972	2,090	5,541	555	716	189
Gerga	9	197,640	5,882	1,443	1,572	4,632	26	26	25
Qena	10	281,030	7,625	1,635	2,871	6,291	153	87	77
Aswan	6	69,095	2,764	645	612	2,507	118	71	58
TOTAL	157	3,028,837	118,091	33,425	26,611	108,128	5,108	4,102	2,794

HEALTH

OF RURAL HEALTH CENTRES.

Services

Infectious Diseases Cases							Food Inspections			
Plague	Typhus	Relapsing fever	Typhoid	Cholera	Small pox	Other Diseases	Food condemned	Food samples examined		
								Fit	Adulterated	Decayed
—	5	103	95	—	—	230	1,355	711	16	9
—	1	—	14	—	4	370	310	249	57	6
—	1	—	19	—	1	504	362	316	23	16
—	2	—	5	—	—	248	1,385	706	29	9
—	2	—	14	—	2	200	599	355	13	5
—	8	—	24	—	2	132	608	108	4	18
—	2	—	26	—	5	793	492	174	36	1
—	1	—	2	—	—	164	192	114	4	—
—	—	—	2	—	—	36	597	325	17	—
69	63	83	9	—	12	49	385	406	16	3
—	—	—	1	—	—	45	321	139	5	5
—	—	—	5	—	—	37	166	113	6	1
—	2	—	28	—	18	125	65	66	1	—
—	—	—	—	—	—	15	84	51	1	1
69	87	186	244	—	44	2,948	6,921	3,833	228	74

TABLE No. 31.—ACTIVITIES

Medical and Endemic								
Province	No. Outpatients		No. Ophthalmic Cases		Operations		Total In-patients	Endemic Examined
	New	Old	New	Old	In-patients	Out-patients		
Dakahlia	86,412	92,457	7,729	21,636	2,121	54	848	3,878
Gharbia	58,188	36,995	5,079	6,786	727	141	1,092	42,807
Behera... ..	69,570	83,076	8,323	19,340	1,131	80	648	38,607
Menoufia	115,362	133,476	11,340	23,365	2,990	230	893	61,584
Kaliubia	102,519	51,730	9,844	63,023	1,442	32	841	44,072
Sharkia	62,364	98,369	7,729	12,980	2,518	50	565	39,823
Giza	90,638	29,564	9,777	23,690	1,457	51	773	34,081
Fayoum	23,469	9,500	1,973	3,196	308	9	171	8,516
Beni Suef	20,310	7,274	2,116	3,593	63	11	330	15,346
Minia	52,479	33,157	16,428	22,310	277	52	674	61,646
Assiut	56,733	43,870	7,290	7,130	878	—	52	17,257
Gerga	37,003	14,542	3,541	4,568	174	3	26	14,865
Qena	35,061	8,485	8,707	5,169	253	—	59	6,445
Aswan	26,011	9,588	6,454	6,648	36	—	—	5,483
TOTAL ...	836,119	652,083	106,330	223,434	14,375	713	6,972	384,510

OF RURAL HEALTH CENTRES (Contd.)

Diseases Services

Diseases												Pellagra cases
Schistosomiasis				Dysentery Cases				Intestinal parasites				
Positive	Started treatment	No. Injections	Completed treatment	Positive	Started ^d treat.	injections	Comp. treat.	Positive	Carbon chloride doses	Oil chenopod. doses	Comp. treat.	
27,417	21,906	433,019	15,717	28,588	2,108	15,770	11,652	147	130	798	128	647
20,305	11,106	97,431	4,813	20,181	2,171	7,866	3,414	142	86	529	81	397
21,373	19,935	123,021	9,914	17,648	1,460	11,465	9,808	359	326	2,092	306	330
44,566	24,164	177,710	10,959	41,192	3,553	25,278	11,216	297	197	1,052	175	571
25,834	17,793	193,281	3,564	33,209	785	26,704	7,535	147	113	722	101	723
17,861	12,500	77,701	4,414	20,449	715	10,525	4,351	433	335	1,714	202	108
23,057	14,974	155,869	4,825	2,055	6,300	5,508	2,735	34	32	171	25	97
5,102	4,687	35,750	4,388	755	515	155	1,043	76	71	426	68	—
8,483	6,772	49,224	3,356	1,110	2,177	162	717	30	25	138	22	102
15,752	12,966	110,813	3,633	6,622	2,819	1,007	737	148	117	701	84	141
8,430	6,233	47,645	3,318	4,022	2,158	271	1,089	99	76	486	58	13
14,117	13,996	88,230	7,375	6,092	2,728	1,701	3,127	91	72	387	48	50
3,943	2,861	31,372	1,858	3,193	1,450	1,472	1,700	83	79	451	54	28
1,132	1,125	1,651	960	97	8	2	10	19	19	169	13	1
237,372	171,018	1,922,717	79,094	185,213	28,947	107,886	59,134	2,105	1,678	9,836	1,365	3,415

TABLE No. 31.— ACTIVITIES

Province	Maternity and					
	Pregnants		Number of children	Syphilis		
	New	Old		Blood Samples	Positive	No. Started treatment
Dakahlia	5,079	15,642	43,535	235	300	2,757
Gharbia	3,871	13,203	32,397	278	213	2,796
Behera	3,723	9,352	30,988	125	150	1,950
Menoufia	5,841	21,258	47,102	482	722	7,502
Kaliubia	4,737	13,518	28,475	171	383	2,282
Sharkia	2,411	11,750	40,017	192	225	2,290
Giza	4,430	18,894	54,947	266	387	4,727
Fayoum	954	1,527	4,139	59	51	536
Beni Suef	1,877	6,662	19,120	99	82	1,267
Minia	2,693	9,683	18,441	303	—	3,161
Assiut	1,731	3,072	5,769	319	538	2,142
Gerga	348	957	1,840	34	34	480
Qena	268	—	243	15	11	709
Aswan	92	378	1,424	17	34	193
TOTAL	38,055	125,896	328,437	2,495	3,130	32,792

OF RURAL HEALTH CENTRES (Contd).

Child Health							
Cases		Deliveries			Home Visits		
Arsenic Inj.	Bismuth Inj.	Home deliveries	Deliveries in Health Centres	Total	To pregnantas Prenatal	To post Natal	To Infants
1,437	5,082	657	25	6,703	16,279	34,836	17,052
1,018	4,202	848	20	4,026	5,624	15,791	7,037
563	2,859	4,732	16	4,748	5,935	21,892	8,962
2,573	6,221	567	12	7,155	21,220	43,967	44,467
1,637	4,849	213	35	3,689	8,482	25,853	11,384
489	2,804	384	15	2,625	4,809	15,570	7,371
4,670	5,034	4,569	46	4,975	12,310	20,201	9,558
—	1,059	166	2	1,009	1,169	5,417	1,395
327	1,904	191	9	1,639	3,416	8,632	5,201
780	2,767	367	7	2,751	6,517	14,636	9,104
—	1,607	1,213	2	2,635	3,182	15,232	2,801
—	400	120	—	979	555	5,981	657
284	42	48	—	268	536	268	268
90	91	7	—	202	155	1,330	80
13,868	38,921	14,082	189	43,494	90,189	229,606	125,337

Chapter VI — QUARANTINE

A.—Foreword :

(1) The sanitary situation was satisfactory throughout the year 1949 in all ports and airfields. No cases of quarantinable diseases were reported, except for a few sporadic cases of Typhus reported in Cairo, Alexandria and Suez.

(2) Modifications were effected in the sections of the Quarantine Administration, as a result of the decision taken by the Committee of the World Health Organization at its meeting held in Cairo in February 1949, to incorporate the Pan Arab Regional Health Bureau with the World Health Organisation which assumed, amongst other activities, the exchange of sanitary information among the countries of the Eastern Mediterranean with effect from 1st July 1949.

(3) As regards the regulations in force, some amendments were introduced as summarised hereunder :

(a) The practice of taking samples for bacteriological examination from consignments of hides and skins, wool and other animal products and debris arriving unaccompanied by sanitary certificates from country of origin has been abolished as from April 1, 1949. Such consignments shall henceforth be re-exported. It will be recalled that this practice was resorted to in view of the country's great need for skins and wool during war years.

(b) Before January 1949, anti cholera inoculation certificates were considered valid for from 6 days to 6 months under Art. 32 of the International Sanitary Convention for Aerial Navigation concluded in 1933. According to the interpretation of the WHO Experts Committee on Epidemiology the validity period for cholera, as provided for in the International Sanitary Convention of 1944, will be from 7 days to 6 months. Circular No. 2 of January 1, 1949, has been issued to this effect.

(c) Before March 1949 and under reservation made by the Egyptian Government in connection with the amendment of the two Sanitary Conventions in 1944, certificates of anti yellow fever vaccination issued to persons staying in or entering endemic areas within 10 days from vaccination were considered valid for 15 days from date of vaccination. On the recommendation of the WHO Experts Committee a mean validity period of 12 days instead of 15 was accepted as a temporary measure until a final decision is reached by the Yellow Fever Research Committee. A circular letter to this effect was issued on March 2, 1949.

(d) At the request of the WHO, instructions have been given to quarantine units to disinfest all vessels and aircraft leaving Egyptian ports and airfields directly for Sardinia and to provide them with certificates of disinfestation.

(e) On November 12, 1949, Quarantine units were advised to accept anti cholera inoculation certificates issued on international forms without questioning the strength of the vaccine or the number of doses, until a decision is taken by the WHO Expert Committee on Epidemiology and Quarantine as to what constitutes an acceptable cholera vaccine for quarantine purposes. It was also decided to exempt children under one year of age from inoculation against cholera. Children over that age would receive a reduced dose proportionate with their bodyweight.

B.—MARITIME NAVIGATION

The sanitary situation in the ports was satisfactory throughout the year as it appears from the following table :

TABLE NO. 32— QUARANTINABLE DISEASES REPORTED IN THE PORTS
DURING THE YEAR 1949

Port	Plague		Cholera		Small-pox		Typhus	
	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths
Alexandria	—	—	—	—	—	—	13	7
Port-Said	—	—	—	—	—	—	—	—
Suez... ..	—	—	—	—	—	—	2	—
Cairo	—	—	—	—	2	—	13	—
Luxor	—	—	—	—	—	—	2	—

Other Ports: El-Tor, Abu Zenima, Safagha, Hurghada, Shellal, Kantara, Ras Ghareb, Rosetta, Abu Kir, Mersa Matrouh, Sollum : NIL

INSPECTION OF VESSELS

As provided for in Article 48 of the Quarantine Regulations, all vessels arriving at Egyptian ports must, before communicating with the shore, be medically inspected.

Vessels arriving from infected ports are subjected to a detailed medical inspection, (arraisonnement).

In the tables that follow are given :

(1) List of localities declared infected during the year by the Quarantine Authority (Table No. 33).

(2) List of localities declared clean during the year by the Quarantine Authority (Table No. 34).

(3) Number of vessels subjected to simple medical inspection (Table No. 35).

(4) Number of vessels subjected to detailed medical inspection (Table No. 35).

(5) Number of vessels arrived from the South via the Nile (Table No. 36).

(6) Cases of diseases found on vessels on their arrival at Egyptian ports (Table No. 37).

(7) Vaccinations carried out on board vessels in Egyptian Ports (Table No. 38).

(8) Passengers (Table No. 39).

TABLE No. 33.—LOCALITIES DECLARED INFECTED DURING THE YEAR 1949

Date	Disease	Name of Country	Name of locality Considered as Infected	Arrivals by :
1949				
January 4 ...	Smallpox	Algeria	Whole Territory	All Routes.
	"	Colombia	" "	"
	"	Ecuador	" "	"
	"	Transjordan ...	" "	"
	"	Burma	" "	"
	"	Portuguese East Africa.	" "	"
	"	Iran	" "	"
	Typhus	Union of South Africa.	" "	"
	"	Iraq	" "	"
	"	Transjordan ...	" "	"
	"	Chile	" "	"
	"	Colombia	" "	"
	"	Ecuador	" "	"
	Plague	Ecuador	" "	"
	"	Indochina	" "	"
January 9 ...	Cholera	Siam	" "	"
	Plague	Union of South Africa.	Cape Province Hay Dis- trict.	"
January 13 ...	Plague	Burma	Whole Territory	"
	Smallpox	China	" "	"
	"	Lebanon	" "	"
	Typhus	Sierra Leone ...	" "	"
	"	Tripolitania ...	" "	"
January 23 ...	Plague	Ethiopia	" "	"
	"	Union of South Africa.	Kunuman District, Cape Province.	"
	Smallpox	Bahrain Island ...	Whole Territory	"
	"	Indonesia	Batavia	"
February 8 ...	Plague	Siam	Whole Territory	Air Sea.
March 2 ...	"	Union of South Africa.	Queenstown and Uitenhage Cape Province.	All Routes.
	"	" "	Perys District Orange Free State.	"
April 6 ...	Cholera	Burma	Bassein	Air, Sea.
April 7 ...	Plague	Union of South Africa.	Randfontein District Tran- sval Province.	All Routes.
April 10 ...	Smallpox	Belgian Congo ...	Stanley Ville District ...	"
May 24 ...	"	Gambia	Bathurst Port	"
	"	Indonesia	Sumatra Island (Taponolin District).	"
	"	"	Bandoeng Port	"
	"	"	Cheribon Port	"
	"	"	Pekalongon (Java) ...	"
July 13 ...	"	Ceylon	Central Province	"
	"	Afghanistan ...	Whole Territory	"
August 6 ...	Typhus	"	" "	Air Sez.
	Plague	South West Africa	" "	All Routes.
	"	Basutoland ...	" "	"
August 24 ...	"	Union of South Africa.	Glen Aden Hemelstraat, Gordonia District (Cape Province).	"
	"	U.S.A.	New Mexico State	Air Sea.
	"	Kenya	Kyambo Province	"
August 24 ...	Smallpox	Indonesia	Java Island (Semarang) ...	Air Sea.
Sept. 8 ...	Cholera	Burma	Irrawaddi District	"
	Plague	Kenya	Rift Valley District... ..	"
Sept. 19 ...	Plague	Union of South Africa.	Bothaville District Orange Free State.	All Routes.

TABLE NO. 33.—LOCALITIES DECLARED INFECTED DURING THE YEAR 1949. (Contd.).

Date	Disease	Name of Country	Name of locality considered as infected	Arrivals by :
1949				
Oct. 10	Plague	Indonesia	Jogjakarta (Java)	Air, Sea.
	"	Peru	Monsefu, Chiclayo Prov....	"
Oct. 13	Plague	Union of South Africa.	Vryburg, St. Marks District (Cape Province).	"
	Plague	" "	Zastrom, Vredfort Hopstad Senekal Districts (Orange Free State).	All Routes.
	Plague	" "	Hellbron Dist.	"
Nov. 6	"	" "	Talbagg Cape Province ...	"
	"	Peru	Trujillo, La Libertad Province..	Air ; Sea
	"	"	Chancay Dist., Lima Province.	"
Nov. 14	Smallpox	"	Whole Territory	"
Nov. 24	Plague	Indonesia	Cibolga Dist. (Sumatra Island).	"
Dec. 1	Plague	Brazil	Ceara States Pernambuco State.	"
Dec. 24	Plague	Hawaii	Haina Island	"
	"	Union of South Africa.	Blom Fontein District ... (Orange Free State).	"

TABLE NO. 34.—RESTRICTIONS WERE WITHDRAWN FROM THE FOLLOWING LOCALITIES

Date	Disease	Name of Country	Name of Locality Considered as Decontaminated	Arrivals by :
1949				
Jan. 23	Typhus	Tripolitania	Whole Territory	All Routes.
Feb. 3	Plague	Union of South Africa	Koppies District (Orange Free State).	"
Feb. 21	Typhus	Chile	Whole Territory	Air, Sea
March 29	Plague	Ethiopia	" "	"
April 10	Typhus	Iraq	" "	All Routes.
April 26	"	Union of South Africa	" "	"
May 24	Plague	" "	Randfontein District ...	"
June 11	Smallpox	Aden	Whole Territory	"
		Indonesia	Kondor Island	"
		Phillippines Island	Mindoro Island	"
Aug. 3	Smallpox	Ceylon	Central Province	"
Aug. 31	"	Gambia	Bathurst Port	"
	Cholera	Burma... ..	Bassein Port	"
Sept 19	Smallpox	Lebanon	Whole Territory	"
Sept. 26	Plague...	Indonesia (Java Island).	Tegal District	"
		Kenya	Kyambu District	"
	Smallpox and Typhus	Hashemite Kingdom of the Jordan.	Whole Territory	"
Oct. 10	Plague	Burma	Rangoon	"
Oct. 10	Smallpox	China	Tientsin City	"
Nov. 1	"	Gibraltar	Whole Territory	"
		Italy	Naples	"
Nov. 24	Plague	Union of South Africa	Botaville Dist. (Orange Free State).	"
Dec. 5	"	" "	Tulbagg Dist. (Cape Province	"
Dec. 24	"	" "	Glen Aden, Uitenhage, Kuruman, St. Mark, Queenstown (Cape Prov.	"
Dec. 24	"	" "	Hemelstraat, Vryburg, Heilbron, Zastron, Koppies, Senekal (Orange Free State)	"

TABLE NO. 35— STATEMENT OF ALL SHIPS ARRIVED DURING THE YEAR 1949

Port	Cargo	Passenger vessels	Passenger and cargo	Sailing Vessels and Launches	Tankers	Various	TOTAL
SIMPLE MEDICAL INSPECTION							
Alexandria	598	105	—	51	65	9	828
Port Said	1,905	247	360	254	2254	236	5,256
Suez... ..	497	26	50	322	496	18	1,409
Tor	—	—	—	119	—	18	137
Kossier	21	—	—	106	—	—	130
Damietta	—	2	—	118	—	—	120
Rosetta	—	—	—	79	—	—	79
Hurghada	—	—	—	—	—	—	—
Safaga	16	—	—	28	—	—	44
Kantara	—	—	—	35	—	—	35
Sollum	—	—	—	12	—	—	12
Ismailia	—	—	—	—	—	—	—
Abu Zenima	2	—	—	93	—	—	95
Mersa Matruh	—	—	—	17	—	—	17
Râs Ghareb	99	—	—	3	215	—	317
Abukir	—	—	—	13	—	—	13
Borollos	—	—	—	1	—	—	1
Shellal	105	68	381	588	—	—	1,142
DETAILED MEDICAL INSPECTION							
Alexandria	891	260	—	99	27	—	1,277
Port-Said	2,038	302	560	87	3,084	225	6,296
Suez... ..	1,697	266	497	148	2,821	138	5,567
Tor	—	15(*)	—	37	—	32	84
Kossier	13	—	—	23	—	—	36
Damietta	—	—	—	15	—	—	15
Rosetta	—	—	—	—	—	—	—
Hurghada	—	—	—	—	—	—	—
Safaga	7	—	—	25	—	—	32
Kantara	—	—	—	—	—	—	—
Sollum	—	—	—	—	—	—	—
Ismailia	—	—	—	—	—	—	—
Abu Zenima	10	—	—	—	—	—	10
Mersa Matruh	—	—	—	—	—	—	—
Ras Ghareb	3	—	—	4	4	—	11

(*) Pilgrim Ships.

TABLE No. 36.—FLUVIAL NAVIGATION

(1) All the Nile Vessels arriving from the south are subjected to inspection by the Shellal Quarantine Authority :

Ships	Arrivals	Departures
Express Passenger Steamers	105	105
Ordinary Passenger Steamers	66	66
Special Passenger Steamers	2	2
Passenger and Cargo Steamers	381	354
Sailing Vessels	588	562
TOTAL	1,142	1,089

Total of Passengers
Arrived 70,786

Total of Passengers
Departed 70,400

(2) No cases of quarantinable or infectious disease were found either on arrival or after control at the place of destination of the passengers; except one suspected case of smallpox isolated at Aswan Fever Hospital which was ultimately diagnosed as Chickenpox.

The Shellal Quarantine Office carried out the vaccination of 12,311 passengers against smallpox, and isolated 172 passengers coming from Yellow Fever Infected areas without being in possession of regular vaccination certificates against that disease.

TABLE NO. 37.—QUARANTINABLE AND INFECTIOUS DISEASES FOUND ON
BOARD VESSELS

Alexandria No Case.

Port Said (a) Quarantinable Diseases : N I L.

(b) Infectious diseases : 46 cases on board 44 vessels including the
the following diseases :

- 1 Typhoid Fever.
- 1 Paratyphoid.
- 1 Diphtheria.
- 1 Meningitis.
- 1 Chicken Pox.
- 2 Enteritis.
- 5 Measles.
- 7 Influenza.
- 5 Bronchitis.
- 1 Acute Bronchitis.
- 1 Chronic Bronchitis.
- 2 Suspected Fever.
- 4 Tuberculosis.
- 4 Pneumonia
- 5 Tuberculosis of Lungs.
- 1 Broncho-Pneumonia.
- 4 Malaria.

—
46
=

Suez (a) Quarantinable Diseases : N I L.

(b) Infectious Diseases : 875 cases on board 152 vessels, including
the following diseases :

- 20 Influenza.
- 4 Whooping Cough.
- 191 Tuberculosis of Lungs.
- 194 Malaria.
- 18 Suspected Smallpox.
- 17 Chickenpox.
- 26 Measles.
- 13 Pleurisy.
- 5 Typhoid.
- 125 Dysentery.
- 4 Mumps.
- 210 Tuberculosis.
- 40 Pneumonia.
- 2 Leprosy.
- 3 Erysipelas.
- 1 Bronchitis.
- 1 Dengue.
- 1 Scarlet Fever.

—
875
=

Kantara One Influenza case (a passenger arriving by train from Palestine).

TABLE NO. 38.—VACCINATIONS CARRIED OUT ON BOARD VESSELS

Suez :

- 161 Passengers arriving on board vessels from Port Sudan, were vaccinated against Smallpox.
- 169 Passengers and Crews of S.S. "ORDU", were vaccinated against Smallpox. (Seven suspected cases of smallpox were isolated).
- 3 Passengers arriving on board vessels from Port Sudan were vaccinated against smallpox.
- 1,322 Passengers and Pilgrims on board S.S. "RODA" were vaccinated against smallpox. (Seven cases of suspected smallpox were isolated).
- 16 Passengers and cattle drovers arriving by sea from Port-Sudan were vaccinated against smallpox.
- 237 Passengers on board S.S. "SAKARA" (from Tor, after the Pilgrim Season) were vaccinated against smallpox.
- 59 Passengers arriving on board vessels from Port Sudan were vaccinated against smallpox.

TOTAL 1,967

TABLE NO. 39.—CONTROL OF PASSENGERS

A. (LANDING)

Port	I and II Classes	III and IV Classes	TOTAL
Alexandria	11,994	9,076	21,070
Port-Said	14,099	35,631	4,973
Suez	2,156	6,595	8,751
Tor	28,511 (Pilgrims)	—	28,511
Kantara	3,017 (1)	1,122 (2)	4,139
Ras Ghareb	554	543	1,097
Damietta	6	—	6

B. (EMBARKING)

Alexandria	10,394	17,448	27,842
Port-Said	17,294	35,619	52,913
Suez	1,557	5,415	6,972
Tor	28,509 (Pilgrims)	—	28,509
Kantara	2,354 (3)	—	2,354
Ras Ghareb	383	490	873
Damietta	7	—	7

(1) Arriving by train.

(2) Arriving by camels.

(3) Leaving by train.

C.—Control of Aerial Navigation:

Reference was made in last year's report to the ever increasing air traffic in Egyptian aerodromes and the consequent growth in volume of passengers, tourists and businessmen travelling by this means.

For technical difficulties, the instructions given last year for all foreign aircraft to land in Cairo Airport could not be put into execution until the end of this year when the difficulties were overcome. In the course of December, all foreign airlines transferred their services from Almaza to Cairo Airport. Almaza aerodrome is now used by near east aircraft only.

The question of collecting quarantine dues from passengers arriving from abroad with no Egyptian currency represented a problem to quarantine authorities. It was suggested that air navigation companies collect these from passengers when booking their passages and refund to quarantine authorities in lump.

Some agents concurred to the arrangement; others did not.

TABLE No. 40. (A)—AIRCRAFT DEALT WITH DURING 1949

Name of Airport	Landing	Departing	Aircraft disin- sectised	Reconnaissance	Arraisonnement
CAIRO :					
Cairo	4,128	4,070	855	1,064	3,074
Almaza	3,995	3,964	443	1,275	2,720
Luxor	689	689	457	232	457
ALEXANDRIA :					
Fouad el Awal	1,295	1,306	399	509	786
MERSA MATRUH	13	12	—	13	—
PORT SAID	6	6	—	6	—
TOR	42	42	42	—	42
FAYED	1,996	1,614	354	677	1,319

TABLE No. 40. (B) —PASSENGERS LANDING FROM AIRCRAFT.

Name of Airport	Landing	Departing	Transit	Isolated	Remarks
Cairo	21,366	22,441	57,913	228	177 Irregular anti Cholera Certificates. 45 Irregular anti Yellow Fever Certificates. 3 For the arrival from Jeddah (Pilgrim Season)
Almaza	21,659	23,210	24,506	178	3 In the company of Pilgrims. 120 Irregular anti Cholera Certificates. 41 Irregular anti Yellow Fever Certificates. 15 Pilgrims (Pilgrim Season)
Luxor	112	400	8,606	13	2 In the accompany o pilgrims.
Fouad el Awal... ..	4,686	4,650	18,548	92	8 not in possession of : i- Yellow fever Certificates. 84 not in possession of anti-Cholera certificates.
Mersa Matruh	14	14	—	—	
Fayed	12,300	9,415	1,588	1	1 Incomplete Certificate of anti Cholera vaccination.

D.—Anti-Plague Work :

The following tables give details of rat catching in town and port areas carried out in Alexandria, Port-Said and Suez and their identification by the laboratories.

As regards the fumigation of vessels, under Art. 28 of the International Sanitary Convention of 1926, modified in 1938, masters of vessels are given the option to have their vessels fumigated either by the Quarantine Authority by the Clayton Gas process, or by the Near East Chemical and Fumigation Company, which carries out this operation by the Cyanide process under the supervision of the Quarantine Authority.

TABLE No. 41.—NUMBER OF RATS CAUGHT, DESTROYED AND EXAMINED IN THE PORTS

Number and species of rats caught		Alexandria	Port Said	Suez
R. Norvegicus	Town	6,542	6,206	1,068
	Port Area	213	484	240
R. Rattus	Town	7,546	39	35
	Port Area	1,410	317	162
Acomys Cahirinus	Town	1,034	—	586
	Port Area	106	—	242
TOTAL OF RATS CAUGHT		16,851	7,046	2,333
Mice	Town	—	761	276
	Port Area	—	3,882	330
Rats killed or found dead	Town	1,606	37	—
	Port Area	—	20	—
No plague infected rats were found		—	—	—
Rats found dead after fumigation on board vessels :				
(R. Rattus)		258	1	62
(R. Norvegicus)... ..		3	—	—
Mice		—	—	86

TABLE NO. 42—FLEAS FOUND ON RATS CAUGHT

Fleas found on :	Town		Port Area		TOTAL
	L.M.	X. Ch.	L.M.	X.Ch.	

A.—ALEXANDRIA

R. Norvegicus	130	126	11	24	291
R. Rattus	838	706	244	186	1,974
Acomys	—	—	—	—	—

B.—PORT-SAID

R. Norvegicus	103	402	42	135	677
R. Rattus	10	19	45	96	170
Acomys	—	—	—	—	—

C.—SUEZ

R. Norvegicus	3	385	4	20	412
R. Rattus	—	—	—	—	—
Acomys	—	—	—	—	—

L.M. = Leptopsylla Musculi.

X. Ch. = Xenopsylla Cheopia.

TABLE NO. 43.—VESSELS DERATISED

Port of	VESSELS			Process of deratization
	Steamers	Sailing	TOTAL	
Alexandria	8	3	11	Sulphur
Port-Saïd	3	1	4	
Suez	4	—	4	

Vessels deratised by the Imperial Chemical Industries, Ltd., under the supervision of the Quarantine Administration :

Alexandria	16	—	16	Cyanide
Port-Saïd	—	—	—	
Suez	4	—	4	

Certificates of Exemption from Deratization issued to :

Alexandria	60	11	71
Port-Saïd	99	43	141
Suez	73	91	164
Damietta	1	28	29

E.—*Pilgrimage to the Hedjaz for the year of the Hegira 1368 (August–November 1949, A.D.)*

A notice published by the Quarantine Administration in the Official Journal enforced, as from August 1, the usual sanitary provisions in respect of the control of pilgrims transiting Egyptian territory on their way to the Hedjaz. These provisions, which do not differ from those enforced in previous years, provide for the vaccination of unprotected or insufficiently protected pilgrims, their surveillance, etc.

Measures for the control of pilgrims returning home, as published in the Official Journal of August 22, 1949, were instituted after the completion of religious rites and remained in force until the closure of Tor Camp and termination of the pilgrim season on November 21, 1949.

OUTWARD JOURNEY

A. BY SEA

(a) *Egyptian Pilgrims :*

Vaccinations and inoculations.—As in previous years, all Egyptian pilgrims were subjected, before departure, to double anti-cholera and anti-typhoid inoculations and to anti-smallpox vaccination, the latter carried out under the same conditions as those enforced in 1945 (vide 1948 report).

Transport of Pilgrims.—The transport of Egyptian pilgrims to and from the Hedjaz was carried out by the Misr Shipping Co. which assigned for this purpose "Misr", "Sudan", and the S.S. "Providence" for one trip. The S.S. "Taif" and "Talodi" belonging to the Khedivial Mail Company carried foreign pilgrims.

All these vessels were inspected by the Quarantine Authorities and measured before being allowed to embark pilgrims and, having ascertained that the accommodation and installations were as laid down in the International Sanitary Convention of 1926, were issued with certificates of measurement. The S.S. "Misr" and "Sudan" were issued with certificates of measurement by the Alexandria Quarantine Authorities, and the S.S. "Amin" and "Zamalek" by the Suez Quarantine Authorities :

Name of Vessel	Date	Class I	Class II	Twindecks
S.S. Misr	20 August	54	117	1,235
S.S. Sudan	21 August	58	117	1,235
S.S. Amin	18 Sept.	—	—	123
S.S. Zamalek	16 Sept.	8	—	298

A total of 17, 732 Egyptian pilgrims left Suez for Jeddah during the period from 14th. August to 25th. September 1949 as against 20,106 during the previous season.

(b) *Foreign Pilgrims.*—Foreign pilgrims who transit Egyptian territory on their way to Hedjaz, generally consist of :

- (i) Those arriving at Port Said on board pilgrim ships bound for Jeddah in transit through the Canal.
- (ii) Pilgrims arriving by train from Palestine through Kantara to Suez, where they embark on pilgrim ships for Jeddah.
- (iii) Pilgrims arriving by train from Libya to Sollum, Alexandria and thence to Suez for embarkation for Jeddah.
- (iv) Pilgrims arriving at Port Said and Alexandria on ordinary vessels thence proceed to Suez by land and embark there for Jeddah.

(i) *Pilgrim Ships Transiting the Canal.*— 14 Pilgrim ships carrying 8,594 pilgrims arrived at Port Said on their way to Jeddah through the Canal (as against 5 vessels carrying 4,550 during the preceding pilgrim season). Details of these steamers are:

Table No. 44

Name of Steamer	Date of arrival	Port of Departure	Net Tonnage	No. of Pilgrims
Rawdah	6 September ...	Beirut Lattakia... ..	2,267	938
Spiros	12 „ ...	Beirut	1,084	859
Taif	14 „ ...	Beirut	770	634
Marios II	17 „ ...	Benghazi	648	171
Buntas	18 „ ...	Istambul	104	138
Nazer	19 „ ...	Ismir	1,004	576
Ordu	20 „ ...	Istambul	4,202	130*
Chelchuk	21 „ ...	Ismir	1,427	418
Rawdah	21 „ ...	Lattakia	2,267	1,197
Providence	22 „ ...	Marseilles	6,693	1,364
Sadik Zada Nazim	23 „ ...	Istambul	750	324
Talodi	23 „ ...	Beirut	784	646
Hak	23 „ ...	„	511	303
Spiros	23 „ ...	Lattakia	1,084	884
TOTAL				8,582
(*) PILGRIMS EMBARKED AT PORT SAID ON S.S. "ORDU"				12
TOTAL				8,594

The nationalities of pilgrims on board are: Afghanis (18), Algerians (510), Saudis (24), Indians (15), Irakians (633), Iranians (478), Lebanese (501), Malaysians (11), Moroccans (442), Palestinians (2), Senegalese (240), Syrians (1,738), Jordanians (1), Tripolitarians (171), Tunisians (173), Turks (3,616), French (11), American (1), Italian (1), Cypriots (8), Total 8,594.

All the vessels and pilgrims on board were inspected on arrival. The measurements and sanitary installations were verified and the following conditions found on board:

(1) The S.S. "Hak" arrived without the disinfecting chamber required under article 112 (f) of the International Sanitary Convention;

(2) The S.S. "Spiros" (2 Trips), "Nazar" and "Buntas" arrived without the condenser required by article 112 (e) of the convention.

(3) The S.S. "Spiros" was found on her second trip with a wooden kiosk set up on the deck, thus contravening Art. 100 of the Convention which provides that pilgrims should be accommodated in the between decks.

(4) The S.S. "Marios II" arrived from Benghazi without a certificate of measurement and was measured by the Port Said Quarantine Authorities and issued with one authorizing her to embark 228 pilgrims.

No pilgrims were transported through Kantara this year.

Pilgrims arriving through the Western Frontier by land routes

(*) All foreign pilgrims were found duly immunised except 59 Turkish pilgrims arriving at Port Said by S.S. "Taif" who were vaccinated against cholera and 31 of them against small pox by quarantine authorities.

A total of 20 Tripolitanian pilgrims arrived in Egypt through the Western border in transit through Egyptian territory. The pilgrims were examined on their arrival and found immunised against cholera, smallpox and typhoid.

B. BY AIR

During the period from 14th. August to 28th. September, 78 aircraft carrying 1,764 pilgrims left Cairo aerodromes for the Hedjaz. The nationalities of these pilgrims are as follows:

Egyptians 775, Turks 650, Indians 88, Pakistanis 69, Palestinians 45, Morroccans 19, French 19, Tunisians 16, Sudanese 16, Syrians 6, Indonesians 6, Afghanis 5, Chinese 12, Irakians 11, British 9, Lebanese 6, Iranians 4, Hedjazians 3, Algerian 1, Malayan 1, Jordanian 1, South African 1, Canadian 1. Total 1,764 pilgrims.

Departure of Pilgrims from Suez.

A total of 18,178 pilgrims left Suez for Jeddah on board pilgrim ships during the period from 14th. August to 25th. September as compared with 26,519 pilgrims for the last pilgrim season.

TABLE NO. 45.—DETAILS OF THE STEAMERS

Name of Steamer	Net Tonnage	Date of departure	Number of Pilgrims		
			Egyptians	Foreigners	TOTAL
		1949			
Taid	770	14 August ...	—	18	18
Talodi	770	21 August ...	—	7	7
Misr (1)	5,051	26 August ...	1,269	—	1,269
Sudan (1)	5,029	28 August ...	1,255	—	1,255
Zamalek	929	29 August ...	—	23	23
Misr (2)	5,051	31 August ...	1,351	—	1,351
Sudan (2)	5,029	2 September ...	1,377	—	1,377
Misr (3)	5,051	5 September ...	1,375	—	1,375
Sudan (3)	5,029	7 September ...	1,396	—	1,396
Misr (4)	5,051	10 September...	1,385	—	1,385
Talodi (2)	770	10 September	—	24	24
Sudan (4)	5,029	12 September...	1,390	—	1,390
Misr (5)	5,051	15 September	1,381	—	1,381
Zamalek	929	16 September	48	226	274
Sudan (5)	5,029	17 September	1,361	—	1,361
Amin	334	19 September	1	124	125
Misr (6)	5,051	20 September	1,406	—	1,406
Sudan (6)	5,029	22 September	1,405	5	1,410
Saqqarah	1,813	24 September	—	18	18
Misr (7)	5,051	25 September	1,332	1	1,333
TOTAL			17,732	446	18,178

The nationalities of the 446 pilgrims are as follows :

Afghani	...	...	...	...	...	...	...	...	...	1
Saudis	...	...	...	...	...	...	...	...	...	26
Irakians	...	...	...	...	...	...	...	...	...	1
Nigerians	...	...	...	...	...	...	...	...	...	35
Senegalese	...	...	...	...	...	...	...	...	...	2
Jordanians	...	...	...	...	...	...	...	...	...	2
Tunisians	...	...	...	...	...	...	...	...	...	11
Yemenites	...	...	...	...	...	...	...	...	...	66
Pakistanis	...	...	...	...	...	...	...	...	...	2
Algerians	...	...	...	...	...	...	...	...	...	7
Indians	...	...	...	...	...	...	...	...	...	12
Morroccans	...	...	...	...	...	...	...	...	...	227
Palestinians	...	...	...	...	...	...	...	...	...	8
Syrians	...	...	...	...	...	...	...	...	...	8
Tripolitarians	...	...	...	...	...	...	...	...	...	31
Turks	...	...	...	...	...	...	...	...	...	4
Somali	...	...	...	...	...	...	...	...	...	1
Cypriots	...	...	...	...	...	...	...	...	...	2
TOTAL										<u>446</u>

RETURN JOURNEY

Yom Arafat coincided this year with October 1, 1949. The first returning pilgrims arrived at Tor on 10th. October. These were 1,355 Egyptian pilgrims on board the S.S. "Misr" and 134 pilgrims borne by five Saudi aircraft. The last ship that left Tor lazaret was the S.S. "Taif" on 19th. November, the camp closing and the pilgrim season ending on 21st. November. The season thus lasted 43 days.

During that period, 30 steamers carrying 27,347 pilgrims and 42 aircraft carrying 1,165 pilgrims landed at Tor Lazaret, thus making a total of 28,512 (as against 26,535 for the last pilgrim season) consisting of 18,982 Egyptians and 9,530 foreigners.

All pilgrims arriving at Tor lazaret were kept under observation for the regulation period except 8,931 foreign pilgrims arriving by 15 pilgrim vessels and 19 by a French aircraft on their way to Tunisia who, after medical inspection, were authorised to transit the Canal in quarantine under Art. 142 of the Sanitary Convention. The regulation period of observation was 48 hours for arrivals by sea and 3 days for arrivals by air. Air borne pilgrims arriving before pilgrimage was declared clean were, however, subjected to five days quarantine.

Sanitary Condition.—In view of the absence of cholera and plague in the Hedjaz and the negative results of the individual stool examination of 1,355 pilgrims and 160 members of crew arriving by S.S. "Misr" and 1,508 by S.S. "Providence", and 134 pilgrims by air, and since the clinical examination of these pilgrims was satisfactory, it was decided—on 14th. October 1949—to apply at Tor the provisions of Article 142 of the International Sanitary Convention of 1926.

TABLE NO. 46.—DETAILS OF STEAMERS WHICH LANDED PILGRIMS AT TOR STATION.

Name of Vessel	Net Tonnage	Date of arrival	Date of Departure	Destination	Number of Pilgrims		
					Egypt.	Foreigners	TOTAL
Misir (1)	5,051	10 Oct.	13 Oct.	Suez	1,349	6	1,355
Providence	6,693	12 "	15 "	"	1,498	—	1,498
Sudan (1)	5,029	14 "	17 "	Jeddah	1,241	—	1,241
Providence (2)	6,693	16 "	18 "	Suez.	1,342	—	1,342
Sudan (2)	5,029	18 "	20 "	"	808	—	808
Misir (2)	5,051	22 "	24 "	"	1,414	4	1,418
Sudan (3)	5,029	25 "	27 "	"	1,444	—	1,444
Sudan (4)	5,029	29 "	31 "	"	1,403	2	1,405
Misir (3)	5,051	1 Nov.	3 Nov.	"	1,421	—	1,421
Talodi (1)	874	4 "	6 "	"	182	57	239
Misir (4)	5,051	5 "	7 "	"	1,408	2	1,410
Sudan (5)	5,028	8 "	10 "	"	1,378	1	1,379
Misir (5)	5,051	12 "	14 "	"	1,372	3	1,375
Sudan (6)	5,029	17 "	19 "	"	1,308	8	1 316
Misir (6)	5,051	19 "	21 "	"	653	112	765
TOTAL ...					18,221	195	18,416

TABLE NO. 47.—DETAILS OF STEAMERS WHICH TRANSITED THE CANAL

Name of Steamer	Net Tonnage	Date of Arrival	Date of Departure	Destination	Total of Foreigners
Ordu	4,902	15 Oct.	15 Oct.	Istanbul	64
Marios II	748	20 Oct.	20 Oct.	Benghazi	169
Providence	6,693	26 Oct.	26 Oct.	Tunis	1,484
Rawdah	2,267	27 Oct.	27 Oct.	Beirut	1,243
Spiros	1,000	27 Oct.	27 Oct.	Lattakia	863
Buntas	104	28 Oct.	28 Oct.	Istanbul	134
Nazar	1,004	28 Oct.	28 Oct.	„	577
Trabzon	4,233	29 Oct.	29 Oct.	Beirut	477
Seldjek	1,427	31 Oct.	31 Oct.	Istanbul	389
Sadek Zad Nazam	750	31 Oct.	31 Oct.	„	299
Halal	1,121	1 Nov.	1 Nov.	Beirut	363
Taif (1)	770	1 Nov.	1 Nov.	„	655
Rawdah (2)	2,267	8 Nov.	8 Nov.	„	1,183
Spiros (2)	1,000	10 Nov.	10 Nov.	Lattakia	925
Taif (2)	770	19 Nov.	19 Nov.	Beirut	106
TOTAL					8,931

TABLE NO. 48.—DETAILS OF AIRCRAFT WHICH LANDED PILGRIMS AT TOR STATION.

Name of Aircraft	Net Weight	Date of Arrival	Date of Departure	Destination	Number of Pilgrims		
					Egyptian	Foreign	TOTAL
	LBS.						
SAAA-D	40,000	10 Oct.	14 Oct.	Cairo	32	—	32
SAAA-B	40,000	10 Oct.	14 Oct.	"	32	1	33
SAT-I	8,000	10 Oct.	14 Oct.	"	20	—	20
SAAA-A	40,000	10 Oct.	14 Oct.	"	33	1	34
SAT-3	8,000	10 Oct.	14 Oct.	"	15	—	15
SAT-2	8,000	12 Oct.	15 Oct.	"	16	4	20
68967	15,000	13 Oct.	16 Oct.	"	49	—	49
68964	15,000	13 Oct.	13 Oct.	"	42	6	48
SAAA-B	40,000	13 Oct.	16 Oct.	"	19	15	34
SAAA-D	40,000	14 Oct.	17 Oct.	"	36	1	37
SAAA-B	40,000	14 Oct.	17 Oct.	"	35	1	36
SAT-7	8,000	14 Oct.	17 Oct.	"	21	—	21
68964	15,000	14 Oct.	17 Oct.	"	29	14	43
SAT-7	8,000	16 Oct.	19 Oct.	"	21	—	21
SAAA-D	40,000	16 Oct.	19 Oct.	"	17	19	36
SAT-I	8,000	16 Oct.	19 Oct.	"	11	10	21
SAAA-E	40,000	16 Oct.	19 Oct.	"	32	4	36
SAT-I	8,000	17 Oct.	20 Oct.	"	19	2	21
SAT-3	40,000	17 Oct.	20 Oct.	"	21	—	21
SAAA-E	40,000	17 Oct.	20 Oct.	"	36	2	38
SAAA-B	40,000	17 Oct.	20 Oct.	"	34	2	36
SAAA-D	40,000	17 Oct.	20 Oct.	"	8	19	27
SAAA-C	40,000	18 Oct.	21 Oct.	"	28	3	31
SAT-3	8,000	19 Oct.	22 Oct.	"	9	10	19
SAAA-C	40,000	19 Oct.	22 Oct.	"	15	21	36
SAAA-E	40,000	19 Oct.	22 Oct.	"	13	20	33
F-BAXZ	8,000	20 Oct.	20 Oct.	Tunis	—	19	19
SAAA-E	40,000	22 Oct.	25 Oct.	Cairo	13	17	30
SAAA-B	40,000	22 Oct.	25 Oct.	"	28	8	36
SAAA-E	40,000	23 Oct.	26 Oct.	"	6	26	34
SAT-I	8,000	24 Oct.	27 Oct.	"	12	9	21
SAT-2	8,000	25 Oct.	28 Oct.	"	4	17	21
SAAA-D	40,000	26 Oct.	29 Oct.	"	9	20	29
SAT-2	8,000	28 Oct.	31 Oct.	"	4	18	22
SAT-I	8,000	28 Oct.	31 Oct.	"	7	12	19
SAAA-D	40,000	31 Oct.	3 Nov.	"	8	19	27
SAT-10	8,000	1 Nov.	4 Nov.	"	6	10	16
SAT-2	8,000	1 Nov.	4 Nov.	"	—	21	21
SAT-9	8,000	2 Nov.	5 Nov.	"	4	3	7
SAT-9	8,000	5 Nov.	8 Nov.	"	5	16	21
SAT-9	8,000	7 Nov.	1 Nov.	"	7	20	27
SAT-7	8,000	6 Nov.	12 Nov.	"	3	14	17
TOTAL					761	404	1,165

TABLE NO. 49.—COMPARATIVE STATEMENT OF PILGRIMS LANDED
AT TOR DURING THE LAST THREE PILGRIM SEASONS

Nationalities	1947 A. D. 1366 Heg.	1948 A. D. 1367 Heg.	1949 A. D. 1368 Heg.
Egyptians	7,279	21,415	18,983
Afghanis	7	4	39
Algerians	687	609	517
Chinese	—	2	2
British	10	5	46
Cypriots	—	3	2
Cyrenaics	—	—	—
French	—	—	1
Ceylonese	—	21	—
Indians	18	187	171
Iranians	—	1,246	360
Irakians	9	521	503
Indonesians	—	12	19
Lebanese	367	167	473
Greeks	1	—	—
Moroccans	830	593	525
Palestinians	1,389	7	59
Pakistanis	—	—	20
Senegalese	—	241	300
Syrians	1,652	924	1,826
Transjordanians... ..	13	3	4
Tripolitaniens	—	75	198
Tunisians	263	270	213
Turks	4,358	58	4,066
Saudis... ..	81	128	157
South Africans	—	21	11
Miscellaneous	3	23	17
TOTAL	16,967	26,535	28,512

It will thus be observed that the number of returning Egyptian Pilgrims was 18,983 as against 18,507 pilgrims leaving during the pilgrim season. The difference represents pilgrims who had remained in the Hedjaz from previous pilgrim seasons and those who had left before the Pilgrim season for the Ragabia Visit (April-May 1949).

HOSPITAL ADMISSIONS

A total of 302 persons were admitted to hospitals, including 285 pilgrims, 9 relatives accompanying patients and 8 non pilgrim officials and inhabitants):—

	Pilgrims	Non-Pilgrims
Rash, under observation	211	1
Fractures	8	—
Dysentery (2 positive bacteriologically) 1 (1 negative ") ...	3	—
Senility	4	—
Furunculosis	7	—
Abscesses	3	—
Intestinal Colics	2	—
Pyorrhoea	1	—
Asthma	1	—
Senility with chronic bronchitis	1	—
Enteritis with nutrition oedema	—	—
Pyelitis	—	—
Acute Bronchitis with debility	1	—
Vomiting and fainting	1	—
Orchitis	1	—
Renal Colics	3	1
Hemiplegia... ..	2	—
Scabies	1	—
Heart failure with senility and bronchitis ...	2	—
Acute Bronchitis	2	—
Ulcer at buttocks	1	—
Otitis	1	—
Air Sickness	1	—
Influenza	1	—
Acute Pleurisy	1	—
Rheumatic Fever	1	—
Ulcer of ear pinna	1	—
Heat failure with Pneumonia and cellulitis	1	—
Diabetes and debility	1	—
Wounds (contused)	2	1
Hepatitis	—	1
Erysipelas	1	—
Hysteria	1	—
Prostatitis and retention of urine	2	—
Contusion	3	1
Diarrhoea	1	—
Hernia (Strangulated)	1	—
Anemia, resulting from abortion... ..	1	—
Cellutitis (leg)	1	—
Appendicitis (suspected)	—	1
Gynecology : Difficults Labour	1	—
Normal "	3	—
New Births	4	—
Pregnancy... ..	1	—
Relatives accompanying patients... ..	9	—
TOTAL	294	8

Deaths.—Four deaths occurred during the pilgrim season, three among pilgrims and one inhabitant of Tor. The causes of death were :

- 1 Acute enteritis with nutritive oedema.
- 1 Senility with chronic bronchitis.
- 1 Heart failure, senility and bronchitis.
- 1 Heart failure, with pneumonia and cellulitis.

LABORATORY

The laboratory carried out the individual bacteriological examination of the stools of all pilgrims and members of crew arriving by the first three steamers and by aircraft arriving at the same time. As regards succeeding steamers, samples were taken at a rate of 50 per cent gradually diminishing to 10 per cent from the last vessel. The stools were examined in collective tubes of 5 specimens.

A total of 5,825 specimens were thus examined for the cholera vibrio during the pilgrim season with the following results :

- 19 Non-agglutinating and hemolytic for sheep's blood.
- 2 " ,, non hemolytic for sheep's blood.
- 2 Agglutinating and hemolytic for sheeps' blood.

Pilgrims who proved to be agglutinating vibrio carriers were treated with sulphaguanidine. From these, specimens were taken repeatedly until the vibrio entirely disappeared from the stools and three negative results given before being allowed to proceed.

Specimens received from hospitals gave the following results :

- 1 Amoebic dysentery.
- 1 Bacillary Dysentery (Flexner).

Specimens of stools were taken from all Indian and Pakistani pilgrims arriving by air (two specimens on two consecutive days).

All Pilgrims suffering from diarrhoea had their stools examined bacteriologically and were kept in hospital until the cessation of this symptom.

Water.—Regular examination of water was carried out with the following results :

1. Specimens were taken twice from three wells :

- (a) No. of lactose fermenters in 10 cm³ : 12, 5 and 5 respect.
- (b) No. of lactose fermenters in 10 cm³ : 15, 8 and 8 respect.
- (c) No. of bacteria in 1 cm³ : 10, 12 and 20 Respectively.

No. of bacteria in 1 cm³ : 50, 30 and 25 Respectively.

2. Water Tanks : 13 specimens taken with the following results :

Lactose fermenters in 25 cm³ : 3 present 10 absent.

"	"	50	": 5	"	8	"
"	"	100	": 9	"	4	"

F.— DISINFECTION :

TABLE No. 50.—DISINFECTION BY CHEMICAL MEANS

	Alexandria	Port-Said	Suez	Shellal	Tor
Vessels disinfected	—	—	—	—	30
Railway trucks disinfected... ..	—	—	—	—	—
Cabins occupied by sick	—	8	2	—	—
Barges (mooring)	—	467	—	—	—
Barges and boats	107	18	262	—	—
Holds of vessels disinfected	134	—	—	—	—
Transport carts and motor cars	60	—	21	—	—
Effects of pilgrims (by formol)... ..	—	—	—	—	113
Vessels carrying sick	1	—	1	—	—
Miscellaneous... ..	3	—	210	—	—
Number of stovefulls	—	212	—	—	—
Boats carrying sick	—	7	—	—	—
Vessels carrying cattles	—	13	74	—	—
Vessels treated for disinsectisation (mosquitoes)	—	—	2,859	—	42

TABLE No. 51.—DISINFECTION BY STEAM UNDER PRESSURE

	Alexandria	Port-Said	Suez	Shellal	Tor
Bales of wool and cotton rags... ..	2,792prcl or 11,528Kgs	—	—	—	—
Parcels for customs Administ. Used clothes... ..	795prcl	—	—	—	—
Post parcels	50	—	—	—	—
Effects of porters	1,311	—	373 Kos	—	—
Parcels disinfected without payment ...	—	—	—	—	—
Parcels and effects belonging to the Quarant. Administ... ..	—	—	—	—	94
Effects of crews of steamers or sailing vessels... ..	—	—	—	—	28
Effects of pilgrims	—	—	—	—	393
Effects of passengers	—	1,583	730	—	—
Effects in Kilos	—	—	8.039	—	—
Parcels for Customs Administration ...	—	2.555	—	—	—

TABLE NO. 52.—CONTROL OF WATER DISTRIBUTION TO VESSELS IN THE PORTS

	Alexandria	Port-Said	Suez
Number of specimens taken from taps supplying vessels	704	98	149
Number of specimens taken from water boats	91	903	186
<i>Result of bacteriological examination:</i>			
Specimens found fit for use:			
Taps	669	64	126
Water boats	91	424	131
Specimens found unfit for use:			
Taps	35	34	23
Water boats	—	479	55
Number of times water was purified	—	287	45
Number of cisterns and water boats disinfected and cleaned	42	194	51

G.—Control of Hides and Skins, Wool, Animal Products and Debris:

The Quarantine Regulations provide that imported consignments of hides and skins, wool, animal products and debris, should be accompanied by sanitary certificates testifying that the country of origin is free from animal diseases.

* During war years, however, and in view of the country's great need for hides and skins, the Quarantine Administration agreed to take samples for bacteriological examination from consignments arriving without regular certificates. The goods were released on the samples proving negative for animal diseases.

This emergency arrangement which was prompted by war time conditions remained in force until April 1, 1949. As from that date, it has been decided to discard this arrangement and strictly adhere to Quarantine Regulations. All consignments arriving without regular certificates shall henceforth be re-exported.

During the period from 1st. January, to 31st. March, 1949, the laboratory carried out the following examinations of samples:

TABLE NO. 53.—EXAMINATIONS OF SAMPLES

Goods	Alexandria	Port-Said	Suez	Almaza	Shellal
Wool	35	6	6	1	1
Hides and Skins	5	4	2	—	12
Hair... ..	8	—	—	1	—
Salted Guts	2	—	—	—	—
Shaving Brushes	12	—	—	7	—

All samples were examined and the results were negative for Anthrax Spores.

TABLE NO. 54—CONTROL OF HIDES, SKINS AND ANIMAL DEBRIS

Article	Alexandria			Port-Said			Suez			Sheddiel		Tor		Kantara
	Import	Export	Transit	Import	Export	Transit	Import	Trans-shipment	Transit	Import	Export	Import	Export	Import
Ox hides	364,003	—	Bales 16,377	132,842	—	48,715	Kilogr. 191,611	2,597 Bales	135,646 Pieces	966,119	—	Kilogr. 1,060 Pieces	—	—
Sheep and goat skins ...	pieces 3	225,081	495	—	—	—	—	—	1,200	—	—	—	—	—
Salted guts... ..	Kilogr. 25,720	20,607	—	—	—	26 Barrels	—	3 Boxes	—	—	—	—	—	Kilogr. 1,025
Horns and hoofs	—	112,032	—	—	—	—	—	—	—	—	—	—	—	—
Wool (in kilos)	463,034	122,791	109	611,346	—	21,932	260,969	—	—	6,851	8,187	—	—	3,136
Animal hair	3,827	5,000	—	—	—	—	15,550	—	—	—	—	—	—	—
Calcinated hair	136	383,154	—	—	—	—	—	—	—	—	—	—	—	—
Bones	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Goat hair	—	—	—	—	—	39 Bales	—	—	—	—	—	—	—	Kilogr. 27,650 Export.
Waste wool	—	40,000	—	—	—	—	—	—	—	—	—	—	—	—
CONTROL OF RAGS, USED CLOTHES, ETC.														
Rags	—	—	—	Kilogr. 158,415	—	—	Kilogr. 8,779	—	—	—	—	—	—	—
Used clothes	682,937	914,464	—	—	—	—	—	—	—	—	—	—	—	—
Used Jute	—	—	—	Kilogr. 104,304	—	—	—	—	5	139,745	—	—	—	—

Chapter VIII — CHEST DISEASES

Statistical Data :

According to the 1948 report, a total of 85,012 tuberculous cases were recorded between 1929 and that year. A further 10,280 cases were detected during the year 1949, making a total of 95,292 cases at the end of 1949.

During the year, the following units were opened :

(1) *Suez Chest Diseases Hospital*.—On 22nd. January, 1949 with an out-patient Dispensary and an in-patient Department.

(2) *Beni Suef Chest Diseases Hospital*.—On 24th. February, 1949 with an out-patient Dispensary and an in-patient Department.

(3) *Mass Radiography Mobile Unit*.—Started on 3rd March, 1949.

(4) *A branch of Alexandria Chest Diseases Dispensary at Rosetta*.—On 10th. March, 1949.

(5) *A branch of Aswan Chest Diseases Dispensary at Kom Ombo*.—On 17th. March, 1949.

(6) *Construction of Damietta Chest Diseases Hospital*.—On 19th. September, 1949. with an out-patient Dispensary and an in patient Department

Thus, the Chest Diseases units are now as follows :

- 24 dispensaries.
- 17 branch dispensaries.
- 15 in-patient departments within dispensaries.
- 5 sanatoria.
- 2 surgical T.B. institutions.
- 4 preventoria.
- 1 colony for convalescents.

The following are the occupations of tuberculous patients detected during the year 1949 :

582 Tradesmen : consisting of :

- 177 foodstuff vendors.
- 54 poultry and cattle merchants.
- 108 grocers.
- 60 fruiterers.
- 183 other trades.

719 Employees : including :

- 362 civil servants.
- 151 commercial employees
- 51 teachers.
- 155 other employments.

2,880 Craftsmen : consisting of :

- 94 cooks.
- 210 barmen.
- 64 servants (farrashes).
- 150 barbers.
- 173 drivers.
- 138 shoemakers.
- 85 painters.
- 262 employees in firms.
- 186 mechanics.
- 466 other occupations.
- 73 waiters.
- 81 domestic servants.
- 46 gate-keepers.
- 91 laundrymen.
- 166 tailors.
- 173 carpenters.
- 54 building labourers.
- 317 weavers.
- 61 printers.

1,866 Farmers.

374 Pupils.

3,839 Unemployed : including :

- 2,426 invalids.
- 825 children.
- 580 unemployed.

Of 181,544 new patients examined during the year, 10,280 were found positive for tuberculosis. Of these, 648 were children (less than 10 years old) and the remaining 9,632 were adults.

Of 8,470 contacts (3,336 children and 5,134 adults) examined, 295 developed tuberculosis.

Health visitors paid 32,596 home visits this year, and the medical officers 10,216.

Appended to this report are detailed statistical data of the work carried out by the various dispensaries and other institutions.

RESUME OF ACTIVITIES IN MEDICAL AND SOCIAL SPHERES

Medical, social and preventive activities proceeded according to plan. During this year, the following measures were undertaken: In pursuance of the policy of developing anti-tuberculosis service in Egypt, the Ministry has, with the aid of the inhabitants, completed the construction of several institutions for tuberculosis, namely :

- (a) Suez Chest Diseases unit—erected on a site of land ten feddans in area. It consists of an out-patient dispensary and a 50-bed in-patient Department, capable of future expansion. The total cost of the buildings amounted to L.E. 60,000, of which L.E. 32,000 were contributed by Suez inhabitants. The equipment cost L.E. 10,000. The unit was opened for treatment on 22nd. January, 1949.

(b) Beni Suef Chest Diseases unit—erected on a site of land two feddans in area and consists of an out-patient dispensary and a 20-bed in-patient department. The buildings cost L.E. 20,000 of which L.E. 2,600 were contributed by the Provincial Council. The cost of equipment amounted to L.E. 5,000. It was opened for treatment on 24th. February 1949.

(c) Damietta Chest Diseases unit—erected on a site of land ten feddans in area. It also consists of an out-patient dispensary and a 100-bed in-patient department capable of future expansion. The cost of buildings was L.E. 76,000 of which L.E. 24,097 were subscribed by the inhabitants and the Misr Silk Spinning Co. of Damietta. Equipment of the hospital cost L.E. 20,000. It was opened for treatment on 19th. September 1949.

II.—B.C.G. vaccination has drawn the interest of most countries of the world and Egypt was no exception. By courtesy of the World Health Organization, this Ministry communicated with the B.C.G. Serum Institute of Copenhagen. Dr. Johannes Holm, the Director of the Serum Institute arrived in Egypt in February 1949 and on behalf of the World Health Organization, concluded an agreement with the Egyptian Government for launching a Joint Vaccination Campaign in Egypt, for one year. Under the agreement, the Institute was to provide the necessary vaccine for the Campaign together with personnel and equipment for two mobile teams. The Egyptian Government would provide personnel and equipment for four teams. A team is composed of a medical officer, two nurses, a secretary, and a number of junior staff. A credit of L.E. 8,000 has been allocated by the Egyptian Government for the purpose. The Campaign was started on 1st December 1949 by testing and vaccinating the nursing personnel in Cairo. A total of 7,771 cases were tested by Tuberculin until the end of the year. 1,061 Cases received B.C.G. vaccination. Work is still proceeding.

III.—The Ministry is meanwhile undertaking a mass survey of the population to determine the extent of the spread of tuberculosis in Egypt, so that in the light of the data obtained, adequate control measures may be provided. A mobile radiographical unit had been obtained for the purpose and was first employed in the Agricultural and Industrial Exhibition held in Cairo in March 1949. Later, the unit proceeded to factories, companies and schools. Of a total of 20,130 persons examined by the unit during the year, 109 persons were found positive, 456 persons suspicious and the remaining 19,565 negative as per details given below :

	No examined	Positive cases	Suspicious	Negative
Visitors to the Exhibition during March and April	1,017	21	—	996
Al Azhar University Personnel and students (May and June)	2,256	14	76	2,166
Boys Orphanage, Agouza (June)	236	1	13	222
Shubra El Kheima Factories (66 in number) during July, August and September ...	11,005	45	219	10,741
Officers and men of the Buluk Nizam Force in Cairo and Provinces as well as the Royal Police College during October and December, (the apparatus topped during November)	5,617	28	148	5,441

Positive and suspicious patients were called to the headquarters of the Unit in Khalifa Chest Diseases Dispensary for examination and making enlarged films.

IV.—The Ladies Society for Health Improvement has undertaken a wide propaganda activity in conjunction with the Health Propaganda Section of the Ministry. Contributions were collected and stamps sold during the Tuberculosis Week to the value of L.E. 26,166.233 mills.

This sum was utilised in providing food and clothing and in payment of rents for destitute tuberculous patients and their families who are under the care of the Society. The Society was also instrumental in finding suitable work to able ex-patients and in building a Colony at the Pyramids for the accommodation and education of children of tuberculosis patients.

V.—Since the annual subsidy of L.E. 15,000 provided by the Government for the aid of poor tuberculosis patients proved insufficient, a credit of L.E. 45,000 has been applied for this year. During the year, a total of L.E. 33,172 was spent in aid of 2,448 poor families.

VI.—As in previous years, children residing in Cairo Preventoria were sent to Alexandria during the Summer. They were sent on three batches of 30 children each to spend a fortnight in Alexandria as a form of heliotherapy. They are accommodated in the Maritime Sanatorium at San Stefano.

The following are details of the different courses of treatment given at the dispensaries during the year :

TABLE NO. 56.—LISTS OF THE DIFFERENT FORMS OF TREATMENT FOLLOWED
IN THE DISPENSARIES AND THE RESULTS IN THE YEAR 1949.

DOMICILIARY TREATMENT			ARTIFICIAL PNEUMOTHORAX					
			Number					
CONDITION ON 1ST EXAMINATION	Tuberculous Patients		9,011	Patients treated A. P.		3,522		
	Sputum	positive	6,308	1st inductions		764		
		negative	2,703	Refills		38,160		
	Lesion	unilateral	4,385	CONDITION BEFORE TREATMENT	Sputum	Positive	2,859	
		bilateral	4,626			Negative	663	
		cavitary	4,224		Lesion	Unilateral	2,973	
	Last Sputum Ex.	positive	5,344			Bilateral	549	
		negative	3,667	Cavitary		2,281		
	Increase of weight		3,915	Haemoptysis	329			
	Decrease of weight		1,610	Unilateral A.P.	3,197			
Stationary		2,463	Bilateral A.P.	240				
RESULT OF TREATMENT	Died		1,023	Extrapleural A.P.	18			
	Unable		2,757	Continued refills	2,057			
	Walking		2,918	STOPPED A.P. AND CAUSE	Adhesions... ..	337		
	Light Work		2,017		Bilateralisation	188		
	Full Work		296		Effusion	220		
	RESULT OF TREATMENT	Sputum still positive		1,569	RESULT OF TREATMENT	Sputum still positive		1,569
		" " negative		691		" " negative		691
" returned negative ..		1,086	" returned negative ..			1,086		
" " positive		176	" " positive			176		
Increase of weight		1,923	Increase of weight			1,923		
Decrease of weight		785	Decrease of weight			785		
Stationary		640	Stationary			640		
Died		174	Died			174		
Incapable		1,083	Incapable			1,083		
Walking		804	Walking			804		
Light Work		1,204	Light Work		1,204			
Full work		257	Full work		257			

TABLE No. 57.—STATISTICS OF PATIENTS IN SANATORIA AND IN-SECTIONS OF DISPENSARIES (TANTA, MANSOURA, DAMANHOUB, ZAGAZIG, DAMIETTA, SHERBIN, ZIFTA, FAYOUM, BENI SUEF, MINIA, ASSIUT, SOUHAG AND ASWAN) IN 1949, AND THE RESULT OF THEIR TREATMENT.

		Sanatoria							In-pt. sections in Disp.	
		Almaza	Abbassia	Giza	Alex.	Mehalla el-Kobra	Suez	Port-Said		
No. of In-patients discharged ...		1,735	1,081	392	275	388	65	437	1,118	
Before Admission	Sputum	{ positive ...	1,018	698	238	177	277	65	353	758
		{ negative ...	717	383	154	98	111	—	84	360
		{ unilateral ...	751	463	159	215	—	52	318	868
		{ bilateral ...	984	618	233	60	388	13	119	250
Before Admission	Lesion... ..	{ cavitary ...	551	615	118	58	193	8	107	632
		{ normal ...	1,186	389	277	207	265	18	279	642
		{ abnormal ...	549	692	115	68	123	47	158	476
		{	4,774	1,081	250	175	173	15	548	815
Treatment given	General Treatment	{	2,330	468	138	100	215	40	217	349
		{	—	19	—	—	14	1	—	17
		{ No. of patients	199	183	—	—	65	24	—	440
		{ No. of injections	—	—	—	—	—	—	—	2
Treatment given	Tuberculin inject.	{ No. of patients	—	—	—	—	—	—	—	90
		{ No. of injections	—	—	—	—	—	—	—	472
		{ Inductions	861	358	138	113	152	25	201	472
		{ Refills	10,504	6,811	3,498	2,034	2,522	438	3,118	9,906
Treatment given	Extrapleural A.P.	{	2	1	—	—	158	—	230	2
		{ Phrenic Crush	297	170	28	18	27	7	22	108
		{ Pleurotomy	35	6	—	—	—	—	1	—
		{ Aspiration	298	322	97	60	90	3	68	141
Treatment given	Thoracoplasty	{	120	14	—	—	1	—	—	4
		{ Adhesiotomy	459	239	20	45	60	11	52	122
		{ Complications	65	369	—	—	10	—	2	103
		{ No. of other injections given	7,265	14,621	2,082	—	635	216	1,101	5,053
Cause of discharge	Patients went on leave (and did not return)	{	208	9	88	13	20	3	11	46
		{ At request	414	600	141	81	8	1	2	159
		{ „ having special difficulties	95	61	—	—	93	22	308	155
		{ With agreement of physician	1,018	411	116	157	267	39	116	758
Cause of discharge	Weight	{ increase of weight	1,166	613	182	194	277	48	337	750
		{ decrease of weight	428	183	88	46	82	5	70	188
		{ Stationary	141	285	122	35	29	12	30	180
		{ Normal	1,427	718	290	207	320	53	386	845
Condition on Discharge	Temperature	{ Abnormal	308	363	102	68	63	12	51	273
		{ still positive	822	491	229	119	168	—	158	407
		{ „ negative	356	103	89	86	103	—	84	366
		{ became negative	385	378	65	57	107	38	194	322
Condition on Discharge	Sputum	{ „ positive	172	109	9	13	10	27	1	23
		{ Successful A.P. continued	861	506	114	89	140	39	188	434
		{ A.P. failed	197	113	24	24	49	5	13	190
		{ Condition improved	1,211	544	170	153	238	39	286	759
Condition on Discharge	„ worse	{	85	89	18	63	58	11	21	114
		{ „ stationary	302	351	157	35	82	12	106	206
		{ Died	137	97	47	24	10	3	24	39
		{ Ability to work	19	18	46	18	9	—	2	43
Condition on Discharge	working { fully	{ partially	1,141	355	118	117	180	41	284	543
		{ incapable	438	616	181	116	199	21	127	493
		{ Average duration of stay in days	128	185	142	66	160	90	83	98
		{ Pts. stayed 6 months or more	723	117	112	209	147	25	26	326
Condition on Discharge	„ less than 6 months	{	1,012	964	280	113	241	40	411	792

TABLE No. 58.—No. OF T.B. POSITIVE CASES NOTIFIED BY THE CHEST DISEASE DISPENSARIES DURING THE YEAR 1949, ACCORDING TO RESIDENCE

Dispensaries	Cairo	Alex.	Damietta	Port-Said	Canal-Suez & Ismailia	Bohara	Gharbia	Menoufia	Dakahlia	Sharkia	Kaliniabia	Giza	Bent-Suef	Fayoum	Minia	Assiut	Goraa	Qena	Aswan	Oases	TOTAL
oulaq	1,231	—	30	9	11	2	8	51	13	3	126	65	2	3	5	8	6	6	11	1	1,591
Mohadayan	487	19	—	8	17	10	11	21	11	6	48	397	6	—	4	3	4	6	5	—	1,063
Khalifa	922	12	—	—	15	13	14	52	17	23	10	12	15	25	14	10	12	4	5	—	1,175
Damanhour	—	2	—	—	—	167	53	—	—	—	—	—	—	—	—	—	—	—	—	—	222
Alexandria	—	713	—	—	—	179	—	—	—	—	—	—	—	—	—	—	—	—	—	—	892
Bacous	—	137	—	—	—	9	1	—	—	—	—	—	—	—	—	—	—	—	—	—	147
Tanta	—	—	—	—	—	8	236	18	—	—	—	—	—	—	—	—	—	—	—	—	262
Mansoura	1	—	1	—	—	—	80	—	277	6	—	1	—	—	—	—	—	—	—	—	366
Shebin el Kom	—	—	—	—	—	1	—	245	—	—	22	—	—	—	—	—	—	—	—	—	268
Mehalla el Kobra	—	—	—	—	—	2	435	8	25	—	—	—	—	—	—	—	—	—	—	—	479
Zagazig	—	—	—	2	22	—	2	2	28	268	11	—	—	—	—	—	—	—	—	—	335
Damietta	—	1	193	—	—	—	62	2	268	—	—	—	—	—	—	—	—	—	—	—	532
Port-Said	—	—	1	501	55	—	—	—	2	1	—	—	—	—	—	—	—	1	—	—	560
Sherbin	1	—	—	—	—	1	149	3	132	2	—	—	—	—	—	—	—	—	—	—	290
Zifta	—	—	—	—	—	—	179	3	119	—	—	—	—	—	—	—	—	—	—	—	301
Suez	—	—	—	—	274	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	275
Fayoum	—	—	—	—	—	—	—	—	—	—	—	—	39	277	—	—	—	—	—	—	316
Beni Suef	—	—	—	—	—	—	—	—	—	—	—	—	157	—	—	—	—	—	—	—	157
Minia	—	—	—	—	—	—	—	—	—	—	—	—	2	—	—	33	—	—	—	—	302
Assiut	—	—	—	—	—	—	—	—	—	—	—	—	—	—	274	236	5	2	—	—	243
Souhag	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	151	—	—	—	151
Qena	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	1	218	4	—	224
Aswan	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	131	—	131
TOTAL	2,642	884	232	529	394	392	1,230	405	892	309	217	475	231	305	298	291	179	237	156	1	10,280

TABLE No. 59.—T.B. DEATHS REPORTED TO THE DISPENSARIES DURING THE YEAR 1949
ACCORDING TO AGES

Dispensaries	1—5 Years	5—15 Years	15—25 Years	25—35 Years	35—45 Years	Above 45 Years	TOTAL
Boulaq	8	36	77	48	20	13	202
Mobtadayan	14	28	39	47	28	13	169
Khalifa	1	3	65	123	98	78	368
Damanhour	—	—	10	11	15	12	48
Alexandria	11	19	21	26	14	10	101
Bacous	—	1	3	1	—	—	5
Tanta	3	7	14	12	12	14	62
Mansoura	—	8	26	13	10	14	71
Shebin el-Kom	1	5	22	18	17	3	66
Mehalla el-Kobra	—	3	15	18	19	11	66
Zagazig	—	—	15	7	8	—	30
Damietta	—	2	27	11	4	2	46
Port-Said	2	6	25	27	22	12	94
Sherbin	—	6	8	16	12	6	48
Zifta	1	—	6	9	2	—	18
Suez	—	—	7	13	5	1	26
Fayoum	2	9	12	37	23	12	95
Beni Suef	—	2	9	26	8	5	50
Minia	1	5	8	22	27	9	72
Assiut	—	3	14	8	4	3	32
Souhag	1	6	14	8	4	2	35
Qena	1	2	13	10	6	1	33
Aswan	—	4	8	6	2	3	23
TOTAL ...	46	155	458	517	360	224	1,760

TABLE NO. 60.—SHOWING PROGRESS IN NUMBER OF CHEST DISEASES UNITS FROM 1929 TO 1949.

Year	Chest Dis. Dispensaries			Chest sanatoria	T.B. Bone Sanatoria	Preventoria	T. B. convalescent colonies
	Dispensaries	Branches	In-Patient sections				
1929... ..	2	—	—	—	—	—	—
1930... ..	3	—	—	—	—	—	—
1931... ..	3	—	—	—	—	—	—
1932... ..	3	—	—	—	—	—	—
1933... ..	4	—	—	—	—	—	—
1934... ..	4	—	—	1 ⁽¹⁾	—	—	—
1935... ..	5	—	—	1	—	—	—
1936... ..	6	—	—	1	1 ⁽²⁾	—	—
1937... ..	8	—	—	1	1	—	—
1938... ..	12	—	2	2	1	1	—
1939... ..	13	—	2	2	1	1	—
1940... ..	14	—	4	2	1	4	—
1941... ..	14	1	4	2	1	4	—
1942... ..	15	3	6	2	2	4	—
1943... ..	15	3	6	2	2	4	1
1944... ..	16	4	8	3	2	4	1
1945... ..	17	4	10	3	2	4	1
1946... ..	19	12	12	4	2	4	1
1947... ..	19	14	12	5	2	4	1
1948... ..	21	15	13	5	3	4	1
1949... ..	24	17	15	5	3	4	1

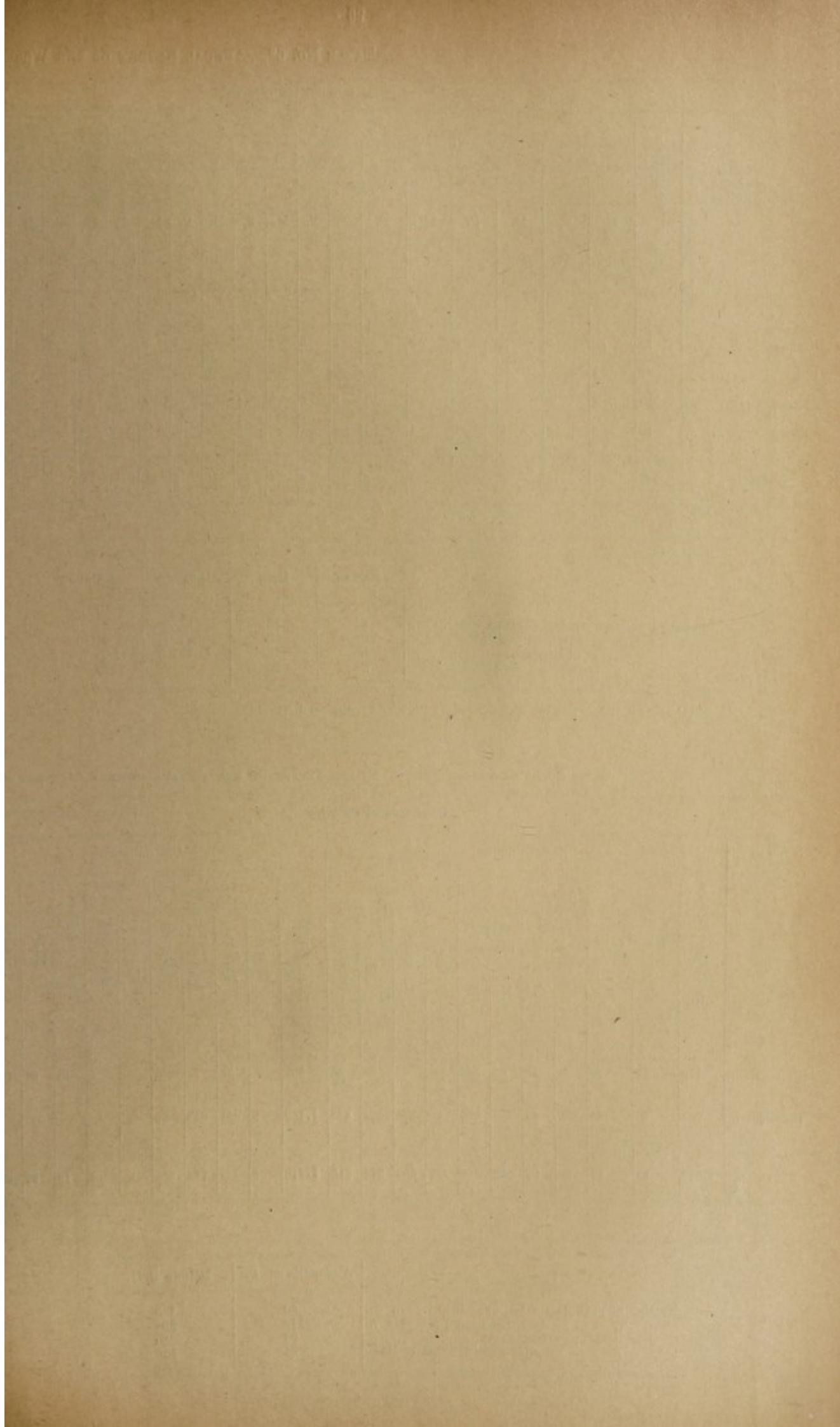
N.B.—⁽¹⁾ Almaza Sanatorium, had been attached to this Section in September 1934.

⁽²⁾ Maritime Sanatorium, Alexandria, had been attached to this Section in September 1936.

TABLE NO. 61.—ANNUAL RETURN OF BEDS AVAILABLE IN THE IN-PATIENT UNITS
AT THE END OF THE YEAR 1949

Unit	Beds for Sur- gery	1st Class		2nd Class		3rd Class Paying		3rd Class Gratis			TOTAL
		F.	M.	F.	M.	F.	M.	F.	M.	Children	
Almaza Sanatorium	128	—	10	—	72	—	*132	—	540	—	882
Abbassia Chest Dis. Hospital	30	—	—	24	—	44	—	328	—	74	509
Giza Sanatorium ...	—	—	—	—	—	—	—	—	155	—	155
Alexandria Sanato- rium	—	—	—	—	—	—	7	30	79	10	126
Mehalla el Kobra Sanatorium ...	—	—	—	2	6	3	6	52	88	4	161
Suez Chest. Dis. Hospital	—	—	—	1	1	2	2	22	22	—	50
Maritime Sanat., Port Said	(Pulmonary T.B.)			1	1	9	9	31	85	24	160
Damanhour Dis- pensary	—	—	—	—	—	—	—	—	20	—	20
Tanta Dispensary	—	—	—	—	—	—	—	—	18	—	18
Mansoura ..	—	—	—	—	—	—	—	10	15	—	25
Zagazig ..	—	—	—	—	—	—	—	—	20	—	20
Damietta ..	—	—	—	—	—	8	8	50	50	—	116
Sherbin ..	—	—	—	—	—	—	—	—	30	—	30
Zifta ..	—	—	—	—	—	—	—	—	22	—	22
Fayoum ..	—	—	—	—	—	—	—	—	30	—	30
Beni Suef ..	—	—	—	—	—	—	—	10	15	—	25
Minia ..	—	—	—	—	—	—	—	6	14	—	20
Assiut ..	—	—	—	—	—	—	—	15	35	—	50
Souhag ..	—	—	—	—	—	—	—	4	20	—	24
Aswan ..	—	—	—	—	—	—	—	7	15	—	22
Maritime Sanat. Alexandria ...	(For Bones)		—	—	—	—	—	24	25	51	100
T.B. Bone Hosp. Helwan	—	—	—	1	3	4	12	60	65	55	200
Helwan Prevento- rium	—	—	—	—	—	—	—	—	—	90	90
Marg Preventorium.	—	—	—	—	—	—	—	—	—	50	50
Alexandria Preven- torium	—	—	—	—	—	—	—	—	—	54	54
Assiut Prevento- rium	—	—	—	—	—	—	—	—	—	50	50
Village Settlement At Marg	No. of Residents in the Village					—	—	—	79	—	79
									Families		
TOTAL	158	—	10	29	83	70	176	649	1442	462	3,079

* N.B.—This number includes { 30 beds for students.
32 „ E.S.R. and
3 „ Staff of Tramway Co. Cairo.



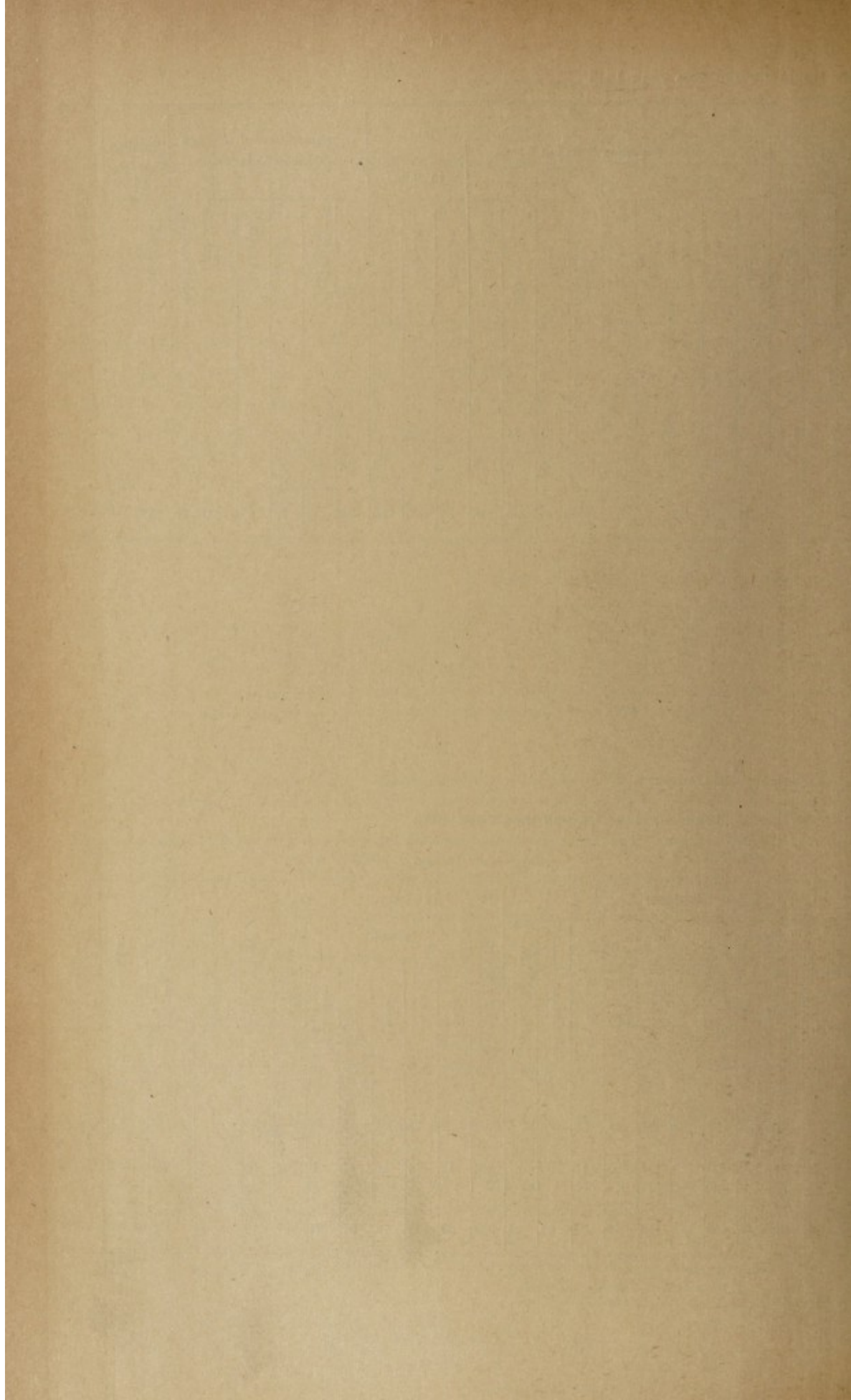
THE PREVENTORIA DURING THE YEAR 1949

Ages				Details regarding relatives										Mantoux Test in child			Diseases attacked children During their residence						Children Discharged		Remarks
9-10 Years.		More than 10 Years.		Relation					Condition				Positive	Negative	Not Done	Skin	Stomach	Ears	Ophthalmic	Chest	Other diseases	Discharged	Died		
M.	F.	M.	F.	Father	Mother	Brother	Sister	Others	Died	Alive	Sputum Neg	X-Ray Pos													
—	4	2	—	13	31	1	—	—	—	49	4	45	24	3	54	8	5	29	2	32	58	66	12		
—	—	1	—	1	—	1	—	—	—	2	—	12	—	—	12	1	—	—	—	—	1	13	—		
2	—	2	—	20	3	8	—	—	—	31	31	—	1	30	—	—	—	—	—	—	—	74	1		
1	—	—	—	7	19	2	—	1	4	25	—	29	—	—	29	12	—	—	45	29	31	19	—		
3	4	5	—	41	53	12	—	1	4	107	35	76	25	33	85	18	5	29	47	61	90	192	13		

SELWAN HOSPITAL FOR BONE DISEASES DURING THE YEAR 1949

IN-PATIENT SECTION

No. of New Patients Admitted	New Patients											Discharged										Major Operations	Minor Operations	Plaster	X — Ray	Streptomycin Inj.
	Ages						T.B. Spine	T.B. Knee	T.B. Hip	T.B. Bones of Joints	Other Diseases	No. of Pat. Discharged	Result					Treat. By Ultra Violet								
	Under 5 Years		5-10 Yrs.		above 10 Yrs.								Died	Cured	Stationary	Improved	Discharged, in Plaster									
	M.	F.	M.	F.	M.	F.																				
112	13	7	19	11	37	25	45	16	19	28	4	98	2	29	22	18	27	—	10	—	158	191	90			
301	—	16	30	12	128	115	108	30	11	65	87	250	18	106	50	67	9	250	60	9	264	861	1,995			
413	13	23	49	33	165	140	153	46	30	93	91	348	29	135	72	85	36	253	70	9	422	1,452	2,085			



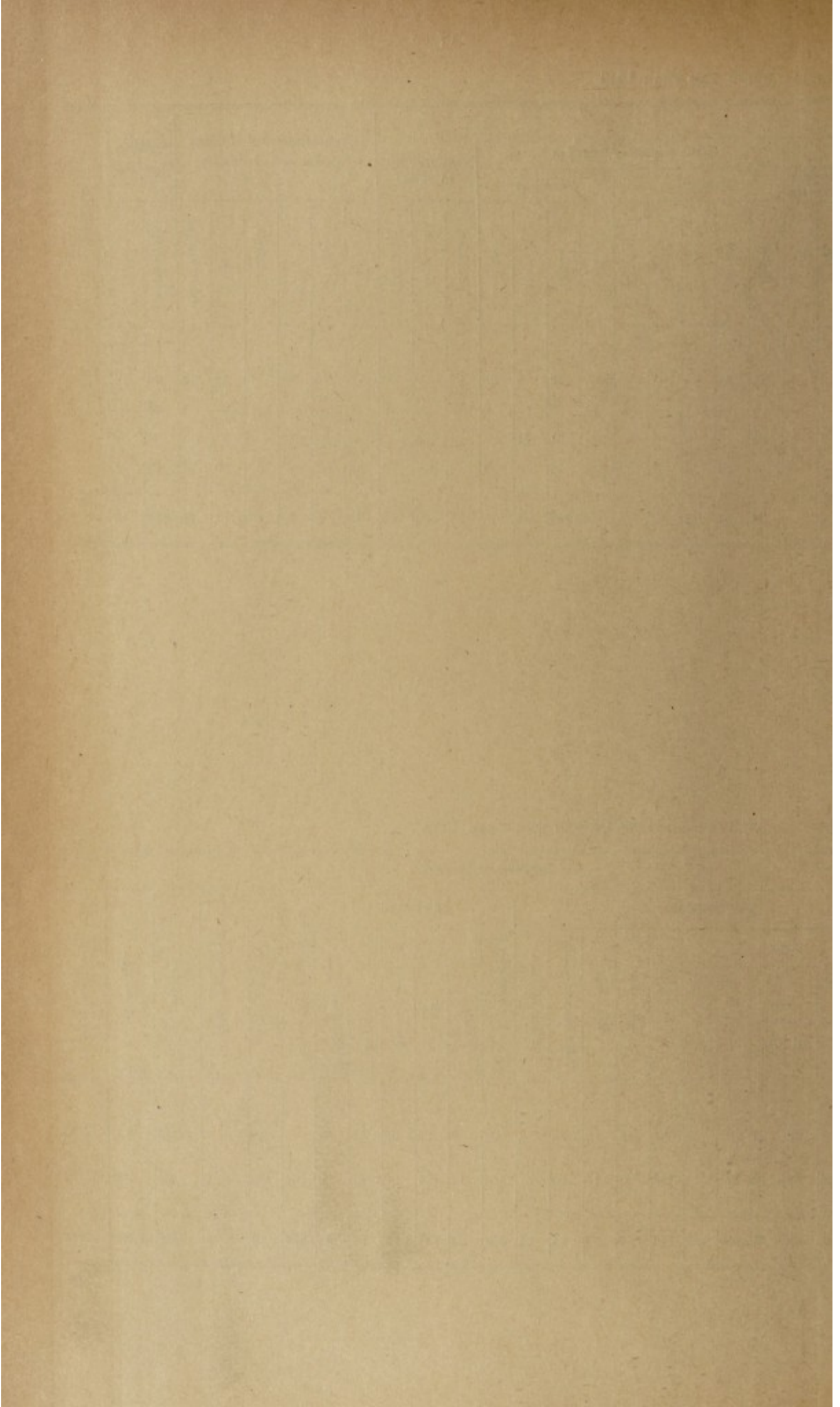
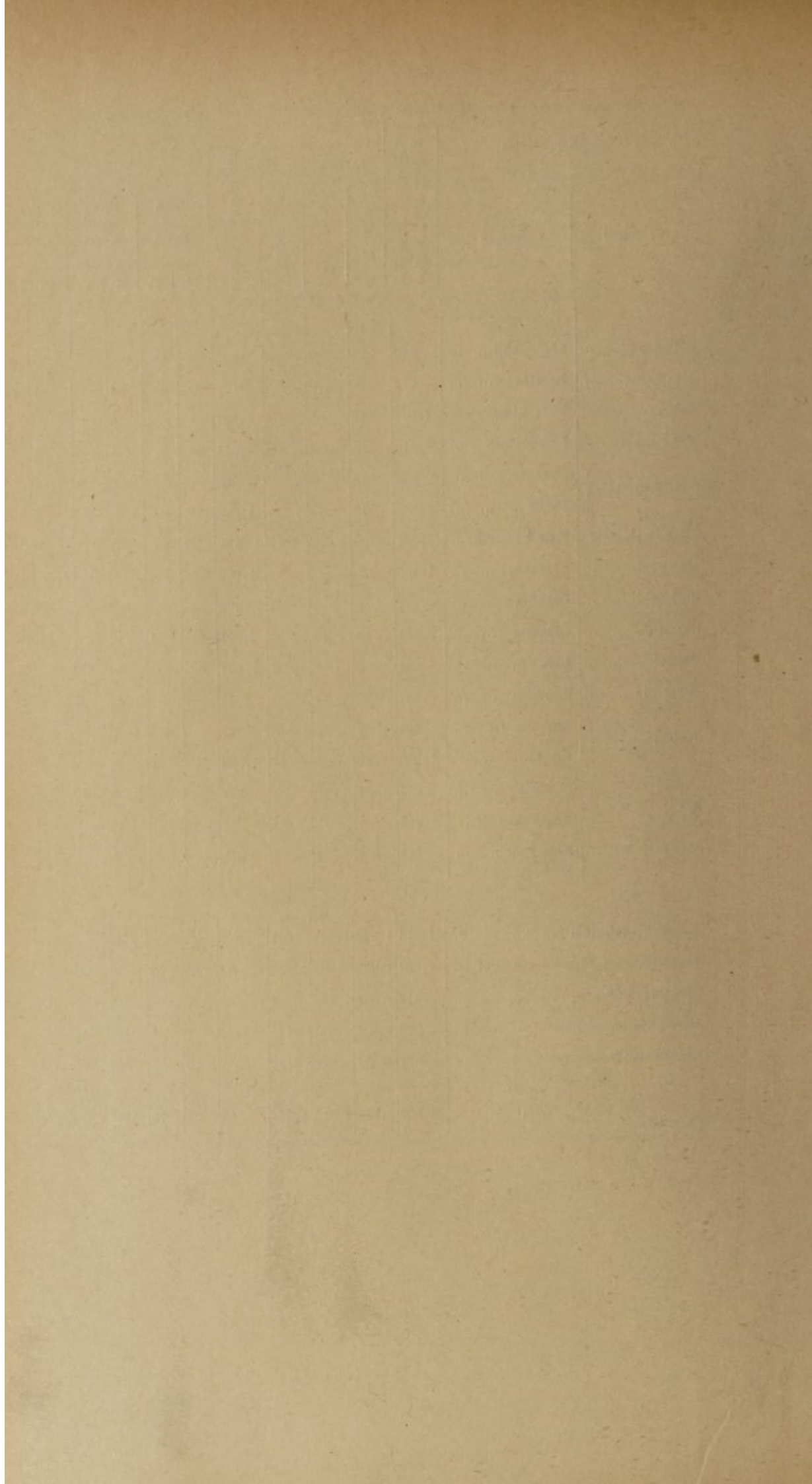


TABLE 25.—ANNUAL TONNAGE OF VESSELS AND BRANCHES OF CRIST DOMINGUEZ ENTERPRISES DURING THE YEAR 1905

[illegible]



Chapter IX—VENEREAL AND SKIN DISEASES

The total number of new patients attending venereal and skin diseases units during the year was 253,118 (93,446 males and 159,672 females) as compared with 267,460 new patients during the previous year.

The number of attendances was 461,344 as against 466,818 in 1948.

Gonorrhoea :

Of a total of 7,259 new patients returned positive for gonorrhoea, 5,314 patients (3,731 males and 1,583 females) suffered from acute gonorrhoea as against 7,681 in 1948.

Syphilis :

Of a total of 10,292 (4,466 males and 5,826 females) new syphilis cases, 2,752 (1,873 males and 879 females) were of the acute type, as against 3,798 acute cases in 1948.

Other Venereal Diseases :

These numbered 5,380 (924 males and 4,456 females) as against 1,173 in the previous year.

Technical Works :

Different propaganda methods are used by the venereal diseases units to demonstrate to the public the evils of these diseases and the unsightly and ruinous deformities they leave behind.

Penicillin is now used extensively in the treatment of acute gonorrhoea and will shortly be used in the treatment of acute syphilis as well.

Great strides have been made in the fight against favus particularly among school children. Some 26 units will soon be equipped with X-ray apparatus for the purpose.

Special interest is taken in the treatment of scabies, a widespread disease. Benzil benzoate is supplied to venereal diseases units as well as some 100 rural health centres for the treatment of scabies. Besides, there are two mobile treatment units, one in Minia Province and another in Sharkia province for this purpose.

The two lock hospitals at Hod el Marsoud, Cairo, and Gabbari, Alexandria, have been converted into venereal diseases hospitals and provided with in-patient accommodation for syphilis and skin diseases patients and out-patient departments for the treatment of venereal diseases.

Every endeavour is made to increase the number of venereal diseases units.

TABLE No. 67.—NEW PATIENTS AND VISITS TO THE SKIN AND VENEREAL DISEASES HOSPITALS DURING 1949

		CAIRO HOSPITAL										ALEXANDRIA HOSPITAL									
		Syph.		Gon.		Skin.		Other. Dis		Total		Syph.		Gon.		Skin.		Other. Dis		Total	
		M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
In-patients	Public	54	51	25	73	22	33	—	—	101	157	35	15	—	—	8	3	8	2	52	20
	Prostitutes	—	138	—	81	—	17	—	—	—	236	—	87	—	137	—	2	—	43	—	269
	Sailors	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	TOTAL...	54	189	25	154	22	50	—	—	101	393	35	102	—	137	8	5	9	45	52	289
Out-patients	Public	107	505	73	232	558	1,113	42	311	780	1,861	24	18	7	—	1,395	2,653	97	70	1,523	2,741
	Prostitutes	—	138	—	—	—	—	—	—	—	138	—	—	—	—	—	—	—	—	—	—
	Sailors	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	TOTAL...	107	343	73	232	558	1,113	42	311	780	1,999	24	18	7	—	1,395	2,653	97	70	1,523	2,741
Total of in and out-patients...		161	532	98	386	580	1,163	42	311	881	2,392	59	120	7	137	1,403	2,658	106	115	1,575	3,039
Number of Visits		440	2,208	602	5,171	1,472	2,283	—	—	2,514	9,662	112	460	10	—	1,962	3,555	151	417	2,235	4,432

TABLE NO. 68.—NEW CASES OF SYPHILIS IN VENEREAL DISEASES HOSPITALS DURING 1949

	EARLY CASES						LATE CASES						Herd		TOTAL	
	Primary		Second		TOTAL		Test.		Latent		Nervous					
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
Cairo Hospital ...	18	8	31	158	49	166	4	4	68	144	7	—	33	80	161	394
Alexandria Hosp.	14	13	11	8	25	21	10	5	11	93	12	2	1	2	59	20
TOTAL.... ..	32	21	42	166	74	187	14	9	79	237	19	2	34	82	220	514

NEW CASES OF GONORRHOEA DURING 1949

	Acute		Chronic		TOTAL	
	M.	F.	M.	F.	M.	F.
Cairo Hospital ...	41	129	57	257	98	386
Alexandria Hosp. ...	3	—	4	137	7	137
TOTAL	44	129	61	394	105	523

CURED CASES OF VENEREAL DISEASES DURING 1949

	OUT-PATIENTS				IN-PATIENTS			
	Syph.		Gon.		Syph.		Gon.	
Cairo Hospital ...	5	29	50	162	54	189	25	154
Alexandria Hosp. ...	19	13	6	—	29	107	—	137
TOTAL	24	42	56	162	83	296	25	291

INFECTED CONTACTS

	Syph.		Gon.	
	M.	F.	M.	F.
Cairo Hospital ...	27	16	6	12
Alexandria Hospital.	—	—	—	—
TOTAL ...	27	16	6	12

CURED SKIN DISEASES CASES DURING 1949

	Scabies		Favus	
	M.	F.	M.	F.
Cairo Hospital ...	35	65	—	—
Alexandria Hospital.	67	120	20	51
TOTAL ...	102	185	20	51

TABLE NO. 69.—CASES OF SYPHILIS IN VENEREAL DISEASES CLINICS DURING 1949

Locality of Clinic	ACUTE SYPHILIS						OTHER STAGES								TOTAL	
	Primary		Second.		TOTAL		Tert.		Latent		Nervous		Herd.			
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
Sayed Zeinab	143	8	43	28	168	36	9	9	53	97	2	—	15	23	247	165
Shubra	120	16	44	34	164	50	13	11	87	107	1	1	8	20	273	189
Gamalia	129	17	102	66	231	83	20	8	81	98	2	1	17	14	351	204
Abbassia	31	3	10	10	41	13	9	6	65	51	1	1	7	3	123	74
Old Cairo	13	1	15	10	28	11	—	—	10	15	1	—	4	5	43	31
Khalifa	33	1	16	9	49	10	9	1	8	35	1	—	3	7	90	53
Heliopolis	32	2	10	5	42	7	12	3	40	8	—	—	2	2	96	20
Port-Said	1	—	19	7	20	7	4	4	4	41	2	—	4	7	34	59
Port Said Health Centre	1	1	2	9	3	10	—	—	13	64	1	—	8	21	25	95
Ismailia	5	—	17	18	22	18	2	8	52	156	—	—	4	15	8	197
Suez	52	5	47	16	99	21	4	10	43	47	1	1	11	7	158	86
Damietta	—	—	2	5	2	5	4	3	27	98	—	1	3	4	36	111
Benha	6	—	3	12	9	12	4	5	26	46	1	—	6	14	46	77
Shebin el Kom	11	—	11	14	22	4	8	4	38	36	—	—	20	21	88	75
Menouf	1	1	6	5	7	6	8	4	17	25	2	1	2	2	36	38
Tanta	30	11	24	21	54	32	36	39	104	305	—	—	47	96	241	472
Mehalla el Kobra	20	2	19	19	39	21	24	12	23	82	4	1	21	14	111	130
Kafr el Zayat	—	—	11	9	11	9	1	2	53	91	1	—	15	13	81	115
Zagazig	16	1	32	26	48	27	16	6	29	57	—	—	10	7	103	97
Faccus	5	—	4	15	9	15	4	2	47	201	2	—	19	24	81	242
Mansoura	10	2	17	14	27	16	15	10	63	149	3	—	34	37	142	212
Mit Ghamr	4	2	23	8	27	10	24	9	14	142	—	—	33	49	98	210
Damanhour	23	3	32	45	55	48	5	6	36	48	4	3	18	19	118	124
Kafr el Dawar	2	—	5	4	7	4	3	—	21	45	—	—	1	1	32	50
Giza	49	5	21	12	70	17	9	7	14	29	1	—	11	11	105	64
Fayoum	16	4	26	29	42	33	36	73	14	36	1	1	7	11	190	154
Sennuris	1	—	34	37	35	37	4	14	14	45	—	—	29	14	82	110
Beni Suef	34	3	25	20	59	23	7	16	8	31	1	—	6	13	81	83
Minia	2	—	38	15	49	15	11	8	34	82	—	—	12	10	97	115
Samalout	2	—	13	9	15	9	8	5	35	64	—	—	10	19	68	97
Assiut	28	1	10	9	38	10	8	14	94	268	—	—	44	58	184	350
Deirout	3	—	11	22	14	22	3	3	8	27	1	—	1	1	27	53
Gerga	30	10	93	126	123	136	4	3	10	13	1	—	7	14	145	166
Tahta	20	—	25	16	45	16	18	43	116	307	1	3	53	61	233	430
Suhag	5	—	20	14	25	14	11	24	98	201	—	—	22	20	156	259
Qena	11	1	38	35	49	36	14	26	30	28	—	—	32	55	125	245
Nag' Hammadi	36	—	16	16	52	16	40	53	46	191	1	—	9	43	148	303
Luxor	11	1	12	8	23	9	2	2	62	112	—	—	8	16	95	139
Aswan	35	1	6	—	41	1	3	3	24	107	3	—	16	21	87	132
TOTAL	971	102	902	777	1873	879	412	456	1563	3685	39	14	579	792	4466	5826

TABLE NO. 70.—NEW CASES AND VISITS TO THE SKIN

LOCALITY OF CLINIC	NEW CASES									
	Syphilis		Gonorrhoea		Skin Dis.		Other Dis.		TOTAL	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
Sayeda Zeirab	247	165	465	155	2,346	3,509	37	368	3,055	4,197
Shubra	273	189	646	405	3,875	14,092	74	32	4,868	14,718
Gamalia	351	204	834	514	1,485	1,481	113	724	2,786	2,923
Abbassia	123	74	214	286	2,243	3,033	68	84	2,648	3,477
Old Cairo	43	31	55	120	760	1,165	1	358	859	1,674
Khalifa	90	53	76	209	1,087	5,937	17	89	1,270	6,288
Heliopolis	96	20	93	3	1,134	2,241	—	176	1,323	2,440
Port-Said	34	59	80	39	2,039	2,997	79	527	2,232	3,622
Port Said Health Centre ...	25	95	14	49	1,696	2,270	—	93	1,735	2,597
Ismailia	80	197	87	26	1,088	2,173	—	412	1,255	2,808
Suez... ..	158	86	284	72	1,593	4,622	58	1594	2,093	6,374
Damietta	36	111	25	37	2,133	7,696	—	5	2,194	7,843
Benha	46	77	133	11	2,436	2,961	252	479	2,867	3,528
Shebin el Kom	88	75	70	19	4,670	7,729	13	76	4,841	7,899
Menouf	36	38	15	3	1,963	4,693	—	90	2,014	4,824
Tanta	241	472	120	113	4,783	5,657	27	68	5,171	6,310
Mehalla el Kobra	111	130	43	38	4,009	3,829	105	212	4,268	4,209
Kafr el Zayat	81	115	29	25	2,556	2,682	—	82	2,666	2,904
Zagazig	103	97	81	23	3,666	3,301	8	—	3,858	3,421
Faccus	81	242	7	26	2,067	2,387	1	82	2,156	2,737
Mansoura	142	212	62	9	2,861	4,005	150	1,055	3,215	5,281
Mit Ghamr	98	210	7	—	2,990	3,982	20	6	3,115	4,198
Damanhour	118	124	142	170	3,826	6,248	—	—	4,086	6,542
Kafr el Dawar	32	50	12	16	681	1,802	7	2	732	1,870
Giza	105	64	56	6	956	2,212	26	463	1,143	2,745
Fayoum	100	—	300	202	1,425	2,006	—	—	1,825	2,372
Sennuris	82	110	9	11	1,362	4,303	1	31	1,454	4,455
Beni Suef	81	83	88	64	3,490	3,930	2	8	3,661	4,085
Minia	97	115	49	20	2,130	3,467	—	218	2,276	3,829
Samalout	68	97	10	16	779	779	—	6	857	918
Assiut	184	350	100	2	2,280	3,349	4	33	2,568	3,734
Deirout	27	53	6	—	2,119	2,678	60	72	2,212	2,893
Gerga	145	166	26	20	4,163	9,278	—	14	4,344	9,478
Tahta	233	420	4	13	1,261	3,016	3	78	1,501	3,537
Suhag	156	259	22	—	1,397	1,551	—	—	1,575	1,810
Qena	125	245	25	5	1,575	2,504	—	—	1,725	2,754
Nag Hammadi	148	303	18	51	752	1,136	1	21	919	1,511
Iaxor	95	139	47	5	852	1,563	4	17	958	1,724
Aswan	87	132	90	32	847	1,178	17	84	1,041	1,426
TOTAL	4,466	5,820	4,444	2,815	83,378	143,362	924	4,456	93,446	159,672

AND VENEREAL DISEASES CLINICS DURING THE YEAR 1949

NUMBER OF VISITS

Syphilis		Gonorrhoea		Skin Dis.		Other Dis.		TOTAL	
M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
4,881	7,024	718	1,419	1,985	4,365	11	126	7,595	12,934
4,893	5,018	1,147	2,961	1,700	3,728	344	477	8,084	12,184
9,297	8,087	1,487	3,299	870	1,280	219	260	11,873	12,926
3,015	3,375	272	2,427	676	1,126	10	—	3,973	6,929
976	1,287	137	2,764	327	1,075	—	3	1,440	5,129
1,315	1,980	46	1,985	541	1,465	—	40	1,902	5,470
1,687	291	138	1,994	1093	1,287	—	—	2,918	3,572
1,848	4,344	368	1,637	920	1,248	4	—	3,140	7,229
456	2,473	108	2,505	573	1,185	—	—	1,137	6,163
1,210	4,194	402	1,592	1,300	2,191	26	47	2,938	8,024
3,952	4,161	781	910	1,627	3,104	129	3,858	6,489	12,033
1,786	4,929	125	381	600	1,541	—	—	2,511	6,851
583	1,260	320	294	284	421	160	255	1,347	2,230
2,085	2,677	512	1,309	1091	1,791	—	—	3,688	5,777
1,648	2,338	114	1,702	1,232	2,376	—	—	2,994	6,616
6,932	13,238	478	1,957	1,952	2,438	—	1	9,362	17,634
4,964	6,271	369	1,351	2125	1,672	80	64	7,538	9,358
2,187	2,567	76	580	928	1,563	—	2	4,211	4,712
1,555	2,680	111	41	1,352	1,096	4	—	3,022	3,817
1,648	7,358	19	392	1,604	2,268	—	83	3,271	10,101
3,373	6,123	300	57	372	542	159	2,317	4,204	9,093
2,522	5,716	20	6	1,144	1,287	—	—	3,686	7,009
2,173	2,378	246	363	1400	1,745	—	—	3,819	4,486
511	992	3	14	166	298	—	—	680	1,304
3,068	4,284	106	3,142	344	668	—	—	3,518	8,094
3,153	7,867	506	410	156	218	—	—	3,815	8,495
1,259	3,322	9	21	841	2,448	2	242	2,111	6,033
2,305	3,397	283	893	1,414	2,032	19	40	4,021	6,362
3,593	4,241	299	845	1,004	1,469	—	—	4,896	7,155
2,322	4,681	23	90	280	301	—	—	2,625	5,072
5,137	11,497	112	153	1,343	1,858	—	12	6,592	13,520
1,371	3,014	6	—	948	1,079	194	251	2,519	4,344
2,793	4,420	87	131	1,165	2,419	—	—	4,045	6,970
3,343	7,734	10	925	86	117	5	38	3,444	8,864
5,529	9,410	25	—	461	433	—	—	6,015	9,843
2,397	7,495	82	38	275	599	—	—	2,754	8,132
3,134	8,968	66	541	218	219	—	—	3,418	9,728
3,632	8,331	247	477	501	1,313	—	2	4,380	10,123
2,849	6,662	200	591	294	511	—	—	3,343	7,764
111,382	196,735	10,378	40,397	36,192	56,776	1,366	8,118	159,318	302,026

TABLE No. 71.—NEW CASES OF GONORRHOEA IN VENEREAL DISEASES
CLINICS DURING THE YEAR 1947

Locality of Clinic	Acute		Chronic		TOTAL	
	M.	F.	M.	F.	M.	F.
Sayed Zeinab	432	25	33	130	465	155
Shubra	473	226	173	179	646	405
Gamalia	821	482	13	32	834	514
Abbassia	189	158	25	128	214	286
Old Cairo	29	100	26	20	55	120
Khalifa	43	8	33	201	76	299
Heliopolis	91	3	2	—	93	3
Port-Said	80	33	—	6	89	39
Port-Said Health Centre	14	43	—	6	14	49
Ismailia	62	—	25	26	87	26
Suez	265	72	19	—	284	72
Damietta	10	14	15	23	25	37
Benha	131	10	2	1	133	11
Shebin el Kom	52	15	18	4	70	19
Menouf	10	—	5	3	15	3
Tanta	75	17	45	96	120	113
Mehalla el Kobra	42	35	1	3	43	38
Kafr el Zayat	19	10	10	15	29	25
Zagazig	78	19	3	4	81	23
Faccus	7	5	—	21	7	26
Mansoura	60	4	2	5	62	9
Mit Ghamr	6	—	1	—	7	—
Damanhour	109	98	33	72	142	170
Kafr el Dawar	3	3	9	13	12	16
Giza	45	4	11	2	56	6
Fayoum	173	109	127	93	390	292
Sennuris	9	11	—	—	9	11
Beni Suef	53	10	35	54	88	64
Minia	38	5	11	15	49	20
Samalut	8	5	2	11	10	16
Assiut	100	2	—	—	100	2
Deirout	5	—	1	—	6	—
Gerga	25	16	1	4	26	20
Tahta	4	6	—	7	4	13
Suhag	22	—	—	—	22	—
Qena	20	4	5	1	25	5
Naga Hammadi	10	27	8	24	18	51
Luxor	38	—	9	5	47	5
Aswan	80	4	10	28	90	32
TOTAL	3,731	1,5	713	1,232	4,444	2,815

TABLE No. 72.—CURED CASES IN VENEREAL DISEASES CLINICS DURING THE YEAR 1949

Locality of Clinic	Cured Cases		Cured Cases	
	Syphilis		Gonorrhoea	
	M.	F.	M.	F.
Sayeda Zeinab	11	14	359	142
Shoubra	10	13	793	998
Gamalia	88	58	808	682
Abbassia	2	1	144	249
Old Cairo	—	—	21	60
Khalifa	—	—	43	108
Heliopolis	—	—	73	31
Port-Said	—	1	37	31
Port Said Health Centre	1	2	4	49
Ismailia	—	—	76	280
Suez	2	12	168	53
Damietta	10	30	23	25
Benha	—	—	113	51
Shebin el Kom	—	—	33	18
Menouf	—	—	2	—
Tanta	—	—	64	31
Mehalla el Kobra	1	—	5	42
Kafr el Zayat	3	5	8	28
Zagazig	3	10	36	14
Faccus... ..	1	2	10	82
Mansoura	16	27	45	2
Mit Ghamr... ..	—	3	2	—
Damanhour	1	3	63	49
Kafr el Dawar	—	—	7	4
Giza	6	4	52	5
Fayoum	1	8	84	62
Sennuris	—	4	5	10
Beni Suef	1	4	33	36
Minia	62	52	40	14
Samalut	—	—	8	8
Assiut	—	—	97	7
Deirout	—	1	8	—
Gerga	22	27	14	20
Tahta	4	17	6	65
Suhag	—	4	20	—
Qena	3	—	5	3
Nag Hammadi	—	—	3	2
Luxor	—	—	25	39
Aswan	1	—	87	31
TOTAL	249	302	3,419	3,331

TABLE No. 73.—NEW CASES OF SCABIES DURING THE YEAR 1949

Locality of Clinic	New Scabies	
	M.	F.
Sayeda Zeinab	316	391
Shubra	802	2,330
Gamalia	363	253
Abbassia	484	432
Old Cairo	148	185
Khalifa	181	767
Heliopolis	145	260
Port-Said	626	916
Port Said Health Centre	388	364
Ismailia	220	269
Suez	218	331
Damietta	496	1,384
Benha	763	716
Shebin el Kom	1,966	1,875
Menouf	256	592
Tanta	667	451
Mehalla el Kobra	1,442	1,468
Kafr el Zayat	677	624
Zagazig	1,509	1,288
Faccus	898	786
Mansoura	655	1,047
Mit Ghamr... ..	1,065	1,248
Damanhour	1,560	1,763
Kafr el Dawar... ..	231	423
Giza	148	284
Fayoum	241	345
Sennuris	290	343
Beni Suef	569	470
Minia	223	274
Samalut	156	117
Assiut	765	980
Deirout	400	355
Gerga	361	230
Tahta	265	249
Subag	185	110
Qena	195	151
Nag Hammadi	131	146
Luxor	196	394
Aswan	126	125
TOTAL	20,427	24,736

TABLE NO. 74.—NEW CASES AND NUMBER OF VISITS TO MOBILE
UNITS DURING THE YEAR 1949

Units	New Cases		Number of Visits	
	M.	F.	M.	F.
Ibrahimia	1,221	1,473	511	770
Saft el Khamar ...	257	183	108	76
TOTAL	1,478	1,656	619	846

FULL DETAILS

Units	Scabies				Other Skin Diseases	
	New Cases		Cured Cases			
	M.	F.	M.	F.	M.	F.
Ibrahimia	507	439	465	419	714	1,034
Saft el Khamar ...	87	72	47	49	170	101
TOTAL	594	511	512	468	884	1,145

TABLE NO. 75.—NEW CASES AND VISITS
TO SCABIES TREATMENT BATH-HOUSE
DURING THE YEAR 1949.

New Cases		Number of Visits	
M.	F.	M.	F.
3,179	2,007	6,597	3,873

HOSPITALS AND CLINICS FROM WHICH PATIENTS
WERE REFERRED DURING THE YEAR 1949.

District	Patients	
	M.	F.
Shubra Clinic	1,589	1,731
Sayed el Zeinab Clinic ...	3	3
Gamalia „ ...	165	48
Giza „ ...	86	39
Old Cairo „ ...	54	25
Abbassia „ ...	4	—
Bulaq Health Centre ...	225	126
Bab el Shaaria „ ...	4	2
Demerdash Hospital... ..	3	1
Malek „	12	1
Kasr el Aini „	—	—
School Hygiene Dept. ...	39	13
Other Units	995	18
TOTAL	3,179	2,007

Chapter X—MENTAL DISEASES

The Ministry is pleased to record some progressive measures taken during the year towards the treatment and welfare of mental cases. An out-patient department, for the treatment of psychoneurotics and early psychotic cases was established in a general hospital, the King's Hospital, situated in the centre of Cairo, and was opened by the Minister of Public Health on March 17th. The need for such a department was at once so readily shown by the public that the establishment of another became necessary and was actually opened before the end of the year at another general hospital, the Boulac Hospital. Both departments are run by psychiatrists from the two government mental hospitals assisted by social workers.

For the first time insulin treatment was started at the Abbassia Hospital during the year and would have been further extended but for the shortage of doctors.

A social worker was attached to the Department for the first time in its history and took charge of his office in the beginning of April. He soon directed his attention to welfare measures for the benefit of the patients. On June 7 and 8, August 8, September 13 and 18 and October 9 and 10, cinema films were shown at the two hospitals, while on June 25 and 26 two shows of the Popular Troup of the Ministry of Social Affairs were made.

Accommodation, Admissions and Discharges :

No new buildings have been erected as yet, though the Ministry has agreed in principle to a new project for enlarging the Khanka Hospital and dividing it into two separate hospitals, one for the criminal cases and the other for ordinary patients and will include female wards. As the accommodation still remains at 3,334 beds in the two present hospitals, the overcrowding became more accentuated during the year. The number of patients remaining in residence on December 31, 1948 was 5,194, the admissions during the year under review numbered 3,410, and those discharged or dead numbered 3,121, thus leaving 5,483 in residence at the end of the year, which is an increase of 287 patients compared with the previous year and of 2,149 patients over and above the normal number of beds.

Accused Persons Suspected of Insanity :

During the year, 186 persons were sent by the Procurer General for examination and report. Of these 58 were accused of crimes of violence and 42 accused of theft. The Parquet also asked for reports on 71 persons who were admitted as ordinary patients. Thus the number of reports sent to the Parquet totalled 257.

Ages of Persons Admitted :

Ages of patients ranged between 10 and 90 years.

Religions and Nationalities of Patients :

Moslems, Christians, Jews and of unknown religions were admitted to both hospitals. Besides Egyptians, admissions included Europeans and Near Easterners.

Occupation of Male Patients :

These included mainly farmers, sailors, artisans, students and servants of religion, unemployed, clerks and Government employees.

Residence of Patients :

Patients from all Provinces and Governorates of the Egyptian Kingdom were admitted to both hospitals.

Physical Condition on Admission :

The ratio in both hospitals was as follows :

	Khanka %	Abbassia %
Fair	46.6	62.12
Poor	7.2	32.93
Very poor or moribund	46.2	4.95

Wassermann Tests :

3,157 specimens of blood and 69 specimens of cerebro-spinal fluid were sent to the Laboratories of the Ministry of Public Health for examination and gave various results.

Scabies :

238 cases of scabies were treated locally in Abbassia Hospital.

Accused Patients and Prisoners in Residence.

Patients accused in crimes numbered 857.

Deaths :

The patients who died during their stay in the two hospitals numbered 377. The ratio of deaths compared with the total cases treated is 4.4 per cent as against 4.3 per cent in 1948.

Ophthalmic and Dental Clinics.

The work in both clinics continued for the benefit of the patients. 679 cases were treated.

Electric Shock and Cardiazol Treatment.

Treatment by both methods continued on a larger scale. Cases of schizophrenia, manic-depressive, confusional psychosis and anxiety neuroses were treated giving results varying between recovery, marked improvement, slight improvement and no improvement.

Accidents :

67 major and 1,877 minor accidents took place in both hospitals. One suicide occurred in Abbassia.

Artificial Feeding :

This was carried out 16,828 times without accidents.

Epileptic Fits :

6,655 epileptic fits were recorded during the year.

Physical Illnesses.

10,026 cases were treated locally from physical ailments.

Births :

11 children were born in the female wards at Abbassia Hospital.

Autopsies :

80 post-mortem cases were made during the year.

Pharmacy :

38,500 prescriptions and 2,200 photos were prepared in the pharmacy of Abbassia Hospital and an almost similar number in Khanka.

X-Ray Department :

232 photos and 311 screenings were made in Abbassia Hospital.

Central Medical Commission :

88 patients in Abbassia were reported upon to the C.M.C. other than 30 in Khanka.

Length of Residence :

The length of residence ranged between one day and 40 years.

Escapes :

Of 2 patients escaped one from Abbassia and another from Khanka, one was recaptured and brought back to the hospital.

Khanka Farm :

The production of vegetables from the farm continued as usual so also its use as a means of occupational therapy to the patients.

Chapter XI—PROPAGANDA AND SOCIAL HEALTH

Every available propaganda means was utilised during the year in the control of seasonal outbreaks of infectious diseases, in diffusing health education and in raising the health standards of the population.

The Propaganda Section embarked this year on a new field, namely, extending social health services to the population.

The following are details of propaganda activities during the year :

Health Films.—A total of 119 copies have been reproduced from old health films for distribution to all propaganda units. These films dealt generally with the more important health problems confronting the nation among which may be mentioned malaria, bilharzia, typhoid fever, venereal diseases, tuberculosis, ophthalmias, gambiae, insects, nutrition and alcoholic drinks.

15 short films of 2-5 minutes duration have also been produced with a health advice underlying each film.

Propaganda Vehicles.—Having been equipped with propaganda films, apparatus and literature, these vehicles carried their work in the crowded communities according to a programme laid down by the Senior public health inspector of the province or governorate in the light of seasonal flares of infectious diseases and areas involved.

The following meetings were held during the year :

4,501	day time meetings.
3,019	evening meetings.
1,708	meetings in schools.
914	meetings in markets.
188	meetings during fairs.
465	meetings during cinemas.

Broadcasting.—As an important and effective propaganda organ, broadcasting has been used extensively this year. Lectures on health questions were broadcast weekly and on special events. A total of 68 lectures and eight theatrical representations were broadcast during the year.

UNESCO Conference.—Having been invited to join the Egyptian delegation to the UNESCO conference held at Beirut, the Section gave a display of all health propaganda methods in use in Egypt. A lecture explaining these methods was delivered to members of the conference.

The Agricultural and Industrial Exhibition.—Advantage was taken of this exhibition. A large number of public health exhibits were arrayed in the space allotted to the Ministry. It was well attended by visitors. Some 80,000 copies of health propaganda literature were distributed to visitors and health propaganda films were shown during 250 meetings.

Co-operation with other Sections of the Ministry.—Propaganda units helped other sections of the Ministry in promoting their respective activities. Thus tuberculosis, nutrition, endemic diseases, flies and malaria were each allotted a week during which propaganda was conducted on a large scale.

Medical officers of the different units were asked to lecture the public on current health problems using propaganda facilities within their areas. Some 1,430 lectures were delivered during the year.

At the request of the Quarantine Department, a propaganda vehicle was sent to Tor lazaret to conduct propaganda activities among returning pilgrims. 75 cinema shows, 88 morning meetings and 82 religious and health talks were given.

Propaganda units co-operated with the B.C.G. vaccination teams provided by the World Health Organization. The people were advised as to the benefits of vaccination and urged to profit by it. Two films, one produced locally and another translated into Arabic, were shown in cinemas for the purpose.

64 propaganda meetings were held for the entertainment of patients in general hospitals, sanatoria and leprosy colony.

Co-operation with other Organizations :

It has been arranged with the Preaching Administration of Al Azhar that preachers, would include health propaganda in their sermons, particularly during the spread of infectious diseases, health weeks and B.C.G. vaccination.

The Mosques Section of the Ministry of Waqfs asked Imams of mosques to include in their weekly sermons some health advice.

Arrangements were made with the School Hygiene Department of the Ministry of Education, the different administrations of the Ministry of Social Affairs, private institutions with social activities, factories and workmen corporations, for the diffusion of health education among their members.

Social Health Services :

A Social Health Services Office has been set up at Assiut, under the supervision of the Propaganda Section. Among its functions may be mentioned :

(i) Investigating living conditions of patients to facilitate their treatment and sustenance, to supply them with artificial limbs and drugs and to urge social institutions to provide homes for the accommodation of convalescents.

(ii) Studying child welfare problems and advising parents to profit by services rendered by child welfare centres.

(iii) Combating ophthalmias by visiting house wives in their homes and instructing them in methods of eye protection.

(iv) Studying the tuberculosis problem in rural areas. Catering for the patients and families socially and medically.

(v) Protection of the offspring through the control of venereal diseases. This is realised by demonstrating to the public the evils of these diseases, by advising the young to spend their leisure time in sports and by setting up an office for the medical examination of persons before marriage.

(vi) Combating narcotics and intoxicants by all means of publication and broadcasting.

(vii) Conducting researches and studies on nutrition in conjunction with the Nutrition Section.

(viii) Catering for patients during epidemics and advising the public to avail themselves of services rendered by public health units, bath-houses, hospitals, dispensaries, etc.

(ix) Conducting surveys and compiling data on various health problems.

(x) Raising the standards of rural areas through the aid of rural health and social units.

(xi) Directing the steps of private societies with health and social activities, towards serving the needs of the population.

(xii) Promoting propaganda activities to meet the needs of the districts, and providing health museums.

The equipment of the office was completed and work commenced during the year. This involved :

(i) The appointment of most of the staff, namely the M.O. i/c. of the Office. social workers and sanitary surveyors. A doctor and house visitors will shortly be appointed.

(ii) The office is provided with a museum containing a variety of health models and a hall for showing health films to the public.

(iii) A survey of the area has been completed and data regarding the various health problems collected prior to drawing up plans for operation.

(iv) Government and private bodies with social activities have been approached with a view to coordinating their efforts.

(v) Meetings for the entertainment of hospital patients have been organised by the office; and the social health and financial conditions of poor patients have been studied.

(vi) Arrangements have been made for setting up an office for the medical examination of persons before marriage.

(vii) Credits have been provided to meet expenditures incurred by the office.

PART III — TREATMENT

Chapter XII — GENERAL HOSPITALS

Number of Hospitals :

There were 90 general hospitals in operation this year. 29 of these were situated in governorates and chief towns of provinces and 56 in Bandar and District towns. The remaining five were out-patient dispensaries.

Hospital Accommodation :

The total number of hospital beds this year was 6,864 of which 5,729 were reserved for patients and 1,135 for the staff and pupil nurses.

Treatment :

Treatment was given this year to 104,732 in-patients and 2,286,893 out-patients.

Operations :

A total of 46,963 major operations were performed on in-patients and 76,947 minor operations on out-patients or a total of 123,910 operations as against 39,628, 73,604 and 113,232 respectively in the previous year.

X-Ray Examinations :

The number of cases examined and treated by X-Rays was 24,665 as against 27,248 in 1948.

Deaths :

A total of 4,258 deaths were recorded among the 104,732 in-patients or a death rate of 4.0 per cent as against 3.75 per cent in 1948.

TABLE NO. 76.—SHOWING GENERAL HOSPITALS IN OPERATION SINCE 1939

Year	Hospitals in Capitals of Provinces and Governorates	Hospitals in Chief towns of Districts	Village Hospitals	Hospitals in the Oases	Out-patient Clinics
1939	20	48	62	—	3
1940	20	51	62	—	3
1941	20	52	—	—	3
1942	20	52	—	—	4
1943	26	52	—	—	3
1944	27	53	—	—	2
1945	27	53	—	6	2
1946	28	61	—	6	2
1947	28	56	—	—	4
1948	28	56	—	—	5
1949	29	56	—	—	5

TABLE NO. 77.—NUMBER OF BEDS IN GENERAL HOSPITALS

Year	Number of Beds	Remarks
1939	6,979	
1940	6,926	The Lock hospitals were detached from the Section.
1941	6,969	The village hospitals were detached from the Section.
1942	6,880	
1943	6,363	Alexandria hospital was detached from the Ministry.
1944	6,553	
1945	6,663	
1946	7,014	
1947	6,879	The Oases and Demerdash hospitals were detached from the Section.
1948	7,171	
1949	6,864	Helmiyet-El-Zeitoun hospital was converted into a military hospital.

TABLE No. 78.—DISTRIBUTION OF BEDS

Hospital	1st Class	2nd Class	3rd Class Paying	3rd Class Ordinary	Children	Ophth.	Total beds of patients	Staff Beds	Total No. of Beds
King's	—	—	—	285	9	—	294	106	400
Helmiet el Zeitoun	This hospital was converted into a military hospital								
Boulaq	—	—	—	32	—	6	38	31	69
Bab-El -Shaaria	—	—	—	51	—	6	63	25	88
Incurable Diseases Helwan	—	—	—	135	—	—	135	94	229
Port-Said	2	2	16	248	14	—	282	38	320
Suez	8	15	—	164	—	25	212	31	243
Damietta	—	2	—	125	—	—	127	13	140
Damanhour	—	4	—	89	5	—	98	15	113
Tanta	—	4	—	218	2	—	224	88	312
Mansoura	—	—	—	142	10	—	202	27	229
Mit Ghamr	—	—	—	45	—	12	57	11	68
Zagazig	1	3	—	208	12	—	224	16	240
Shebin el Kom	—	—	—	89	—	—	89	9	98
Benha	—	—	—	69	—	—	69	10	79
Kaliub	—	—	—	89	—	—	89	4	93
Fayoum	—	1	—	92	4	—	97	8	105
Beni-Suef	—	—	—	114	—	—	114	8	122
Minia	—	1	—	81	8	—	90	37	127
El-Fikria	—	—	—	28	—	13	41	8	49
Maghagha	—	—	—	—	—	—	—	—	—
Assiut	—	4	—	189	11	—	204	18	222
Mallawi	—	—	—	28	—	11	39	4	43
Souhag	—	2	—	103	—	—	105	26	131
Tahta	—	—	—	33	—	—	33	4	37
Qena	—	—	—	13	—	—	73	12	85
Luxor	5	7	—	76	—	25	113	15	128
Esna	—	—	—	68	—	23	91	14	105
Aswan	1	2	—	48	—	25	76	3	79
Shoubra El-Khema	—	—	—	22	—	—	22	3	25
Ismailia	—	2	—	86	—	12	100	16	116
Delingat	—	—	—	30	—	12	42	6	48
Kafr el Dawar	—	—	—	68	—	8	76	11	87
Rosetta	—	—	—	29	—	12	41	8	49
Shubrakheet	—	—	—	28	—	12	40	8	48
Edfeena	—	—	—	47	—	—	44	6	50
Kom Hamada	—	—	—	29	—	11	40	9	49
Mahmoudia	—	—	—	21	—	—	21	2	23
Abou Homos	—	—	—	27	—	—	27	6	33
Desouk	—	—	—	35	—	15	50	9	59
Mehalla el Kobra	—	—	—	114	—	—	114	13	127
Samanoud	—	—	—	38	—	8	46	7	53
Tayeba	—	—	—	39	—	15	54	8	62
Sherbin	—	—	—	31	—	12	43	9	52
Zifta	—	—	—	45	—	—	45	11	56
Kafr El Sheikh	—	2	—	60	—	—	62	7	69
Fowa	—	—	—	34	—	8	42	6	48
Kafr El-Zayat	—	—	—	32	—	8	40	10	50
Absheet	—	—	—	—	—	—	—	—	—
Biala	—	—	—	—	—	—	—	—	—
Faraskour	—	—	—	31	—	8	39	7	46
Sinbellawein	—	—	—	22	—	12	34	8	42
Manzala	—	—	—	35	—	—	35	9	44
Aga	—	—	—	44	—	8	52	7	59
Dikernes	—	—	—	66	—	12	78	11	89
Belbeis	—	—	—	24	—	12	36	14	50
Faccous	—	—	—	33	—	12	45	11	56
Minia El Kamh	—	—	—	32	—	8	40	9	49
Inshas	—	—	—	31	—	19	50	11	61
Teftish El Wadi	—	—	—	—	—	—	—	—	—
Tala	—	—	—	29	—	11	40	10	50
Ashmoun	—	—	—	52	—	12	64	8	72

TABLE NO. 78. DISTRIBUTION OF BEDS (Contd.)

Hospital	1st Class	2nd Class	3rd Class Paying	3rd Class Ordinary	Children	Ophth.	Total beds of patients	Staff Beds	Total No. of Beds
Menouf	—	—	—	60	—	16	76	11	87
Zawiet el Naoura	—	—	—	33	—	14	47	9	56
Shebin el Kanater	—	—	—	27	—	12	39	10	49
Saff	—	—	—	31	—	12	43	7	50
Ayat	—	—	—	49	—	16	65	10	75
Itsa	—	—	—	32	—	11	43	9	52
Wasta	—	—	—	25	—	12	37	9	46
Beba	—	—	—	35	—	12	47	10	57
Beni Mazar	—	—	—	40	—	8	48	13	61
Fashn	—	—	—	29	—	12	41	9	50
Samalout	—	—	—	68	—	—	68	8	76
Deirout	—	—	—	30	—	12	42	10	52
Badari	—	—	—	21	—	10	31	6	37
Sahil Selim	—	—	—	25	—	8	33	12	45
Manfalout	—	—	—	35	—	—	35	5	40
Mataana	—	—	—	—	—	—	—	—	—
Abou Tig	—	—	—	35	—	8	43	8	51
Akhmim	—	—	—	25	—	12	37	8	45
Baliana	—	—	—	24	—	12	36	7	43
Gerga	—	—	—	50	—	12	62	9	71
Dishna... ..	—	—	—	25	—	8	33	9	42
Kous	—	—	—	39	—	12	51	7	58
Nag Hamadi	—	—	—	28	—	14	42	9	51
Kom Ombo	—	—	—	25	—	—	25	4	29
Eneiba	—	—	—	11	—	—	11	1	12
Dahabiet el Dirr	—	—	—	—	—	—	—	—	—
TOTAL	17	51	16	4,930	75	640	5,729	1,135	6,864

Treatment :

The following table No. 79. shows the number of patients treated in the hospitals,

TABLE NO. 79.

Year	No. of In-Patients	No. of Out-Patients	No. of attendance to out-patients section
1945	96,663	1,850,888	3,495,322
1946	103,496	2,285,035	3,920,413
1947	92,699	1,952,519	3,363,931
1948	99,092	2,165,007	3,520,316
1949	104,732	2,286,893	4,098,140

Operations and X. Ray Examinations:

The following table No. 80 shows the number of operations and X-Ray examinations performed in the hospitals during the last 5 years.

TABLE No. 80.

Year	In-patients Operations	Out-patients Operations	TOTAL	X. Ray Examinations.
1945	37,730	76,447	114,177	28,565
1946	40,454	79,977	120,431	29,309
1947	39,346	74,326	113,672	25,304
1948	39,628	73,604	113,232	27,248
1949	46,963	76,947	129,910	24,665

Deaths :

The following table No. 81 shows the number of in-patients treated in the hospitals during the last five years and the number of deaths and death-rates in each year

TABLE No. 81.

Year	No. of in-patients	No. of Deaths	Death-rates per cent
1945	96,663	4,570	4.72
1946	103,496	3,453	3.3
1947	92,699	4,693	5.06
1948	99,092	3,723	3.75
1949	104,732	4,258	4.06

Venereal Diseases :

The following table No. 82 shows the number of prostitutes treated in the General and District hospitals during the year 1949.

TABLE No. 82.

Gonorrhoea	Syphilis	Other Diseases	TOTAL
2	71	—	73

The following table No. 83 shows the total number of patients treated for venereal diseases in the General and District hospitals during the year 1949.

TABLE No. 83.

In-patient Sections			Out-patient Sections		
Gonorrhoea	Syphilis	Total	Gonorrhoea	Syphilis	TOTAL
6	185	191	895	5,851	6,746

Chapter XIII—OPHTHALMIC HOSPITALS

New Units :

Credits have been granted in this year's budget for ophthalmic branches at Inshas, Abul Matamir, Teh el Baroud and extension of ophthalmic treatment at Mallawi.

Clinical work :

The following table No. 84 gives a summary of the clinical work carried out during the year 1949 as compared with that of the year 1948 :—

TABLE NO. 84

	1949	1948
New patients	1,208,209	1,282,154
In-patients	33,572	30,721
Out-patients	5,564,944	3,724,100
Operations	220,806	206,277
Out-patient attendances	6,806,942	6,774,156

Cases of blindness including cataract cases totalled 15,775 or 2.79 per cent of total patients examined. Excluding cataract cases, these numbered 11,642 or 2.04 per cent.

Other services :

(1) Ophthalmologists pay regular visits to the following institutions and hospitals for the treatment of eye diseases among their inmates :—

Leprosy hospitals at Abu Zaabal and Siyoufia —Mental Hospitals at Abbassia and Khanka — Children Preventoria at Giza and Zeitoun — Fever hospitals at Abbassia and Embaba, Convalescents Home and Children preventorium at Marg.

(2) Ophthalmologists are detailed from time to time to visit Arish, Tor, and the Oases for the examination and treatment of the inhabitants. During pilgrimage, an ophthalmologist accompanies the medical mission sent to the Hedjaz to treat pilgrims.

(3) Medical officers of other ministries desiring to gain experience in ophthalmic treatment technique are accepted in ophthalmic hospitals for the purpose.

(4) Medical officers with practical training in ophthalmic treatment technique are provided to ophthalmic units of other ministries and departments.

(5) Ophthalmic units instruct and train assistant midwives and health visitors of rural health centres in ophthalmic treatment.

Corneal Graphing (Keratoplasty) :

Ophthalmic units began in 1949 to perform corneal graphing operations. Certain ophthalmic hospitals have been provided with the most modern instruments as well as refrigerators for the purpose.

At the invitation of Cairo University, Prof. Fieji arrived in Egypt, delivered some lectures and performed a number of operations at Kasr el Aini Hospital which were attended by medical officers of the ophthalmic section. Profitting by his experience, the medical officers began to perform these operations in the ophthalmic hospitals. A number of operations have already been performed but it is still in the experimental stage.

Nursing in Ophthalmic Hospitals :

The substitution of Bashtamurgis (chief male attendants) by nurses continues in ophthalmic hospitals according to available budget credits. It is proposed to introduce this arrangement into all units.

Accommodation :

The number of beds in all ophthalmic units was 2,342. Where space permits in in-patient departments in ophthalmic hospitals, more beds are added. 87 more beds have been approved in this year's budget.

Post Graduate Course :

Fresh medical officers desiring to join the ophthalmic service are sent to the Faculty of Medicine of Cairo University to attend a post graduate course in ophthalmology.

Ophthalmic Library :

There is a circulating ophthalmic library with headquarters at Rod el Farag Ophthalmic Hospital for the benefit of medical officers in ophthalmic units. It is kept provided with old and new ophthalmic literature which is placed at the disposal of medical officers to keep them acquainted with recent advances and new developments in the ophthalmic field. Important books and references indispensable to junior medical officers are kept in several copies to facilitate their frequent circulation.

Modern apparatus for ophthalmic hospitals :

Ophthalmic units are kept provided with up-to-date apparatus and instruments.

Chapter XIV—PHARMACIES

Private Pharmacies :

52 permits for new private pharmacies were granted this year by the Ministry. Authority was given for the transfer of ownership of 19 pharmacies partly owned by non pharmacists, to qualified pharmacists.

Night Service Pharmacies :

There were four night service pharmacies in operation in Cairo this year as against three in the previous year. The prescriptions dispensed totalled 14,521 not including patented preparations which were dispensed without prescriptions.

Agents :

Ten permits for agents having depots and 6 without depots were granted during the year.

Registration of Egyptian Specialities:

75 permits were granted for the preparation of Egyptian specialities bringing the number of registered specialities to 1,655. Ten specialities were refused registration.

Pharmaceutical Laboratories :

One new pharmaceutical laboratory was authorised this year and three closed down in Cairo.

Application of the Law :

Of 522 contraventions drawn up, 93 were for trading in or being in possession of poisonous substances and drugs without authorisation, three for practising pharmacy without licence and 99 against pharmacists and assistant pharmacists for violating the law.

Schedule 1 and 2 Poisonous Drug Stores :

Four permits for poisonous drug stores were granted this year, two in Cairo, one in Zagazig and one in Dakahlia.

Schedule IV Drug Stores :

28 permits were granted this year : 18 in Cairo, 5 in Alexandria, 2 in Gharbia, one in Menoufia, one in Behera and one in Damietta.

Schedule V Drug Stores :

Three permits were granted in Cairo this year, one of which has since been cancelled.

Schedule II Drug Stores :

12 permits were granted this year: 3 in Gharbia, two in Menoufia, 2 in Behera and one in each of Dakahlia, Suez, Sharkia, Fouadieh and Arish.

TABLE No. 85.—QUANTITIES OF STUPEFACIENTS IMPORTED INTO EGYPT
AND EXPORTED THEREFROM DURING THE YEAR 1949

Name of drug	Quantity imported		Quantity exported	
	Kgs.	Grams.	Kgs.	Grams.
Opium and its preparations	76	730	—	—
Morphine and its salts	2	230	—	—
Cocaine and its salts	—	996	—	—

TABLE No 86.—QUANTITIES OF STUPEFACIENTS CONFISCATED
FOR ILLICIT IMPORT OR EXPORT.

Name of drug	Tons	Kgs.	Grams.
Opium	6	118	—
Cannabis Indica	14	983	—
Heroin	—	4	—
Cocaine	—	—	361

TABLE No. 87.—QUANTITIES OF STUPEFACIENTS CONSUMED
FOR MEDICAL PURPOSES.

Name of drug	Kgs.	Grams.
Opium and its preparations	80	430
Morphine and its salts	2	810
Cocaine and its salts	—	996

Chapter XV.—UNIVERSITIES HOSPITALS

MANIAL HOSPITAL, CAIRO

Bedding Accommodation :

Eleven beds have been provided in the Radiography Section bringing the total number of beds to 1,449 as against 1,438 in the previous year.

In-patients :

A total of 20,429 in-patients were admitted to the various departments of the hospital during the year or 4,723 more in-patients than the previous year. This increase is due to the re-opening for treatment of the sections which were closed on the outbreak of the cholera epidemic.

Of this number, 15,982 were discharged as cured, improved or at their own request. 3,185 were transferred to the out-patients department for further treatment, 244 were referred to other hospitals and 718 died. The death rate was 3.5 per cent as compared with 4.02 per cent in 1948.

Out-patients :

The new and old out-patients totalled 899,929 as against 658,797 in the previous year or 241,132 more out-patients. Of this number, 338,202 were new and 561,727 old as against 206,977 and 451,820 respectively in 1948.

Diagnosis of in-patient medical diseases :

Diagnosis of medical diseases treated within the in-patient departments of the hospital fall under ten principal headings namely :

- (1) Respiratory system diseases numbered 2,197 (1,677 males and 520 females).
- (2) Digestive system diseases numbered 1,807 (1,177 males and 630 females).
- (3) Diseases of the cardio vascular system numbered 3,062 (1,915 males and 1,147 females).
- (4) Diseases of the uro-genital organs numbered 747 (594 males and 153 females)
- (5) Diseases of the central nervous system numbered 1,433 (1,037 males and 396 females).
- (6) Diseases of blood, lymphatics and spleen numbered 810 (609 males and 201 females).
- (7) Diseases of the metabolism and endocrine glands numbered 525 (335 males and 190 females).
- (8) Diseases of the joints and bones numbered 386 (214 males and 172 females)
- (9) Infectious diseases and fevers numbered 133 (80 males and 53 females).
- (10) Miscellaneous diseases numbered 219 (142 males and 77 females).

Kasr el Aini Hospital :

The number of beds this year was 1,250 as compared with 1,237 in the previous year, i.e. 13 beds more. A 2-bed centre for blood transfusion and another for urgent casualty cases have been provided this year.

During the year under review, a total of 21,348 patients were admitted to the hospital as compared with 15,747 in 1948, or an increase of 5,601 patients. Again this increase is due to the re-opening of sections following the extermination of the cholera epidemic.

Casualty Cases :

Of a total of 5,159 cases admitted to Kasr el Aini Hospital during the year, 4,575 were discharged as cured and 599 died as compared with 3,269 admissions, 2,786 cured and 376 deaths during 1948.

Falls whether from height, stairs or slipping over accounted for 1,432 cases, then come motor accidents accounting for 868 cases and scalds accounting for 690 cases.

Discharges during the year totalled 21,230 as compared with 16,391 in the previous year. Of this number, 12,230 were discharged cured, 7,580 were referred to the out-patients department or other hospitals for further treatment and 1,056 died or a death rate of 5 per cent.

Surgical cases treated during the year numbered 18,017 (13,274 males and 4,743 females).

For further details please refer to the Annual Statistical Report of the Universities Hospitals Department.

ALEXANDRIA UNIVERSITY HOSPITALS

Accommodation :

Only 14 beds were increased making a total of 615 beds.

In-patients :

The total number of in-patients treated during the year was 17,705 (10,272 males with 1,150 children and 7,433 females with 968 children) or 731 in-patients over last year.

The surgical department was the most congested with a total of 7,405 patients. Added to the 1,345 orthopaedic patients, this gives a total of 8,750 patients or almost half the total number of patients. Medical diseases come next with 3,874 patients, then follow gynaecological and obstetric diseases with 2,830 patients and venereal and skin diseases with 945 patients.

1,169 deaths were recorded during the year or a ratio of 7.3 per cent of total discharges.

Diagnosis of 5,361 medical diseases cases revealed that respiratory system diseases accounted for 560 cases ; digestive system diseases for 698 cases, cardio vascular system diseases for 1,543 cases; urogenital system diseases for 155 cases, central nervous system diseases for 609 cases ; diseases of the blood, lymphatics and the spleen for 327 cases, diseases of metabolism and endocrine glands for 318 cases ; diseases of the bones and joints for 260 cases, infectious diseases, and fevers for 59 cases and other sundry diseases for 414 cases.

According to diagnosis of 8,095 surgical cases, there were 484 cases of pyogenic infections and infected wounds, 277 cases of burns and scalds, 720 cases of wounds, 1,222 cases of fractures, 412 cases of affections of the scalp and cranium, 349 cases of affections of the brain and meninges, 1,205 cases of affections of the intestines, 473 cases of affections of the rectum and anus, 351 cases of affections of the kidneys, 274 cases of affections of the bladder, 154 cases of affections of the testis and epididymis and 91 cases of affections of the spermatic cord.

Out-patients :

The total number of out-patients was this year 733,928 consisting of 232,303 new and 501,625 old out-patients.

The ophthalmic department still attracts the largest number of out-patients, namely 218,184. The surgical department follows with 182,709 out-patients and the medical diseases department with 88,783 out-patients.

A total of 43,558 out-patients (24,714 new and 18,844 old) attended the special tropical diseases section of the out-patients department.

PART IV ENDEMIC DISEASES

Chapter XVI—ANCYLOSTOMA AND BILHARZIA

I.—Statistical data about this year's Activities :

1. Out—Patients :

(a) Treatment undertaken by Units :

The following table No. 88 gives the number of new patients, number of injections and anthelmintic doses given to patients during 1949 as compared with corresponding numbers of the previous year :

TABLE No. 88.

	1949	1948
Number of new patients.	1,133,223	1,046,019
Number of injections	4,378,959	3,867,355
Number of anthelmintic doses ...	420,296	404,683

(b) Treatment of pupils subject to written consent of Parents :

Of a total of 21,138 pupils examined in schools during the year :

7,481 suffered from bilharzia,
 285 suffered from ancylostoma and
 1,755 suffered from ascaris.

These received 45,346 anti bilharzia injections and 1,414 anthelmintic doses.

(c) Treatment of Territorial Forces :

Examination and treatment of the territorial force continued to be undertaken by Ancylostoma and Bilharzia Units.

Of 9,113 men examined, 4,384 suffered from bilharzia, 1,640 from ancylostoma and 2,206 from ascaris. A total of 40,511 bilharzia injections and 3,573 anthelmintic doses were given to patients.

(d) Treatment of the rural population by the branch clinic system :

Bilharzia units continued the examination and treatment of inhabitants of surrounding villages by the branch clinic system. The M.O. of the unit proceeds to the village on a certain day of the week to examine and treat the sick. During the year, branch clinic treatment was carried out in Wahal village, Kafr el Sheikh District, Talat village, Fayoum District and Manayel village, Shebin el Kanatir District.

Of a total of 10,702 inhabitants examined, 2,815 suffered from bilharzia, 225 from ancylostoma and 1,717 from ascaris. These were given 20,495 anti-bilharzia injections and 1,247 anthelmintic doses.

(e) Treatment by mobile units :

The following ten mobile units carried the examination and treatment of patients in the villages mentioned against each :

- Mobile Unit No. 2 Shabas el Shohada, Desouk District.
3 Helwan - Miniet Shebin, Shebin el Kanatir District.
4 Shubra Nabas, Tanta District.
6 Mandara, Alexandria.
9 Tahta.
13 Shubra industrial area - Mustorod, Cairo Suburbs
14 Inshas.
15 Manshiet el Bakri - Qaha, Toukh District.
16 Abshaway, Barrage.
17 Ezbet Kazouli, Delengat District.

Of a total of 34,068 patients examined, 17,929 suffered from bilharzia, 3,631 from ancylostoma and 19,032 from ascaris. These received 104,672 anti-bilharzia injections and 16,320 anthelmintic doses.

(f) *Combined Treatment Centres :*

The Bilharzia and Ancylostoma Section co-operated in 38 combined treatment centres of medical services of other organisations and ministries. Details of these centres are given later under co-operation with other authorities interested in endemic diseases treatment.

Of a total of 49,913 persons examined in these centres, 20,855 suffered from bilharzia, 5,823 from ancylostoma and 11,649 from ascaris.

To these were given 129,791 bilharzia injections and 13,299 anthelmintic doses.

(g) *Treatment of Workmen in Factories :*

Since parasitic infections affect the health of workmen and consequently reduce their productivity, a campaign was conducted for the examination and treatment of workmen in factories.

Of 16,354 workmen examined, 7,730 suffered from bilharzia, 858 from ancylostoma and 11,130 from ascaris. 61,496 injections were given to bilharzia patients and 10,382 anthelmintic doses administered.

(b) *Meals served to anaemia and pellagra out-patients :*

A total of 298,820 mid-day meals were issued to anaemia and pellagra out-patients attending the 100 Ancylostoma and Bilharzia units.

(i) *Certificates of freedom from parasites for pupils :*

A total of 67,077 certificates of freedom from parasites were given to pupils in schools and other educational institutions following the negative findings by microscopic examination.

2. *In-patients*

Of a total of 17,783 in-patients treated in the 98 units (including the Endemic and Medical Diseases hospital, Tewfikieh, Behera) 17,069 were cured. The remainder improved.

II.—*New Units :*

1. *Out-patient Units :*

No funds were made available and their number remained the same as in the previous year, namely 101.

2. *New In-patient Sections :*

Again no funds were allocated for new sections. The Ministry however completed the sections already approved in previous budgets, numbering 97. All the sections are now in operation. These sections accommodate a total of 1,940 beds, exclusive of 40 beds in Tewfikieh hospital.

Transfer of Units :

In a re-shuffle of the units, the following have been transferred to Kaliubia Province to assist in the joint campaign against bilharzia which was launched this year :

No. 3. mobile unit transferred from Helwan to Miniet Shebin, Shebin el Kanater District.

No. 13. mobile unit transferred from Shubra Industrial area to Mostorod, Cairo suburbs.

No. 15. mobile unit transferred from Manchiet el Bakri to Qaha, Toukh District.

No. 16. mobile unit transferred from Abshaway, Fayoum, to Barrage.

III.—*Improvements :*

(1) *Treatment :*

Atebrin is now used for the treatment of hymenolepis worms in the same way as taenia worms. Carbon tetrachloride is now used for the treatment of trichostrongyloides worms in the same way and under the same precautions used for the treatment of ancylostoma. Specific drugs were given in clinically suspected malaria cases where the disease is known to be prevalent. Secondary anaemia is now treated by tablets of iron sulphate.

(2) *In-patients :*

In-patients requiring supplementary treatment or isolation are referred to competent hospitals with request to follow up their treatment and report. The entertainment of in-patients is recommended.

(3) *Diets of patients :*

Two inspectors have been appointed to tour the units to ensure that patients received their full quantities of diets. As a precaution against the transmission of infectious, parasitic or skin diseases to patients, all personnel engaged in handling diet including contractors, are medically inspected annually.

The ten mid-day meals served by each unit to anaemia and pellagra out-patients have been increased in quantity to produce 1,759 calories each.

(4) *Constructional Improvements :*

In units accommodated in wooden hutments, the floor in kitchens, wash-houses and lavatories has been built of cement tiles to ensure better sanitation and facilitate cleanliness. Gardens have been provided in a number of units. It is proposed to introduce these improvements in the remaining units as and when possible.

IV.—*Development of Projects :*

(1) *The Bilharzia General Treatment Campaign :*

Reference was made in previous reports to the arrangement made between the Bilharzia and Ancylostoma Section and medical services of other ministries interested in endemic diseases control, under which the Section provided trained technical personnel and equipment and the medical services undertook the treatment of endemic diseases. Under this arrangement, it was possible to increase the number of treatment units and bring treatment to patients in distant localities.

Desiring to exploit this co-operation to the maximum extent possible, the Ministry decided to provide a treatment unit to every group of villages lying within a limited area. Units of the various medical services of other ministries are utilized for the purpose. Where no units exist, a mobile unit visits the village for examination and treatment. After spending about two months in the village, it moves to another and so on.

A committee convened under the chairmanship of the Minister of Health and membership of representatives of medical services of this ministry and other ministries decided to apply this arrangement to Kaliubia province as an experiment. The province was divided into five zones, namely, Benha, Toukh, Kaliub, Shebin el Kanatir and Mataria (Suburb).

Units engaged in this experiment were provided with laboratory assistants and tamurgis as follows :

TABLE No. 89

Service	Number of Units	Lab. Assts	Tamurgis	Remarks.
Rural Hygiene Department ...	11	22	22	Each unit was provided with 2 lab. assts. and 2 tamurgis and equipment.
Hospitals Section	1	2	1	Shubra el Kheima Hospital was provided with 2 lab. assts. and 1 tamurgi and equipment.
Ministry of Education... ..	1	1	2	The mobile unit was provided with 1 lab. asst. and 2 tamurgis and equipment.
Ministry of Social Affairs (Social Centres)	8	8	8	Each social centre was provided with a Lab. asst. and a tamurgi and equipment.
TOTAL	21	33	33	

The necessary instructions were circulated to operators. Each of the five zones was assigned to an inspector of the Section. A propaganda vehicle with a preacher was provided to tour the zones and carry propaganda activities in support of these units.

The campaign was started in Kaliubia on 21st, December 1949.

2. *Certificates of Freedom from Parasitic Infection.*

Bilharzia and Ancylostoma Units continued the examination of pupils in all schools. Negative pupils were issued with certificates of freedom from parasitic infection.

Factories and firms employing large number of workmen were requested to insist on producing certificates of freedom from parasites by their workmen before appointment.

It has been decided to apply this condition to the following categories :

Candidates for hors cadre government service.

Workmen in industrial firms and contractors' labour.

Itinerant vendors.

Domestic servants and other categories who apply for identity cards from the Identity Department.

It is proposed to further apply this condition to daily paid workmen who apply for permanent service in the government.

(3) *Compulsory Treatment Campaign :*

Laboratory surveys were resumed in Talaat village, Fayoum Province on the lines adopted in 1946-1948. These surveys were still in progress at the end of the year. The final results will be published on completion.

Amendment of Law No. 58 of 1951 regulating bilharzia control is under consideration. New provisions will be introduced to ensure : that all students and workmen produce certificates of freedom from bilharzia infection, that the law shall apply to communities outside the areas prescribed, that offences against the law shall not lapse after three years from date of application of the law to the locality.

(4) *Drug Tests :*

Experiments referred to in last year's report have been continued in co-operation with the Research Institute and Hospital for Tropical Diseases, namely :

Daily administration of tarter injections.

Two-day abortive treatment with Ripodral for in-patients.

Four-day abortive treatment with Ripodral for out-patients.

The Institute was requested to carry experiments on the treatment of taenia with potassium tartrate tablets.

(5) *Co-operation with organizations concerned with the treatment of endemic diseases.*

This year, the cooperative centres totalled 38 (21 of these have been referred to in the Kaliubia project). The remaining 17 are shown herebelow :

Two health centres at Gaehena and Khanka villages.

Frontier Districts units at Arish, Siwa, Dakhla, Kharga and Mersa Matrouh.

Fayed Malaria Research Station of the Research Institute and Hospital.

Medical Section of Cairo University.

Medical Section of El Azhar University.

Medical Services in the following enterprises :

Sugar Factory at Armant-Misir Spinning at Kafr el Dawar — Misr Spinning and Weaving at Mehalla Kobra.

Home for stray children at Agouza.

Womens' Society for the amelioration of health at Pyramids.

Amira Fadia Foundation at Abbassia.

Red Crescent Hospital at Armant.

V.—*Training :*

The policy of training fresh staff and raising the technical and educational standard of old staff has been maintained. The training Centre at No. 20 Fom el Khalig Ancylostoma Hospital trained 49 new medical officers, 11 clerks and 13 laboratory assistants for the Section and 17 medical officers and 100 laboratory assistants for other organizations, i.e. Rural Health department, Social Affairs, School Hygiene department, Hospitals Section, Chest Diseases section, Fouad Hospital for confinement and the Leprosy section. Some of the Section's personnel were delegated to train in insect control, examination of blood films for malaria and propaganda work.

VI.—*Propaganda :*

Special attention was paid to the organization of the various aspects of propaganda work this year namely :

(1) Arranging lectures to be delivered to patients within the units and to the institutions outside.

(2) Distribution and hanging up of propaganda literature in public thoroughfares and much frequented places.

(3) Preparation of posters illustrating the various endemic diseases, *i.e.* bilharzia, ancylostoma, ascaris, etc.

(4) Preparation of designs of parasitic diseases on post-cards.

(5) Showing of films and production of a film on bilharzia.

(6) Arranging broadcasts on parasitic infections comprising health talks, light representations and dialogues in simple language.

(7) Giving theatrical performances on endemic diseases, their dangers and how to protect against them.

(8) Participation in the 1949 Agricultural and Industrial Exhibition.

(9) Publishing a booklet on bilharzia and other parasitic diseases and its distribution among organizations and individuals.

(10) Raising the standard of health education among the pupils of the schools for health visitors, and social health workers of the Ministry of Education and pupils of child welfare centres at Bab el Shaaria, Zeitoun, Old Cairo, Shubra, Sharabia and Boulaq as well as among midwives and inspectresses of the Farmer's Department, Ministry of Social Affairs.

VII.—Control :

Again the Section paid special attention to the control of foci of infection. Legal steps have been taken for the amendment of the Decree dated 18 th. December, 1945 forbidding the contamination of water ways and birkas. The competent authorities have been approached for the extermination of planorbis snails from Suez locality and forbidding the use of human manure in the fertilization of vegetables in Zawia el Khadra village, Fayoum.

Chapter XVII.—MALARIA

The number of malaria stations remained the same as in the previous year, namely 36 main stations and 76 branch stations.

Blood Specimens and their results :

Out of total of 68,715 blood specimens examined microscopically this year, 16,390 or 23.8 per cent were returned positive (both new infections and relapses) with a decrease of 4.5 per cent as compared to last year. This is a result of the increased mosquito larvae control measures, use of modern insecticides and exercising closer supervision on aircraft activities. Tables Nos. 106, 107 and 108 give the distribution of these specimens according to two categories: (1) Persons attending malaria units and (2) Suspected persons and general examinations.

In addition, the Research Institute for Tropical Diseases examined the blood specimens that were sent from different localities. Table No. 109 gives details of the result of examination. Table No. 110 gives the distribution of blood specimens examined for filariasis by the Institute. Table No. 111 refers to blood specimens examined by malaria branches annexed to Ancylostoma hospitals. These branches are now 18 in number with an increase of ten branches over that of last year.

New Infections and Relapses :

According to table No. 108, 3,129 cases were considered new infections and 13,261 relapses or a ratio of 19 per cent of the total positive cases for the former as against 31.3 per cent in the previous year *i.e.* a decrease of 12.3 per cent

Malaria Among Infants Under One Year :

Table No. 112 gives the malaria general ratio among infants under one year of age in Lower and Upper Egypt as compared to last year. Malaria in infants is considered new infections.

Types of Malaria :

Tables Nos. 113 and 114 give the incidence of the two types of malaria (Benign and Malignant) in the Governorates and Provinces provided with malaria stations and the percentage of each type to total positive cases.

Monthly Distribution of Malaria :

Tables Nos. 115 and 116 give the monthly distribution of malaria cases of all types in Lower and Upper Egypt.

It is observed that the incidence rate of the benign tertian type was highest in Lower Egypt during May and June and in Upper Egypt during May and October. The ratio of the malignant type was highest in Lower Egypt during October and January and in Upper Egypt during October and December.

Malaria Cases reported in Governorates and Provinces during 1948 and 1949.

Table No. 117 gives the number of malaria cases and deaths reported to the Statistical Department from the Governorates and Provinces during 1948 and 1949. It shows that there were 6 deaths and 1626 cases less than in 1948.

Survey of Mosquito Breeding Places :

Mosquito breeding places were surveyed by malaria units on the same lines as in previous years. Priority of disposal was governed by the incidence of malaria. These were reported to the Public Utilities Service or other competent Departments for disposal. Table Nos. 118, 119, 120, and 121 give details of the survey work and results thereof.

Control Work :

Control work by different modern methods (permanent and temporary) was carried out as in the previous year. Table No. 122 gives details of the insecticides employed, the quantities consumed and the areas controlled.

Warnings and Contraventions :

Besides the above mentioned control work, malaria units supervised the application of Malaria Law No. 1 of 1926 modified by Law No. 78 of 1946. Warnings and contraventions were served and judgments were given in certain cases. Table No. 123 gives details of the warnings and contraventions served in Lower and Upper Egypt.

Treatment and Drugs :

Malaria treatment was given to cases proved positive by microscopic examination. Table No. 125 gives details of the various drugs distributed by malaria units in Lower and Upper Egypt. Treatment is now available to malaria patients at all treatment centres throughout the country.

Application of the Malaria Law No. 1 of 1926 modified by Law No. 78 of 1946 and restriction of rice and sugar-cane cultivations.

Laws and arrêtés restricting aqueous cultivations were applied on the same lines as in previous years.

Control of mosquitoes and flies within Public Health Units :

Buildings of the important public health units were spray painted with 5 per cent D.D.T in Kerosene as a control measure against mosquitoes and flies.

Propaganda :

As in previous years, propaganda activities were carried out in conjunction with health propaganda units. Every propaganda means was employed to explain to the inhabitants the life cycle of the malaria carrier mosquito, its characteristics, means of its spread and methods of protection and treatment.

Complaints :

All complaints receive due consideration and the cause of the complaints removed.

Mosquito control in Cairo :

Mosquito control in Cairo was carried out on the same lines as in previous years. The number of darakat (zones) was increased to 97, as against 92 in the previous year, distributed among 10 districts having 120, 594 houses. 33, 514 of these houses were connected to the main drainage system and the rest or 72 per cent were drained in private cesspits. The following table No. 90 shows the distribution of these houses and darakat in the districts.

TABLE No. 90

Serial Number	District	Number of Darakat		No. of houses		TOTAL
		Houses	Farms	Drained in private cesspits	Connected to the main Drainage	
1	Shubra	13	1	19,406	9,679	29,085
2	El Daher	14	4	14,483	9,250	23,733
3	Fom el Khalig	13	—	11,730	6,657	18,387
4	Darb el Ahmar:	13	—	13,027	4,353	17,380
5	Imam el Shafie	—	—	—	—	—
6	Zeitoun	9	1	4,890	2,325	7,215
7	Maadi	5	2	6,169	33	9,202
8	Helwan	3	3	2,466	—	2,466
9	Giza	8	—	9,301	547	9,848
10	Imbaba	8	—	5,608	670	6,278
TOTAL		86	11	87,080	33,514	120,594

Mosquito control can be summarized in the following :

(1) Mosquito control in habitations : Cairo and its suburbs were divided into 97 darakat distributed over the nine districts. Private cesspits were sprayed with D.D.T. in malariol. Out of 219 complaints received against mosquitoes, 43 were true and were dealt with.

(2) Malaria control in cultivated lands : Streams within cultivated lands were surveyed for mosquito larvae. Malaria control was carried out with 5 per cent D.D.T. in malariol or Paris Green. The governmental drains were cleaned from weeds.

(3) Sanitary Systems in habitations. Habitations were examined for this purpose and warnings were served on owners for lacking sanitary requirements. In case of failure, contraventions were drawn up and judgments obtained for removal of sources of offence at the expense of owners.

The following table No. 91 gives details of the measures taken.

TABLE No. 91

Memoranda received from the districts	Complaints from the inhabitants	Warnings served	Executed	Unexecuted	Remarks
1,866	1,729	2,669	642	1,919	Some memoranda and complaints were sent to government departments.

Survey and control measures were also taken against larvae of *Aedes aegypti*, the yellow fever vector, breeding within Heliopolis and Almaza and Cairo airports. A malaria team joined the Palestine campaign for the control of malaria, and remained in Palestine from August 1947 to July 1949.

The Nile flood was not so high this year, hence seepage water appeared in few places in Cairo totalling 61 feddans in area. These were treated with larvicides until dried up.

The following table No. 92 shows the quantities of insecticides consumed during this year.

TABLE No 92

	Ton	Kil.	Gram.
D.D.T. in malariol ...	73	408	500
D.D.T. emulsion ...	5	922	500
D.D.T. in Kerosene...	—	400	—
Cooking Gas Oil ...	12	929	—
Paris Green	—	2	500
D.D.T. Gypsum balls	—	Three balls	

THE FOLLOWING TABLE NO. 93 SHOWS LARVAE SPECIES DETECTED IN CAIRO DURING 1949.

Kinds of larvae	Shubra	Daher	Khalifa	Darb El Ahmer and Innam el Shafie	Zeitoun	Maadi	Helwan	TOTAL
	1	2	3	4 and 5	6	7	8	
A. pharoensis ...	3	13	—	—	8	25	14	63
Culex pipiens... ..	74	92	28	21	19	54	65	353
Culex prex.	1	19	1	—	—	6	2	29
Culex lan.	—	—	1	—	—	—	—	1
Aedes egypti. ...	2	3	—	—	—	—	2	7
Aedes casp.	2	22	1	—	—	5	4	34
TOTAL	82	149	31	21	27	90	87	487

The personnel of this branch is made up of 5 supervisors, 13 controllers and surveyors, 89 overseers, 16 foremen and 493 labourers under the supervision of a medical officer or an engineer. Clerical duties were carried out by a clerk assisted by some overseers. A credit of L.E. 41,000 was allocated for wages during the year 1949—1950 as against L.E. 20,000 in the previous year.

Sanitary Engineering Service :

This branch carried out sanitary repairs ordered in 81 houses in Cairo under Malaria Law No. 1 of 1926 amended by Law No. 78 of 1946. These repairs cost L.E. 1,996 debited to L.E. 2,000 allocated for this purpose.

THE FOLLOWING TABLE NO. 94 SHOWS THE DISTRIBUTION OF
THESE REPAIRS

District	No. of houses	District	No. of houses
Bab el Shaaria	96	Sayed Zeinab	2
Darb el Ahmar	9	Old Cairo	2
Abdin	2	Gamalia	23
Khalifa	2	Waili	3
Zeitoun	18	Rod el Farag	2
Ezbekia	1	Boulaq	1

This work was carried out under the supervision of three sanitary engineers assisted by three draughtsmen.

Anti Mosquite Campaign in Fayoum :

Last year's program was resumed this year. Spray painting of habitations was continued in the remaining darakat of the Province, mostly in Fayoum and Abshaway Districts. Until the end of 1948, 54 out of 175 darakat, the total darakat of the province, had been spray painted. During the year 1949, the remaining 12 darakat in Fayoum District were treated during the period from January until the end of March. Work was then transferred to Itsa District where 18 darakat were spray painted by the end of the year.

In Abshaway District, the remaining 20 darakat were treated by the end of August. Work was then transferred to Sennouris District where 15 darakat were spray painted by the end of the year.

THE FOLLOWING TABLE NO. 95 GIVES DETAILS OF THIS WORK

District	No. of darakat	Darakat painted during 1948	Darakat painted during 1949	Darakat without paint until the end of 1949	Remarks.
Fayoum	46	33	12	1	This darak of Bandar Fayoum was left intentionally without control in order to find out its non-infestation period.
Sennouris	47	3	14	30	
Abshaway	34	13	21	—	
Itsa	48	5	18	25	
TOTAL	175	54	65	56	

This shows that 65 darakat were treated during 1949 in the four districts and 119 darakat during 1948 and 1949 out of a total of 175 darakat representing the whole province

The following table No. 96 gives details of houses and rooms spray painted during 1948, and 1949 in the four districts.

District	1948		1949	
	No. of Houses	No. of Rooms	No. of Houses	No. of Rooms
Fayoum	25,115	121,646	7,502	39,386
Sennouris	5,203	22,455	7,244	31,863
Abshaway	15,518	68,817	13,132	67,918
Itsa	5,450	23,608	20,320	100,998
TOTAL	51,286	236,526	48,198	240,165

Mosquito survey :

In 1948, the ratio of mosquito infestation of houses was 13.1 per cent before spray painting and 3.4 per cent after. In 1949 these were 8.8 per cent and 6 per cent respectively. During the first half of 1949, however, these ratios were 3 per cent and 0.5 per cent respectively, the insecticide used being D.D.T. and malariol. During the latter half of the year, neocid was used instead and some difficulties were encountered during its use. Details are given in the following tables Nos. 97 and 98:

TABLE No. 97.—MONTHLY DISTRIBUTION OF MOSQUITOES BEFORE SPRAY PAINTING.

Month	No. of Houses examined	Positive	A Sergenti	A Pharoensis	A Multicolor	Percentage		
						A.S.	A.PH.	A.M.
January	2,907	24	15	1	8	.5	.03	.27
February	2,827	15	4	9	1	.14	.31	.07
March	3,126	44	—	9	35	—	.28	1.1
April	1,735	38	—	3	35	—	.17	2
May	3,628	287	42	16	229	1.1	.44	6.3
June	3,968	147	9	—	120	.22	.32	3.1
July	3,193	136	10	89	37	.3	2.7	1.1
August	4,728	458	11	354	93	.23	7.5	2
September	3,777	844	47	651	140	1.2	17.2	3.8
October	3,110	727	35	592	100	1.1	1.9	3.2
November	3,519	574	58	446	70	1.6	12.6	2
December	4,248	303	42	145	116	1	3.3	2.7
TOTAL	40,766	3,597	273	2,324	1,000	.7	5.7	2

TABLE No. 98.—MONTHLY DISTRIBUTION OF MOSQUITOES AFTER SPRAY PAINTING.

Month	No. of Houses	Positive	A Sergenti	A Pharçensis	A Multicolor	Percentage		
						A.S.	A.P.H.	A.M.
January	2,897	1	1	—	—	·03	—	—
February	2,135	1	—	—	1	—	—	·04
March	2,155	—	—	—	—	—	—	—
April	2,851	1	—	1	—	—	·03	—
May	3,159	44	5	7	32	·12	·22	·1
June	1,595	31	—	—	31	—	—	1·9
July	1,314	43	1	23	19	·08	1·7	1·4
August	2,679	208	8	181	19	·3	6·7	·07
September	2,161	286	3	222	61	1·4	10·2	2·8
October	2,572	404	27	300	77	·1	11·6	·3
November	2,425	485	90	321	74	3·7	13·2	·3
December	2,235	188	133	120	35	1·4	5·3	1·5
TOTAL	28,201	1,692	168	1,175	349	·6	4·2	1·2

The General Average is 6.6 per cent.

Larvae Control :

Larvae control was carried out in the three districts of Fayoum, Sennouris and Abshaway on the same lines as in the previous year. 5 per cent D.D.T. in malariol was used in control work. During June, 3 per cent neocid was used in some darakat of the districts mentioned and from August until December, 1 per cent paris green was used in some darakat of Fayoum District.

Larvae Survey before and after spraying :

The general ratio for larvae infestation in the province was 1.6 per cent before spray painting. This fell to 1.2 per cent in 1948 and 1.66 per cent at the end of 1949. The ratio in Fayoum District (around the Bandar) was particularly low being 0.4 per cent. This was the result of spray painting the houses with D.D.T. in Kerosene during 1947 and D.D.T. in malariol during 1948.

TABLE NO. 99.—MONTHLY RESULTS OF LARVAE SURVEY :

Month	No. of Units Surveyed	No. of Positive Units	A. Sergenti	A. Pharoensis	A. Multicolor	Percentage			Remarks
						a. s	a. ph	a. m	
January	8,248	26	8	15	3	·09	·18	·03	
February	7,066	2	1	1	—	·01	·01	—	
March	8,309	20	2	13	11	·02	·15	·13	
April	8,896	21	5	10	6	·05	·11	·06	
May	9,496	96	35	25	36	·36	·26	·36	
June	7,571	60	5	19	36	·06	0·25	·47	
July	7,460	69	1	65	3	·01	·87	·04	
August	11,344	174	1	154	19	·001	1·03	·16	
September	9,400	172	8	146	18	·08	1·5	·19	
October	8,772	180	11	143	26	·12	1·6	·3	
November	10,476	165	11	142	12	·1	1·3	·1	
December	10,065	153	8	127	18	·08	1·2	·17	
TOTAL	107,093	1,144	96	860	188	·09	·8	·17	The general ratio is 1.06% as against 1.2% in 1948

TABLE NO. 100.—RESULTS OF LARVAE SURVEY ACCORDING TO DISTRICTS

District	No. of Units Surveyed	Positive	A. Sergenti	A. Pharoensis	A. Multicolor	Percentage			Average
						a. s	a. ph	a. M	
Fayoum	33,205	133	9	112	12	·02	·3	·3	·4
Sennouris	26,417	375	34	292	49	·1	1·1	·01	1·4
Abshaway	26,189	343	46	238	59	·17	·8	·2	1·2
Itsa	19,508	293	7	218	68	·03	1·01	·3	1·5
TOTAL	107,093	1,144	96	860	188	·09	1·8	·17	1·06

Remarks : As against 1.2 per cent in 1948.

THE FOLLOWING TABLE NO. 101 SHOWS THE RESULTS OF CONTROL
WORK DURING 1949 AS COMPARED WITH 1946 AND NUMBER OF CASES
AND DEATHS OF MALARIA DURING THE TWO YEARS

Year	Larvae	Mosquitoes	New cases	Deaths
	%	%		
1946	6	33	1,622	3
1949	106	6	82	—

Expenditures :

TABLE NO. 102 DETAILS OF EXPENDITURE DURING 1949.

Salaries		Wages		Insecticides		Rents		Motorcar Repair		Telegrams		Water		TOTAL	
L.E.	Mills	L.E.	Mills	L.E.	Mills	L.E.	Mill	L.E.	Mills	L.E.	Mills	L.E.	Mills	L.E.	Mills
304	400	16,127	932	3,027	924	197	394	98	851	3	395	2	014	19,887	910

Control Work by Aircraft.

TABLE No. 103.—SANTARY AIR SQUADRON CONTINUED ITS WORK DURING 1949 AS INDICATED BELOW :

Date		District	No. of Sprayings	Flying Time		Spraying Time		Benzine in Gallons	Oil in Gallons	D. D. T. in		Area in acres	Total expenses L.E. Mills	Average cost of spraying the acre once Mills.
Beginning Work	Termina- ting Work			H.	M.	H.	M.			Malariaol 15% in Gallons	Velicol 20% in Gallons			
2/5	10/5	Ballah (Canal Zone)...	3	7	10	1	37	185	2	—	191	2,712	167,275	61.6
15/6	27/9	Idku ...	3	26	20	7	46	641	10	567	518	11,380	529,525	45.07
21/6	18/10	Alexandria and Montazah ...	5	206	5	62	16	5,628	95.5	2,556	6,912	115,537	6,333,750	54.8
5/11	9/11	Kobba Palace area ...	3	5	35	2	12	166	3.5	—	261	3,696	222,560	60.1
17/11	23/11	Army Parade Grounds at Almaza ...	4	3	30	1	33	103	2	—	185	2,601	156,250	60
4/12	Cont.	Fayoum Auberge ...	3	17	15	3	40	426	6.5	—	431	6,160	378,700	61.5
TOTAL ...			...	265	45	78	4	7,148	119.5	2,923	8,498	142,093	7,788,800	54.7

TABLE NO. 104—RESULTS OF AERIAL CONTROL WORK :

District	No. of Sprayings	Larvae				Adult Mosquitoes			
		Anopheles Before Spraying	After Spraying	Culex Before Spraying	After Spraying	Anopheles Before Spraying	After Spraying	Culex Before Spraying	After Spraying
		%	%	%	%	%	%	%	%
Idku :									
Land Darakat	4	18.2	4.3	4.8	7.6	12.8	8.6	66.8	57.9
Sea Darakat	4	10.5	6.6	0.6	4.6				
From 15/6 — /27/9/1949									
Alexandria :									
Area A	2	—	—	25	18.5	No adult Mosquitoes surveyed			
Area B	4	6	1.4	32.6	19				
Area C	5	34.8	—	34.5	11.3				
Area D	4	31.6	—	37.8	8.1				

TABLE No. 105—RESULTS OF FOGGING BY AIRCRAFT ON FLIES IN THE PERIOD FROM 25/8 UNTIL 28/8/1948.

Date	Site of experiment	Duration of Fogging	No. of aircrafts	Temperature	Speed of Wind (Miles per hour)	Death rates in Flies		Velsicol consumed in Gallons	Area covered by fogging feddans	Average of insecticide to the acre	Remarks on wind
						After 4 hours	After 24 hours				
						%	%				
25/8	Ras el Tin Palace	38	2	24.04	12-15	13	14	75	1,064	14.18	Moderate wind.
26/8	" " " " " " " "	46	3	23.08	13-17	25	13	38	532	14	Air Pockets "
27/8	" " " " " " " "	39	2	23.03	12-15	42	38	77	1,092	14.18	" "
28/8	Montazah Palace	100	3	24.04	12-14	49	45	199	2,800	14.07	Moderate.

(1) Average increase in death rate during the last three days] = 39 per cent

(2) Average amount of insecticide used per feddan = 14.11 Gallons.

**TABLE NO. 106.—DISTRIBUTION OF BLOOD FILMS EXAMINED FOR LOWER EGYPT
AND CANAL AND SUEZ GOVERNORATES DURING 1949**

Category	No. of specimens	Positive			Rate Per cent
		New	Relapses	Total	
(1) Attendance at Malaria Units and Ancylostoma Hospitals	41,550	2,947	10,771	13,718	33
(2) Suspected cases in habitations and under general examination	1,384	22	188	210	15.1
TOTAL	42,934	2,969	10,959	13,928	32.4

**TABLE NO. 107.— DISTRIBUTION OF BLOOD FILMS EXAMINED FOR UPPER EGYPT
AND THE SOUTHERN AND WESTERN DESERT GOVERNORATES DURING 1949**

Category	No. of specimens	Positive			Rate Per cent
		New	Relapses	Total	
(1) Attendance at Malaria Units and Ancylostoma Hospitals	18,799	134	2,064	2,198	11.7
(2) Suspected cases in habitations and under general examination	6,982	26	238	264	3.7
TOTAL	25,781	160	2,302	2,462	9.5

**TABLE NO. 108.— GENERAL DISTRIBUTION OF BLOOD FILMS EXAMINED FOR MALARIA
IN EGYPT DURING 1949**

Category	No. of specimens	Positive			Rate Per cent
		New	Relapses	Total	
(1) Attendance at Malaria Units and Ancylostoma Hospitals	60,349	3,081	12,835	15,916	26
(2) Suspected cases in habitations and under general examination	8,366	48	426	474	5.6
TOTAL	68,715	3,129	13,261	16,390	23.8

**TABLE No. 109.— NUMBER OF SPECIMENS EXAMINED FOR MALARIA
BY RESEARCH INSTITUTE DURING 1949**

Category	No. of Blood specimens	Positive Malaria			Total positive	Rate per cent
		Benign	Malignant	Mixed infection		
(2) Specimens from Malaria stations and outposts ...	9,396	970	84	4	1,058	11·2
(1) Specimens from Hospitals...	343	89	5	—	94	27·4
(3) Specimens from Ancylostoma Units	231	21	1	—	22	9·5
TOTAL	9,970	1,080	90	4	1,174	11·8

**TABLE No. 110.— DISTRIBUTION OF BLOOD FILMS EXAMINED FOR FILARIASIS
BY RESEARCH INSTITUTE DURING 1949**

Province or Governorate	Locality of Exam.	No. of Specimens	Positive Filaria	Rate per cent	Remarks.
Cairo	Research Institute in Cairo	43	1	2·3	
Behera... ..	Rosetta	8,468	679	8	
	TOTAL	8,511	680	7·9	

TABLE NO. 111.— NUMBER OF BLOOD SPECIMENS EXAMINED BY MALARIA UNITS ANNEXED
TO ANCYLOSTOMA HOSPITALS IN EGYPT DURING 1949

Ancylostoma Units	No. of Blood Speci- mens	Positive Malaria	Rate Per cent	Positive Malaria				Remarks
				Benign Ter.		Malig. Ter.		
				New	Relap.	New	Relap.	
Benha	1,450	232	16	26	204	1	1	
Shebin el Kom	812	154	18.9	5	148	—	1	
Zagazig	279	152	54.4	47	74	—	31	
Faccous	184	109	59.2	77	27	5	—	
Abu Kebir	5,644	1,566	27.7	1,049	386	88	43	
Belbeis	401	149	27.1	7	70	5	67	
Ismailia	971	31	3.1	19	12	—	—	
Dekernis	2,683	692	25.8	25	654	—	13	
Mehalla el Kobra	369	178	48.2	125	53	—	—	From August to December.
Biala	2,098	563	26.8	5	556	1	1	
Kafr el Sheikh	3,859	1,771	45.7	270	1,492	2	7	
Dessouk	3,893	2,332	60	551	1,720	24	37	
Fowa	3,022	1,969	65.1	1	1,808	—	163	
Kafr el Dawar	1,329	148	11.1	27	117	—	4	
Damanhour	80	7	8.7	—	7	—	—	From September to December.
Fayoum	1,016	154	15.1	31	113	2	8	
Beni Suef	156	57	38.6	—	55	—	2	From August to December.
Aswan... ..	412	9	2.7	—	9	—	—	
TOTAL	26,658	10,273	38.5	2,265	7,505	128	375	

**TABLE NO. 112.—MALARIA CASES AMONG INFANTS UNDER ONE YEAR OF AGE
IN LOWER AND UPPER EGYPT DURING 1948 AND 1949.**

Province or Governorate	Name of Station	Year 1949			Year 1948		
		No. of children examined for Malaria	Positive	Rate Per cent	No. of children examined for Malaria	Positive	Rate Per cent
Behera...	Idku	77	8	10.3	210	42	20
	Kafr el Dawar ...	31	2	6	—	—	—
Gharbia	Biala	11	—	—	49	19	39.3
	Mehalla el Kobra...	20	8	40	40	11	27
Dakahlia	Dekernis... ..	—	—	—	56	35	62.6
Canal	Suez... ..	1	—	—	—	—	—
	Ismailia	—	—	—	216	—	—
Sharkia	Belbeis	89	18	20.2	3,114	1,149	37
	Abu Kebir	548	79	22.7	422	119	28.1
	Inshas	31	13	53.8	19	8	42
Menoufia	Shebin el Kom ...	2	2	100	—	—	—
Kaliubia	Toukh	56	8	14.2	100	10	10.
TOTAL		666	138	20.7	4,266	1,393	32.9
Southern Desert ...	Kharga Oasis ...	29	—	—	45	—	—
Giza	Giza	—	—	—	3	—	—
Fayoum	Fayoum	—	—	—	—	4	—
	Abshaway	239	42	17.5	610	114	18.6
Minia	Minia	5	3	60	—	—	—
Qena	Qena	5	3	60	2	2	100
Aswan	Aswan	—	—	—	1	1	100
TOTAL		278	48	17	665	117	17.5
GRAND TOTAL ...		944	186	19.7	4,891	1,510	30.8

**TABLE NO. 113.—DISTRIBUTION OF MALARIA CASES ACCORDING TO SPECIES
IN LOWER EGYPT AND CANAL GOVERNORATE DURING 1949**

Province or Governorate	Total of Specimens	Total of Posit. Cases	Rate per cent	Benign Tertian				Malignant Tertian			
				No.	New	Relapse	Rate per cent	No.	New	Relapse	Rate Per cent
Canal	1,356	58	4.2	57	35	22	4.2	1	1	—	.07
Western Desert ...	4,861	273	5.8	273	11	262	5.8	—	—	—	—
Behera	4,344	770	17.8	765	27	738	17.7	5	—	5	.1
Gharbia	13,425	6,926	51.5	6,690	962	5,728	49.8	236	27	203	1.01
Dakahlia... ..	6,567	2,002	30.4	1,982	731	1,251	30.3	20	5	15	.2
Sharkia	7,726	2,577	33.3	2,398	1,034	1,364	31.2	179	26	153	2.2
Menoufia... ..	812	154	18.8	153	5	148	18.8	1	—	1	.1
Kaliubia	3,843	1,168	30.3	1,148	105	1,043	29.8	20	—	20	.5
TOTAL	42,934	13,928	32.4	13,466	2,910	10,556	75.8	462	59	403	3.3

**TABLE NO. 114.—DISTRIBUTION OF MALARIA CASES ACCORDING TO SPECIES IN UPPER EGYPT
AND THE SOUTHERN DESERT GOVERNORATE DURING THE YEAR 1949**

Province or Governorate	Total of Specimens	Total of Posit. Cases	Rate per cent	Benign Tertian				Malignant Tertian			
				No.	New	Relapse	Rate per cent	No.	New	Relapse	Rate Per cent
Southern Desert ...	3,128	27	.8	22	6	16	81.4	5	3	2	18.6
Giza	5,410	1,028	14	963	—	963	93.6	65	—	65	6.4
Fayoum	6,386	726	11.3	682	53	629	93.9	44	5	39	6.1
Beni Suef	413	29	7	28	3	25	96.5	1	1	—	3.5
Minia	2,779	472	17	459	53	406	97.2	13	3	10	2.8
Assiut	1,211	34	2.8	34	33	1	100	—	—	—	—
Gerga	156	15	9.6	15	—	15	100	—	—	—	—
Qena	5,571	106	1.9	106	—	106	100	—	—	—	—
Aswan	727	25	3.4	25	—	25	100	—	—	—	—
TOTAL	25,781	2,462	9.5	2,334	148	2,186	94.8	128	12	116	5.2

TABLE No. 115.— MONTHLY DISTRIBUTION OF MALARIA CASES ACCORDING TO SPECIES IN LOWER EGYPT AND CANAL AND SUEZ GOVERNORATES DURING 1949

Month	Total of Specimens	Total Positive	Rate %	Benign Tertain				Malignant Tertain			
				No.	New	Relapses	%	No.	New	Relapses	%
January	1,885	447	23.7	391	67	324	20.7	56	4	52	3
February	1,619	359	22.1	304	50	254	18.8	55	5	50	3.3
March	2,033	463	22.8	413	58	355	17.4	50	3	47	5.4
April	2,860	906	31.6	875	159	716	30.5	31	1	30	1.1
May	4,613	1,949	42.2	1,939	361	1,578	42.03	10	2	8	0.2
June	5,771	1,933	33.5	1,920	349	1,571	33.4	13	4	9	0.1
July	3,634	1,297	35.6	1,292	253	1,039	35.5	5	4	1	0.1
August	7,777	2,822	36.2	2,789	673	2,116	35.8	33	3	30	0.4
September	6,147	1,911	31.08	1,867	586	1,281	30.3	44	11	33	1
October	2,548	761	29.8	699	233	466	27.4	62	13	49	2.4
November	1,425	372	26	334	65	269	23.5	38	2	36	2.5
December	2,622	708	26	643	56	587	24.5	65	7	58	1.5
TOTAL	42,934	13,928	32.4	13,466	2,910	10,556	31.3	462	59	403	1.07

**TABLE No. 116.— MONTHLY DISTRIBUTION OF MALARIA CASES ACCORDING
TO SPECIES IN UPPER EGYPT AND THE SOUTHERN DESERT GOVERNORATE DURING 1949**

Months	Total of Speci- mens	Total of Positive	Rate Per cent	Benign Tertain				Malignant Tertian			
				No.	New	Relap.	%	No.	New	Relap.	%
January	1,179	92	7·7	87	1	86	7·2	5	1	4	0·4
February... ..	1,094	80	7·2	78	3	75	7·1	2	—	2	0·1
March	1,663	145	8·7	142	8	134	8·5	3	—	3	0·18
April	1,816	184	10·1	181	7	174	9·9	3	—	3	0·1
May	2,312	303	13·1	295	25	270	12·7	8	—	8	0·44
June	2,092	180	8·6	174	3	171	8·3	6	—	6	0·28
July	1,520	122	8	120	—	120	78·	2	—	2	0·1
August	2,806	302	10·7	293	1	292	10·4	9	2	7	0·3
September	3,854	389	10·1	367	24	343	9·5	22	1	21	0·5
October	2,230	327	14	301	44	257	13·	26	6	20	1·1
November	3,449	241	6·9	222	21	201	6·4	19	1	18	0·5
December	1,766	97	5·4	74	11	63	4·1	23	1	22	1·3
TOTAL	25,781	2,462	9·5	2,334	148	2,186	9·	128	12	116	0·5

TABLE NO. 117.—NUMBER OF MALARIA CASES AND DEATHS NOTIFIED DURING 1948 AND 1949

Province or Governorate	New Malaria Cases				Difference		Relapsed Malaria Cases			
	1948		1949				1948		1949	
	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths
Cairo	546	4	607	3	61	— 1	17	—	34	—
Alexandria	241	1	204	1	— 37	—	—	—	—	—
Other Governorates ...	529	1	201	3	—328	2	36	—	10	—
Behera	679	—	30	—	—649	—	1	—	—	—
Dakahlia	209	—	107	1	—102	1	7	—	6	—
Gharbia... ..	224	3	575	3	351	—	1	—	599	—
Menoufia	45	1	87	—	42	— 1	6	—	36	—
Sharkia... ..	478	4	110	1	—368	— 3	—	—	16	—
Kaliubia	1,068	1	230	1	—838	—	4	—	16	—
Giza	105	—	250	3	—145	3	—	—	—	—
Fayoum	120	1	82	—	— 38	— 1	1,398	—	611	—
Beni Suef	26	1	50	—	24	— 1	1	—	6	—
Minia	126	—	229	—	103	—	—	—	18	—
Assiut	10	—	32	—	22	—	—	—	—	—
Gerga	2	1	7	—	5	— 1	—	—	—	—
Qena	7	3	13	1	6	— 2	20	—	25	—
Aswan	29	2	4	—	— 25	— 2	3	—	15	—
TOTAL	4,444	23	2,818	17	—1,626	— 6	1,494	—	1,392	—

TABLE NO. 118.— DISTRIBUTION OF ANOPHELES LARVAE EXAMINED BY PRINCIPAL STATIONS IN LOWER EGYPT DURING 1949

Province or Governorate	No. of Species	Anoph. Species				Other Species
		Pharoen.	Mult.	Sergenti.	Mauri.	
Western Desert	121	37	80	4	—	—
Canal	381	246	12	1	10	112
Behera... ..	16,794	2,513	—	—	1,659	12,622
Gharbia	330	244	18	1	29	38
Dakahlia	86	83	1	—	2	—
Sharkia	272	247	3	—	22	—
Menoufia	49	49	—	—	—	—
Kaliubia	60	49	11	—	—	—
TOTAL LOWER EGYPT ...	18,093	3,268	125	6	1,722	12,772

TABLE NO. 119.— DISTRIBUTION OF ANOPHELES LARVAE EXAMINED BY PRINCIPAL STATIONS IN UPPER EGYPT DURING 1949

Province or Governorate	No. of Species	Anoph. Species				Other Species
		Pharoen.	Mult.	Sergenti.	Mauri.	
Giza	52	52	—	—	—	—
Beni Suef	151	151	—	—	—	—
Minia	277	277	—	—	—	—
Assiut	63	63	—	—	—	—
Gerga	120	120	—	—	—	—
Qena	435	434	—	—	—	—
Aswan	295	156	139	—	1	—
TOTAL	1,393	1,253	139	—	1	—

TABLE No. 120.—NUMBER OF VILLAGES SURVEYED AND BIRKAS FOUND HARBOURING LARVAE OF ANOPHELES, AND CULEX PIPENS IN LOWER EGYPT AND CANAL GOVERNORATE DURING 1949

Province or Governorate	Station	No. of villages surveyed	No. of Birkas examined	Positive Birkas for Larvae		Birkas Harboursing Anopheles Larvae						Birkas Harboursing Culex Pipens		Remarks	
				No.		Pharoen.		Mult.		Sargentl		Other species		No.	%
				No.	%	No.	%	No.	%	No.	%	No.	%		
Behera...	Idku ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Kafr el Dawar ...	2	3	—	—	—	—	—	—	—	—	—	—	—	—
	Damanhour ...	10	40	28	70	—	—	—	—	—	—	—	—	—	—
Gharbia ...	Fowa ...	2	2	2	100	2	100	—	—	—	—	—	—	—	—
	Dessouk ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Kafr el Sheikh ...	2	5	2	40	1	20	1	20	—	—	1	20	—	—
	Biala ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Mehalla el Kobra	7	11	6	54.5	—	—	—	—	—	—	6	54.5	—	—
Dakahlia ...	Faraskour ...	5	7	1	14.3	1	14.3	—	—	—	—	—	—	—	—
	Dekernis ...	1	3	2	67	1	33.3	—	—	—	—	—	1	33.3	—
Canal ...	Ismailia ...	9	91	91	100	89	97.8	4	5	—	—	3	33	—	—
	Suez ...	4	40	1	2.5	—	—	1	2.5	—	—	—	—	—	—
Sharkia ...	Belbeis ...	3	22	8	36.3	11	50	—	—	—	—	—	—	—	—
	Abu Kebir ...	1	2	—	—	—	—	—	—	—	—	—	—	—	—
	Inshas ...	4	12	2	16.6	2	16.6	—	—	—	—	—	—	—	—
Menoufia ...	Shebin el Kom ...	4	10	—	—	—	—	—	—	—	—	2	20	—	—
Kaliubia ...	Toukh ...	30	110	69	62.7	47	42.7	11	10	—	—	—	—	—	—
Western Desert ...	Baharia Oases ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Siwa ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Wadi el Natroun	1	77	77	100	26	33.7	51	66.2	—	—	—	—	—	—
GRAND TOTAL ...		85	435	289	66.1	208	47	68	15	—	—	10	23	3	0.6

TALBE No. 121.— NUMBER OF VILLAGES SURVEYED AND BIRKAS FOUND HARBOURING EITHER LARVAE OF ANOPHELES OR CULEX PIPPIENS IN UPPER EGYPT
AND WESTERN DESERT GOVERNORATES DURING 1949.

Province or governorate	Station	No. of Villages Surveyed	No. of birkas examined	Positive birkas for larvae		Birkas Harboursing Anopheles Larvae						Birkas Harboursing Culex Pippiens	
				No.	%	Phar	Mult		Surgenti	Other Species		No.	%
							No.	%		No.	%		
Giza	Giza	44	196	142	.72	31	—	—	—	—	—	113	57.6
Beni Suef	Beni Suef	4	7	—	—	—	—	—	—	—	—	—	—
Minia	Minia	6	12	3	.25	3	—	—	—	—	—	—	—
Assiut	Assiut	11	81	21	25.9	21	—	—	—	—	—	—	—
Qena	Qena	3	8	—	—	—	—	—	—	—	—	—	—
GRAND TOTAL		68	304	166	54.6	55	—	.18	—	—	—	113	37

**TABLE NO. 122.— QUANTITIES OF LARVICIDE CONSUMED IN LOWER
AND UPPER EGYPT DURING 1949**

Province or Governorate	Name of Station	Pure D.D.T.	D.D.T With Malariol	Malariol	Paris Green	Controlled Areas
		Kilo	Kilo	Kilo	Kilo	m2
Lower Egypt :						
Behera	Idku	3.071	—	6,482	5,153.420	12,527,904
	Kafr el Dawar	57.500	—	576.500	232.875	1,799,086
	Damanhour	200.210	—	1,675.500	591.850	6,630,990
Gharbia	Fowa... ..	—	183 500	—	276.250	31,856,680
	Dessouk	49	—	163,270	489.128	4,283,466
	Kafr el Sheikh	29.500	—	—	742.500	6,335,651
	Biala	198.100	—	—	743.121	5,558,235
Dakahlia	Mehalla el Kobra	24.700	—	—	233	2,343,510
	Faraskour	—	—	—	1,095.912	4,571,082
Canal	Dekernis	255	572.305	706	925.687	1,851,129
	Ismailia	—	1,043	—	1,720	14,592,931
Sharkia	Suez	—	—	983	1.323	17,014,860
	Belbeis	84	2,142	—	275.400	47,93,069
	Abu Kebir	13	2.164	—	393	60,34,217
Menoufia... ..	Inshas	—	808.500	—	266.250	3,878,927
	Shebin el Kom	16.200	—	—	330.084	3,232,853
Kaliubia	Toukh	2.800	—	3,613.500	2,296.190	15,195,055
Western Desert	Baharia Oases	—	780	—	175	0,504,650
	Siwa	—	—	—	230.950	2,329,626
	Wadi el Natroun	—	1,903.500	—	—	1,495,600
TOTAL		4,001.010	7434.968	14,199.770	17,457.617	147,830.320
Upper Egypt :						
Giza... ..	Giza	14.467	—	12.481	—	9,794,000
Beni Suef	Beni Suef	117 646	—	2.290	306	6,912,843
Minia	Minia	36,368	—	873.955	2,795.215	25,093,180
Assiut	Assiut	57.950	200	—	843.485	2,958,037
Gerga	Souhag	47.800	—	—	521	1,589,589
	Gerga	28.800	—	—	245.900	2,169,440
Qena	Nag' Hammadi... ..	—	457.898	—	1199.354	8,412,750
	Qena	108.433	—	1,425.715	141.570	6,579,339
	Luxor	—	160.250	957	617.400	5,163,971
	Mata'na	26.566	694.363	—	256.900	2,659,869
Aswan	Kom Ombo	41.500	—	1,095.311	1477.400	10,642,126
	Aswan	—	522.021	—	385.553	4,622,662
TOTAL		14,932.063	2,034.532	16,835.271	8429.777	86,502.806
GRAND TOTAL		18,903.073	9,469.500	31,035.041	25,887.394	234,333.326

TABLE No. 123.— NUMBER OF WARNINGS AND P.Vs. CONTRAVENTION DRAWN UP BY MALARIA UNITS AND THEIR BRANCHES
IN UPPER AND LOWER EGYPT DURING 1949

Province or Governorate	Unit	Burrow Pits or Puddles		Filling in or covering over disused wells or sakis and Abolishing pumps		Clearing Drains or misks		Clearing Ponds or Marshes		Prohibition of Rice and Sugar cane		Emptying or Covering Cesspits	
		Ws.	P.Vs.	Ws.	P.Vs.	Ws.	P.Vs.	Ws.	P.Vs.	Ws.	P.Vs.	Ws.	P.Vs.
LOWER EGYPT	Canal ...	1	—	1	—	7	10	7	—	—	—	—	—
	Ismailia ...	2	—	—	—	94	—	—	—	—	18	—	—
	Mehalla el Kobra ...	—	—	—	—	—	—	—	—	—	—	—	—
	Kafr el Sheikh ...	1	—	1	—	—	—	—	—	—	326	—	—
	Damanhour ...	5	—	—	—	—	—	—	—	—	—	—	—
	Shebin el Kom ...	2	—	2	—	—	—	—	—	—	—	—	—
	Wadi el Natroun ...	—	—	—	—	—	—	—	—	—	—	—	—
TOTAL		11	—	4	—	101	10	7	—	—	344	—	—
UPPER EGYPT	Giza ...	—	—	—	—	—	—	45	12	—	2	—	—
	Fayoum ...	4	4	—	—	9	9	—	—	—	—	—	—
	Beni Suef ...	28	9	3	2	—	—	—	—	—	—	27	1
	Minia ...	—	—	—	—	30	11	12	—	—	—	—	—
	Assiut ...	3	—	—	—	—	—	—	—	—	—	—	—
	Qena ...	97	—	131	—	—	—	—	—	—	—	—	—
	Luxor ...	2	—	—	—	—	—	—	—	—	—	—	—
	TOTAL	134	13	154	2	39	20	57	12	—	2	27	14
	GRAND TOTAL	145	13	158	2	140	30	64	12	—	346	27	14

TABLE No. 124.—HOSPITALS AND HEALTH UNITS, ETC., AND NO. OF ROOMS SPRAY PAINTED
WITH INSECTICIDE BY MALARIA STATIONS IN EGYPT DURING 1949

Station	No. of Hospitals and Health Units	No. of Rooms	Insecticide Employed	Quantities Consumed (Gallons)
LOWER EGYPT				
Suez	4	225	Liquid (D.D.T.) ...	704
Mehalla el Kobra	7	220	" " ...	138
Biala	12	96	" " ...	117
Dessouk	4	39	" " ...	64
Fowa	4	36	" " ...	52
Damanhour	16	390	5 % D.D.T. Solution	1,000
Faraskour	12	431	D.D.T.in Kerosene	1,274
Dekernis	22	377	" " ...	305
Idku	28	192	" " ...	230
Abu Kebir	2	26	" " ...	12
Shebin el Kom	4	50	" " ...	80
Belbeis	11	301	" " ...	850
TOTAL LOWER EGYPT	126	2,383	— —	4,806
UPPER EGYPT				
Giza	7	106	Liquid (D.D.T.) ...	150
Beni Suef	9	729	" " ...	400
Minia	22	164	" " ...	180
Assiut	21	345	" " ...	14
Gerga	3	230	" " ...	124
Souhag	8	68	" " ...	208
Qena	18	626	" " ...	375
Mataana	7	91	" " ...	56
Luxor	8	158	" " ...	80
Nag Hammadi	6	16	" " ...	40
Kom Ombo	10	194	" " ...	176
TOTAL UPPER EGYPT	119	2,327	— —	1,803
GRAND TOTAL	245	5,110	— —	6,609

TABLE No. 125. —QUANTITIES OF DIFFERENT DRUGS CONSUMED FOR TREATMENT
OF POSITIVE CASES IN LOWER AND UPPER EGYPT DURING 1949

Kind of Drugs	Consumed Drugs in Tablets		GRAND TOTAL
	Lower Egypt	Upper Egypt	
Atebrine	225,551	144,385	369,936
Quinin 5 grs.	24,438	2,529	26,967
„ 2 „	12,910	1,397	14,307
„ Chocolate	7,872	3,307	11,179
Plasmochine L. Comp. I cm.	1,636	98	1,734
„ Sm Comp. $\frac{1}{2}$ cm.	2,762	1,443	4,205
Paludrine	2,332	—	2,332
Blaud's Pills	53,724	56,450	110,174

The following are details of the allocations and expenditures on Malaria Control;

I. Credits allocated for the Malaria Section during the fiscal year 1949-1950 ;—

a. General control	L.E. 82,513
b. A. Sergenti campaign in Fayoum	30,987
c. Aerial control	30,000
d. Mosquito control in Cairo	41,000
e. Sanitation of habitations	2,000
	<u>186,500</u>

II. Expenditures during the same year:

a. General Control	73,329
b. A. Sergenti Campaign in Fayoum	29,064
c. Aerial Control	17,693
d. Mosquito control in Cairo	26,635
e. Sanitation of habitations	1,996
	<u>148,735</u>

III. Expenditures of Central Administration

(Salaries and Allowances)	43,565
	<u>192,300</u>

Chapter XVIII.—INSECT CONTROL

PRELIMINARY STUDIES ON HOUSEFLIES IN EGYPT

The housefly in Egypt had passed the stage of being a nuisance and had become a dangerous menace to human health. During the cholera epidemic of 1947, the Ministry of Health organized an anti-fly campaign as an important part of its programme for controlling the disease. Since then, due attention has been paid to the importance of more fundamental studies on the problem of flies, of which the estimation of the fly-population density is a prime consideration.

1. Methods of Estimating Housefly Population Densities

With the advent of DDT and other newer insecticides, the control of houseflies and other pests has been revolutionized. For the successful evaluation of such insecticides, it has been necessary to devise an adequate method of sampling the density of housefly populations. The variability of the adult habitats and the nature of their congregations make the standardization of adequate and suitable sampling for statistical analysis practically impossible.

1.1 "*Fly-grid*" method.

Scudder devised a new technique for sampling housefly populations by means of what he called the "fly grill". The grill, which is made of wooden strips and which neither attracts nor repels flies, is placed at a point where flies are concentrated; the flies which collect on the grill can then be counted. Scudder's technique was adopted in Egypt at the time of the cholera epidemic of 1947, when DDT formulations were used extensively to control houseflies.

(The name "fly grill" was changed to "fly grid".)

Certain modifications of the original technique were introduced by workers in this department. Of these we may mention the following:

(1) Establishment of a certain number of stations in which three grid counts are made at one placement. The stations were chosen after initial search for places with maximum concentrations of flies, and they were never changed.

(2) Introduction of outdoor and indoor counts to be made at nearly the same time in each station.

(3) Use of a grid of one size, 80 cm × 80 cm (15 strips), for outdoor and indoor counts (fig. 1).

FIG. 1. THE "FLY-GRID"



(4) Search in each station for the maximum concentrations of flies within a radius of 5 yards (4.57 metres) from the centre of the station.

(5) Averaging the three counts of each grid placement to give an index, and obtaining from the averages a mean to represent an index figure of the fly population of a certain locality.

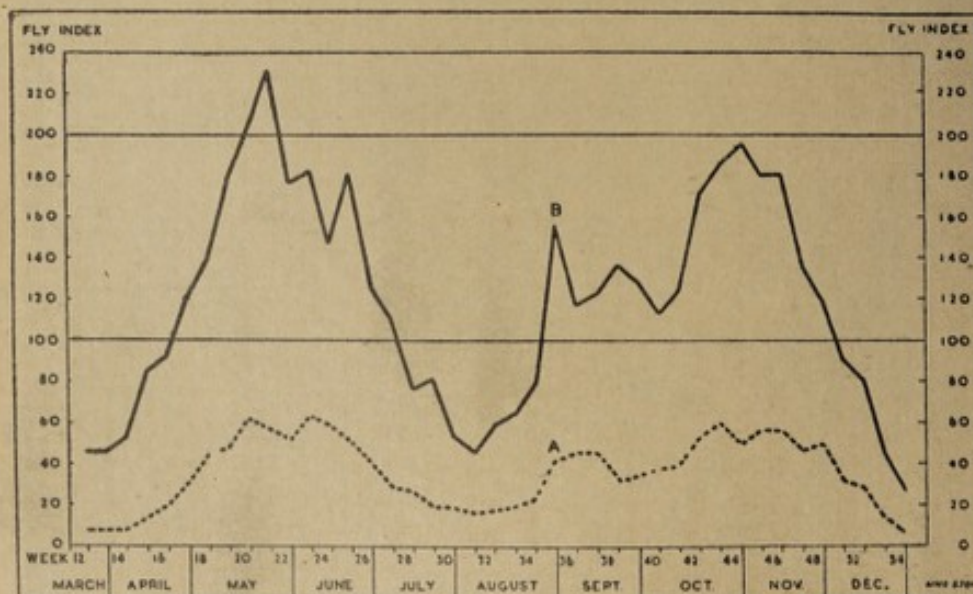
(6) Daily counts at hourly intervals.

On revising the data obtained from the modified technique, we noted that this system was not satisfactory because it contradicted Scudder's fundamental theory and implied random sampling rather than sampling concentrations of flies. Fixing permanent stations of a limited space fails to illustrate the general fly population of a certain locality. Some of these stations may lose their attractiveness, thus giving very low counts, while obvious increases in concentrations of flies can easily be seen in other parts of the village. This is very important in the evaluation of fly-control measures. For reasons stated above we established, in most of our centres, new zones, such as lanes and squares, in which the inspector looks for the maximum concentrations of flies where grid counts should be taken, as Scudder originally proposed. For indoor readings, too, the search covers the whole house until a higher count is obtained. The choice of such zones was also based on our initial observations of places in which flies tend to congregate, and a continuous search is being made in order to replace any station which may lose its attractiveness.

For obtaining an index, the highest figure of three counts at each grid placement is always considered, and from these maxima the mean (i.e., the index) is obtained. In order to compare the results obtained with the modified Scudder technique and with our present system, we decided to use both in one village, Talbia (Giza province). The results (Fig. 2) show that our present system, which is based on searching for concentrations, gives higher counts. This, as has already been advanced, is extremely advantageous in the evaluation of control measures, since the other system is much less sensitive.

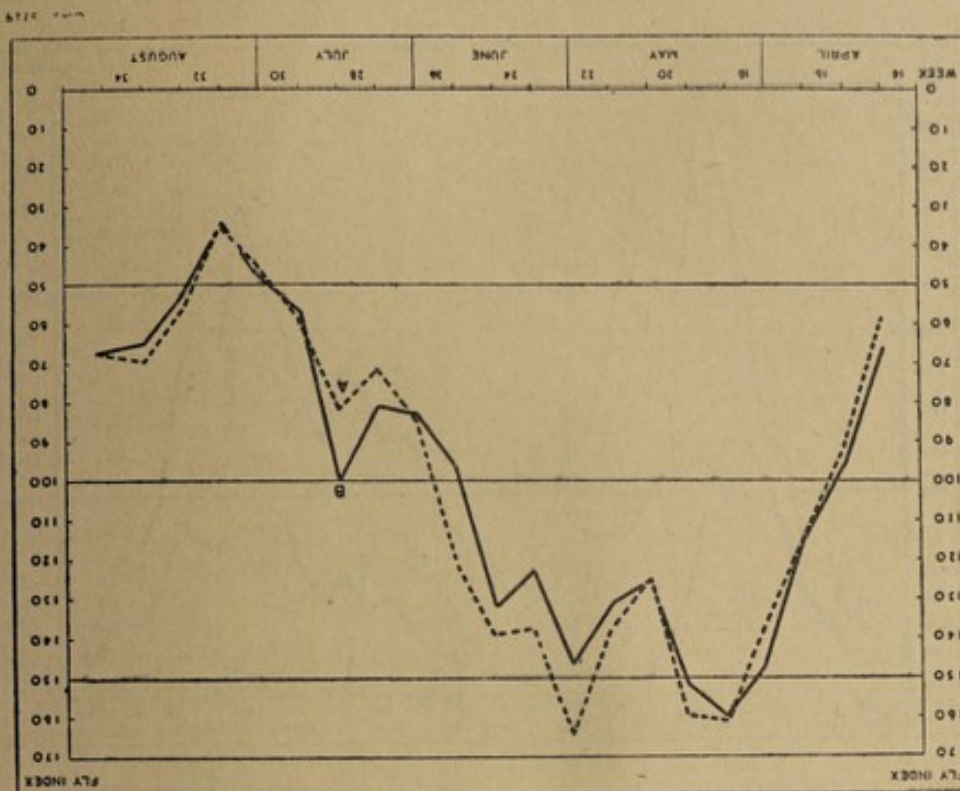
As regards time of observations, we find that three daily readings taken at different hours, such as 9-10 a.m., 12-1 p.m., and 3-4 p.m., can represent the diurnal variation satisfactorily. Consecutive counts made at short intervals (10.30-11.30 a.m. and 12-1 p.m.) showed very small variation.

Fig. 2 Weekly grid indices of fly population at Talbia, March- December 1949, Showing the results obtained by (a) The modified Scudder Technique, and (b) The present system



A — Modified Scudder technique
B — Present system

Fig. 3. Weekly grid indices of fly population at Abul Nomros, April-August 1949
Showing results of consecutive counts at short intervals



A — Counts made between 10.30 and 11.30 a.m.
B — Counts made between 12 and 1 p.m.

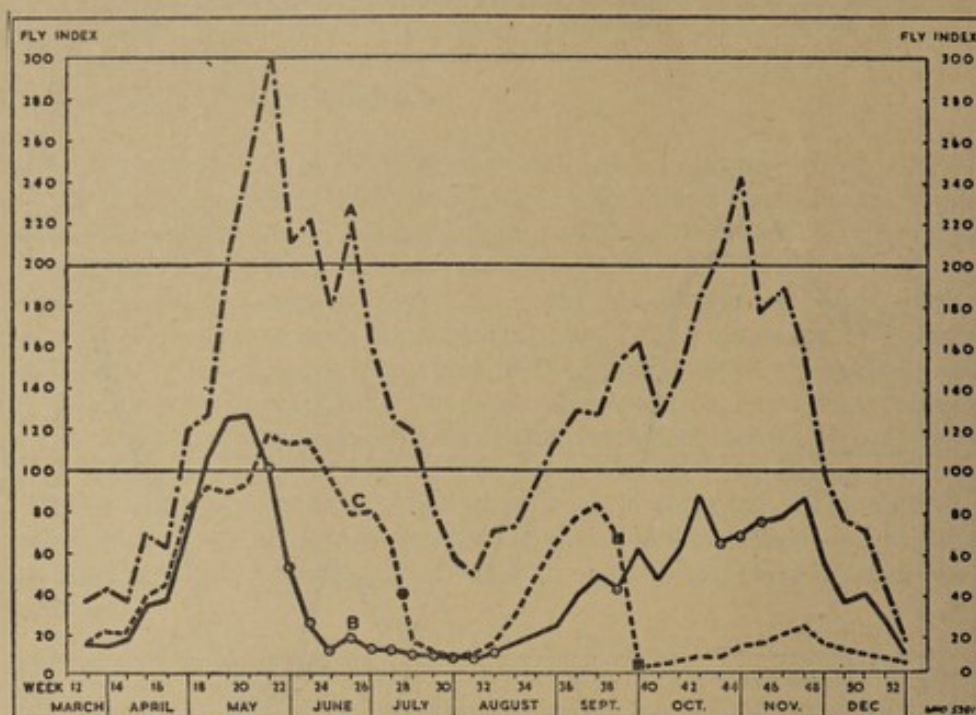
The question of the relation between the number of grid placements and the size of the locality is yet unsolved. Scudder himself did not indicate the number of placements from which he always selected a constant number of counts to produce an index for a certain area. For rural areas, however, we were able to evolve an arbitrary system for deciding the number of grid placements. This was based on the total number of houses in a village, the rate being 10-15 grid placements for the first 1,000 houses, or less, and five additional placements for every 1,000 houses thereafter. This classification is not absolutely rigid since it was found that the number of grid placements in some cases was not correlated with the size of the locality. This became apparent in large villages and cities where attractive foci are concentrated at only a few centres.

Regarding the efficiency of the grid method, it should be noted that no claim is made to absolute accuracy in our estimates produced by this method, in which a personal factor is involved, i.e., the honesty and efficiency of the inspectors who count the flies on the grid. Even with well trained persons, counts sometimes vary greatly. In our opinion, these estimates have no statistical significance apart from providing a general comparison of the relative abundance of the fly population of a certain locality throughout the year. In the same way, fluctuations in fly density during treatment campaigns can be studied (fig. 4).

1.2 Other methods:

As regards other methods used in determining the density of fly population, reference may be made to our experience with tanglefoot paper and bait-traps. In view of the fact that flies tend to rest on hanging cords, wires, frames, etc., we tried suspending tanglefoot paper in the same manner, but catches obtained from this paper did not give a good representation of the circulating population. Even when the tanglefoot paper was placed in fly concentrations, only odd numbers were caught. We placed strips of tanglefoot paper on the fly grid. We also tried placing small portions of putrefied chicken entrails and bits of feathers on glazed tiles which were smeared with tanglefoot, but catches were representative of the circulating population only when these tiles were placed near concentrations found in shade.

Fig. 4. Weekly grid indices of fly population at Talbia, Konayesa, and Tersa, March-December 1949
Showing the effect of treatment with insecticides



A = Talbia

B = Konayesa

C = Tersa

● = Wall-spraying with 7.5% DDT emulsion

○ = Treatment of breeding places with gammexane dust (4% BHC)

■ = Wall-spraying with gammexane suspension

Trials with bait-traps were carried out by previous workers in this department who reported the following difficulties :

- (1) knocking-down of traps by wind or children ;
- (2) removal of bait by cats and dogs ;
- (3) rapid desiccation of bait ;
- (4) difficulty of supplying the traps with bait of uniform attractiveness.

To overcome the first three difficulties, certain modifications were introduced into the construction of the original trap (fig. 5). In the old trap, the bait was placed on the ground, which caused unduly rapid desiccation. By placing the bait on a circular tray, it can be kept moist for longer periods. Moreover, the trap is fitted with a bottom which carries the tray. Immediately above the bottom there is a circular slot which serves as a fly passage and through which the tray is introduced. The width of this circular slot is about 2 cms, a space which does not permit the interference of cats and dogs. The new trap has been designed to be fixed into the ground in order to avoid removal by the wind or children.

To supply the traps with bait of uniform attractiveness, a large stock of well-putrefied fish sufficient to service the traps for several weeks was maintained ; but it was discovered later that, as decomposition advanced, the number of flies caught decreased. In view of this, a weekly supply of fish had to be added a day or two before operation (fig. 6). It should be emphasized that the choice of fish as bait was based on previous trials with several other baits; it was found that fish could compete with human faeces, which are also highly attractive to flies. It is hoped, however, that, through further investigation, a technique for producing a bait of uniform attractiveness may be devised.

Fig. 5. the bait-traps

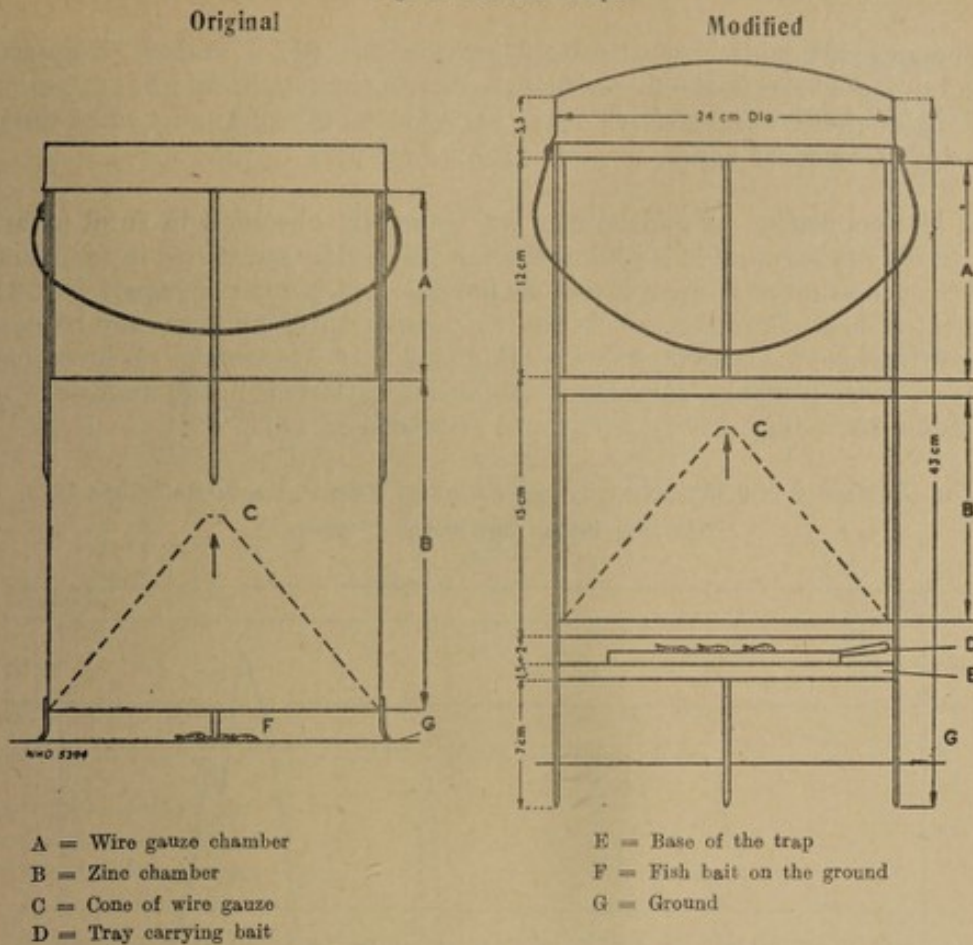
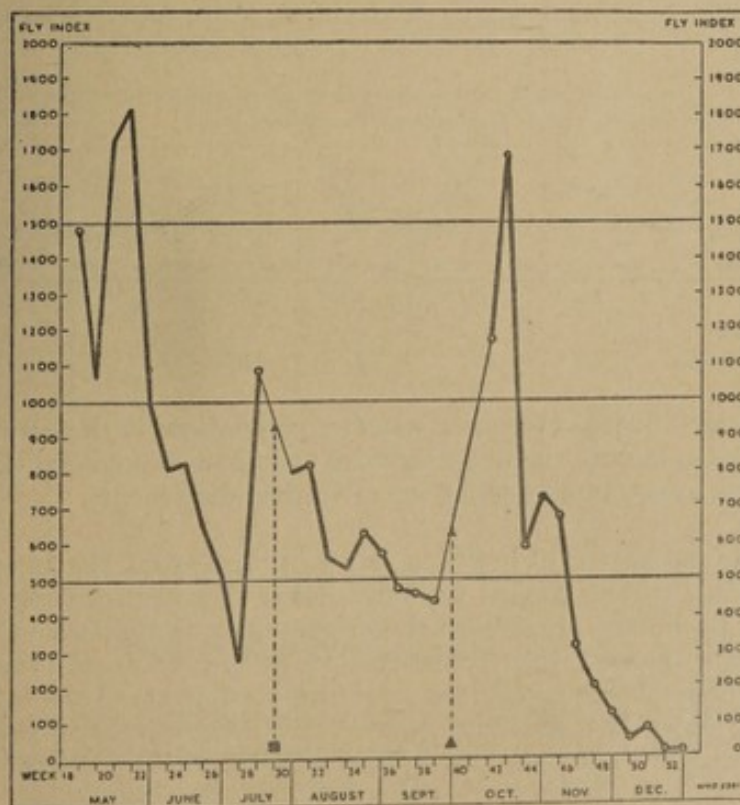


Fig. 6. Weekly bait-trap indices of fly population at Cairo sewage farm, Gabal Asfar, May-December 1949, showing the effect of treatment with insecticides

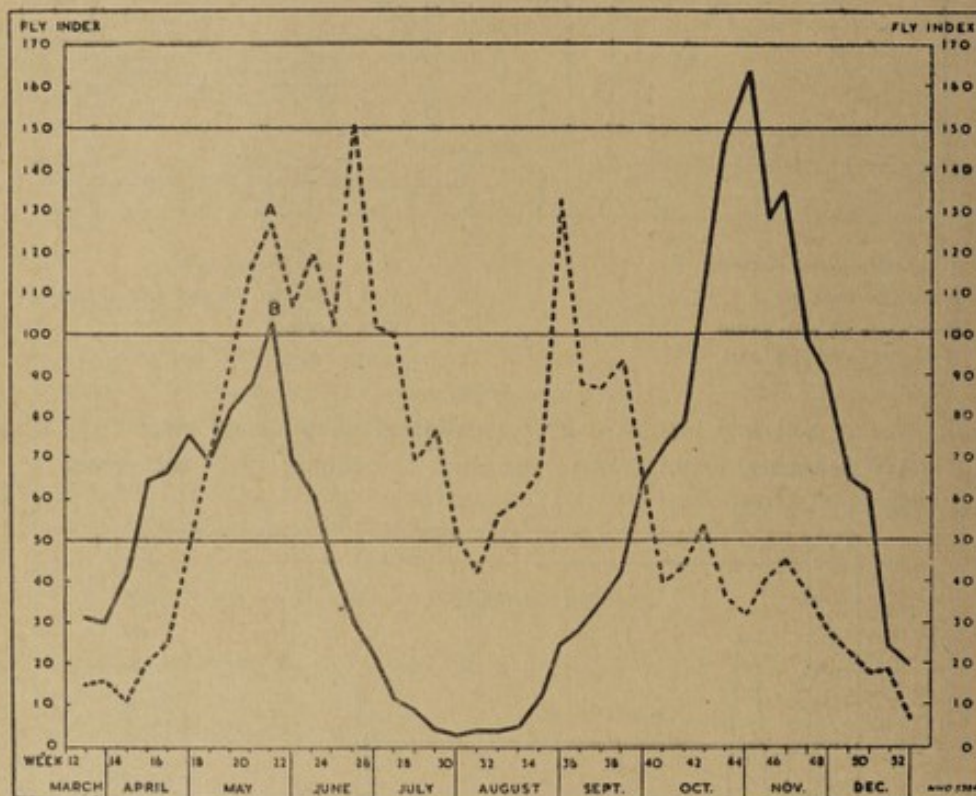


2. Preliminary Results of Estimations of Housefly Population

From our grid counts in rural areas (Giza province) (fig. 7 and 8), it appears that there was a marked rise in the fly population starting about the middle of April. From the end of May there was a steady decline until the middle of August when the population started to increase again, forming an autumn peak.

The low population of midsummer was generally observed in rural areas where natural manure (a favourable breeding medium) is rapidly consumed in fertilizing summer crops, such as maize. Thus it may be possible to assume that, apart from the probable effect of heat, the reduction in the fly population in summer may be correlated with the reduction of this favourable breeding medium. Our survey of breeding places in Konayesa (Giza province) revealed the following variations in the number of manure heaps : June, 352 ; July, 159 ; August, 272 ; September, 351.

Fig. 7. Weekly grid indices of fly population at Talbia, March-December 1949, Showing indoor and outdoor counts



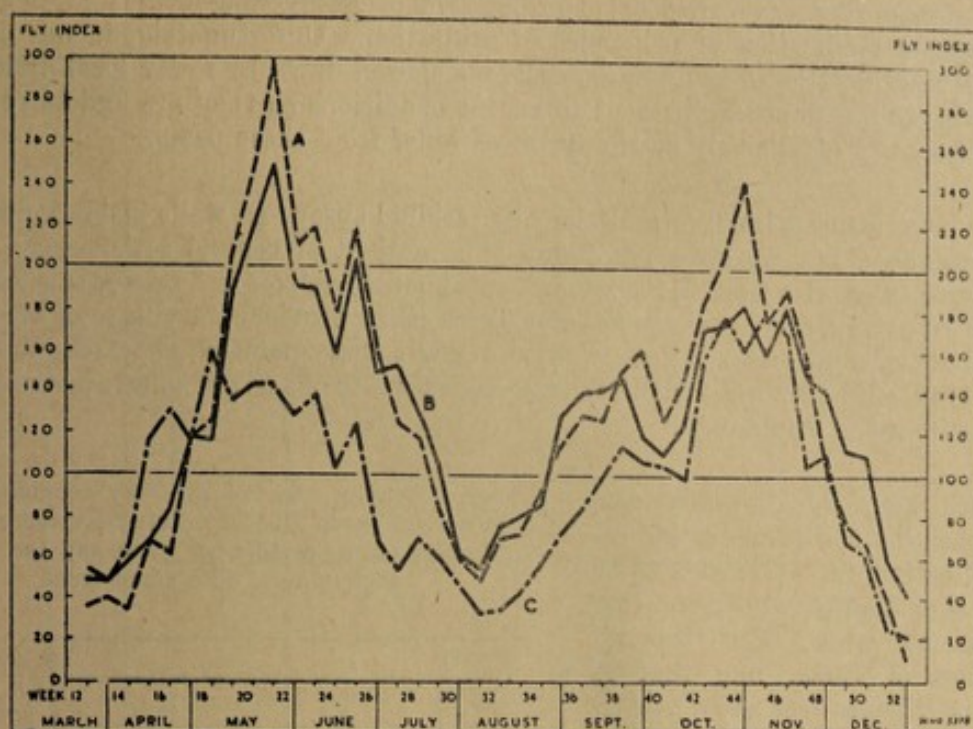
A = Indoor counts
B = Outdoor counts

As regards the influence of heat on summer populations of flies, we tend to believe that it affects the immature stages rather than the adult insects and that this effect is indirect in that it causes rapid desiccation of the breeding media.

According to our survey of breeding places in rural areas, the amount of positive breeding media in July and August was much lower than that of June (table No. 126). Fly populations in summer are subject to various changes, not least of which are prolonged heat waves when the large concentrations of flies are to be found indoors. As shown in fig. 7, the outdoor population started to decline about the last week in May, while the indoor population remained higher. With the advent of the cooler weather of autumn, another inversion was noted, giving higher counts outdoors again.

As illustrated in fig. 8, in Talbia the summer afternoon populations were the lowest. This observation was again confirmed by our fly counts in the Arab district of Port Said (fig. 9). According to our experience, in summer flies tend to shelter on foliage during the hottest hours of the day and from sunset onwards,

Fig. 8—Weekly grid indices of fly population at Talbia, Macrh-December 1949
Showing counts at different hours



A = Counts made between 9 and 10 a.m.

B = Counts made between 12 and 1 p.m.

C = Counts made between 3 and 4 p.m.

Fly populations at coastal areas in the northern part of the country, such as Port Said, seem to be dense throughout the summer. In urban districts where suitable breeding media are always available, flies also seem to remain relatively thick throughout the hot season. All these observations, however, need further confirmation.

TABLE NO. 126.—RESULTS OF EXAMINATION OF POSSIBLE BREEDING PLACES FOR FLIES IN TALBIA, JUNE-OCTOBER 1949

Month	Percentage of breeding places found positive in						
	manure heaps	latrines	stables, pigsties, etc.	fowl pens	garbage	fuel cakes	damp soil
June	66	63	64	31	30	87	43
July	16	49	38	28	23	66	20
August	50	21	40	12	27	64	15
September	33	30	19	11	22	37	14
October	48	31	33	3	27	51	16

3. Trials of Housefly Control in Egypt

In Egypt, the presence and access of various fly-breeding media, together with inadequate application of sanitary measures, are the main causes of the extreme abundance of housefly populations. Almost any place in an Egyptian village could be a potential breeding place for flies: manure heaps, animal sheds, and latrines are the principal breeding places in villages; garbage is the most common source in towns, though in slum districts, animal sheds and stables, and poor sanitation also provide fertile breeding media.

It is commonly accepted that the effective control of houseflies is dependent on the proper application of preventive measures. By preventive measures we mean the proper storage of manure, prompt disposal of garbage and other breeding media and, in general, the adequate application of principles of sanitation. Unfortunately, in our country the proper application of sanitary measures is slowed down by many local difficulties. Therefore, we are forced at present to accept conditions as they are and to resort to chemical control extensively as the quickest relief from these pests.

We have utilized DDT formulations as residual sprays on walls inside houses and other buildings, but we have not found this method of control satisfactory. DDT formulations were also tried in two of our experimental centres and proved unsuccessful.

One of our experimental centres was Tersa (Giza province), a village of about 600 houses built of mud bricks. The whole village was spray-painted, about the first week in July 1949, with a 7.5. per cent DDT emulsion at a rate of 3gs. per square metre applied on walls from the inside only.

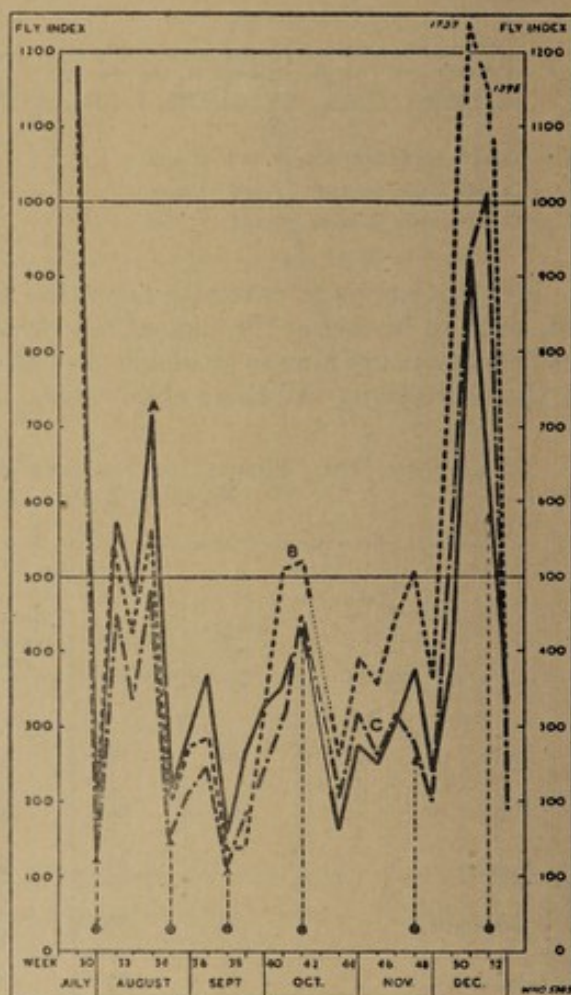
With this residual spray it was hoped that the insecticide would remain effective for at least 8 to 10 weeks, thus depressing or retarding the autumn peak. But the fly population of Tersa, like that of untreated villages (see above), started to increase again from the middle of August (fig. 4). This indicates that the effect of the DDT residual spray probably did not last for more than 6 weeks, and it might have been less.

The other experimental centre was the Cairo sewage farm at Gabal Asfar, where, about the middle of July 1949, the stony walls of the area were spray-painted with 5 per cent DDT emulsion at a rate of 2gs. per square metre. Only minor reduction resulted (fig. 6), and this was further evidenced by complaints which we received from the farm authorities, who indicated that flies were still abundant after the treatment. It must be emphasized here that the principal breeding media in that locality are the drying beds where sludge is exposed to natural drying. Larvae can easily be destroyed in these beds by periodical flooding. According to our observations in June and July, the flooding operations were not well attended to, and flies bred there prolifically. Later, more care was given to the flooding, and consequently lower population was noted in August and September.

The failure of DDT residual sprays may, in our opinion, be attributable to three main factors :

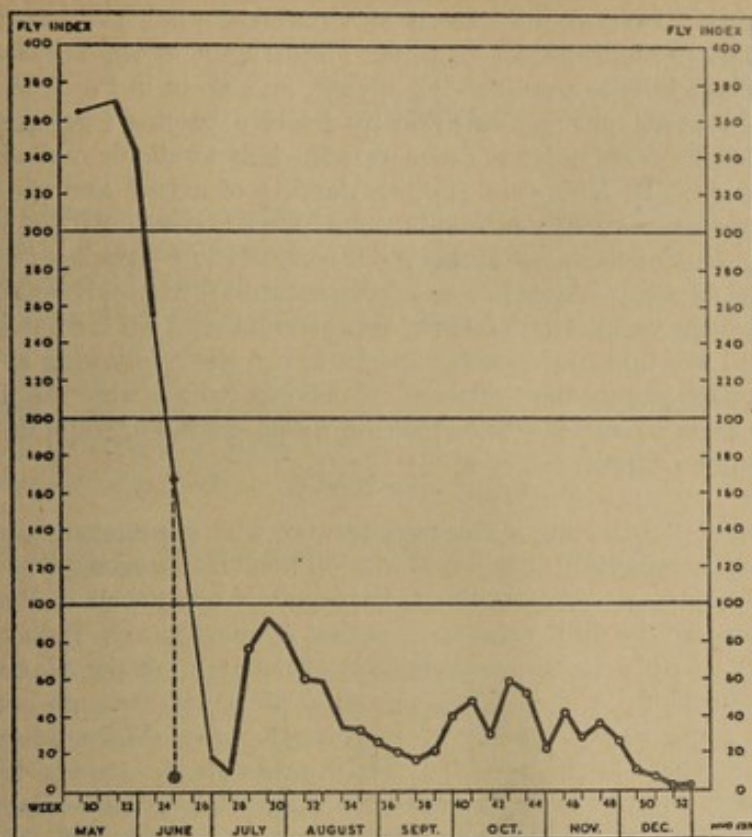
(1) the presence of DDT-resistant strains ;

Fig. 9 Weekly grid indices of fly population at Port Said (Arab District), July-December 1949, Showing counts at different hours and the effect of treatment with gammexane



- A = Counts made between 9 and 10 a.m.
- B = Counts made between 12 and 1 p.m.
- C = Counts made between 3 and 4 p.m.
- = Treatment of breeding places with gammexane dusts (4% and 20% BHC)

Fig. 10. Weekly Bait-Trap indices of fly population at Inshas farms, May-December 1949, Showing the effect of treatment with gammexane



(2) the inability of residual films to cope with the dense populations produced by potential breeding places ;

(3) *Musca domestica vicina* seems to have different habits in Egypt from elsewhere.

We have noted from repeated observations that the fly in its daily activities shows a marked preference for horizontal surfaces and that the number of flies which contact walls is almost negligible. According to a few observations, we tentatively assume that the preferential resting and sheltering place in summer is foliage.

On account of what has been mentioned about the fly preference for horizontal surfaces, we may suggest that controlling flies with residual sprays might prove successful if insecticides which have fumigant action, such as benzene hexachloride (BHC) or chlordane, were used. However, these insecticides are no more effective than DDT in heavily infested areas. This came to our notice at the Cairo sewage farm, where a 4 per cent kerosene solution of chlordane applied about the end of September 1949 was ineffective (fig. 6).

Our experience with BHC is illustrated in fig. 4 and 10. The first experiment was made about the second week in June 1949, at Inshas farm (Sharkia province), which is a typical rural area with a moderate fly population. The stone houses of that area were painted with a 6 per cent suspension of BHC in water at a rate of 40 ml per square metre. (The suspension was prepared from a wettable powder containing 6.5 per cent gamma-isomer). A considerable reduction of the fly population was noted immediately after treatment (fig.10). The population remained low throughout the summer, but this may be attributable to the use of natural manure on summer crops, as mentioned above. Therefore, the actual residual effect of BHC spray in Inshas could not be exactly traced ; however, the retardation of the autumn peak provides a very interesting observation which may be compared with our experiment with DDT residual spray in Tersa (page 170). Later, a second experiment was made in Tersa with the same 6 per cent suspension of BHC sprayed on walls about the end of September 1949. As illustrated in fig. 4, this treatment was effective in depressing the autumn peak, and its effect lasted for about six weeks.

Due attention was paid to treatment of fly-breeding places with insecticides. By treatment of breeding places we mean covering the surface of the breeding medium with a thin layer of the insecticide. This ensures successful destruction of gravid females, but killing of larvae is fortuitous since it only happens when the insecticide gets into cracks and crevices of the breeding medium. Treatment of the breeding places alone was tried in a village in Giza province, Konayesa, and again in Port Said, accompanied in the latter by direct attacks on adult flies by means of ground fogging and DDT solutions with pyrethrum. Gammexane dusts were the only available material at the outset of this investigation. In Konayesa (fig. 4), dusting of actual and potential breeding places was carried out at weekly intervals, from May 26, 1949 until the second week in August, with gammexane dust containing 4 per cent BHC (0.5 per cent gamma-isomer). The arrangements of weekly application of gammexane dust in Konayesa were based on our estimates of the population after the first, second, and third treatments, when the population started to build up towards the end of the week following every treatment. It is surprising that gammexane dusts in Konayesa, which were applied during the autumn, did not show an appreciable effect on fly populations, while in the spring the effect was markedly evident.

In Port Said, too, all breeding places were treated with gammexane dusts containing 4 per cent and 20 per cent BHC. (Owing to local difficulties, dusting was carried out at nearly monthly intervals). As a result of these control operations in Port Said, counts of the week following the first treatment revealed considerable reduction in the fly population (fig. 9). This reduction amounted to 69 per cent, 85 per cent and 98 per cent of the original population. For maintaining such a low level, the same control measures should have been repeated periodically every 10 to 15 days. The sudden rise of the fly population in December should be noted. It is probably due to the low dose of the preceding treatment which was made about the third week in November.

Regarding the costs, those of the first treatment were about L.E. 300, i.e., approximately 0.2 piastre per capita (Port Said population is about 170,000). Further investigation is being carried out in the direction of adjusting the doses and the intervals after which periodical treatment should be repeated. It is hoped that the greatest reduction in the fly population at minimum costs will be achieved.

Chapter XIX.—BILHARZIA SNAIL DESTRUCTION

1. REVIEW

In the 8 years since its establishment, the Snail Destruction Section has initiated control in as many provinces, as well as in the infested oases of the Libyan Desert. This involves a perennially irrigated area exceeding 2,000,000 feddans* and containing over 100,000 kilometres of streams, of which at least 1/3 ought to be regularly treated.

It is felt that, after this quick expansion, a period of consolidation and intensification of measures will be needed in order to achieve satisfactory control. So far insufficiencies on all levels and dilution of our efforts have not permitted full control, but within the measure of our effort, results have been encouraging.

In the following a review is given of our aims, policies and procedures.

(1) *Surveys* :

Net-method. The dipping of snails by net at stations is extensively used. It is a suitable method for the rapid evaluation of the heavy snail infestations prevalent in the Egyptian streams, of which we cannot hope, at present, to treat but the more important. As an example of the extent of these recurrent surveys we are quoting figures from the general spring survey of 1949 : 99,800 kms. of streams were surveyed of which 29,838 were found infested ; 8,637,970 dips were taken, thereby dipping out 399,187 *Bulinus* snails, 189,231 *Planorbis* and 586 *Limnaea caillaudi*.

Trap-method. In order to detect lower levels of infestation, and for accurate checking during the year, palm-leaves are placed below water level and re-inspected for attached snails several days later. This method is important but of limited use, on account of the time and effort involved. Main feeding streams, negative by net, are re-surveyed with traps as a routine measure. The scope of these trap surveys is illustrated for the spring of 1949 as follows : 4,529 kilometres were surveyed of which 2,456 were found infested ; 206,926 palm leaves were used and the snails trapped were 28,441 *Bulinus*, 555 *Planorbis* and 193 *Limnaea*.

It must be understood that many more snails could be found in similar surveys later in the year, but indications obtained in the spring fully serve their purpose of guiding priorities in treatment operations.

(2) *Clearance* :

Clearance of streams from vegetation, which is often indispensable to permit the dragging of the bags of CuSO_4 , is widely used whenever copper sulphate is not available in quantity, as it reduces the amount of sulphate necessary for killing snails. It is never to be forgotten that clearance also removes a large number of snail eggs, which are not killed by CuSO_4 , at the concentration sufficient to kill snails.

Regular competent clearance of small distributaries would seriously impair their function as snail nurseries, but the task is beyond the material possibilities of the section.

During 1948, 12,200 kms., or about 85 per cent of the lengths sulphated, were prepared by clearing, the hired labour used amounting to 304,394 man/days.

(3) *Sulphation* :

Closed-stream method. The routine method of sulphation aims at a uniform concentration of about 15 - 20 p.p.m. in the whole volume of water of a stream, which is left

* 1 Feddan = 4,200 m²

to act for several days. For this purpose close dovetailing with the irrigation water schedules is necessary as we have to dam a stream and to fill it up during its low or dry rotation. The difficulties of co-ordination have been considerable and in the case of main feeders, often unsurmountable.

Open-stream method. To obviate these difficulties, a method for sulphating running streams was evolved, whereby only the shallow and weedy marginal strips, with low current velocities, which harbour the majority of snails, are sulphated. A group of men, posted 50 m. apart, dissolve each 4 kg. bags of copper-sulphate, suspended from a stick, by walking to and fro in the length allotted to them. The group works towards the intake, at the highest water level. Each man can treat 6-800 m. daily. The method is convenient whenever there exists a shortage of labour, time and especially of copper sulphate, and was used extensively in Giza, Qena and Kaliubia Provinces.

Sulphation Work During 1948 - 1949.

The section sulphated about 20,000 separate streams or portions of streams, corresponding to about 14,000 kms., using 750 tons of copper sulphate and employing 56,765 man/days of hired labour; 5 per cent of these streams were sulphated twice. The section believes, however, that really effective permanent snail control cannot be achieved with less than 4 applications a year.

Generally speaking 1/3 of the infested numbers or 1/2 of the infested lengths were sulphated.

(4) Annual schedule :

The bi-annual schedule of two general surveys yearly at snail population peaks followed by sulphation has been abandoned and replaced by a system postulating one general survey in spring, followed by continuous treatments and checking of streams. It was also decided to pre-date the beginning of the survey by one month in order to be able to begin treatment at the spring peak of snail population.

II. LEGISLATION

Law No. 29, "Relative to the extermination of the molluscan vectors of Bilharziasis" was promulgated in March 1948. This law authorizes the Ministry of Public Health to ask landowners to clear distributaries twice yearly, and in case of non-execution, to clear at the owner's expense, the moneys being reimbursed to the Ministry by way of tax collection. The Ministry now has the legal right, after pre-arrangement with the Irrigation Department, to deviate streams, fill in ponds or drains, place pipes, etc. as deemed necessary, and to close or open intakes for treatment purposes. It makes it illegal for the population to interfere with the execution of control measures or to tamper with treated waters. It makes legal the inspection of private lands by our officers which have the status of judicial police. Small fines are provided for infringements.

A separate budget, provisionally fixed at L.E. 30,000 has been allotted this year for the application of the law.

III. THE LABORATORY

(1) Routine examinations of bilharzial infection of snails from Giza, Kaliubia, Menoufia and Behera Provinces were made in the Cairo laboratory, results being used in the field for guiding priorities of treatment, as in previous years.

The collected snails are also used for experimental purposes in our laboratory and in the laboratories of other parts of the world, as required.

(2) Various higher boiling point naphthas and chlorinated benzenes of a type that has gained popularity as weed killers in the U.S., together with other weed killers and insecticides were investigated for their molluscocidal properties and were found, without exception, of too high lethal concentrations for practical use.

The laboratory gave hospitality and assistance to the I.C.I. expert who spent all summer making field experiments with "Gammexane", especially the delta and gamma isomers; the chemical is promising, but in the present formulation it cannot compete economically with copper sulphate.

(3) By special agreement, the section has also extended all facilities for bilharziasis research to a number of workers from foreign countries, for periods ranging from 1 month to over two years, by providing laboratory space, equipment, an assistant staff, transportation, infected materials and by raising animals such as white mice, gerbils, guinea pigs and monkeys for experimental purposes.

IV. EDUCATIONAL

(1) *Museum.* A comprehensive documentary was prepared for the 16th Agricultural exhibition which has been housed in a museum on the premises of the section.

(2) *Textbook.* A textbook, primarily for the personnel of the section, written in simple Arabic and extensively illustrated is now under print. It will also be for sale to the general public at a moderate price.

(3) *Training centre.* A fully equipped training centre was set up last year and a full-time instructor is now handling classes of about 20 junior grade men monthly. The higher grade personnel is taken care of by the laboratory staff.

(4) *Films.* The Section has been giving advice, materials and other facilities to the Medical Propaganda Section for the production of films on bilharziasis.

Chapter XX — LEPROSY CONTROL

The campaign against Leprosy in Egypt began in 1929. Since the creation of the section, great efforts were displayed in combating the disease. Out - patient dispensaries were set up in the chief provinces, each provided with isolation quarters and four branch-units in the neighbouring districts for the examination and treatment of leprosy patients, and the isolation of the greatest possible number in agricultural and industrial colonies provided with all means of comfortable living.

The Section prepared a project for combating leprosy and segregation of lepers. The Ministry of Health issued law No. 131 of 1946 regulating the detection and isolation of cases, so as to protect the community against this fatal disease and to ensure the care of leprosy patients.

General Statistics :

Of 2,060 patients presenting themselves to leprosy units during the year, 1214, were found leprosy, as against 1916 and 897 respectively during the previous year. This brings the total number of patients returned positive for leprosy since leprosy control was launched in 1929 to 15,664 out of a total of 31,571 patients presenting themselves to leprosy units for examination during the same period.

Of the 1214 positive lepers found this year, 453 were repeatedly recorded in leprosy units. This leaves 761 new lepers proper.

Of the total 15,664 lepers recorded since 1929 until this year, 3,964 were recorded in more than one leprosy unit. This leaves a total of 11,700 lepers proper on records.

The following table No. 127 gives the distribution of new lepers according to leprosy units and branches :

Unit	Branches	No. of lepers	TOTAL
Abou Zaabal Leprosy Colony ...	—	159	159
Amria Leprosy Colony	—	229	229
Cairo Leprosy Hospital	Main Clinic	123	212
	Imbaba B.	21	
	Karamidan B.	56	
	Kaliub B.	12	
Zagazig Leprosy Clinic	Main Clinic	20	47
	Abu Hammad	1	
	Shebin el Kanater	18	
	Minia el Kamh	4	
	Abou Kebir	4	
Souhag Leprosy Clinic... ..	Main Clinic	37	99
	Tema	22	
	Gerga	9	
	Tahta	27	
	Akhmin	4	
Tanta Leprosy Clinic	Main Clinic	58	164
	Mehalla el Kobra	44	
	Zifta	16	
	Kallin	42	
	Kafr el Zayat	4	
Minia Leprosy Clinic	Main Clinic	41	43
	Bani Mazar	2	
	Abou Kirkas	—	
	Samallout	—	
	Mallawi	—	
Alexandria Leprosy Clinic	Main Clinic	22	57
	Damanhour	23	
	Karmouz	1	
	Desouk	4	
	Rosetta	3	
	Idko	4	
Mansoura Leprosy Clinic	Main Clinic	40	68
	Damietta	7	
	Sinbellawein	8	
	Sherbin	8	
	Dekernis	5	
Shebin el Kom Leprosy Clinic ...	Main Clinic	18	73
	Menouf	22	
	Ashmoun	6	
	Quesna	9	
	Benha	10	
	Tala	8	
Qena Leprosy Clinic	Main Clinic	14	63
	Luxor	21	
	Kous	16	
	Deshna	7	
	Nag' Hamadi	5	

At the end of 1949, there were 923 lepers in segregation at Abou Zaabal and Amria Colonies and Cairo Leprosy Hospital and isolation quarters annexed to the Leprosy units as against 863 at the end of the previous year. They were distributed as follows:—

Abou Zaabal Colony	437
Amria Colony	267
Cairo L. Hospital... ..	177
Sohag L. Clinic	2
Mansoura L. Clinic	17
Qena L. Clinic	23
TOTAL	923

The average rate of attendance of lepers for treatment was 21 per cent as demonstrated by the following table No. 128.

TABLE No. 128

Month	No of attendances (Visitors)	Rate
		%
January	9,761	17
February	9,338	21
March	12,067	27
April	9,700	16
May	13,509	27
June	9,868	21
July	9,023	20
August	12,687	22
September	10,381	22
October	7,690	17
November	12,256	21
December	10,486	22

Treatment :

Hydnocarpus oil was used for the treatment of all lepers. It was given intramuscularly in a weekly dose of approximately 4-5 ccs.

A total of 117,903 injections weighing 529 kgs., of hydnocarpus oil were given to patients during the year as against 107,729 injections and 481 kgs., in the previous year. A total of 173,822 dressings were applied to patients during the year, as against 171,181 in the previous year. The following Table No. 129 gives the details :

TABLE No. 129

Month	Number of injections	Quantity of oil	Number of dressings
January	8,916	40,717	16,255
February	8,625	38,690	16,318
March	11,386	50,378	20,457
April	9,130	41,588	13,484
May	11,509	52,096	15,814
June	9,426	42,021	12,471
July	8,537	38,127	11,772
August	12,059	53,610	15,593
September	9,859	44,670	12,685
October	7,126	31,318	11,086
November	11,302	50,874	15,159
December	10,028	44,699	12,728
TOTAL	117,903	528,788	173,822

Treatment was not restricted to leprosy but was given to other attendant diseases.

ABOU-ZAABAL COLONY.

Following the completion of female quarters within the Colony, 90 female lepers were transferred from Cairo Leprosy hospital to Abou Zaabal Colony. It is proposed to use the Cairo hospital as a preventorium for the accommodation of healthy children of leprous parents.

During the year, 279 lepers were admitted to the Colony as against 210 in 1948. Of these admissions, 120 had previously been in segregation in the Colony but were discharged for one reason or another. The number of lepers in segregation at the end of the year was 437 as against 455 in the previous year.

Technical Work:

(1) Examination of the 159 new admissions revealed that 54 were anesthetic type, 20 tubercular and 85 of the mixed type. Examination of the 120 re-isolated lepers revealed that 73 were anesthetic, 12 tubercular and 35 of the mixed type.

(2) Bacteriological examination of nose and skin samples taken from the 437 lepers in segregation gave the following results:

150 lepers positive nose only; 83 lepers positive skin only; 133 positive nose and skin and 71 negative nose and skin. It was also revealed that 10 positive lepers became negative, 4 negatives became positive and 423 remained unchanged.

(3) The annual clinical examination of residents showed that the conditions of 285 lepers improved, 112 remained stationary and 40 deteriorated.

(4) There were 127 cases of perforating ulcers. All were treated and improved, except 19 cases which were still under treatment.

(5) Of 289 cases of leprosy reaction met with this year, 232 were light and 57 severe. All were duly treated and improved, except 5 severe cases which were still under treatment at the end of the year.

(6) A total of 82,440 dressings were applied to lepers this year.

(7) 153 surgical operations were performed on lepers this year, namely :

82 incisions, 43 widening of incisions, 16 removal of bones, 11 removal of auricula infima and one circumcision.

(8) Skin diseases affections numbered 505 this year, namely :

156 cases of scabies; all were treated and recovered completely.

342 cases of dermatitis. All were treated and recovered, except 92 cases which were still under treatment at the end of the year.

4 cases of favus. All were treated. One case recovered and three were still under treatment at the end of the year.

3 cases of urticaria. All were treated and recovered completely.

(9) Venereal diseases cases (syphilis) numbered 18. All were treated.

(10) Medical diseases cases which were treated and recovered numbered 351 namely :

3 cases of cholecystitis, 317 cases of dyspepsia and gastritis,

3 cases of heart failure, 26 cases of general debility and two cases of dropsy.

(11) 62 cases of chest diseases were met with during the year namely :

5 cases of pulmonary tuberculosis still under treatment, 2 cases of asthma, 7 cases of acute bronchitis, 45 cases of bronchitis and 3 cases of pneumonia, all of which were treated.

(12) Lepers attended the ophthalmic clinic for treatment 2,963 times. 114 operations were performed during the year, namely :

25 probing of canaliculi, 7 skin and muscle, 1 lacrymal cyst, 20 trachoma, 27 follicles, 15 trichiasis, 2 pterygium, 2 excisions, 1 paracentesis, 2 extractions of cataract, 5 chalazion, 3 graft, and 4 canthoplasty.

The oculist paid the Colony 32 visits this year.

(13) 230 patients attended the dental clinic this year and were treated. Dental operations totalled 54 namely :

17 Extractions .

28 Pyorrhoea.

6 Abscesses of the gum.

3 Extractions of radix.

The dentist paid the Colony 39 visits during the year.

(14) Parasitic affections numbered 45, namely :

21 cases of bilharziasis.

19 " " ancylostomiasis and ascaris.

5 " " malaria.

All were treated and recovered.

(15) 196 samples of urine were taken from patients and staff examined at the colony's laboratory. This gave the following results :

1 Bilharziasis — 13 Renal casts — 126 Pus and 56 salts.

(16) Samples of faeces numbered 33 and gave the following results :

6 Ancylostoma .

17 Ascaris

10 Other parasites.

Staff Clinic :

Members of the staff in residence with their families in the Colony attended this clinic 4,972 times for treatment or an average of 14 visits daily. Diseases treated were as follows :

270	Rheumatism.
4	Mumps .
130	Tonsilitis.
45	Otitis.
1	Rhinitis.
160	Enteritis.
240	Bronchitis.
485	General debility.
75	Constipation.
39	Bilharzia.
4	Ascaris.
6	Dysentery
16	Malaria
35	Scalds .
2	Scabies .
4	Urticaria.
10	Circumcision .
55	Abscesses .
3	Deliveries.
15	Ophthalmia .
2	Whooping cough.
1	Puerperal fever.
12	Scorpion sting.
12	Renal colic.
2	Eczema.
75	Wounds .
1	Syphilis.
268	Small pox vaccinations
242	Diphtheria vaccinations
28	Extraction of tooth.
1	Abrasion.
45	Eye operations.
700	Eye painting.
1400	Dressings.
490	Acidity.
1	Metrorrhagy .
17	Penicillin treatment.
1	Insulin " .

Social Activities :

(1) *School* : 22 lepers attended the day school and 13 attended the night school.

(2) *Library* : Lepers frequented the library on an average of 350 times a month or 12 times a day.

Books were loaned to lepers on an average of 150 per month or 5 books daily.

(3) *Lectures and Preaching* : Lepers are lectured and preached in the mosque of the Colony during Friday prayers. These leave a good effect on the morale of lepers.

(4) *Sports*: Scout and physical drills were practised by the scouts troop comprising 30 lepers. The object is to instil discipline in young patients. A football team was organised from 20 lepers who have weekly training.

Club and Welfare :

The welfare of lepers in segregation received the special attention of the Colony authorities. Traditional meals were provided during Ramadan fasting. Cakes and pudding were provided during feasts and special events. The canteen provided other commodities.

Prison :

This prison accommodates lepers serving terms of imprisonment. It is under control of the Prisons Department. 16 lepers were in prison at the beginning of this year. 30 lepers were admitted to the prison during the year and 16 prisoners were released, leaving 30 prisoners in segregation at the end of the year.

Industrial Activities :

A large variety of articles required by the Colony and inmates were manufactured by the workshops within the Colony. These workshops which comprise carpentry, shoe making, foundry, tailoring, etc. are manned by lepers. Other activities such as nursing, teaching, gardening, etc. are also undertaken by lepers.

Agricultural Activities :

A further 20 and a half acres of land have been reclaimed this year bringing the total area under cultivation to 133 acres of land. This land was properly cultivated by lepers under the supervision of an agricultural overseer. It produced adequate quantities of vegetables, cereals and fruits to meet the requirements of inmates. Besides, a large number of cattle is now kept in the colony mainly, 73 buffaloes, 3 cows, 22 oxen, 13 donkeys, 3 mules, a camel and 2 oxen kept for breeding. The dairy farm produced some 22, 677 kgs. of milk and 2,985 cubic metres of manure during the year. Male offsprings are slaughtered for food.

Water and Light Works :

These comprised a power station, a pumping station, a sedimentation plant, a drainage pump and a repair workshop.

A total of 471,780 Kilo Watts of electricity were used for lighting and sedimentation. A total of 1,185,840 cubic meters of fresh water were filtered for drinking by the sedimentation plant. The drainage pump drained all waste water which, after purification, was used for irrigation. The workshop is a small mechanical and electrical workshop for undertaking minor repairs for the various plants.

Cairo Leprosy Hospital :

Of 288 persons presenting themselves to the hospital, 212 were found leprous and 76 suffered from other diseases.

Of the 212 leprous patients, 116 were anesthetic, 40 tubercular and 56 of the mixed type.

Contacts :

Lepers attending the hospital are advised to bring their contacts for medical examination with a view to detecting the infection on its onset. Contacts are examined periodically every three months.

In-patients :

This section is assigned for the accommodation of female lepers prior to their transfer to the special section provided within Abou-Zaabal Colony. 90 patients have already been transferred this year. The number of lepers in segregation at this hospital at the end of the year was 177.

These patients carry out all domestic duties i.e. cleaning, washing, tidying beds etc. Bed ridden patients are attended by other inmates. Some patients undertake needle work and sewing.

Lepers in residence are entertained from time to time by the hospital and afforded every possible amusement.

Out-patients :

There are three out-patient clinics working in connection with this hospital namely :

1. Embaba dealt with 21 new patients and 2,972 attendances.
2. Kara Midan dealt with 56 new patients and 8,235 attendances.
3. Kaliub dealt with 12 new patients and 2,725 attendances.

Treatment :

Patients were treated with hydnocarpus oil given intramuscularly. All other diseases, complications and reactions accompanying leprosy were treated as well. A total of 22,504 injections weighing 100.129 kgs of hydnocarpus oil were given to patients in the hospital and branch clinics during the year.

Some 19,038 dressings were applied to patients during the same period.

AMRIA COLONY

This was opened on 22/10/1947. The number of lepers in segregation at the end of the year under review was 360.

229 new patients were admitted during the year. Of this number, 18 lepers were tubercular, 109 anesthetic and 102 of the mixed type.

All the inmates received hydnocarpus oil treatment. Lepers treated at the Colony during the year numbered 8,061. An equal number of injections weighing 31.630 kgs. of hydnocarpus oil were given to patients.

Entertainment of Inmates :

The same arrangements as used in Abou Zaabal Colony and Cairo Leprosy hospital are afforded to the inmates. During feasts, the meat ration is doubled and the inmates are provided with sweets and cigarettes.

All other commodities required by the inmates are provided by the colony at cost price.

A radio set as well as various games were provided for the amusement and entertainment of inmates.

PART V—RESEARCHES & LABORATORY EXAMINATIONS

Chapter XXI — SUMMARY OF THE WORK OF THE PUBLIC HEALTH LABORATORIES DEPARTMENT

1.—*Bacteriological Section :*

The total number of specimens examined bacteriologically in the Central, Provincial and Branch laboratories, during the year 1949, amounted to 520,214.

2.—*Clinical-pathological Section :*

4,035 specimens were examined in the Section during the year under review.

3.—*Chemical Section :*

The total number of samples examined chemically in the Central Laboratories as well as in the Tanta and Assiut laboratories, during the year 1949, was 71,269.

4.—*Water Section :*

(a) *Bacteriological Service* :—The total number of samples of water, aerated water, ice and syrup examined by this Service during 1949 amounted to 8,476.

(b) *Chemical Service* :—During the year under review 1,648 samples of water were subjected to chemical analysis.

5.—*Antirabic Institute and Hospital :*

During the year 1949, 9,899 patients attended the Institute at Cairo. Of these 9,726 were fully treated.

The number of patients who attended the Antirabic Out-Centres at Alexandria and Luxor amounted to :

Alexandria : 912 of whom 699 were fully treated.

Luxor : 499 of whom 458 were fully treated.

6.—*Serum and Vaccine Laboratory :*

The following vaccines and sera were prepared during the year 1949 :

(1) T.A.B. Vaccine, 980,225 ccs.

(2) Anti-cholera Vaccine, 176,400 ccs.

(3) Calf Lymph Vaccine, 21, 327,500 doses.

(4) Diphtheria prophylactic (Formal Toxoid), 38,705 bottles of 20 ccs., 13,633 bottles of 10 ccs., and 18256 boxes (each box for one person)

(5) Diphtheria Antitoxin, 9,274 ampoules of 10,000 units, 35,533 ampoules of 4,000 units, and 15,635 ampoules of 1,000 units.

(6) Anti Tetanus, 60,210 ampoules of 3,000 units.

(7) Anti-Scorpion, 90,852 ampoules.

Chapter XXII—SUMMARY OF THE WORK OF THE RESEARCH INSTITUTE FOR TROPICAL DISEASES

Out-patients Department :

The total number of patients who attended the out patients department was 8,481 classified as follows :

(1) Males more than 12 years of age	...	...	...	...	...	5,048
(2) " less " " " "	...	...	...	...	...	474
(3) Females more " " " "	...	...	...	...	...	2,542
(4) " less " " " "	...	...	...	...	...	417

On their first day of attendance, all patients are subjected to a thorough clinical examination, examination of their urine and stools for parasitic infection, and estimation of hemoglobin content. Other investigations are performed for each case as required.

These investigations include.

(1) Physical, chemical and bacteriological examination of urine. The new tests for detection of Bilharzial infection are also performed.

(2) Examination of stools for different protozoa and culture to detect Bacteria.

(3) Complete examination of the blood for :

- (a) Blood picture
- (b) Sedimentation rate
- (c) Microscopic examination for blood parasites
- (d) Estimation of bleeding and coagulation time.
- (e) Biochemical tests
- (f) Bacteriological tests

(4) Examination of the sputum for micro-organisms and Bilharzia ova.

(5) Kidney and liver function tests.

(6) Cardiography.

(7) Estimation of B.M.R.

(8) Sigmoidoscopy and examination of rectal scrapings

(9) X-ray films and screening.

All patients suffering from parasitic infections were tested either as out or in-patients. The patients diagnosed as suffering from organic diseases numbered 751 and are classified as follows :

<i>Diseases of the heart and circulatory system :</i>	Cases
Hypertension	78
Heart failure	21
Mitral stenosis	33
" " and regurg.	21
Double mitral and aortic regurg.	11
Aortic regurg. (Rheumatic)	3
" " (Syphilitic)	4
Angina pectoris	3
Femoral thrombosis	4
Congenital heart defects	2

Treatment of Schistosomiasis :

The routine method used for the treatment of Bilharzial infection during 1949, was the same that has been followed since 1946.

The patient weighing 60 Kgms or more is given a daily dose of 5 ccs. of repodral intramuscularly for ten consecutive days.

The excreta are examined directly after finishing the course of treatment. Further examinations are carried out one week, 2 weeks and one month later.

The results are given in table No. 133 which shows that the ratio of apparent cure was 79 per cent.

The treatment of Bilharzia infection with Miracil per os was also continued on a large scale and with different dosage than last year.

The results are published in a special report.

Treatment of Helminthic infection :

(1) Ancylostoma worms : The drug used was carbon tetrachloride in a dose of 5 ccs with a saline purge two hours later.

(2) Ascaris worms : a dose of 2 1/2 ccs. of oil of chenopodium is administered, to be followed by a saline purge within 2 hours.

(3) Taenia worms : The drug used is atebrin. The dose given is 0.9 gram on an empty stomach after two days on fluid diet. A saline purge is given after 2 hours.

(4) Heterophyes heterophyes worms : Treatment is carried out by filix mas. The dose is 5 ccs. followed by a saline purge within two hours.

(5) Hymenolepis worms are also treated by filix mas with the same dose as that used in Heterophyes infection.

(6) Oxyuris worms : carbon tetrachloride in the same dose as used in the treatment of ancylostoma. All the doses mentioned above are those given to adult patients weighing 60 kgms or more.

The results of treatment of helminthic infection are illustrated in table No. 134. The ratio of apparent cure after the first purge in each case is as follows :

	per cent
(1) In ancylostoma infection	42
(2) „ ascaris „	44
(3) „ taenia „	65
(4) „ Het. het. „	60
(5) „ Hymenolepis „	31
(6) „ Oxyuris „	41

Furthermore, some cases of ascaris infection were treated with Hexylresorcinol. Also atebrin and chloroquine were used for the treatment of taenia and hymenolepis infection.

The results are mentioned later in special reports.

Haematology section

The following blood specimens were examined during the year 1949 :

	Cases
(1) Haemoglobin estimations	7,764
(2) Complete blood count	1,166
(3) Red cell count	48
(4) Total white count	155
(5) Differential count	108
(6) Sedimentation rate	212
(7) Bleeding time	46
(8) Coagulation time	53

	cases
(9) Platelet count	23
(10) Blood examination for malaria	
(a) Negative results	584
(b) Positive results	47
(11) Blood examination for microfilaria	
(a) Negative results	774
(b) Positive results	76
(12) Reticulocyte count	4

Report of the X-ray department :

The following X-ray films were done during the year 1949 :

[illegible]

TABLE No. 130.—ANTI-BILHARZIAL TREATMENT IN O. P. IN 1949

[illegible]

TABLE No. 131.—RESULT OF TREATMENT OF HELMINTHES INFECTIONS DURING 1949

Parasitic infection	Total number of Pts.	Pts. who did not attend for treatment or for re-examination	Results of stool examination after 1st purge						Results of stool examination after 2nd purge						Results of stool examination after 3rd purge			
			after one week	after one month	after two months	Cured	Discontinued		after one week	after one month	after two months	Cured	Discontinued		after one week	after one month	after two months	Cured
Ancylostoma	915	736	77	102	41	21	32	15	+	—	+	—	+	—	+	—	+	—
Ascaris	946	747	91	108	57	24	40	19	24	26	16	19	9	19	14	13	6	13
Taenia	102	45	37	19	37	—	37	—	8	3	—	8	—	8	—	—	—	—
Heterophyes heterophyes	11	6	3	2	1	—	1	—	2	—	2	—	2	—	—	—	—	—
Oxyuris	136	93	19	24	18	12	11	10	2	3	2	1	2	3	2	2	1	2
Hymenolepis nana	154	110	15	29	10	11	8	6	3	4	2	2	1	2	3	2	1	1
Trichostrongylus	95	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Tricocephalus	26	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

SUMMARIES OF THE RESEARCHES CARRIED OUT DURING
THE YEAR 1949

Miracil D : effect on *B. mansoni* in vitro and in the treatment of urinary Bilharziasis.

A. Halawani, A. Hafez, J. Newsome and E. G. Cowper.

(1) A method for cultivating *B. mansoni* in vitro in serum - tyrode medium and the testing of the action of miracil D on worms in vitro is described. This method is considered to be of value in screening anti - Bilharzial drugs.

(2) Twenty young Egyptian prison guards who presented a six-months history of urinary Bilharzia and who were very unlikely to be recently infected were treated with miracil D.

(3) A gradual scale of dosage beginning at 2 gms. daily in two doses gave a satisfactory blood level of about 5 mg / ml. which was maintained for 5 days or more.

(4) Unpleasant symptoms were mainly the result of gastro-intestinal irritation. In this small series, no toxic effects were seen in the heart, kidney, liver, or blood.

(5) 9 out of 15 patients on full dosage were completely cleared of live eggs within 3 weeks. Two out of 5 patients receiving lower doses were also rid of live ova.

(6) Re-examination carried out 2 months after the cessation of treatment showed that 18 out of 20 patients have relapsed though a few live eggs were found in the urine. After 6 months, two patients were free of live eggs. Although the remainder of the cases showed clinical improvement, they still passed eggs.

(7) The future of miracil D as a curative drug in Bilharzia is discussed

TREATMENT OF CESTODES WITH CHLOROQUIN AS COMPARED
WITH OTHER KNOWN VERMIFUGES

Gamal Nor El Din - Ibrahim I. Baz.

25 cases with *hymenolepis nana* infection were treated by chloroquin. Stool examinations were carried out for 6 months after finishing treatment and the results were as follows :

- (1) Negative results were continuously obtained in 18 patients.
- (2) A relapse occurred in four patients within 3 months.
- (3) The treatment failed from the beginning in 3 patients.

Chloroquin was also used for the treatment of 51 cases of taenia infection in doses similar to atabrin. The head of the worm was obtained in 18 cases (35 per cent). Slight toxic manifestations were encountered in some patients. These are nausea, fatigue and vomiting, and usually disappeared within two hours. Alarming symptoms, however, occurred in a child 5 years of age. Half an hour after taking the drug, he began to vomit incessantly and collapsed. The patient was rapidly treated and he was cured after five hours.

MENTAL DISEASE AND HEREDITY
M. M. DAWOOD.

In this article, the author studied a syphilitic family : although it is known that not more than 5 per cent of aments are syphilitic, yet the results which he illustrated in table form showed that syphilis is not a negligible factor with regard to mental defectiveness.

Co-sanguinity also played its part in this respect as the author believes. Two children were treated with malaria and penicillin inoculation but showed no improvement in the mental condition within six months after treatment.

Cinemicrophotography of helminths and other semi-opaque objects using dark ground illumination

J. NEWSOME

The author described an apparatus which has proved to be very simple to operate and which may prove to have a wider application in the fields of helminthology and entomology.

A SIMPLE TEST OF CURE IN B. HAEMATOBIIUM INFECTION.

J. NEWSOME

The author described a method in which he used a lens of 3.5 to 4 cms. diameter and about 3 cms. focal length to be inserted in place of the condenser of the substage of the microscope. The urinary sediment, after centrifuge is put in a glass cell of 5 ccs. capacity which is placed on the mechanical stage, a microscope lamp is adjusted to give even illumination and directed on to the cell, through the lens and to a screen about 6 feet from the lens.

INCIDENCE OF CESTODE INFECTIONS AMONG EGYPTIANS.

DR. GAMAL NOR EL DIN

The authors found that hymenolepis and taenia infections occurred in a percentage of 3.6 and 2.3 respectively with regard to the total number of out-patients. Only four cases of hymenolepis diminuta and one case with taenia solium were encountered. They observed that hymenolepis infection occurs mostly in children under 10 years of age. This fact is attributed to both uncleanness and un-hygienic habits. The authors discussed the importance of vitamins with regard to susceptibility of rats to infection with hymenolepis. They referred to the work of Larch and Shandler concerning immunity to hymenolepis infection in rats. Among hundreds of fleas examined by the authors, only one flea of the xenopsylla group was found harbouring cysticercoids of H. diminuta.

A Preliminary report on the treatment of Ambulant cases of bancrofti Filariasis with Hetrazan in Egypt.

A. HALAWANI, I BAZ, M.M. DAWOOD

The drug was tried in 17 patients all of whom were hard working labourers who continued their daily work while taking the drug. The drug was well tolerated, and only slight side-effects occurred.

These side effects are general weakness, malaise, pain and swelling of testes, headache, lumbar pain, pain in joints, perspiration. Muscular symptoms appeared as early as the first day of treatment, and lessened gradually inspite of continuation of the drug.

The drug has proved to have a definite effect on microfilaria, their number being markedly reduced or completely disappeared.

Laboratory investigations were carried out before and after treatment, and the results illustrated in table form.

A SIMPLE NEW STAIN FOR INTESTINAL PROTOZOA

DR. M. I. EL KORDY

The infusion of the brownish outer-skin of the Egyptian onion (allium cepa) was found to possess an excellent tinctorial power for the staining of protozoa. Neither mordant nor differentiation were needed. The tinctorial power of pigment is quercitrin.

BIOCHEMISTRY DEPARTMENT

Several Biochemical and Biological experiments have been carried out on the antimony in its pentavalent form to find out whether compounds of pentavalent antimony have got any effect in the treatment of Bilharzia.

The minimum lethal dose of one of those compounds was found in order to compare it with the other known organic compounds of antimony like Fouadin, Anthiomalin and Tartar emetic. Results are tabulated in the following :

TABLE NO. 132.

Name of Compound	Experimental animals	Dose
Pentavalent antimony	Swiss rats	12 ccs./ Kilo.
Compound	White rats (English).	3 ccs./ Kilo.
	Dogs	2 ccs./ Kilo.

Moreover, dogs were injected $\frac{1}{2}$ cc. per Kilo for two consecutive days (massive treatment) and also for one day. No toxic symptoms appeared.

N.B. The quantity of the drug received was very limited and so we could not inject the animals with more than 2 ccs. per kilo in order to find the minimum lethal dose.

The same experiment was repeated using the other trivalent organic compounds in order to find out the minimum lethal dose.

Results are tabulated in the following :

TABLE NO. 133.

Name of compound	Experimental animals	Dose
Fouadin	White rats (English).	About 2.1 ccs./ Kilo.
„	Swiss rats	0.3 cc./ Kilo.
„	Dogs	0.45 cc./ Kilo.
Tartar emetic	Dogs (intravenous) ...	0.25 cc./ kilo.
Anthiomalin	Dogs (intramuscular)	0.25 cc./ kilo.

1 cc. of Tartar emetic solution contains 22 mgs. sb.

1 cc. of Anthiomalin solution contains 10 mgs. sb.

1 cc. of the pentavalent antimony compound contains 8 mgs. antimony.

By comparing the minimum lethal doses of the above mentioned compounds with the percentage of antimony they contain, it was found that the pentavalent organic compound is the least toxic.

The percentage of antimony in mgms was calculated in the pentavalent organic compound by calculating it from its structural formula and it was found that 1 cc. of its solution contains 8 mgms.

This compound was also analysed by reducing the pentavalent antimony into the trivalent form with hydrochloric acid and estimating it adopting the iodometric method in order to find out the percentage of antimony content.

This method was also used for the estimation of similar compounds like solutibosan and neostibosan.

3. The effect of this drug on Bilharzia worms was also tried : Swiss mice were injected with the drug in a dose of $1\frac{1}{2}$ cc./k. on two days.

This had no effect as revealed by stool examination for ova. A dose of 2 ccs./k. was given in 10 days . This big dose was somewhat effective.

The drug was found safe to be given to human beings. It had no effect on liver or kidney as shown by liver and kidney function tests.

4. Eight specimens of Repodral, delivered from the Ministry's stores were examined chemically and biologically. By comparing the results with those obtained for Repodral used in the hospital of the Institute, they were found comparable.

The treatment of diabetis with antimony was also investigated. Some diabetic persons were given the usual course of Repodral. Blood sugar and sugar in urine were less after treatment than before treatment.

TABLE NO. 134.

Sugar in blood fasting		1 hour later	2 hours later
% mgms.			
Before treatment ...	125	222	133
After ,, daily	100	153	100
,, ,, 7 days	87	133	90

PROTOZOOLOGY SECTION

1.—Effect of atebtrin on *E. histolytica* :

In vitro

The following medium, which was devised by us was used :

Ringer's solution, 3 ccs.

Trisod. phosphate sol (3.1 per cent) 2 ccs.

pH was adjusted at 7.2 — 7.0

One ccm. of horse serum was diluted by 9 ccs. of the above solution. Sterile rice starch was added to the medium before inoculation of the infected stools.

Amoebae were grown in Erlenmyers' flasks because we wanted large numbers of amoebae.

Three strains of *E. histolytica* were used in these experiments to know the effect of atebtrin on *E. histolytica* and to compare its effect with that of emetine hydrochloride.

It was shown that a concentration of one part per million sol. of emetine kills the used amoebae and that was the highest dilution of emetine which could kill the amoebae. On the other hand it was found that $1/100,000$ atebtrin sol. could kill the same amoebae and that was the highest dilution of atebtrin which could kill the amoebae. From the above, it is obvious that the effect of atebtrin on *E. histolytica* in vitro is less ten times than that of emetine HCl.

In vivo : 60 patients suffering from amoebic dysentery were treated with atebtrin. Only 39 patients were followed up. Amoebae disappeared from 33 cases only but most of them relapsed after about one and a half months.

II. Discovery of a simple new stain for intestinal protozoa.

We have discovered a new stain for nuclear and differential staining of intestinal protozoa. This stain is the infusion obtained by boiling the brownish outer skin of the Egyptian Onion (*Allium cepa*). The infusion contains quercitrin which is one of the most widely distributed natural pigments. It occurs in many plants such as horse-chest, nut, vine leaves, hops, tea and dyes oak.

Its chemical composition is $C_{21} H_{20} O_{11}$ (yellow needles M.P. 182 — 185 — °C). Its chief colouring component is quercitrin which is a penta hydroxyflavone $C_{15} H_{10} O_7$ (3, 5, 7, 3, 4 - penta hydroxyflavone, yellow crystals, m.p. 316-317°). Quercitrin is a 3 - rhamnose glycoside.

The infusion can be used as stain immediately after its preparation. Time or additional material are not required for ripening as in the case of haematoxylin solutions. Neither mordant nor differentiating solutions were needed.

Method of Staining :

(1) Smears of the infected stools are made on cover slips (2) Fix in Schaudinn's fluid.

Staining : The watery infusion or the diluted infusion with 70 per cent alcohol (4 staining sol. and 1 alc.) can be used as the staining sol. Time of staining from 2 hours to over night at 37°C or at room temperature. The dehydration and mounting are as in the usual methods.

The details are published in the J. R.E.M. Association, Vol. 32 May 1949 No. 5.

PROTOZOOLOGY SECTION

TABLE NO. 135.—NUMBER OF STOOLS SPECIMENS EXAMINED AND PERCENTAGE OF INTESTINAL INFECTION DURING THE YEAR 1949

No. of exam. specimens for the first time	Positive	Percent.	Negative	Percent.	E. Histo.			E. Coll.	Percent	Iodamoeba bitrichi	Percent.	Endolimax, Nana	Percent.	G. Lamblia	Percent.	Tichon or as homini	Percent.	Chilomastix moenili	Percent.	Total Number of specimens examined more than one time	Total Number of specimens examined during 1949
					Neg.	Cysts	%														
1,785	739	41.4	1,046	58.6	106 (5.9%)	47 (2.6%)	8.5	372	20.8	57	3.1	80	4.4	82	4.5	114	6.3	29	1.6	645	2,430

MALARIAL AND ENTOMOLOGICAL SECTION

This year the Section received 19,195 thick drops of blood for parasitic examination.

Of this number there were 10,464 sent for malarial examination and out of these, 464 drops or 4.7 per cent of the total number were unfit. 1,174 drops were returned positive for malarial parasites or 11.8 per cent of the number examined and only 8 per cent of the positive were of the malignant tertian type. The rest were of the benign tertian type.

There were also 8,731 blood drops sent for filarial examination out of which 220 drops or 2.5 per cent were unfit. 680 drops or 8 per cent of the total number examined were returned positive for Microfilaria.

418 specimens were received for entomological examination of which 38 were unfit and five others with in-complete information. Among the rest, there were 333 specimens containing one species of mosquito larvae, 11 specimens each containing more than one species and 31 specimens containing adult mosquitoes.

Larvae and adults were either, *A. phoroensis*, *A. multicolor*, *A. sergenti*, *A. (coastani)* *C. pipiens*, *C. laurenti*, *C. perexiguus*, *Aedes caspius*, *Theobaldia* or *Uranotaenia* and few Chironomidae larvae were found amongst some of these specimens. The section also received 157 specimens collected from trapped rats by the Quarantine authorities at seaports and from shipping and these were found to contain fleas of the following species: *X. cheopis*, *O. musculi*, *Ctenocephalus felis*, and among these there were few *Cimex lectularis* larvae. The number of Rats trapped was 3,820 and these were either *R.R.*, *R.N.*, *Acomyes*, or *sori*.

The section received also 7 medical officers, 8 agricultural engineers and 12 technical assistants delegated by the different sections of the Ministry of Public Health to study Malaria, Filaria, and measures of control.

The section was responsible for the arrangement of the Institute's exhibits at the Agricultural and Industrial exhibition held during the year. These were awarded the first prize and a golden medal.

A parasitological survey of the district as well as a snail survey were made of Fayed district and the snail *Lymnae truncatula* was found there :

A survey of *Fasciola* infection among the cattle was also made and a high incidence of this disease as well as a high infection of *Paramphistomum cervi* were found.

During this year, several D.D.T preparations were also examined and their efficiency tried in field work. It was concluded that 5 per cent D.D.T. solution in crude tar oil to be used for mosquito control and in amount as recorded for the D.D.T. was most efficient and least expensive.

Several insecticides were examined also to demonstrate their insecticidal properties according to the request of Malaria stations.

Tests were carried out on preservation of wheat against pests by spraying with Gammexane and D.D.T. The results as well as the effect of these insecticides were reported to the Ministry of Agriculture.

The Director of the Section replaced the medical officer at Khanka malaria station for 3 months during which tests on the abortive treatment of malaria with one dose were made. Ratios of relapses among cases treated with the different drugs were recorded. This work is the subject of a separate paper.

The superior efficiency in rat control of the new Antu product forwarded by the municipality was established.

A paper on the incidence of cestode infections and another on treatment with chloroquin compounds were published. Two other papers are in progress one on *Dixa aestivalis* in Egypt and another on Parasitological survey of Fayed.

FAYED MALARIA RESEARCH STATION.

As a result of the stringent anti-malaria measures taken by Fayed Malaria Station and its outposts, the ratio of malaria infection is lower this year than in any previous year.

Meanwhile, bilharzia control and treatment carried out by the station had a gratifying result.

This is demonstrated by the number of the inhabitants treated for parasites and the extensive snail control measures taken.

The same area has been served and the same methods of control and treatment have been used as in previous years.

A total of 7,755 blood specimens were examined during the year. Of this number, 71 or 0.915 per cent were returned positive for malaria. Of these 67 or 0.86 per cent were benign tertian and 4 or 0.05 per cent were malignant tertian.

23 anopheles mosquito breeding places were detected during the year. Examination showed that 22 or 95.6 per cent of the places harboured *A. pharoensis* and 1 or 4.3 per cent harboured *A. sergenti*. This shows that *A. pharoensis* is the prevailing species during August and September.

The most favourable breeding places for anopheles larvae are the drains, puddles and marshes. Hence, special attention is paid to the control of these places. They are either cleared of weeds or regularly dusted with insecticides.

A bilharzia treatment unit was set up on 6/10/1949 under the supervision of the medical officer of the malaria station. Work started on 3/12/1949. Until the end of the year, 1,725 inhabitants had attended for treatment. Of these :

393 were found positive for schistosomiasis (360 urinary and 33 intestinal).

173 " " " " ancylostomiasis

242 " " " " ascariasis.

117 " " " " other intestinal parasites.

19 " " " " amoebic dysentery.

All positive cases were treated by the unit.

All water courses were sprayed with copper sulphate for the extermination of snails, the bilharzia intermediate host. Results were checked by the palm-leaf trap before and after treatment and were found satisfactory.

The collection of snails for identification is a weekly routine work. Places harbouring *Bullinus* and *Planorbis*, particularly in the proximity of habitations are treated with copper sulphate.

Since a large number of habitations lacked latrines, the responsible authorities provided, at the request of the station, a number of latrines which were used advantageously. Meanwhile, a sanitary body has been formed from amongst leading members of the community to deal with the sanitation of the area.

KHANKA MALARIA RESEARCH STATION.

Since the Institute was conducting researches on malaria, the Khanka Malaria Station which was established in 1931 was annexed to the Institute in 1933. In 1937, it was considered part and parcel of the Institute which has since been held responsible for malaria control in that area. Valuable work has been achieved since then. The spread of malaria was successfully controlled in Gebel el Asfar farm in 1936 and in Abou Zaabal Prison in 1942.

This station serves 14 villages with a population of 60,000 inhabitants, besides a number of factories and workshops including the E.S.R. workshops, the Abou Zaabal prison, the leprosy colony, the Abou Zaabal quarries, the Gebel el Asfar farm, the Frontier Districts Corps, the Mental hospital and the youth reformatory at Marg.

Among the control measures adopted by the Station were the construction of water drains and filling in of ponds and water collections.

Tests were conducted on the efficiency of the following new drugs: Aralen, Camoquine, Nivaquine and Paludrine. Patients exhibiting malaria parasites in their blood are thoroughly examined for intestinal and urinary parasites. Chemical analysis of the urine, haemoglobin estimation and differential count are also performed. Patients are followed up for a whole year. Bi-weekly examinations for fever and parasites are carried out to assess the value of each drug and estimate the number of relapses.

During the year, 26,791 patients were examined for malaria. Of these 4,848 or 18 per cent were returned positive (4,426 or 91.5 per cent for benign tertian and 422 or 8.5 per cent for malignant tertian). 22,110 of the patients examined came from within the control area and 4,681 from outside. 9.6 per cent of the former and 57.5 per cent from the latter were returned positive.

Chapter XXIII.—SUMMARY OF THE WORK OF THE MEMORIAL OPHTHALMIC LABORATORY—GIZA.

RESEARCH

I. Acute Ophthalmia :

During 1949, researches in preventive measures against the acute ophthalmic epidemics were continued. In addition to work in the original experimental villages in the Abou-Rawash district, investigations were extended in collaboration with the Rural Health Research Section to the Sindibiss group where modern methods of village sanitation and fly control are being instituted. Encouraging results in limiting the epidemics have been obtained as a result of measures directed against the human carriers and vector flies.

Further advances in the treatment of acute ophthalmia have been achieved with the use of compound sulphanomides and certain of the newer antibiotics.

II. Trachoma :

Problems relating to the aetiology of trachoma remain a major interest of the research department at the Laboratory and some further progress has been made in this direction.

The effect of new therapeutic agents on trachoma and on secondary bacterial infections is under constant study and review.

Routine Histopathology and Bacteriology:

In the course of the year, 348 pathological specimens, received from the Government ophthalmic hospitals and other sources, were reported on.

The routine bacteriological work included the examination of over 7,440 smears, 161 cultures and 472 miscellaneous tests.

Clinical Department :

As in previous years, many patients were referred to the Laboratory for special examination, second opinion, etc. Treatments with new therapeutic agents were carried out in selected cases.

Post-Graduate Teaching:

Members of the Laboratory staff again gave courses of lectures and practical instructions to post - graduate students preparing for the Diploma of Ophthalmic Medicine and Surgery.

PART VI.—APPENDICES

Appendix I—Medical Permits

TABLE No. 136.—NUMBER OF PRACTITIONERS
OF THE MEDICAL AND ALLIED PROFESSIONS AT THE END OF THE
YEAR 1949 AS COMPARED WITH THAT OF THE YEAR 1948

Profession	At the end of 1948	At the end of 1949
Medical Practitioners	4,470	4,612
Veterinary Surgeons	546	596
Dental Surgeons	553	584
Dentists without diplomas *	109	107
Pharmacists	1,317	1,391
Assistant Pharmacists *	325	322
Midwives	965	996

* No permits are now issued to persons of these two categories.

TABLE No. 137.—NUMBER OF PERSONS AUTHORISED TO PRACTISE THEIR
PROFESSIONS IN EGYPT DURING THE LAST FIVE YEARS.

Profession	1945	1946	1947	1948	1949
Medical Practitioners	151	194	142	128	186
Veterinary Surgeons	12	28	24	1	53
Dental Surgeons	9	8	14	19	32
Pharmacists	46	62	120	77	81
Midwives	59	61	68	30	32
Dayas Green Permits	147	192	141	221	56
Dayas White Permits	2	—	2	—	—
Barbers	14	2	7	6	2

TABLE No. 138.—THE ORIGIN OF MEDICAL DIPLOMAS WHOSE HOLDERS
WERE AUTHORISED TO PRACTISE MEDICAL PROFESSIONS DURING 1949

Profession	Cairo	Abbasia	Alexandria	Great Britain	Greece	Switzerland	France	Lebanon	Syria	Italy	Canada	Austria	Germany	Hungary	TOTAL
Medicine	128	9	16	10	3	1	5	8	1	1	—	1	2	1	186
Veterinary Surgery ...	53	—	—	—	—	—	—	—	—	—	—	—	—	—	53
Dental Surgery	23	—	1	—	4	—	—	2	—	—	1	—	1	—	32
Pharmacy	74	—	—	—	—	1	1	5	—	—	—	—	—	—	81
Midwifery	32	—	—	—	—	—	—	—	—	—	—	—	—	—	32

TABLE No. 139.—THE NATIONALITIES OF PERSONS AUTHORISED TO PRACTISE
MEDICAL PROFESSIONS DURING 1949

Profession	Egyptians	Greeks	Iranians	Italians	British	Hungarians	TOTAL
Medical Practitioners	176	4	2	1	2	1	186
Veterinary Surgeons	53	—	—	—	—	—	53
Dental Surgeons	28	4	—	—	—	—	32
Pharmacists	80	1	—	—	—	—	81
Midwives	32	—	—	—	—	—	32

**TABLE No. 140.—ORIGIN OF MEDICAL DIPLOMAS OF EGYPTIAN PRACTITIONERS
WHO WERE AUTHORISED TO PRACTISE MEDICAL PROFESSIONS DURING 1949.**

Profession	Cairo	Abassia	Alexandria	Great Britain	Switzerland	Canada	France	Lebanon	Greece	Germany	Austria	Syria	TOTAL
Medicine	128	7	16	8	—	—	4	8	1	2	11	1	176
Veterinary	53	—	—	—	—	—	—	—	—	—	—	—	53
Dentistry	23	—	1	—	—	1	—	2	—	1	—	—	28
Pharmacy	74	—	—	—	1	—	1	4	—	—	—	—	80
Midwifery	32	—	—	—	—	—	—	—	—	—	—	—	32

**TABLE No. 141.—RESULT OF THE STATE EXAMINATIONS HELD DURING 1949 FOR MEDICAL
PRACTITIONERS, PHARMACISTS AND DENTAL SURGEONS HOLDING FOREIGN DIPLOMAS
FOR THE PURPOSE OF RECORDING THEIR NAMES IN THE MINISTRY'S REGISTER**

Examination	Number	Egyptians		Foreigners		TOTAL	
		Succeeded	Failed	Succeeded	Failed	Succeeded	Failed
Medicine	39	2	4	5	28	7	32
Pharmacy	17	4	2	1	10	5	12
Dentistry	11	—	2	3	6	3	8

Appendix II— Report on the Work of the Central, Provincial and Governorate Medical Commissions, 1949.

The number of medical certificates issued by the Central Medical Commission during the year under review was 31,982 or 2,243 certificates more than the previous year, despite the extension of attributions of medical commissions in governorates and provinces to include granting and approving sick leaves up to sixty days and invaliding out of service of temporary, hors cadre and daily paid personnel, without further reference to the Central Medical Commission for final sanction.

Of this number, 17,167 candidates for government service or educational missions abroad were examined by the Central Medical Commission. These consisted of 11,350 candidates for permanent and temporary service, 341 members for educational missions and 5,476 for hors cadre posts. 59.3 per cent of the candidates for permanent or temporary service and for educational missions were successful. 49 per cent of the candidates for hors cadre posts succeeded.

Of the failures in the first group, 31.1 per cent failed in vision with trachoma and myopia as the main causes ; 2.2 per cent suffered from heart diseases with incompetence of the heart as the chief complaint ; 3.9 per cent suffered from urinary system diseases with albumen as the main complaint. 3.5 per cent were rejected or pronounced unfit for suffering from other diseases e.g. varicoceles, hydroceles or hernia not treated or removed by operation, deformity, debility, respiratory system diseases, etc.

Of the candidates for hors cadre service 39.4 per cent were rejected for defective vision with myopia as the chief complaint ; 6. per cent for urinary system diseases with albumen as the main cause, 0.9 per cent for heart diseases with incompetence of the heart as the main complaint and 4.3 per cent for other diseases e.g. varicoceles and hydroceles not treated or removed by operation, deformity, debility etc.

Of 9,605 persons examined for sick leaves, 6,914 were of the pensionable or temporary personnel and 2,691 of the hors cadre.

Of those granted sick leaves by the Central Medical Commission or by Cairo District medical officers of health and approved by the C.M.C., 3,890 of the former and 1,176 of the latter suffered from medical diseases and 1,718 of the former and 708 of the latter suffered from surgical or ophthalmic diseases.

Herebelow are the diseases accounting for the sick leaves and ratios of their prevalence

TABLE No. 142

Diseases	P. and T. Officials		H.C. Employees	
	Number	Percentage of total (5698)	Number	Percentage of total (1884)
Nose and Larynx	360	6.32	90	4.72
Bronchi and Lungs	473	8.30	162	8.59
Heart and Circulatory System	444	7.79	32	1.71
Stomach and Intestines	224	3.93	89	4.72
Liver	299	5.25	43	2.28
Kidneys and Cystis	217	3.81	50	2.65
Neurasthenia	33	0.58	3	0.16
Mental Diseases	328	5.76	134	7.12
Nervous System	206	3.62	41	2.18
Anaemia and General Debility	438	7.69	98	5.21
Tuberculosis	381	6.69	265	14.07
Syphilis	—	—	2	— .11
Rheumatism	479	8.41	129	6.91
Various Fevers	73	1.28	26	1.38
Other Medical Diseases	25	0.43	12	0.64
Eye Diseases	194	3.40	54	2.87
Ear Diseases	49	0.86	14	0.74
Appendicitis	79	1.39	32	1.71
Hernias	63	1.11	20	1.06
Fistulas	68	1.19	9	0.47
Piles	94	1.65	25	1.32
Hydroceles	5	0.09	5	0.26
Urinary System and Stones	48	0.84	29	1.53
Various Surgical Operations	848	14.88	375	19.91
Fractures	184	3.23	126	6.68
Dental Diseases	86	1.50	19	1.0

A total of 41,474 officials and employees were granted from 1 - 10 days sick leaves by district or outpost medical officers of health in all governorates and provinces. Of these, 32,218 or 77.68 per cent suffered from medical diseases; 6,164 or 14.93 per cent suffered from surgical diseases and 3,062 or 7.39 per cent suffered from ophthalmic diseases. A total of 140,464 days sick leave were granted to pensionable and temporary personnel only.

In Cairo only, 1,770 pensionable and temporary personnel and 704 hors cadre staff were granted from 1 - 10 days sick leave by the C.M.C.

285 pensionable and temporary personnel and 84 hors cadre staff were not granted any sick leaves. In the provinces and governorates these amounted to 1,032 pensionable and temporary personnel and 1,116 hors cadre staff.

Those granted from 11 - 30 days sick leaves by the C.M. C. and Cairo district medical officers of health were 3,928 pensionable and temporary personnel and 1,180 hors cadre. 61 pensionable and temporary personnel were granted longer sick leaves terminating by retirement on pension and 177 hors cadre staff were pronounced unfit for further service

24 pensionable and temporary personnel and 52 hors cadre were pronounced fit for further service.

Medical Examination of Private and Passenger Pilots :

Of 224 candidates for private pilot licence A and wireless licence presenting themselves to the C.M.C., 141 succeeded (120 on first examination, 15 on second and 6 on third examination). 65 of the 83 failures were examined once, 15 twice and 3 were examined three times.

Of 20 candidates for passenger pilot licence B examined, 17 succeeded. Two of the three failures were examined once and one twice. Of 116 private pilots and wireless operators examined for renewal of their licences, 103 succeeded (98 on first examination, 3 on second and 2 on third examination)

Of 132 passenger pilots examined for renewal of their licences 129 succeeded (127 on first examinations, 1 on second and 1 on third examination). Of the three failures, two were examined once and one twice.

Provincial and Governorate Medical Commissions :

A total of 49,757 medical certificates were issued by the provincial and governorate Medical Commissions during the year or 1,341 fewer certificates than in 1948

TABLE NO. 143-- WORK OF THE CENTRAL, PROVINCIAL AND GOVERNORATE MEDICAL COMMISSIONS DURING THE YEAR 1949.

Cause of Rejection of Candidates applying for Entry to Service	Number of Cases											
	Objects of Medical Examination											
	Diseases											
	Total											
Defective Vision	For Admission to Service			Candidates for Missions			For Sick Leave			Invaliding		
	Fit	Refused in 1st Session	Refused in 2nd Session	Fit	Refused in 1st Session	Refused in 2nd Session	Grav. Refused	Unfit	Fit	Unfit	Fit	Other Cases
Urinary System	P. & T.	H. C.	P. & T.	P. & T.	H. C.	P. & T.	P. & T.	H. C.	P. & T.	H. C.	P. & T.	H. C.
	476	814	1,290	3,274	731	2,687	2,789	206	74	—	206	2,789
Respiratory System	P. & T.	H. C.	P. & T.	P. & T.	H. C.	P. & T.	P. & T.	H. C.	P. & T.	H. C.	P. & T.	H. C.
	413	2,427	2,840	47	14	2,687	2,789	206	74	—	206	2,789
Circulatory System	P. & T.	H. C.	P. & T.	P. & T.	H. C.	P. & T.	P. & T.	H. C.	P. & T.	H. C.	P. & T.	H. C.
	32	90	122	260	51	12	5	1	13	8	119	51
Nervous System	P. & T.	H. C.	P. & T.	P. & T.	H. C.	P. & T.	P. & T.	H. C.	P. & T.	H. C.	P. & T.	H. C.
	12	12	12	260	51	12	5	1	13	8	119	51
Digestive System	P. & T.	H. C.	P. & T.	P. & T.	H. C.	P. & T.	P. & T.	H. C.	P. & T.	H. C.	P. & T.	H. C.
	1	1	1	260	51	12	5	1	13	8	119	51
Other Systems	P. & T.	H. C.	P. & T.	P. & T.	H. C.	P. & T.	P. & T.	H. C.	P. & T.	H. C.	P. & T.	H. C.
	292	191	483	2,789	2,687	2,789	2,789	206	74	—	206	2,789
Total	P. & T.	H. C.	P. & T.	P. & T.	H. C.	P. & T.	P. & T.	H. C.	P. & T.	H. C.	P. & T.	H. C.
	2,789	4,616	12,591	2,789	4,616	12,591	2,789	4,616	12,591	2,789	4,616	12,591
Central Medical Commission ...	...	...	...	...	...	...	...	...	...	...	...	...
Provincial and Governorate Medical Commissions ...	...	...	...	...	...	...	...	...	...	...	...	...
TOTAL	8,629	14,285	16,386	798	14,285	16,386	206	74	—	206	74	—
	3,661	798	14,285	798	14,285	16,386	206	74	—	206	74	—
	1,290	3,661	16,386	798	14,285	16,386	206	74	—	206	74	—
	814	2,840	12,591	731	2,687	2,789	2,789	206	74	—	206	2,789
	476	814	1,290	3,274	731	2,687	2,789	206	74	—	206	2,789
	413	2,427	2,840	47	14	2,687	2,789	206	74	—	206	2,789
	32	90	122	260	51	12	5	1	13	8	119	51
	12	12	12	260	51	12	5	1	13	8	119	51
	1	1	1	260	51	12	5	1	13	8	119	51
	292	191	483	2,789	2,687	2,789	2,789	206	74	—	206	2,789
	2,789	4,616	12,591	2,789	4,616	12,591	2,789	4,616	12,591	2,789	4,616	12,591

Appendix III.—Report on the Work of the Central Stores.

As in previous years, the Central Stores continued to supply the various units of the ministry with modern medical apparatus, equipment and drugs despite exchange difficulties and prevailing conditions.

The following new units have been furnished and equipped during the year :

1. Three bacteriological laboratories in provincial fever hospitals.
2. A rabies hospital in Alexandria.
3. Two public bath-houses in Cairo.
4. Rod el Farag II public health office, Cairo.
5. Three food control teams, Cairo.
6. A new disinfection station at Khalifa district, Cairo.
7. Three malaria stations.
8. A Chest diseases unit at Beni Suef.
9. A Chest diseases unit at Belbeis.
10. A hospital for orthopaedics at Helwan.
11. Branches for the treatment of favus.
12. A child welfare centre at Dikernes.
13. A health propaganda unit at Menouf.
14. Two mobile units for treatment of scabies at Assiut and Sharkia.
15. The sanitary technician's institute.
16. Bilharzia snail destruction campaign.
17. Health propaganda.
18. A child welfare centre at Ismailia.
19. Ear, nose and throat department at Damietta hospital.
20. Dental departments in district hospitals.
21. Menouf district hospital.
22. Mellawi district hospital.
23. Port Said hospital.
24. The out-patient department at Deirout hospital.
25. Shukri Pasha health centre
26. An out-patient dispensary at Shawa.
27. An ophthalmic branch at Inshas.
28. Providing additional beds in ophthalmic hospitals.
29. A hospital in each of Maghagha, Teh el Baroud, Hehya, Abul Matamir, Bab el Shaaria, Tanta and Mansoura.
30. Two ophthalmic hospitals at Teh el Baroud and Abul Matamir.
31. Two mobile units for the Eastern and Western deserts.
32. Two fever hospitals at Gerga and Tahta.
33. Six fever hospitals in the provinces.

Equipment of the following units was completed :

1. Chest diseases dispensaries at Mellawi, Zagazig, Suez, Damietta and Damanhour.
2. The leprosy hospital at Amria.
3. Ancylostoma in-patient departments.
4. Insects eradication units.
5. Malaria units.

TABLE NO. 145.—SUMS UP THE WORK OF THE CENTRAL STORES DURING THE YEAR

Work	Number
Receipt vouchers	11,575
Issue „	65,449
Claims	4,300
Outward correspondence	205,149
Inward correspondence and forms	136,563
Railway parcels dispatched	51,939
Consignments received	28,719
Postal parcels dispatched	25,458
„ „ received	38,868
Workshops Repairs	67,006
„ new works	159,817

New constructions during the year were as follows :

1. Six hospitals at Mellawi, Teh el Baroud, Bab el Shaaria, Belcas, Hehya and an outpatient department at Behout Hospital.
2. A mosquito control branch at Ein Shams with a research centre annexed thereto.
3. The mosquito and insects eradication campaign at Siwa oasis and a yellow fever control branch at Ein Shams.
4. A health service office at Assiut.
5. Three chest diseases hospitals at Suez, Beni Suef, Damietta and two branch units at Rosetta and Kom Ombo.
6. The antirabic branch in Alexandria.
7. An ophthalmic branch within Bab el Shaaria health centre.
8. A child welfare centre at Fashn.
9. Two public bath-houses at Sharabia and Rod el Farag.
10. Four free water taps at Zawia el Hamra, Ezbet el Kaisareen, Maasara el Gedida and Helwan.
11. Seventeen health centres at Kafr el Enania, Khanka, Kalama, Diast Gaafaria, Nahtai, Derein, Nesha, Behout, Zahra Behera, Balaktar, Mansouria, Meshta, Maragha, Awlad Hamza, Farshout and Ramadi Bahri.
12. Public bath-houses within health centres at Mit el Faramawi, Malamis, Khanka, Diast, Semikhrat, Mansouria and Farshout.

TABLE No. 146.—NUMBER OF CONTRACTS
CONCLUDED DURING THE YEAR

Item	Number
General adjudications	272
Local ,, 	106
Contracts	580
Local indents	148
Foreign indents... ..	29
Forms 50 C.G.	4,021
Questions submitted to Contracts Board	4,427
Meetings held by ,, ,, 	290
Tenders submitted in general adjudications	1,335
Agreements 	3
Tenders submitted in local adjudications	268
Purchase performed by bargain	44

Appendix IV.—Budget Grants and Posts Establishment

TABLE NO. 147.—DETAILS OF BUDGET GRANTS AND EXPENDITURES 1949

Titles	Budget Grants		Actual Expenditures	
	1948	1949	1948	1949
TITLE I.				
Salaries, Wages, Allowances	1,738,631	1,046,503	1,642,999	929,718
TITLE II.				
General Expenditures	2,227,550	1,203,400	1,908,670	1,219,092
TITLE III.				
New Works	1,439,510	846,000	625,095	513,290
TOTAL	5,405,691	3,095,903	4,176,764	2,662,100

TABLE NO. 148.—DETAILS OF POSTS IN THE
CENTRAL ADMINISTRATION

Posts	1948	1949
<i>Permanent Posts</i>		
Technical and Administra- tive Posts	1,654	894
Intermediate Technical Posts	1,158	760
Clerical Posts	1,100	734
<i>Temporary Posts :</i>		
Technical Posts... ..	26	—
Clerical Posts	366	232
<i>Hors Cadre Personnel</i> ...	9,844	5,369
TOTAL	14,148	7,989

Medical Treatment Department

TABLE NO. 149.—DETAILS OF BUDGET GRANTS AND EXPENDITURES 1949

Titles	Budgets Grants		Actual Expenditures	
	1948	1949	1948	1949
<i>Title I</i>				
Salaries, Wages, Allowances	—	431,645	—	358,572
<i>Title II</i>				
General Expenditures ...	—	876,000	—	622,132
<i>Title III</i>				
New works... ..	—	319,300	—	39,686
TOTAL	—	1,626,945	—	1,020,390

TABLE NO. 150.—DETAILS OF POSTS

Posts	1948	1949
<i>Permanent Posts</i>		
Technical and Administrative Posts	—	638
Intermediate Technical Posts	—	273
Clerical Posts	—	161
<i>Temporary Posts</i>		
Technical	—	43
Clerical	—	45
Hors Cadre Personnel	—	3,668
TOTAL	—	4,828

N.B.—The 1948 Budget of the Medical Treatment Department was included in the Budget of the Central Administration for that year.

Preventive Medicine Department

TABLE No. 151.—DETAILS OF BUDGET GRANTS AND EXPENDITURES

Titles	Budget Grants		Actual Expenditures	
	1948	1949	1948	1949
<i>Title I</i>				
Salaries, Wages, Allowances	—	523,590	—	579,799
<i>Title II</i>				
General Expenditures ...	—	400,000	—	298,484
<i>Title III</i>				
New Works	—	81,300	—	12,759
TOTAL	—	1,004,890	—	891,042

N.B.—1948 Credits were among the Budget proposals of Chapter I (Central Administration) but were detached from C.A. as from the commencement of the year 1949.

TABLE No. 152.—DETAILS OF POSTS

Posts	1948	1949
<i>Permanent Posts</i>		
Technical and Administrative Posts	—	322
Intermediate Technical Posts ...	—	435
Clerical Posts	—	323
<i>Temporary Posts</i>		
Technical Posts	—	95
Clerical Posts	—	2,518
<i>Hors Cadre Personnel</i>	—	—
TOTAL	—	3,693

N.B.—1948 Posts were among the Budget posts of Chapter I (Central Administration) but were detached from C.A. as from the commencement of the year 1949.

Appendix V.- Summary of a Report on the State of Public Health in Alexandria.

TABLE No. 153.—MONTHLY AGE AND SEX DISTRIBUTION OF BIRTHS AND DEATHS IN ALEXANDRIA DURING 1949

Month	Births				Deaths												TOTAL	
	Live		Dead		Under 1 year		1-5 years		5-15 years		15-45 years		45-65 years		Over 65 years			
	Male	Female	M	F	M	F	M	F	M	F	M	F	M	F	M	F		
January ...	2,363	2,305	48	29	343	322	272	265	29	22	107	76	148	78	147	145	1,046	908
February ...	2,259	2,120	45	29	296	283	257	310	25	21	107	69	148	66	165	190	998	939
March ...	2,235	2,127	40	31	281	252	336	296	19	24	108	74	144	73	136	130	1,024	849
April ...	1,941	1,900	38	29	310	254	249	252	35	15	116	66	130	56	138	125	978	768
May ...	1,958	1,872	31	23	568	532	258	264	30	17	87	70	100	52	112	119	1,155	1,034
June ...	1,836	1,695	39	26	618	692	310	358	19	20	111	50	93	65	125	110	1,276	1,295
July...	1,885	1,770	43	28	556	535	329	384	30	33	88	84	121	58	101	119	1,225	1,213
August ...	2,389	2,270	48	29	425	414	295	320	25	18	88	77	101	55	110	123	1,044	1,007
September ...	1,946	1,821	33	31	362	322	235	251	32	21	86	62	103	61	113	120	931	837
October ...	2,022	1,980	35	23	296	253	204	203	25	18	82	55	86	39	119	123	812	691
November ...	2,054	1,950	37	33	300	245	153	163	22	19	78	61	93	47	91	102	737	637
December ...	2,296	2,265	37	36	340	301	160	201	27	26	98	55	92	72	128	105	845	760
TOTAL ...	25,184	24,075	474	347	4,695	4,405	3,058	3,267	318	254	1,156	799	1,359	722	1,485	1,511	12,071	10,958

TABLE NO. 154.—AGE AND SEX DISTRIBUTION OF INFECTIOUS DISEASES CASES AND DEATHS IN ALEXANDRIA DURING 1949

Disease	Sex	0-1 year		1-5 years		5-15 years		15-25 years		25-45 years		45-65 years		Over 65 years		Total	
		Case	Death	Case	Death	Case	Death	Case	Death	Case	Death	Case	Death	Case	Death	Case	Death
Typhus ...	{ M. F. }	—	—	—	—	—	—	3	1	6	2	—	—	—	—	9	3
Acute Excephalitis ...	{ M. F. }	—	—	—	—	1	1	—	—	—	—	—	—	—	—	3	1
Leprosy ...	{ M. F. }	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5	2
Puerperal Fever.	{ M. F. }	—	—	—	—	—	—	—	—	—	—	—	—	—	—	12	—
Epidemic Meningitis ...	{ M. F. }	—	—	—	—	—	—	—	—	—	—	—	—	—	—	7	—
Rabies ...	{ M. F. }	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Scarlet Fever ...	{ M. F. }	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Tetanus ...	{ M. F. }	7	7	4	1	12	6	7	4	11	7	4	2	—	—	45	27
Acute Poliomyelitis ...	{ M. F. }	—	—	—	—	—	—	—	—	—	—	—	—	—	—	13	6
Undulant Fever.	{ M. F. }	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Whooping Cough	{ M. F. }	31	4	44	1	6	—	—	—	—	—	—	—	—	—	81	5
Chicken Pox ...	{ M. F. }	59	3	34	—	46	—	—	—	—	—	—	—	—	—	145	3
		41	—	61	—	81	—	4	—	2	—	—	—	—	—	122	—

Diphtheria	{ M. F. }	24 9	10 6	76 53	16 13	11 18	—	4 2	2 1	—	—	4 2	—	—	1 1	—	—	118 84	30 21
Malaria	{ M. F. }	— —	— —	8 13	— —	30 10	— —	— —	165 24	— —	— —	139 21	— —	— —	17 3	— —	— —	359 71	— 1
Mumps	{ M. F. }	4 3	— —	21 11	— —	120 100	— —	— —	94 13	— —	— —	30 8	— —	— —	2 —	— —	— —	271 135	— —
Erysipelas	{ M. F. }	23 44	1 1	28 36	1 1	15 14	— —	— —	84 38	— —	— —	89 83	1 1	— —	36 35	6 —	1 —	281 250	5 3
Bacillary Dysentery	{ M. F. }	3 1	— —	20 15	— 1	6 4	— —	— —	18 8	— —	— —	41 14	— —	— —	11 3	2 —	— —	101 45	1 1
Amoebic Dysentery	{ M. F. }	4 4	2 4	18 16	7 10	4 1	— —	4 1	7 6	2 1	— —	29 11	5 4	— —	6 4	2 1	— —	73 43	25 221
Influenza	{ M. F. }	39 28	— —	157 101	— —	109 90	— —	— —	338 193	— —	— —	244 145	— —	— —	23 11	1 —	— —	911 568	— —
Measles	{ M. F. }	601 341	70 48	1,165 997	182 214	303 194	— —	14 6	18 18	1 —	— —	8 6	1 —	— —	— —	1 —	— —	2,095 1,558	268 268
Paratyphoid A and B...	{ M. F. }	2 4	— —	15 9	1 1	16 16	— —	— —	29 23	1 1	— —	16 9	— —	— —	— —	— —	— —	78 61	3 2
Typhoid	{ M. F. }	8 3	1 1	92 77	16 8	78 76	— —	8 14	122 79	15 7	— —	74 43	10 7	6 1	18 13	1 1	— —	393 292	56 38
Broncho Pneumonia	{ M. F. }	394 298	299 232	772 719	557 551	54 38	— —	33 25	21 18	13 10	— —	30 20	14 12	19 16	22 7	12 5	12 5	1,305 1,105	947 851
Lobar Pneumonia	{ M. F. }	141 74	22 13	282 193	31 30	70 34	— —	9 7	114 18	9 2	— —	166 44	16 7	14 16	44 12	9 3	5 3	826 378	106 58
Pulmonary T.B.	{ M. F. }	2 1	2 1	27 15	18 11	46 31	— —	32 24	226 116	139 52	— —	317 155	174 96	87 17	129 26	7 2	5 2	754 346	447 203
T.B. of other Organs	{ M. F. }	4 1	4 1	9 10	8 10	11 7	— —	11 7	18 12	18 11	— —	13 5	12 5	6 —	7 —	— —	— —	62 35	59 33

TABLE NO. 155.—VACCINATIONS AGAINST INFECTIOUS DISEASES IN 1949

Month	Typhoid Fever		Diphtheria				Smallpox	
	1st injection	2nd injection	1st injection	2nd injection	3rd injection	Serum	Compulsory	Voluntary
January	4,299	2,872	3,213	2,906	2,905	13	3,054	375
February	5,200	2,730	3,880	3,009	2,992	46	3,293	354
March	8,825	4,599	2,815	2,596	2,651	34	3,880	1,274
April	23,167	10,687	3,005	2,638	2,494	20	3,398	1,695
May	36,815	12,265	3,634	3,488	3,542	31	4,101	866
June	26,142	13,770	2,847	2,925	3,355	19	3,321	568
July	12,985	7,961	2,525	2,340	2,716	11	2,540	280
August	17,919	10,351	3,981	3,199	3,361	29	3,975	676
September	15,098	8,760	3,342	3,378	3,881	28	3,570	426
October	10,743	6,190	3,323	3,233	3,561	31	3,862	399
November	9,602	6,800	3,636	3,708	4,636	59	3,731	477
December	5,995	4,345	3,942	3,577	3,634	57	3,394	302
Total of vaccinations in Health Offices	166,788	91,320	40,143	36,997	39,728	378	42,119	7,692
Total vac. by Vaccination teams	148,562	43,828	—	—	—	—	—	346,116
Vac. by private practitioners	48,827	8,720	—	—	—	—	—	1,396
Total of vaccinations in the City	364,177	143,868	40,143	36,997	39,728	378	42,119	355,204

Appendix VI—Report on the Work of Cairo City Health Department

Population :

The estimated mid year population of Cairo in 1949 was 2, 184, 800.

The following is the distribution of this population in the different Qisms :—

Kubba	...	...	...	...	...	...	...	...	89,300
Heliopolis	...	...	...	...	...	...	...	...	89,000
Zeitoun	...	...	...	...	...	...	...	...	84,700
Abbassia	...	...	...	...	...	...	...	...	129,700
Ezbekia	...	...	...	...	...	...	...	...	105,500
Rod el Farag	...	...	...	...	...	...	...	...	207,000
Shubra	...	...	...	...	...	...	...	...	170,800
Sharabia	...	...	...	...	...	...	...	...	74,100
Gamalia	...	...	...	...	...	...	...	...	115,400
Bab el Shaaria	...	...	...	...	...	...	...	...	114,200
Abdine	...	...	...	...	...	...	...	...	91,200
Mouski	...	...	...	...	...	...	...	...	75,500
Darb el Ahmer	...	...	...	...	...	...	...	...	110,800
Khalifa	...	...	...	...	...	...	...	...	121,200
Sayeda I	...	...	...	...	...	...	...	...	105,200
„ II	...	...	...	...	...	...	...	...	96,500
Boulaq I	...	...	...	...	...	...	...	...	66,600
„ II	...	...	...	...	...	...	...	...	73,300
Adawia	...	...	...	...	...	...	...	...	64,700
Old Cairo	...	...	...	...	...	...	...	...	106,900
Helwan	...	...	...	...	...	...	...	...	48,100
Maadi	...	...	...	...	...	...	...	...	45,100
TOTAL FOR CAIRO									2,184,800
									=====

Births :

The total number of births (excluding still-births) registered during the year was 104,086 or a birth-rate of 47.6 per thousand of population. This number is 4,529 births more than last year.

Table No. 156 shows the number of births distributed on the various qisms and their rates per 1000 of population.

The number of still births registered during the year was 1,876 or a ratio of 18.02 per 1000 births as compared with 1831 during 1948, 2,081 during 1947 and 2,025 during 1946.

Deaths :

During the year, a total of 51,193 deaths were registered of which 1,427 occurred amongst non-residents of Cairo, leaving 49,766 deaths for Cairo proper. This number is 2,370 deaths less than the previous year. This Gives an annual death-rate of 22.7 per thousand of population as compared with 25.1 in 1948, 27.54 in 1947, 33.7 during 1946 and a mean death rate of 33.6 per 1000 population during the last 5 years (1943-1947).

Table No. 56 shows the distribution of these deaths in the various qisms and their rates compared with each other and with the rates of previous years.

Infantile Mortality :

The total number of deaths of children under one year of age was 19,039 with a decrease of 869 deaths than the previous year. This gives an infantile mortality rate of 183 per 1000 births as compared with 191 during 1948, 161 during 1947, 199.6 during 1946 and a mean infantile mortality rate of 204 during the last 5 years (1943-1947).

Table No. 156 shows the distribution of these deaths in the various qisms and their rates compared with each other and with rates of previous years.

Couses of Infantile Mortality :

Diarrhoea and enteritis figure foremost on the list of diseases affecting children. They were responsible for 10,805 deaths or 56.8 percent of infantile deaths (19,039). Marasmus and general debility come next accounting for 5,530 deaths or 26.2 per cent. Respiratory diseases accounted for 1,538 or 8.2 per cent excluding deaths from bronchial and lobar Pneumonia. Other diseases accounted for 610 deaths or 3.3 per cent and Infectious diseases accounted for 556 deaths or 2.5 per cent.

Death Inquiries :

The total number of uncertified deaths requiring investigation during the year 1949 was 24,430 or 47 per cent of the total of Cairo deaths.

District Medical officers of health investigated 8,511 or 35 per cent of the total number of uncertified deaths. District mid-wives investigated 15,919 or 65 per cent of the uncertified deaths.

Infectious diseases :

The total unnumber of infectious diseases cases notified in Cairo City during 1949 was 18,406 cases with 846 cases from outside Cairo, as compared with 14,793 cases during 1948 14,413 in 1947 and 29,196 during 1946.

Cairo deaths from infectious diseases numbered 4,692 or 9.9 per cent of the total deaths of Cairo City as compared with 9.6 per cent during 1948 and 1947 and 16.5 per cent during 1946.

Table No. 158 shows the most prevelant infectious diseases and their distribution on the various districts of Cairo.

Cholera :

No cases or deaths occurred during either 1949 or 1948. This proves that the control measures taken during the 1947 epidemic had a direct bearing on the suppression of the disease.

Relapsing fever:

No cases or deaths occurred during 1949 and 1948 as compared with 14 cases in 1947, 11,903 in 1946 and 2,404 in 1945. This shows that the Relapsing fever epidemic which broke out in 1945 and spread in a severe epidemic form came to an end in 1947, thanks to the effective control measures amongst which stands foremost the periodical D.D.T. dusting of the poorer quarters of the City.

Some 6,403,821 persons were dusted during the year with their clothes and bedding.

Small Pox :

2 cases of small pox with no deaths were recorded during 1949 or a case rate of .001 per 1000 of population as compared with 1 case with no deaths during 1948 and 10 cases with one death during 1947.

See table No. 159.

Vaccination Against Small pox :

Regular house to house vaccination of the population of the City began in 1946. The number of persons thus vaccinated were 286,715 in 1946, 645,764 in 1947 and 552,074 in 1948. During 1949, 321,501 persons were vaccinated in Kubba, Heliopolis, Zeitoun, Abbassia, Old Cairo, Helwan, and Maadi Qisms. This ends the four yearly general vaccination of the whole population of Cairo and brings the total number of persons vaccinated to 1,806,054.

Besides, a total of 97,382 infants were vaccinated by Cairo District Health Offices.

Typhus :

13 cases with no deaths occurred during 1949 or a case rate of .006 per thousand of population as compared with 30 cases and a case rate of .014 during 1948 and 49 cases with 10 deaths and a case rate of .031 and a death rate of .016 per thousand of population during 1947.

See table No. 160.

A total of 1440 slides for Weil felix examination were taken by Cairo Medical Officers of Health. All were taken from living persons and were returned negative with the exception of 32 slides which were found unfit for examination.

Typhoid :

The number of typhoid cases notified during 1949 was 4,066 with 360 deaths or a rate of 1.9 and 0.164 respectively per thousand of population as compared with 2,581 cases with 293 deaths or a rate of 1.239 and 0.141 respectively per thousand of population during 1948 and 2050 cases with 202 deaths or a rate of 1.292 and 0.127 respectively per thousand of population during 1947.

See table No. 161.

Vaccination Against Typhoid :

The number of persons vaccinated against typhoid was 224,862.

Diphtheria :

The number of cases notified during 1949 was 818 with 155 deaths or a rate of 0.374 and 0.071 respectively per thousand of population as compared with 944 cases with 189 deaths and a rate of 0.453 and 0.081 respectively per thousand of population for 1948 and 980 cases with 159 deaths or a rate of 0.617 and 0.101 respectively per thousand of population during 1947.

See table No. 162.

Anti Diphtheria Vaccination :

The number of children immunised against diphtheria during the year 1949 was 76,092 receiving 1st injection, 69,827 receiving 2nd injection and 68,442 receiving third injection.

Measles :

The number of cases of measles notified during 1949 was 1,711 with 682 deaths and a ratio of 0.782 and 0.312 respectively per thousand of population as compared with 1,979 cases with 1,209 deaths or a rate of 0.950 and 0.581 respectively per thousand of population during 1948 and 996 cases with 556 deaths or a rate of 0.627 and 0.167 per thousand of population respectively during 1947.

See table No. 163.

Cerebro Spinal Fever :

The number of cases notified this year was 133 with 41 deaths or a rate of 0.061 and 0.019 respectively per thousand of population as compared with 39 cases with 9 deaths or a rate of 0.018 and 0.005 respectively per thousand of population during 1948 and 72 cases with 21 deaths or a rate of 0.045 and 0.019 respectively per thousand of population during 1947.

See table No. 164.

Scarlet Fever :

Seven cases of scarlet fever with no deaths were reported during 1949 or a case rate of 0.003 per thousand of population as compared with 4 cases and a rate of 0.002 per thousand of population during 1948 and 2 cases or a rate of 0.001 per thousand of population during 1947.

See table No. 165.

Influenza :

The number of cases notified during the year was 2,148 with 12 deaths or a rate of 0.98 and 0.005 respectively per thousand of population as compared with 1,345 cases with one death or a rate of 0.6 and 0.005 respectively per thousand of population during 1948 and 1421 cases with 2 deaths or a rate of 0.895 and 0.042 respectively during 1947.

Tuberculosis :

The number of cases notified during 1949 was 3,581 cases with 1,607 deaths or a rate of 1.6 and 0.7 respectively per thousand of population as compared with 3,508 cases with 1,568 deaths or a rate of 1.7 and 0.7 respectively per thousand of population during 1948 and 3,232 cases with 1,483 deaths during 1947 or a rate of 1.03 and 0.134 respectively per thousand of population.

Deaths Attributed to Confinement :

64 deaths were attributed to confinement or a rate of 0.61 per thousand births as compared with 0.88 during 1948, 2.16 during 1947 and 1.3 during 1946. Out of this figure, 11 were due to puerperal fever with a rate of 0.11 per thousand births as compared with 0.39 during 1948, 1.47 during 1947 and 0.46 during 1946.

The total number of mothers who died within a fortnight of confinement (excluding puerperal fever cases) amounted to 93 as compared with 63 in 1948, 101 during 1947 and 98 in 1946.

The causes of these deaths were as follows: 17 eclampsia, 31 placenta praeva and metrorrhagy — 1 ectopic gestation — 6 heart failure after labour — 8 rupture of uterus — 3 hard labour — 1 caesarian case — 5 Peritonitis — 4 nervous shock after labour — 7 Septicemia — 7 other diseases and 3 infectious diseases.

Disinfection :

In addition to the regular dusting of persons in poor quarters with their clothes and beddings as already mentioned under Relapsing fever, 18,297 rooms were disinfected by Bulaq disinfection station, 50,563 rooms by Fom el Khalig Station and 60,879 rooms by Abbassia disinfection station making a total of 129,739 rooms :—

TABLE No. 156.—VITAL STATISTICS OF CAIRO CITY 1949.

Cairo District	Mid year Population	No. of deaths	Death Rate per 1,000 of Popul.	No. of Births	Birth Rate per 1,000 of popul.	No. of Deaths Under one year	Infantile mortality rate per 1000 Births
Kubba	89,300	2,065	23.1	4,257	46.8	797	187
Heliopolis	89,000	1,094	13.5	2,129	26.3	323	152
Zeitoun	84,700	2,185	25.8	4,415	52.1	788	178
Abbassia	129,700	2,587	19.9	6,549	50.5	836	103
Ezbekia	105,500	1,985	18.8	3,365	34.5	654	179
Rod El Farag	207,000	4,248	21.5	9,806	47.3	1,792	183
Shubra	170,800	3,727	21.8	8,971	52.5	1,574	175
Sharabia	74,100	2,285	32.8	4,727	63.9	922	195
Gamalia	115,400	2,994	25.9	5,718	49.5	1,120	196
Bab el Shaaria	114,200	2,387	20.9	5,066	44.3	894	176
Abdine	91,200	1,706	18.7	2,771	30.4	522	188
Mousky	75,500	1,376	18.2	2,917	38.7	510	175
Darb el Ahmar	110,800	2,472	22.4	5,236	47.3	920	178
Khalifa	121,200	3,193	26.3	5,927	48.9	1,237	209
Sayeda I	105,200	2,686	25.5	6,233	59.2	1,064	171
Sayeda II	96,500	2,064	21.5	3,941	40.8	951	241
Bulaq I	66,600	1,647	24.7	2,791	41.9	638	229
Bulaq II	73,300	1,724	23.5	3,473	38.3	679	195
Adawia	64,700	1,966	29.3	6,103	94.3	776	127
Old Cairo	106,900	2,799	27.1	5,429	50.7	1,147	211
Helwan	48,100	979	20.4	1,984	41.2	399	201
Maadi	45,100	1,456	32.8	2,008	44.5	506	257
TOTAL	2,184,800	49,766	22.7	104,086	47.6	19,039	183
TOTAL FOR 1948	2,076,601	52,136	25.1	99,557	47.9	19,908	191
TOTAL FOR 1947—1943	7,465,600	251,289	33.6	447,740	60.	91,343	204
„ 1942—1938	4,445,500	199,482	30.9	304,361	47.2	83,225	270
„ 1937—1933	6,562,000	168,891	25.7	275,709	42	54,083	196
„ 1932—1928	5,682,500	158,376	27.8	248,677	43.7	73,463	295

TABLE NO. 157.—DISTRIBUTION OF UNCERTIFIED DEATHS ON CAIRO DISTRICTS, 1949

District	Total No. of Deaths	Uncertified deaths			Rate of Uncertified Deaths to total Deaths
		Investigated by Dist. M.Os.	Investigated by Midwives	Total Investigated	
					%
Kubba... ..	2,065	210	596	806	39
Heliopolis	1,094	102	221	323	20·2
Zeitoun	2,185	458	1,109	1,567	71·7
Abbassia	2,587	65	137	202	8
Ezbekia	1,985	190	589	779	39·2
Rod el Farag	4,248	228	951	1,179	27·7
Shubra	3,727	53	573	626	17
Sharabia	2,285	265	1,277	1,542	67·5
Gamalia	2,994	97	122	219	7·7
Bab el Shaaria	2,387	327	197	524	22
Abdine	1,706	260	661	921	54
Mousky	1,376	840	444	684	50
Darb el Ahmar	2,472	1,400	390	1,790	72·7
Khalifa	3,193	805	1,777	2,582	80·8
Sayeda (I)	2,686	742	956	1,698	63·2
Sayeda (II)... ..	2,064	409	570	979	47·4
Bulaq (I)	1,674	336	824	1,160	70
Bulaq (II)	1,724	327	936	1,236	73·2
Adawia	1,966	365	1,013	1,378	70
Old Cairo	2,799	718	1,719	2,437	87
Helwan	979	257	560	817	83·3
Maadi	1,456	657	297	954	65·5
TOTAL	49,766	8,511	15,919	24,430	50

TABLE No. 153.—DISTRICT DISTRIBUTION OF CASES AND DEATHS OF THE PRINCIPAL INFECTIOUS DISEASES 1949.

Cairo Districts	Mid Year Population	Cholera		Relapsing fever		Small pox		Typhus		Scarlet fever		C. S. fever		Typhoid		Diphtheria		Measles	
		C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.
Kubba ...	89,300	—	—	—	—	—	—	—	—	—	—	1	—	239	18	28	4	72	7
Heliopolis ...	89,000	—	—	—	—	—	—	—	—	—	—	14	—	185	5	26	2	103	7
Zeitoun ...	84,700	—	—	—	—	—	—	—	—	1	—	6	2	172	15	29	4	115	41
Abbassia ...	129,700	—	—	—	—	—	—	—	—	1	—	12	2	336	42	49	19	107	9
Ezbekia ...	105,500	—	—	—	—	—	—	1	—	—	—	6	3	175	17	36	3	65	38
Rod el Farag ...	207,000	—	—	—	—	—	—	2	—	—	—	8	3	413	35	81	16	144	62
Shubra ...	170,800	—	—	—	—	—	—	1	—	—	—	11	4	368	46	54	10	107	39
Sharabia... ..	74,100	—	—	—	—	—	—	—	—	—	—	5	1	230	11	35	5	174	9
Gamalia ...	115,400	—	—	—	—	—	—	—	—	—	—	10	3	192	17	62	9	61	5
Bab el Shaaria ...	114,200	—	—	—	—	—	—	1	—	1	—	3	—	243	21	52	10	72	12
Abdine ...	91,200	—	—	—	—	—	—	1	—	—	—	8	3	143	18	32	4	72	50
Mousky ...	75,500	—	—	—	—	1	—	2	—	—	—	4	2	134	5	23	1	49	15
Darb el Ahmar ...	110,800	—	—	—	—	—	—	—	—	—	—	11	4	199	24	60	8	59	12
Khalifa ...	121,200	—	—	—	—	—	—	—	—	—	—	12	6	234	15	38	9	57	16
Sayeda I ...	105,200	—	—	—	—	—	—	1	—	—	—	4	2	147	24	43	8	56	9
Sayeda II ...	96,500	—	—	—	—	—	—	1	—	—	—	4	3	167	9	44	9	73	15
Bulaq I ...	66,600	—	—	—	—	—	—	—	—	—	—	4	—	74	7	37	9	54	27
Bulaq II ...	73,300	—	—	—	—	—	—	—	—	1	—	4	—	85	5	32	6	24	9
Adawia ...	64,700	—	—	—	—	—	—	—	—	—	—	1	—	110	9	16	7	103	91
Old Cairo ...	106,900	—	—	—	—	—	—	2	—	—	—	2	—	136	15	33	8	148	79
Helwan ...	48,100	—	—	—	—	—	—	—	—	1	—	1	—	43	—	3	1	49	15
Maadi ...	45,100	—	—	—	—	—	—	—	—	—	—	2	—	41	2	5	3	53	33
TOTAL ...	2,076,601	—	—	—	—	2	—	13	—	7	—	133	41	4066	360	818	155	1711	682

TABLE No. 159.—DISTRIBUTION OF SMALL POX CASES AND DEATHS ON CAIRO CITY DISTRICTS 1949

Cairo Districts	Mid year Population	No. of Cases	Case-Rate per 1000 of Population	No. of deaths	Death-Rate per 1000 of population	Case Mortality Rate per cent
Kubba... ..	89,300	—	—	—	—	—
Heliopolis	89,000	—	—	—	—	—
Zeitoun	84,700	—	—	—	—	—
Abbassia	129,700	—	—	—	—	—
Ezbekia	105,000	—	—	—	—	—
Rod el Farag	207,800	—	—	—	—	—
Shubra	170,800	—	—	—	—	—
Sharabia	74,100	—	—	—	—	—
Gamalia	115,400	—	—	—	—	—
Bab el Shaaria	114,200	—	—	—	—	—
Abdine	91,200	1	.011	—	—	—
Mousky	75,500	—	—	—	—	—
Darb el Ahmar	110,800	—	—	—	—	—
Khalifa	121,200	—	—	—	—	—
Sayeda I	105,200	—	—	—	—	—
Sayeda II	96,500	—	—	—	—	—
Bulaq I	66,600	1	.015	—	—	—
Bulaq II	73,200	—	—	—	—	—
Adawia	64,700	—	—	—	—	—
Old Cairo	106,900	—	—	—	—	—
Helwan	48,100	—	—	—	—	—
Maadi	45,100	—	—	—	—	—
TOTAL	2,184,800	2	.001	—	—	—

TABLE NO. 160—DISTRIBUTION OF TYPHUS CASES AND DEATHS ON CAIRO CITY DISTRICTS 1949

Cairo Districts	Mid year Population	No. of Cases	Case-Rate per 1000 of Population	No. of deaths	Death-Rate per 1000 of population	Case Mortality Rate per cent
Kubba... ..	89,300	—	—	—	—	—
Heliopolis	89,000	—	—	—	—	—
Zeitoun	84,700	—	—	—	—	—
Abbassia	129,700	—	—	—	—	—
Ezbekia	105,500	1	.009	—	—	—
Rod el Farag	207,000	2	.010	—	—	—
Shubra	170,800	1	.006	—	—	—
Sharabia	74,100	—	—	—	—	—
Gamalia	115,400	1	.009	—	—	—
Bab el Shaaria	114,200	1	.009	—	—	—
Abdine	91,200	2	.022	—	—	—
Musky	75,500	—	—	—	—	—
Darb el Ahmar	110,800	—	—	—	—	—
Khalifa	121,200	1	.008	—	—	—
Sayeda I	105,200	1	.009	—	—	—
Sayeda II	96,500	1	.010	—	—	—
Bulaq I	66,600	—	—	—	—	—
Bulaq II	73,200	—	—	—	—	—
Adawia	64,700	—	—	—	—	—
Old Cairo	106,900	2	.019	—	—	—
Helwan	48,100	—	—	—	—	—
Maadi	45,100	—	—	—	—	—
TOTAL	2,184,800	13	.006	—	—	—

TABLE No. 161.—DISTRIBUTION OF TYPHOID CASES AND DEATHS ON CAIRO DISTRICTS 1949

Cairo Districts	Mid Year pop.	No. of Cases	Case rate per 1000 of population	No. of Deaths	Death rate per 1 000 of population	Case Mortality rate per cent
Kubba... ..	89,300	239	2.7	18	.20	7.5
Heliopolis	89,000	185	2.3	5	.06	2.7
Zeitoun	84,700	172	2.1	15	.02	8.7
Abbassia	129,700	336	2.6	42	.32	12.4
Ezbekia	105,500	175	1.7	17	.16	9.7
Rod-el-Farag	207,000	413	2.0	35	.17	8.4
Shubra	170,800	368	2.2	46	.27	12.5
Sharabia	74,100	230	3.1	11	.15	4.7
Gamalia	115,400	192	1.7	17	.15	8.8
Bab el Shaaria	114,200	243	2.1	21	.19	8.6
Abdine	91,200	143	1.6	18	.20	12.5
Mousky	75,500	134	1.8	5	.07	3.7
Darb el Ahmar	110,800	199	1.8	24	.27	12.6
Khalifa	121,200	234	1.9	15	.12	6.4
Sayeda I	105,200	147	1.4	24	.23	16.3
Sayeda II	96,500	167	1.7	9	.07	5.3
Bulaq I	66,600	74	1.1	7	.11	9.4
Bulaq II	73,200	85	1.2	5	.07	5.8
Adwaia	64,700	110	1.7	9	.14	8.1
Old Cairo	106,900	136	1.3	15	.14	11.2
Helwan	48,100	43	.9	—	—	4.8
Maadi	45,100	41	.9	2	.22	—
TOTAL	2,184,800	4,066	1.9	360	.164	8.8

TABLE No. 162.—DISTRIBUTION OF DIPHTHERIA CASES AND DEATHS ON CAIRO DISTRICTS 1949

Cairo Districts	Mid Year Population	No. of Cases	Case rate per 1,000 of population	No. of Deaths	Death rate per 1,000 of population	Case Mortality rate per cent
Kubba... ..	89,300	28	.313	4	.045	14.3
Heliopolis	89,000	26	.321	2	.025	8.
Zeitoun	84,700	29	.034	4	.005	14.
Abbassia	129,700	49	.377	19	.146	40.
Ezbekia	165,500	36	.331	3	.028	8.3
Rod el Farag	270,000	81	.391	16	.077	20.
Shubra	170,800	54	.316	10	.059	18.5
Sharabia	74,100	35	.473	5	.068	14.2
Gamalia	115,400	62	.537	9	.079	14.5
Bab el Shaaria	114,200	52	.455	10	.087	19.2
Abdine	91,200	32	.351	4	.044	12.5
Mousky	75,500	23	.305	1	.013	4.3
Darb el Ahmar... ..	110,800	60	.541	8	.072	13.3
Khalifa	121,200	38	.314	9	.074	24.9
Sayeda I	105,200	43	.408	8	.076	18.6
Sayeda II	96,500	44	.456	9	.093	20.4
Bulaq I	66,600	37	.505	9	.123	24.3
Bulaq II	73,200	32	.495	6	.093	19
Adawia	64,700	16	.144	7	.063	43.7
Old Cairo	106,900	33	.309	8	.074	25.
Helwan	48,100	3	.062	1	.021	33.3
Maadi	45,100	5	.111	3	.067	60.
TOTAL	2,184,800	818	.374	155	.071	18.8

TABLE No. 163— DISTRIBUTION OF MEASLES CASES AND DEATHS ON CAIRO DISTRICTS 1949

Cairo Districts	Mid Year Population	No. of Cases	Case-Rate per 1000 of Population	No. of deaths	Death-Rate per 1000 of population	Case Mortality Rate per cent
Kubba... ..	89,300	72	·806	7	·078	9·7
Heliopolis	89,000	103	·273	7	·087	6·8
Zeitoun	84,700	115	·018	41	·483	35·6
Abbassia	129,700	107	·825	9	·069	8·3
Ezbekia	105,500	65	·616	38	·360	60
Rod el-Farag	207,000	144	·696	62	·299	43
Shubra	170,800	107	·626	39	·288	36·4
Sharabia	74,100	174	2·351	9	·122	5·1
Gamalia	115,400	61	·539	5	·043	5·2
Bab el-Shaaria	114,200	72	·630	12	·105	16·6
Abdine	91,200	72	·790	50	·548	69·4
Mousky	75,500	49	·649	15	·198	30·6
Darb el Ahmar	110,800	59	·531	12	·108	20·3
Khalifa	121,200	57	·470	16	·132	28
Sayeda I	105,200	56	·532	9	·086	16
Sayeda II	96,500	73	·756	15	·155	20·8
Bulaq I	66,600	54	·736	27	·368	50
Bulaq II	73,200	24	·371	9	·139	37·5
Adawia	64,700	103	·930	91	·280	89·3
Old Cairo	106,900	148	1·384	79	·739	53·4
Helwan	48,100	49	1·018	15	·311	30·6
Maadi... ..	45,100	53	1·175	33	·732	62·2
TOTAL	2,184,800	1,711	·782	682	·312	39·8

**TABLE No. 164.—DISTRIBUTION OF CEREBRO SPINAL CASES AND DEATHS
ON CAIRO CITY DISTRICTS 1949**

Cairo Districts	Population	No. of Cases	Case Rate per 1,000 of population	No. of Deaths	Death Rate per 1,000 of population	Case Mortality Rate Per cent
Kubba	89,300	1	·011	—	—	—
Heliopolis	89,000	14	·173	—	—	—
Zeitoun	84,700	6	·007	2	·002	33
Abbassia	129,700	12	·093	2	·015	17
Ezbekia	105,500	6	·056	3	·028	50
Rod el Farag	207,000	8	·039	3	·014	64
Shubra	170,800	11	·064	4	·023	36·3
Sharabia	74,100	5	·068	1	·014	20
Gamalia	115,400	10	·086	3	·025	30·3
Bab el Shaaria	114,200	3	·026	—	—	—
Abdine	91,200	8	·088	3	·033	37·5
Mousky	75,500	4	·053	2	·026	50
Darb el Ahmar	410,800	11	·099	4	·036	36·3
Khalifa	121,200	12	·099	6	·049	50
Sayedat I	105,200	4	·038	2	·019	50
Sayedat II	96,500	4	·041	3	·031	75
Bulaq I	66,600	4	·055	—	—	—
Bulaq II	73,200	4	·065	1	·015	25
Adawia	64,700	1	·009	—	—	—
Old Cairo	106,900	2	·019	2	·019	100
Helwan	48,100	1	·021	—	—	—
Maadi	45,100	2	·044	—	—	—
TOTAL	2,184,800	133	·061	41	·019	30·8

TABLE No. 165.—DISTRIBUTION OF SCARLET FEVER CASES AND DEATHS
ON CAIRO CITY DISTRICTS 1949

Cairo Districts	Mid Year Population	No. of Cases	Case Rate per 1,000 of population	No. of Deaths	Death Rate per 1,000 of population	Case Mortality Rate Per cent
Kubba	89,300	—	—	—	—	—
Heliopolis	89,000	—	—	—	—	—
Zeitoun	84,700	1	.01	—	—	—
Abbassia	129,700	1	.088	—	—	—
Ezbekia	105,500	—	—	—	—	—
Rod el Farag	207,000	—	—	—	—	—
Shubra	170,000	—	—	—	—	—
Sharabia	74,100	—	—	—	—	—
Gamalia	115,400	—	—	—	—	—
Bab el Shaaria	114,200	1	.009	—	—	—
Abdine	91,200	1	.009	—	—	—
Mousky	75,500	1	.013	—	—	—
Darb el Ahmar	110,800	—	—	—	—	—
Khalifa	121,200	—	—	—	—	—
Sayeda I	105,200	—	—	—	—	—
Sayeda II	96,500	—	—	—	—	—
Bulaq I	66,600	1	.015	—	—	—
Bulaq II	73,200	—	—	—	—	—
Adawia	64,700	—	—	—	—	—
Old Cairo	106,900	—	—	—	—	—
Helwan	48,100	1	.02	—	—	—
Maadi	45,100	—	—	—	—	—
TOTAL	2,184,800	7	.003	—	—	—

PASSENGER CONTROL

Passengers :

During 1949, a total of 32,302 passengers arrived in Cairo from infected countries; as compared with 16,884 in 1948.

Of this number, 13,421 passengers arrived by air, 423 arrived by car via Ismailia, 2,723 passengers arrived by train via Kantara. Those arriving by sea were 1,398 passengers via Suez 3,504 via Alexandria and 712 via Port Said.

Moreover, 10,121 passengers arriving from the Sudan through Shellal were observed for small pox, yellow-fever and meningitis. All the passengers (except 659 or 2.04 per cent who could not be traced) were observed for the regulation period and found in good health.

Pilgrims :

The number of Egyptian pilgrims arriving from the Hedjaz in 1949 was 2,590 as compared with 4,001 in the previous year.

All the returning pilgrims were observed for the regulation period and found in good health.

Deaths :

23 pilgrims died in the Hedjaz.

One died of cerebro spinal fever.

One Pilgrim fell sick with typhoid but later recovered.

188 pilgrims from other localities than Cairo were observed and found in good health.

Personnel of the medical mission numbering 75 as well as 32 employees of Bank Misr were also observed and found in good health.

Unhealthy, Inconvenient, and Dangerous Establishments :

During the year, the following establishments were licensed under Law No. 13 of 28th August 1904, and Arrêté of the Ministry of Interior of 29th August of the same year.

1st Class			2nd Class			3rd Class			GRAND TOTAL
Saha	Zabt	TOTAL	Saha	Zabt	TOTAL	Saha	Zabt	TOTAL	
267	202	469	1,030	462	1,492	537	118	655	2,616

457 Public establishments were licensed under Law No. 38 of 1941.

Of a total of 22,696 unhealthy establishments inspected during 1949, 18,972 were found satisfactory and 3,724 unsatisfactory.

Of a total of 8,338 inconvenient and dangerous establishments inspected, 6789 were found satisfactory and 1549 unsatisfactory. No establishments at Rod El Farag, Mousky and Darb El Ahmer were inspected

Of 3,672 public establishments inspected, 3,000 were found satisfactory and 672 unsatisfactory.

2,733 Proces - verbeaux of contravention were drawn up against establishments exploited without licences, and 1,829 contraventions were drawn up for lacking conditions in licensed establishments making a total of 4,562 contraventions.

Under the theatre regulations, 103 theatres, cinemas and other places of entertainment were inspected during the year.

GENERAL SANITATION

Activities of the Sanitation Section during the year 1949 may be summarised as follows :

1. Samples of water were regularly taken from the different main water supplies of the City, Helwan, Zeitoun, Heliopolis and Giza in order to ensure their purity. Samples of water were also regularly taken from different taps in the City and from swimming baths for the same purpose.
2. Quack doctors continue to be pursued and prosecuted.
3. Maintenance of the cleanliness of streets and thoroughfares .
4. Control of the dumping of sewage matter.
5. Application of law No. 151 of 1947 regarding the fencing and sanitation of waste lands.
6. 3,409 free permits were given for evacuation of private cisterns.
7. Some 7,500 complaints were received and dealt with during the year in respect of throwing dirty water in streets overflow, of private cesspits, etc.
8. Control and maintenance of 210 free water taps distributed throughout the City.
9. Control of 8 basins distributed at the entrances of the City for washing and disinfecting vegetables and fruits before admission to the City.
10. 4,000 compulsory evacuations of cesspits were carried out by this section.

CAIRO POLICE HEALTH OFFICE

The strength of Cairo Police force during the year was estimated at 14,163 all ranks (military and civilians).

The following are details of the work carried out by this Office :

Medical Work :

Policemen examined for sick leaves	21,152
Other police personnel examined for sick leaves	872
Other personnel	310
Medico legal reports	30,822
Car and Cab drivers examined for practising profession	6,466
Candidates for police posts	2,291

Sanitary Work :

Number of inspections of Police units	173
Personnel vaccinated against Small Pox	1,069
„ inoculated against typhoid	8,732
Persons stung by scorpions and received first aid	1,040

The most prevalent diseases amongst police non-commissioned officers and men were bronchitis, rheumatism and wounds. Those prevalent among police officers and civilian officials were : bronchitis, rheumatism, enteritis, diarrhoea and tonsillitis.

Of 429 policemen referred to the fever hospital, 25 suffered from typhoid, 24 from pneumonia, 43 from colitis and the remainder from other diseases.

TABLE No. 166.—PUBLIC BATH-HOUSES AND LAUNDRIES 1949

No.	Address	No. of visitors	No. of persons deloused	Quantity of Soap used
				K.G.
1	Sidi Abdel Gawad, Boulaq ...	39,517	73,570	5,481
2	Tal Zenhom, Sayeda ...* ...	26,307	63,546	4,377
3	Darb el Ansia, Darb el Ahmar	28,431	48,195	3,580
4	El Otouf, Gamalia	29,416	46,082	3,428
5	El Bakria	23,415	54,028	3,690
6	Tura El Faroukia... ..	13,491	34,427	2,364.5
7	Boulaq health centre	15,178	51,809	3,451
8	Sharabia	12,916	29,086	1,956.5
9	Rod el Farag	2,391	84,976	0,300
10	Old Cairo	31,964	50,961	4,136.5
11	Sayed Zeinab	24,788	47,764	3,422.5
12	Mohamady, Abbassia	27,099	49,181	3,401
13	Khalifa	32,312	47,011	3,475.5
	TOTAL	307,225	600,636	43,063.5
				43 Tons nearly

ANTE-MATRIMONY MEDICAL EXAMINATION OFFICE, BOULAQ HEALTH CENTRE

No. of persons presented themselves for examination = 262

134 found eligible and received certificates.

43 found eligible but did not turn up for their certificates.

34 Ceased attendance before completion of examination.

51 found ineligible

LIST OF CONTRAVENTIONS DRAWN UP DURING THE YEAR 1949

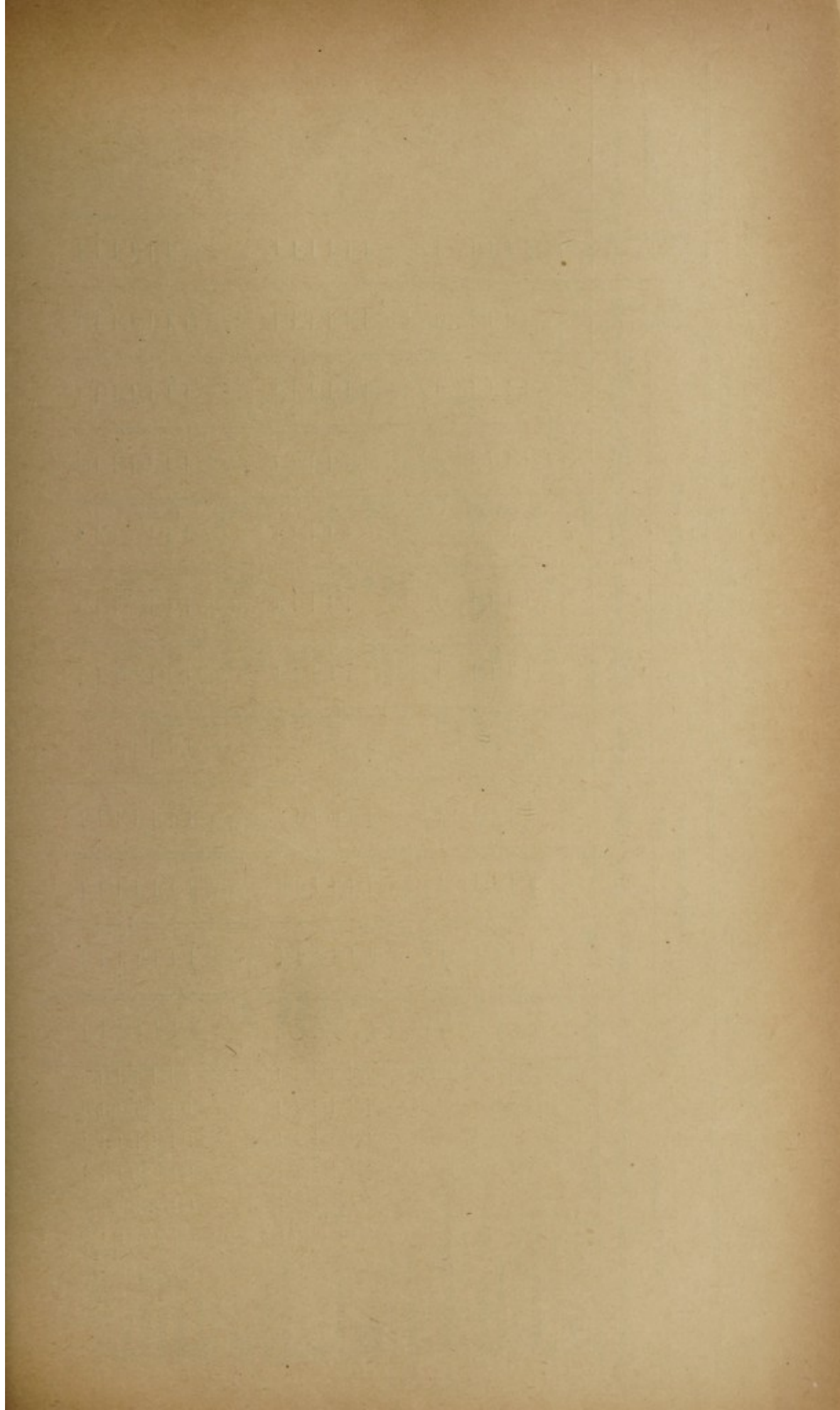
Number of contraventions	Number of contraventions for food stuff adulteration	Number of contraventions under the Icecream law	Number of contraventions for use of illegal colouring matter	Number of contraventions under refuse law of 1949	Number of contraventions for spilling milk	Number of contraventions for unwholesome foodstuffs	Number of contraventions for adulteration of milk	Total numbers of Procès Verbeaux
4,679	287	6	12	151	34	202	1,629	7,000

Number of milk vendors licensed 135
 „ ambulant vendors who were licensed 100

NUMBER OF SAMPLES OF MILK TAKEN DURING 1949 AND RATE OF ADULTERATION

Number of Samples	Adulterated Samples						Total number of adult. samples	Number of genuine samples	Percentage of adulteration
	Skimmed Samples		Samples to which water was added		Samples skimmed and to which water was added				
	No. of Samples	Rate of adult.	No. of Samples	Rate of adult.	No. of Samples	Rate of adult.			
6798	1,027	14.9%	225	33%	207	3%	1,461	5,337	21.2%

N.B The total number of adulterate ! samples includes samples which were unfit.



Appendix VII—International Health

Establishment and Functions of the Section :

This Section was established under Ministerial Arrêté dated 18th August 1949 which was published by Departmental Order No. 166 of 1949. Allocations for its posts were provided for in the 1948/1949 and 1949/1950 Budgets.

Its functions were determined as follows :

1. All matters relating to the World Health Organization.
2. All matters relating to medical and health conferences
3. Observing the execution of International Conventions and Agreements.

The first Director of the Section Dr. M.M. Sidky assumed his duties on November 1st. 1949.

The World Health Organization:

Owing to the close collaboration between the Egyptian Government and the World Health Organization, herebelow is a brief statement on the part played by the Egyptian Government towards the establishment of the Organization.

The WHO had its origin in a proposal made during the United Nations Conference held in San Francisco in 1945 for the creation of a specialised agency to deal with all matters relating to health. A Technical Preparatory Committee, composed of representatives of certain Governments including Dr. A. T. Shousha, the ex- Under Secretary of State for this Ministry as Egypt's representative, was convened by the Economic and Social Council. This committee met in Paris between March 18 and April 15, 1946 and laid down the principles of the WHO Constitution. An International Health Conference attended by representatives from 61 States was held purposely in New-York during the period between June 19 and July 22, 1946.

Egyptian Representatives were :

Dr. A. T. Shousha, ex - U.S.S., Ministry of Health.

Taha El-Sayed Nasr, ex - Adviser, Contentieux, M.P.H.

Dr. Mahmoud Soliman Abaza, ex-Director General, Social Hygiene Department, M.P.H.

The Conference Drafted and signed :

1. The WHO Constitution.
2. An Agreement for the establishment of the WHO Interim Commission, composed of representatives of some States including Egypt, to serve until the Constitution was ratified.
3. A Protocol for the dissolution of the Office International d'Hygiene Publique and the transfer of its functions to the WHO.

By laws No. 136 and 137 of 1947, the Egyptian Government ratified both the WHO Constitution and the Protocol.

The Former came into force on April 7, 1948, following its ratification by 26 Member States of the United Nations as provided in Article 80 thereof.

The latter came into force on October 20, 1947.

The World Health Assembly and the Executive Board :

The Interim Commission continued to serve until the meeting of the first World Health Assembly in Geneva on June 24, 1948, following the ratification of its constitution

The First Assembly elected 18 Member States who appointed as many representatives to form the Executive Board.

Egypt was elected Member of the Board for 2 years. Dr. Shousha was elected President of the Board.

The Second World Health Assembly met in Rome on June 13, 1949 where Egypt was represented by a delegation presided over by the Minister of Public Health.

Until the end of 1949, the Board had held four sessions.

Regional Committees and Offices:

The WHO had divided the world into regional areas each consisting of a group of countries having common natural features and health problems. To each Area was set up a Regional Office to promote health standards within member countries. A Regional Office was set up for the Eastern Mediterranean Area. By decision of the Council of Ministers dated January 9, 1949, the Egyptian Government agreed to have the seat of the Office in Alexandria and to incorporate the Pan Arab Regional Office of Alexandria with the WHO.

Besides, By Law No. 66 of 1949, the Government agreed to lease to WHO the premises hitherto occupied by the Quarantine Department in Alexandria for use as the seat of the Regional Office, for 9 years at a nominal rental of 100 mms. per annum.

Expert Committees.

The WHO has established technical experts committees composed of distinguished specialists to study medical and health problems. Egypt is represented in most of these committees as follows :

Dr. A.T. Shousha,	Experts Committee on Cholera,
Dr. M. Nazif,	Experts Committee on Epidemiology and Quarantine.
Dr. M. Abdel Azim,	Experts Committee on Schistosomiasis
Prof. I. R. Fahmy,	Experts Committee on Unification of Pharmacopias.
Dr. Abdel Fattah El-Tobgy,	Experts Committee on Trachoma.
Dr. M. S. Abaza,	Experts Committee on Tuberculosis.
Dr. T. Goma,	Experts Committee on Tuberculosis.
Dr. I. H. Nagi,	Experts Committee on Venereal Diseases.
Dr. F. A. Soliman,	Corresponding Member of the Experts Committee on Venereal Diseases.
Dr. S. Madwar,	Corresponding Member of the Experts Committee on Malaria.
Dr. I. M. Shaheen,	Member of Experts Advisory Panel on Rabies

The Joint WHO/OIHP Study Group on Schistosomiasis held its first Session in Cairo between the 24th. and the 29th. October 1949. Its report was submitted to the Executive Board and the World Health Assembly.

Egypt's Contribution to the WHO:

Contributions of Member states towards the World Health Organization budgets for the financial years 1948 and 1949 were assessed according to the scale adopted by the United Nations.

Egypt's contribution on that basis amounted to \$36,930 for 1948 and \$38,242 for 1949 i. e. equivalent to 95 units. Besides, Egypt paid \$10524.18 as its share in the Working Capital Fund.

WHO Publications :

Activities of the WHO are published in the following periodicals which are distributed to the Departments of the Ministry for perusal :

Official Records of the World Health Organization,
Chronicle " " " "
International Digest of Health Legislation,
Epidemiological and Vital Statistics Reports,
Bulletin of the World Health Organization,
Weekly Epidemiological Record.

World Health Day :

The Ministry celebrated the 22nd. July 1949 being the anniversary of the signing by 61 States of the World Health Constitution in 1946 as follows :

Press :

A Press Conference was held by the Minister of Public Health who discussed the World Health Organization and its objectives. All the Arabic and European Papers appearing on that day, published accounts of the Conference.

Cinema :

A film recording the visit to Egypt of WHO members on the occasion of the setting up of the Eastern Mediterranean Regional Office was distributed to all cinemas and shown on that day.

Broadcasts from the Egyptian State Broadcasting Station:

Arabic Programme:— A talk and a theatrical performance on the WHO and its aims were broadcast. Besides, a commentary on the World Health Day was broadcast with the News Bulletins.

European Programme:—Two talks were broadcast one in English and another in French. A commentary on the World Health Day was also broadcast with the News Bulletins.

Principal WHO Activities in Egypt during 1949 :

1. The Establishment of the Regional Office for the Eastern Mediterranean Area in Alexandria on 1.7.1949.

2. Arrival in Egypt of Experts in Tuberculosis, Venereal Diseases, Maternal and Child Health and Nursing to discuss with the Ministry the control measures taken against certain diseases and to organize some public health services pertaining to the above mentioned problems.

3. On 23/4/1949, the Council of Ministers authorized the Ministry of Public Health to sign the Agreement concluded between the Egyptian Government and the United Nations International Childrens Emergency Fund and the Danish Red Cross in connection with a mass B.C.G. vaccination campaign. This Agreement was signed on 2/5/1949 and a team was sent to Egypt by these Organizations and is now collaborating with the staff of the Chest Diseases Section in this campaign.

4. The Ministry agreed in principle to the proposed agreement with the WHO for the establishment and operation of a Venereal Diseases Control Demonstration Centre.

5. The WHO adopted the 6th. Revision of the International List of Diseases and Causes of Death (WHO Regulations No. 1) This was communicated to Member States, accepted by this Ministry and came into force on the 1st. of January 1950.

6. Two officials of this Ministry were seconded to the World Health Organization, Geneva, and five others to the Regional Office for the Eastern Mediterranean Area for two years.

7. During 1949, nine officials were awarded fellowships at the expense of the WHO to study tuberculosis, venereal diseases, malaria, mental health, sanitation and social aspects of tuberculosis.

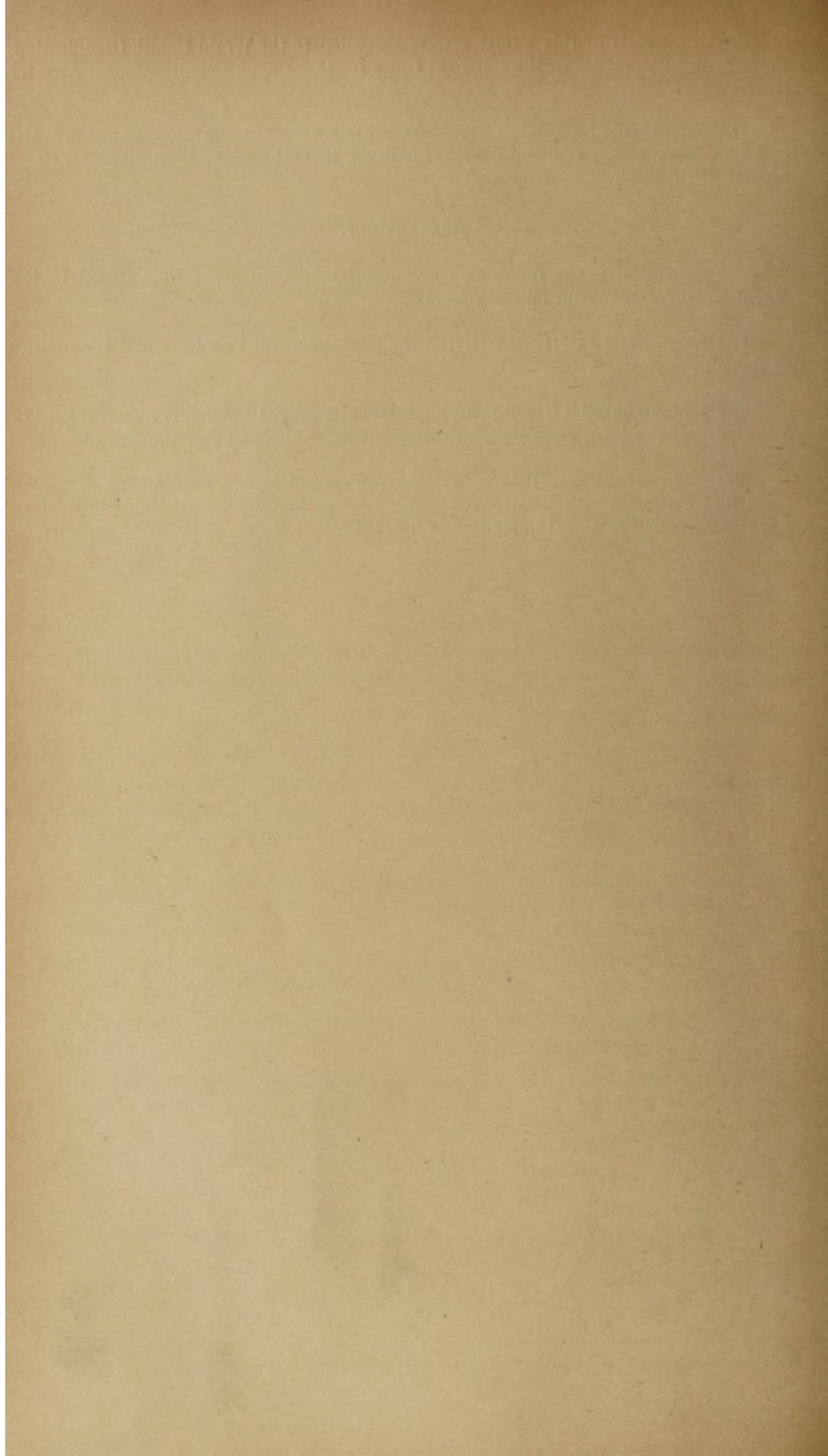
CONVENTIONS.

Decrees ratifying the following conventions and agreements were issued by the Egyptian Government during the year 1949.

1. Decree dated 11/7/1949 ratifying the Agreement on Privileges and Immunities of the United Nations.

2. Decree dated 21/11/1949 ratifying Convention No. 19 Providing for Equality of Treatment for national and foreign workmen as regards compensation for accident.

3. Decree dated 22/12/1949 ratifying the Protocol signed on 4/5/1949 amending the two International Conventions relative to the suppression of the white slave traffic signed in Paris on 18/5/1904 and 4/5/1910.



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Director.

HASSAN ALI KLEWA.

