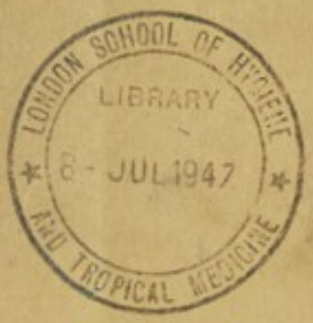
Annual report on the work of the Ministry of Public Health / Egypt.

MINISTRY OF PUBLIC HEALTH, EGYPT



ANNUAL REPORT

ON THE WORK OF THE

Ministry of Public Health

for the year 1941

GOVERNMENT PRESS, CAIRO
1947

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MINISTRY OF PUBLIC HEALTH

ANNUAL REPORT FOR THE YEAR 1941

Part I.—PUBLIC HEALTH

Chapter I.—VITAL STATISTICS

A.—*Population.*

The population of Egypt, as estimated in mid 1941, was 17,030,100, as against 16,773,300 in mid 1940.

B.—*Births.*

The number of births registered throughout Egypt in the year under review was 695,016, i.e. a rate of 40·8 per thousand population, as compared with 41·6 per thousand in 1940. The highest birth-rate was recorded in the Southern Desert Governorate, being 47·3 per thousand population, and the lowest was in Alexandria Governorate, with a birth-rate of 28 per thousand.

C.—*Deaths.*

The number of deaths registered throughout Egypt in the year under review was 440,981, or a death-rate of 25·9 per thousand population, as against 26·5 per thousand in 1940. The highest death-rate was in Suez Governorate and suburbs, being 40·9 per thousand, and the lowest was in Qena Province, with a death-rate of 17·2 per thousand.

D.—*Diseases Causing Deaths.*

Table No. 4 shows the chief diseases causing deaths in all Register Offices. It will be observed that the diseases most prevalent were diarrhoea, enteritis and respiratory diseases.

E.—*Age and Sex Distribution of Deaths.*

Table No. 5 shows the number and rates of deaths in the different age-groups in the Register Offices. Most of the deaths occur in the first three years of life and nearly half the deaths occur before the end of the second year of life.

F.—*Infantile Mortality.*

There were 104,402 infantile deaths in Egypt, or a ratio of 150 per thousand births. The infantile mortality in Register Offices amounted to 45,539, i.e. a ratio of 19·6 per cent of births. Diarrhoea and enteritis were chiefly responsible for these deaths. Table No. 6 shows Infantile Mortality according to age-groups in Register Offices. Most of the deaths, as may be observed, occur in the first three months of life.

TABLE No. 1.—SHOWING RATIOS OF BIRTHS, DEATHS AND INFANTILE MORTALITY IN EGYPT (1921–1941)

YEAR	Birth-rates per 1,000		Death-rates per 1,000		Infantile Mortality per 1,000 Births	
	Egypt	Urban	Egypt	Urban	Egypt	Urban
1921–25	42·9	49·4	25·3	32·5	144	229
1926	43·2	50·0	26·2	33·1	146	217
1927	44·0	43·3	25·2	27·2	152	222
1928	43·3	42·3	26·2	30·3	151	237
1929	43·7	44·4	27·3	28·3	159	214
1930	44·6	45·3	24·4	25·8	151	198
1931	43·2	45·5	25·6	29·3	160	217
1932	41·1	45·4	27·6	27·1	175	202
1933	42·1	46·4	26·5	28·6	162·5	204·9
1934	40·3	44·4	26·6	29·5	166·4	209·9
1935	39·4	42·5	25·1	27·7	166·6	202·5
1936	41·8	—	27·3	—	164	—
1937	43·5	46·9	27·2	29·8	165	206
1938	43·4	45·7	26·4	29·5	163	206
1939	43·2	46·8	26·0	29·3	161	200
1940	41·6	45·9	26·5	29·5	162	199
1941	40·8	44·2	25·9	31·0	150	200

TABLE No. 2.—SHOWING BIRTHS, DEATHS AND INFANTILE MORTALITY IN EGYPT DURING 1941

	Estimated Population Mid 1941	Births		Deaths		Infantile Mortality	
		Number	Rate	Number	Rate	Number	Rate
Governorates :—							
Urban (Cities only) *	2,388,000	93,114	39·0	64,782	27·1	18,306	197
Urban and Rural	2,536,100	98,580	38·9	69,267	27·3	19,294	196
Lower Egypt :—							
Urban (Bandars only) * ...	898,500	46,475	51·7	31,803	35·4	8,502	183
Urban and Rural	7,605,300	328,075	43·1	212,584	28·0	46,175	141
Upper Egypt :—							
Urban (Bandars only) * ...	796,400	40,681	51·1	29,784	37·4	9,307	229
Urban and Rural	6,888,700	268,361	39·0	159,130	23·1	38,933	145
Egypt :—							
Urban (Cities and Bandars)	4,082,900	180,270	44·2	126,369	31·0	36,115	200
TOTAL (all over Egypt) ...	17,030,100	695,016	40·8	440,981	2·59	104,402	150

* Urban comprises all towns having a Health Bureau, provided there is a pure drinking water supply and a municipal or local council;

TABLE No. 3.—SHOWING THE HIGHEST AND LOWEST BIRTH AND DEATH RATES DURING 1941 IN GOVERNORATES, PROVINCES AND TOWNS HAVING A HEALTH BUREAU

	Govte., Prov. or Town having a Health Bureau	Rate per Thousand
BIRTHS		
Governorate or Province with highest birth-rate	Southern Desert ...	47·3
,, ,, ,, lowest ,, ...	Alexandria	28·0
Town or *Bandar* (chief town) with highest birth-rate	Kafr El Dawar ...	85·8
,, ,, ,, ,, ,, lowest ,, ...	Port Fouad	18·2
DEATHS		
Governorate or Province with highest death-rate	Suez and Suburbs ...	40·9
,, ,, ,, lowest ,, ...	Qena *	17·2
Town or *Bandar* (chief town) with highest death-rate	Kafr El Dawar... ...	79·4
,, ,, ,, ,, ,, lowest ,, ,, ...	Port Fouad	11·8
INFANTILE MORTALITY		
Governorate or Province with highest infantile mortality ...	Suez and Suburbs ...	238·0
,, ,, ,, lowest ,, ,, ...	Qena and Gerga ...	117·0
Town or *Bandar* (chief town) with highest infantile mortality	El Montazah	391·0
,, ,, ,, ,, ,, lowest ,, ,,	Gabaris and El Agouzein	86·0

The Birth-rate for all the population of Egypt was 40.8 per thousand.

* Death-rate in the Red Sea District was 16·9.

TABLE No. 4.—SHOWING DISEASES CAUSING DEATHS IN ALL LOCALITIES HAVING A HEALTH BUREAU DURING 1941

DISEASE	Total number of deaths	Death-rate per 1000 of total deaths
Notifiable infectious and parasitic diseases exclusive of those marked * hereunder	5,993	36·8
Pulmonary tuberculosis *	2,531	15·6
Other tuberculous diseases	484	3·0
Syphilis	329	2·0
Malaria *	88	0·5
Dysentery *	448	2·8
Pneumonia (acute, chronic and non-chronic including broncho-pneumonia and capillary bronchitis)	5,796‡	35·6
Bronchitis	13,632	83·8
Other respiratory system diseases	2,024	12·4
Heart diseases	4,256	26·1
Other diseases of the circulatory system	1,160	7·1
Diseases of urinary and genital system (other than venereal)	6,475	39·8
Diseases of puerperium and delivery (other than puerperal septicaemia) ...	657	4·0
Diseases of diarrhoea and enteritis	58,548	359·7
Senility	16,617	102·1
Accidental deaths including suicides	7,239	44·5
Other causes	36,477	224·1
TOTAL DEATHS	162,754	—

‡ This figure includes 4,635 deaths from acute pneumonia (lobar and broncho-pneumonia).

TABLE No. 5.—SHOWING THE AGE AND SEX DISTRIBUTION OF DEATHS IN LOCALITIES HAVING A HEALTH BUREAU DURING 1941

AGE	Number of Deaths			
	Male	Female	Total	Percentage to total deaths
Less than one year	23,952	21,587	**45,539**	**28·0**
1– 2 years	12,526	13,012	**25,538**	**15·7**
2– 3 ,, ...	6,723	6,908	**13,631**	**8·4**
3– 4 ,, ...	3,112	2,933	**6,045**	**3·7**
4– 5 ,, ...	1,620	1,482	**3,102**	**1·9**
5–10 ,, ...	2,787	2,401	**5,188**	**3·2**
10–15 ,, ...	1,631	1,178	**2,809**	**1·7**
15–20 ,, ...	1,533	1,129	**2,662**	**1·6**
20–25 ,, ...	2,134	1,046	**3,180**	**2·0**
25–30 ,, ...	2,257	1,343	**3,600**	**2·2**
30–35 ,, ...	2,026	1,522	**3,548**	**2·2**
35–40 ,, ...	2,307	1,446	**3,753**	**2 3**
40–45 ,, ...	2,312	1,302	**3,614**	**2·2**
45–50 ,, ...	1,993	973	**2,966**	**1·8**
50–55 ,, ...	2,682	1,528	**4,210**	**2·6**
55–60 ,, ...	1,611	782	**2,393**	**1·5**
60–65 ,, ...	2,973	2,009	**4,982**	**3·1**
65–70 ,, ...	1,695	1,076	**2,771**	**1·7**
70–75 ,, ...	3,085	2,647	**5,732**	**3·5**
75–80 ,, ...	1,329	1,165	**2,494**	**1·5**
80–85 ,, ...	2,613	3,162	**5,775**	**3·5**
85–90 ,, ...	797	833	**1,630**	**1·0**
90–95 ,, ...	1,755	2,676	**4,431**	**2·7**
95 and upwards...	1,023	1,819	**2,842**	**1·7**
Unknown	306	13	**319**	**0·2**
TOTAL	**86,782**	**75,972**	**162,754**	—

TABLE No. 6.—SHOWING THE AGE AND SEX DISTRIBUTION OF INFANTILE MORTALITY IN LOCALITIES HAVING A HEALTH BUREAU DURING 1941

AGE	Male	Female	Total	Death-rate per 100 births	Death-rate per 100 deaths
0– 1 month	4,590	3,586	8,176	**3·5**	**5·0**
1– 2 months	1,711	1,483	3,194	**1·4**	**2·0**
2– 3 ,, ...	1,767	1,531	3,298	**1·4**	**2·0**
0– 3 ,, ...	**8,068**	**6,600**	**14,668**	**6·3**	**9·0**
3– 4 ,, ...	1,825	1,673	3,498	**1·5**	**2·1**
4– 5 ,, ...	1,920	1,838	3,758	**1·6**	**2·3**
5– 6 ,, ...	1,749	1,680	3,429	**1·5**	**2·1**
3– 6 ,, ...	**5,494**	**5,191**	**10,685**	**4·6**	**6·6**
6– 7 ,, ...	2,288	2,273	4,561	**2·0**	**2·8**
7– 8 ,, ...	1,768	1,652	3,421	**1·5**	**2·1**
8– 9 ,, ...	2,302	2,110	4,412	**1·9**	**2·7**
6– 9 ,, ...	**6,359**	**6,035**	**12,394**	**5·3**	**7·6**
9–10 ,, ...	1,664	1,513	3,177	**1·4**	**2·0**
10–11 ,, ...	1,551	1,453	3,004	**1·3**	**1·8**
11–12 ,, ...	816	795	1,611	**0·7**	**1·0**
9–12 ,, ...	**4,031**	**3,761**	**7,792**	**3·4**	**4·8**
GRAND TOTAL	**23,952**	**21,587**	**45,539**	**19·6**	**28·0**

TABLE No. 7.—SHOWING DISEASE DISTRIBUTION OF INFANTILE MORTALITY IN LOCALITIES HAVING A HEALTH BUREAU DURING 1941

DISEASE	Number of Deaths	Rate per 1,000 to total births	Rate per 1,000 to total Inf. Mor.
Measles	228	1·0	5·0
Whooping Cough	22	0·1	0·5
Diphtheria	70	0·3	1·5
Tuberculous Diseases	5	0·0	0·1
Syphilis	161	0·7	3·5
Rickets and Osteomalacia	189	0·8	4·2
Convulsions	173	0·7	3·8
Bronchitis	3,195	13·7	70·2
Broncho-Pneumonia	794	3·4	17·4
Pneumonia	200	0·9	4·4
Diarrhoea and Enteritis	25,325	109·0	556·1
Congenital Defects of Conformation	73	0·3	1·6
Congenital Debility	13,007	56·0	285·6
Premature Birth	165	0·7	3·6
Consequences of Delivery	66	0·3	1·4
Infanticide	168	0·7	3·7
Accidents	152	0·7	3·3
Other Causes	1,546	6·7	33·9
TOTAL	45,539	195·9	—

ABLE No. 8.—BIRTHS AND DEATHS RETURN FOR GOVERNORATES AND CHIEF TOWNS OF PROVINCES FOR 1941.

GOVERNORATES AND CHIEF TOWNS OF PROVINCES	Estimated population mid-year 1941	Births				Deaths				Infantile Mortality		Percentage of Infantile Mortality		
												Under one year		1–9 years
		Egyptians	Foreigners	Total	Rate per 1,000 population	Egyptians	Foreigners	Total	Rate per 1,000 population	Under one year	1–9 years	Births	Deaths	Deaths
Governorates:—														
Cairo	1,396,500	62,208	666	62,874	45·0	39,297	868	40,165	28·8	12,441	12,350	19·8	31·0	30·7
Alexandria	729,900	19,521	893	20.414	28·0	15,562	1,410	16,972	23·3	3,945	5,168	19·3	23·2	30·5
Ismailia (Town)	40,000	1,477	66	1,543	38·6	1,363	354	1,717	42·9	363	450	23·5	21·1	26·2
Port Said	126,200	3,867	103	3,970	31·5	2,571	156	2,727	21·6	671	958	16·9	24·6	35·1
Damietta	44,200	2,057	—	2,057	46·5	1,018	—	1,018	23·0	286	283	13·9	28·1	27·8
Suez (Town)	49,000	2,277	39	2,316	47·3	2,031	126	2,157	44·0	589	672	25·4	27·3	31·2
Lower Egypt:—														
Benha	31,900	1,571	—	1,571	49·2	1,085	3	1,088	34·1	290	315	18·5	26·7	29·0
Damanhour	67,200	3,798	—	3,798	56·5	2,971	—	2,971	44·2	826	1,118	21·7	27·8	37·6
Mansoura	75,600	3,524	15	3,539	46·8	2,405	18	2,423	32·1	602	772	17·0	24·8	31·9
Shebin el Kom	34,700	1,679	—	1,679	48·4	1,317	2	1,319	38·0	329	393	19·6	24·9	29·8
Tanta	101,700	4,852	2	4,854	47·7	3,249	11	3,260	32·1	874	959	18·0	26·8	29·4
Zagazig	64,300	3,109	—	3,109	48·4	2,264	12	2,276	35·4	585	790	18·8	25·7	34·7
Upper Egypt:—														
Assiut	62,800	3,024	4	3,028	48·2	2,281	6	2,287	36·4	655	741	21·6	28·6	32·4
Assuan	21,900	747	—	747	34·1	558	5	563	25·7	162	174	21·7	28·8	30·9
Beni Suef	47,800	2,372	—	2,372	49·6	1,506	5	1,511	31·6	397	416	16·7	26·3	27·5
Fayoum	65,100	3,059	1	3,060	47·0	2,377	3	2,380	36·6	764	632	25·0	32·1	26·6
Giza	62,100	3,410	70	3,480	56 0	2,037	22	2,059	33·2	678	735	19·5	32·9	35·7
Minia	54,000	2,619	2	2,621	48·5	2,025	10	2,035	37·7	569	658	21·7	28·0	32·3
Qena	37,000	1,825	—	1,825	49·3	1,216	—	1,216	32·9	406	365	22·2	33·4	30·0
Souhag	33,000	1,814	1	1,815	55·0	1,230	—	1,230	37·3	397	459	21·9	32·3	37·3
TOTAL	**3,144,900**	**128,810**	**1,862**	**130,672**	**41·6**	**88,363**	**3,011**	**91,374**	**29·1**	**25,829**	**28,408**	**19·8**	**28·3**	**31·1**

Table No. 9.—Births and Deaths Return for Egypt, 1941.

Governorates and Provinces	Estimated population mid-1941	Births				Deaths				Infantile Mortality	
		Egyptians	Foreigners	Total	Rate per 1,000 population	Egyptians	Foreigners	Total	Rate per 1,000 population	Total	Rate per 1,000 births
Governorates :—											
Cairo	1,396,500	62,108	666	62,774	45·0	39,297	868	40,165	28·8	12,441	198
Alexandria	729,900	19,521	893	20,414	28·0	15,562	1,410	16,972	23·3	3,945	193
Ismailia (including suburbs)	57,900	2,237	66	2,303	39·8	1,854	354	2,208	38·1	443	192
Port Said (including suburbs)	134,400	4,128	115	4,243	31·6	2,743	162	2,905	21·6	739	174
Suez (including suburbs)	55,100	2,546	39	2,585	46·9	2,127	126	2,253	40·9	615	238
Damietta	44,200	2,057	—	2,057	46·5	1,018	—	1,018	23·0	286	139
Sinai	19,000	639	—	639	33·6	691	8	699	36 8	111	174
Southern Desert	31,500	1,489	—	1,489	47·3	1,108	—	1,108	35·2	295	198
Western Desert	57,100	1,698	64	1,762	30·9	1,762	—	1,762	30·9	347	197
Red Sea District	10,500	314	—	314	29·9	177	—	177	16·9	72	229
Total	**2,536,100**	**96,737**	**1,843**	**98,580**	**33·9**	**66,339**	**2,928**	**69,267**	**27·3**	**19,294**	**196**
Lower Egypt Provinces :—											
Behera	1,128,600	42,767	3	42,770	37·9	28,714	30	28,744	25·5	5,206	122
Dakahlia	1,310,800	60,760	16	60,776	46·4	40,292	26	40,318	30·8	9,529	157
Gharbia	2,108,400	92,542	11	92,553	43·9	56,403	39	56,442	26·8	11,761	127
Menoufia	1,223,500	54,360	2	54,362	44·4	35,892	6	35,898	39·3	8,442	155
Kaliubia	649,200	28,908	3	28,911	44·5	19,676	5	19,681	30·3	4,634	160
Sharkia	1,184,800	48,699	4	48,703	41·1	31,486	15	31,501	26·6	6,603	136
Total	**7,605,300**	**328,036**	**39**	**328,075**	**43·1**	**212,463**	**121**	**212,584**	**28·0**	**46,175**	**141**
Upper Egypt Provinces :—											
Assuan	318,600	11,166	1	11,167	35·1	7,725	6	7,731	24·3	1,482	133
Assiut	1,291,900	52,979	7	52,986	41·0	33,400	10	33,410	25·9	8,186	154
Beni Suef	601,300	22,292	—	22,292	37·1	11,857	5	11,862	19·7	2,657	119
Fayoum	633,000	26,450	1	26,451	41·8	17,815	3	17,818	28·1	5,353	202
Girga	1,218,100	47,967	1	47,968	39·4	25,480	—	25,480	20·9	5,611	117
Giza	749,200	33,908	73	33,981	45·4	20,673	123	20,796	27·8	5,363	158
Minia	988,000	39,495	8	39,503	40·0	23,305	11	23,316	23·6	6,312	160
Qena	1,088,600	34,010	3	34,013	31·2	18,715	2	18,717	17·2	3,969	117
Total	**6,888,700**	**268,267**	**94**	**268,361**	**39·0**	**158,970**	**160**	**159,130**	**23·1**	**38,933**	**145**
Grand Total	**17,030,100**	**693,040**	**1,976**	**695,016**	**40·8**	**437,772**	**3,209**	**440,981**	**25·9**	**104,402**	**150**

Chapter II.—INFECTIOUS DISEASES

The total number of cases of infectious diseases reported throughout the Egyptian Kingdom was 77,468 or 459 per 100,000 population. Of this number, 18,469 died, i.e. 109·4 per 100,000 population as compared with 75,392 cases (449·4 per 100,000) and 17,163 deaths (102·3 per 100,000) in the preceding year. (*Vide* tables 10 and 11).

Compared with the previous year, the increase this year was due to the high incidence of typhus, typhoid, pneumonia, diphtheria, influenza, dysentery and chicken-pox. There was, however, a decline in the incidence of plague, cerebro-spinal meningitis, measles, malaria, whooping cough and erysipelas. As to the other infectious diseases, the incidence was nearly the same in both years.

It will thus be seen that the increase occurred mainly in those diseases which are affected by war time conditions, e.g. malnutrition, overcrowding in cities and towns, immigration and movement of troops and labour. Hereunder is a detailed statement of the more important diseases:—

Typhus

Year	Number of cases	Ratio per 100,000 pop.	Number of Deaths	Ratio per 100,000 pop.	Case Mortality rate
1939	4,296	26	788	4·8	18·3%
1940	4,416	26	863	5·1	19·5%
1941	9,414	56	1,751	10·4	18·6%

This table shows that the ratio of cases per 100,000 population in 1941 rose to more than double that of 1939 or 1940.

Case Distribution according to Governorates and Provinces.

This is given quarterly in table No. 12. The disease spread all over Lower Egypt and the Northern Provinces of Upper Egypt. The highest incidence occurred in the following provinces: Behera, Dakahlia, Gharbia, Sharkia, Menoufia, Kaliubia, Giza and Beni Suef. The disease reached its climax during the first and second quarters of the year.

On comparing the figures for 1941 and 1940, it will be observed that whereas, in 1941, there was a marked rise in Gharbia, Behera, Dakahlia, Sharkia, Kaliubia, Giza and Beni Suef, there was a decline in Cairo, Alexandria, Fayoum, Gerga and Assuan. The incidence was nearly equal in the remaining provinces and governorates.

Weekly Distribution of Cases for all Egypt (Table No. 13).

During the first week of the year, cases occurred at the rate of 14·2 per 100,000 population with only 5·4 more than the preceding year. The incidence, however, continued to rise until the 10th week ending March 11, when it reached its highest level. This was maintained until the 22nd week ending June 3, 1941. On the average, more than 100 cases per 100,000 population were recorded during the interval. The 13th week marked the highest incidence with 155·6 per 100,000 population. The disease began to subside as from the 23rd week ending June 10 and reached its lowest level in the interval between the 34th week ending August 26 and the 44th week ending November 4. During that interval, the rate did not exceed 10 per 100,000 population. This, however, declined to 0·6 per 100,000 population, i.e. the minimum rate, in the 40th and 42nd weeks ending October 7 and 21. It began to rise again in the 45th week ending November 11 and continued to do so until it reached 43·4 in the last week of the year.

Total number of specimens for Weil Felix reaction taken from suspected typhus cases and deaths and percentage of positives. (Table No. 14).

Number of Specimens	Positive W.F.	Negative W.F.	Unfit for Ex.	Percentage of Positives
19,252 from living persons	3,688	14,784	780	19·2%
3,002 from dead ,, ...	220	2,016	766	7·3%

Plague

The number of cases notified during the year under review was 14 of which 6 were fatal. The following table shows the incidence of the disease from 1939 to 1941 :—

Year	Bubonic			Septicaemic			Pneumonic			Total				
	C.	D.	Ratio	C.	D.	Ratio	C.	D.	Ratio	C.	Rate	D.	Rate	C.M.R.
1939	160	50	31·2%	9	9	100%	—	—	—	169	1 %	59	0·3%	34·9%
1940	395	142	35·9%	92	92	100%	4	4	100%	491	2·9 %	238	1·4%	48·4%
1941	14	6	42·9%	—	—	—	—	—	—	14	0·08%	6	0·3%	42·9%

This table shows a marked decline during 1941 as compared with the previous two years.

Distribution of Cases on Areas.

Table No. 15 shows that 10 cases with 5 deaths of the bubonic type occurred in Port Said during June, July and August. 4 cases with one death occurred in Assiut Province, all in Abu Tig District. Of these, 2 cases occurred in January in Beni Fiz village, and 2 cases with one death occurred in February in Awlad Elias village.

Anti-Plague Vaccination.

A total of 55,809 persons were vaccinated in the infected localities. Of these, 24,138 were in Port Said and 30,940 were in Assiut. No cases of plague developed amongst vaccinated persons this year :—

Deratization

Since September 1941, stationary posts for deratization of rivercraft have been set up in the following water ways with a view to preventing the escape of the disease from the ports to the interior.

(1) Mouth of Ismailia Canal to Shubra.

(2) ,, Tewfiki, Menoufi and Beheri Rayyahs in the Delta Barrage.

(3) ,, Ibrahimia, Yousfi and Walidia Canals near Assiut Dam.

Traps were placed in 15,979 boats. 8,332 rats were caught and 16,689 baits were eaten. In addition to this number, 101,437 live rats and 87 dead were caught by the rat gangs in the various towns and villages.

Cultures and Blood Films.

Table No. 16 shows the number and distribution of cultures and films. This may be summarised as follows:—

Number of Cultures	From the Living		From the Dead		Number of Films	From the Living		From the Dead	
	Positive	Negative	Positive	Negative		Positive	Negative	Positive	Negative
1,384	8	28	4	1,344	1,133	9	26	2	1,096

TYPHOID AND PARATYPHOID (Table No. 11).

5,758 cases were reported (i.e. 34·1 per 100,000 population) with 1,179 deaths (7 per 100,000 population). The case mortality rate was 20·5 per cent. In the preceding year, there were 4,841 cases (or 28·8 per 100,000 population) and 934 deaths (or 5·6 per 100,000 population) and a case mortality rate of 19·3 per cent. There was an increase in the incidence of the Enterica group in Cairo, Alexandria, Ismailia, Frontiers Districts, Behera, Menoufia, Sharkia, Assiut, Giza, Minia, Qena and Suez. There was however a decrease in the incidence in Port Said, Dakahlia, Gharbia, Kaliubia, Assuan and Gerga. It was nearly equal in the other provinces.

Anti-Typhoid Vaccination (Table No. 17).

A total of 234,522 persons were vaccinated against the enteric fevers group. Of this number, 78,806 were vaccinated by private practitioners and 155,716 by medical officers of health. 224,117 were vaccinated in 1940.

SMALL-POX

As in 1939, no cases or deaths of small-pox were reported during this year. Two cases only were reported in 1940.

General Vaccination against Small-Pox (Table No. 19).

During the year, a total of 1,982,184 persons were vaccinated in Damietta, Kaliubia, Fayoum, Giza, Sharkia and Minia.

CEREBRO-SPINAL MENINGITIS (Table No. 11).

159 cases were notified, (i.e. 0·9 per 100,000 population) with 94 deaths (i.e. 0·5 per 100,000 population). The case mortality rate was 59·1 per cent as against 191 cases with 96 deaths or 1·1 and 0·6 per 100,000 population respectively in the preceding year and a case mortality rate of 50·2 per cent. The majority of the cases were reported from Cairo and Alexandria (*vide* table No. 10).

ENCEPHALITIS LETHARGICA (Table No. 11).

7 cases and 9 deaths were reported during the year. In many instances, the diagnosis was not made until after death and only recorded on the death certificates. In 1940, 3 cases and 9 deaths were reported.

Diphtheria (Table No. 11).

4,037 cases were notified (i.e. 23·9 per 100,000 population). The number of deaths was 1,932 (i.e. 11·4 per 100,000 population and 47·8 per cent of cases), as against 2,433 cases in 1940 (or 14·5 per 100,000 population) and 1,178 deaths (or 7 per 100,000 population and 48·4 per cent of cases).

Cairo had 2,008 cases with 690 deaths or a death-rate of 34·4 per cent as against 837 cases with 272 deaths in 1940, i.e. a death-rate of 32·5 per cent. In Alexandria, there were 576 cases with 198 deaths, i.e. a death-rate of 34·4 per cent as against 469 cases with 131 deaths in 1940, i.e. a death-rate of 37·7 per cent.

Although the incidence is high in Cairo and Alexandria, yet the death-rate is much less than anywhere else in the whole country. This is mainly due to early notification and prompt treatment. Compared with the preceding year, the incidence this year was higher in Cairo, Alexandria, Canal, Dakahlia, Gharbia, Giza, Menoufia, Sharkia, Kaliubia, Minia and Qena, and lower in Damietta, Suez, Assiut, Aswan and Beni Suef.

Immunization by Diphtheria Anatoxin (Table No. 18).

Uuder provisions of Law No. 24 of 1940, the immunization of all children between 1 and 10 years of age is compulsory in localities where the law is enforced. By Ministerial arrêté, the law has been enforced in all governorates and chief towns of provinces since November 1940. A total of 426,708 children were immunised this year, having received the three anatoxin injections, throughout the whole country. Owing to importation difficulties arising from the war, the vaccine is now prepared locally at the Serum Institute of this Ministry.

Measles (Table No. 11).

9,769 cases were notified (i.e. 57·9 per 100,000 population) with 2,870 deaths (i.e. 17 per 100,000 population), or a case mortality rate of 29·3 per cent. In 1940, there were 14,967 cases with 3,581 deaths (i.e. 89·2 and 21·3 per 100,000 population respectively and a case mortality rate of 23·9 per cent.

There were more cases this year than in 1940 in Alexandria, Suez, the Frontiers Districts, Sharkia and Fayoum. These were less in Cairo, Gharbia, Menoufia, Kaliubia, Assiut, Gerga, Giza, Minia and Qena.

Erysipelas (Table No. 11).

4,502 cases were notified this year with 468 deaths as against 4,827 cases and 466 deaths in 1940. The ratio per 100,000 population was 26·7 and 28·8 for cases and 2·7 and 2·8 for deaths respectively. The case mortality rates were 10·3% and 9·6%.

Influenza (Table No. 11).

11,120 cases and 178 deaths were notified as against 9,763 cases with 180 deaths in the preceding year. The ratios per 100,000 population were 65·9 and 57·8 for cases and 1 and 1·1 for deaths or a case mortality rate of 1·6% and 1·8% respectively.

Pneumonia (Table No. 11).

5,414 cases were notified (i.e. 32·1 per 100,000 population) with 4,843 deaths (i.e. 28 7 per 100,000 population) as against 3,545 cases and 4,939 deaths in 1940 (i.e. 21·1 and 29·4 per 100,000 population respectively).

This means that the number of cases and deaths was nearly equal in 1941 while in 1940, the number of deaths was more than that of cases reported.

Observation of Pilgrims

1,842 Egyptian pilgrims left for the Hedjaz of whom 21 remained there and one died.

All the returning pilgrims were duly observed and no cases of infectious diseases were detected amongst them.

TABLE No. 10.—CASES AND DEATHS FROM NOTIFIABLE INFECTIOUS DISEASES IN 1941, AS COMPARED WITH THOSE OF 1940

	Year	Plague		Typhus		Typhoid		C.S.F.		Diphtheria		Measles		Pul. T.B.		Pneumonia		Influenza		Malaria		Other Infec. Diseases		Total	
		C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.
Cairo	1940	—	—	364	58	2·094	380	60	28	837	272	1·369	478	2·669	1·081	1·593	1·308	1·856	32	582	7	3·102	541	14·526	4·185
	1941	—	—	165	34	2·534	465	81	42	2·008	690	762	264	2·877	1·201	1·836	1·632	1·357	27	668	16	4·335	641	16·626	5·012
Alexandria	1940	—	—	117	28	1·022	192	17	5	469	131	669	86	1·179	378	393	1·234	3·820	12	759	12	2·198	265	10·643	2·343
	1941	—	—	170	47	1·211	264	24	9	576	198	1·272	350	1·159	395	1·294	1·051	5·241	11	1·911	22	1·873	236	14·731	2·583
Ismailia	1940	—	—	2	—	15	3	6	3	20	8	10	—	11	11	15	13	77	4	1·863	6	56	13	2·075	61
	1941	—	—	—	—	70	63	3	3	21	18	15	4	12	23	24	26	28	1	1·377	14	125	32	1·675	187
Port-Said	1940	1	—	21	—	142	19	9	5	42	25	7	—	60	54	48	30	95	—	71	1	123	20	619	154
	1941	10	5	24	—	104	13	—	—	78	33	19	4	85	42	72	22	126	1	119	3	181	13	824	136
Damietta	1940	—	—	—	—	6	2	1	—	3	1	8	—	126	44	6	8	29	—	—	—	91	6	270	61
	1941	—	—	—	—	5	—	—	—	2	2	48	—	65	30	12	2	34	4	12	1	463	4	641	43
Suez	1940	—	—	2	1	107	22	9	3	68	27	25	7	45	24	96	33	313	7	393	—	228	22	1·286	146
	1941	—	—	4	2	116	22	7	2	29	13	122	77	43	30	165	91	212	1	329	4	262	40	1·289	282
Frontiers Districts	1940	—	—	5	1	15	—	3	2	3	—	35	4	38	13	1	—	65	1	252	—	161	1	578	22
	1941	—	—	91	8	141	15	—	—	2	1	202	22	19	4	2	1	113	7	180	—	111	6	861	64
Behera Province	1940	—	—	516	187	72	26	3	2	81	45	285	86	275	156	43	130	489	13	629	7	488	100	3·181	752
	1941	—	—	1·855	354	171	41	5	3	82	69	294	116	236	161	107	132	546	30	720	8	564	120	4·560	1·054
Dakahlia Province	1940	—	—	699	145	160	34	12	11	123	115	1·172	175	420	176	166	202	534	29	515	1	1·219	163	5·020	1·051
	1941	—	—	1·763	370	70	14	2	4	206	160	1·083	237	373	166	179	216	560	30	178	1	1·276	177	5·690	1·375
Gharbia Province	1940	—	—	924	151	158	46	21	6	212	157	2·351	415	288	198	237	598	565	15	1·335	3	1·998	186	8·119	1·775
	1941	—	—	2·152	366	152	35	12	17	255	203	1·112	245	275	205	221	378	818	22	768	9	1·525	186	7·290	1·666
Menoufia Province	1940	—	—	680	121	115	30	2	5	101	74	1·703	134	145	83	65	128	232	13	238	4	975	136	4·256	728
	1941	—	—	678	102	223	34	6	2	170	109	504	89	138	78	122	92	345	9	147	3	881	136	3·214	654
Kalioubia Province	1940	—	—	10	4	171	11	7	4	74	62	742	127	87	74	49	124	296	12	2·013	5	721	120	4·175	543
	1941	—	—	250	43	123	22	1	3	93	81	242	70	111	94	113	136	481	15	1·256	4	595	117	3·256	585

Sharkia Province	1940	—	—	74	21	85	17	6	1	80	83	387	62	201	106	42	83	72	3	2·596	7	869	113	4·412	465
	1941	—	—	688	135	113	27	—	—	136	94	710	141	175	116	107	68	131	3	565	5	772	107	3·397	696
Assuan Province	1940	—	—	91	17	19	4	1	7	27	15	375	81	10	10	37	53	97	3	17	—	87	22	761	206
	1941	—	—	2	1	9	1	—	—	21	12	347	129	26	21	49	22	22	2	5	—	191	18	672	206
Assiut Province	1940	452	212	74	16	124	32	5	2	80	56	1·307	445	140	89	220	229	318	9	187	5	759	160	3·666	1·255
	1941	4	1	171	35	186	46	1	2	68	56	969	421	134	102	340	225	226	8	72	2	706	189	2·877	1·087
Beni Suef Province	1940	—	—	105	29	74	16	4	1	35	17	121	48	36	9	46	103	138	7	116	3	242	33	917	266
	1941	—	—	911	137	78	11	—	—	30	22	47	9	51	43	72	78	326	9	56	2	221	50	1·792	361
Fayoum Province	1940	—	—	18	2	33	3	15	7	11	10	178	27	114	51	37	52	41	—	1·102	3	127	32	1·676	187
	1941	—	—	5	1	28	8	3	2	17	16	323	69	140	71	104	112	47	1	484	—	207	42	1·358	316
Giza Province	1940	37	45	140	42	126	32	—	—	22	22	1·036	312	44	41	99	133	210	4	36	1	379	80	2·129	692
	1941	—	—	109	14	66	22	—	—	24	21	412	188	43	32	159	89	86	2	21	3	291	78	1·211	449
Giza Province	1940	—	—	228	35	164	35	7	5	90	43	766	418	169	121	189	260	296	3	370	2	532	131	2·811	1·053
	1941	—	—	350	63	210	49	6	3	134	88	433	137	193	128	246	311	279	2	138	1	517	122	2·506	904
Minia Province...	1940	1	1	3	—	75	20	1	2	44	33	1·588	364	133	38	86	121	113	4	235	—	314	76	2·593	659
	1941	—	—	5	1	91	16	2	2	61	34	704	234	91	51	105	111	49	2	89	3	496	74	1·693	528
Qena Province	1940	—	—	38	5	34	10	2	3	11	12	833	312	46	29	77	97	107	9	135	1	396	80	1·679	556
	1941	—	—	35	8	57	11	—	—	24	18	149	64	50	36	85	48	93	1	225	3	575	92	1·296	281
Total	**1940**	**491**	**238**	**4·416**	**863**	**4,841**	**934**	**191**	**96**	**2·433**	**1·178**	**14·967**	**3·581**	**6·236**	**2·786**	**3·545**	**4·939**	**9·763**	**180**	**13·444**	**68**	**15·065**	**2·300**	**75·392**	**17·163**
	1941	**14**	**6**	**9·414**	**1·751**	**5·758**	**1·179**	**159**	**94**	**4·037**	**1·932**	**9·769**	**2·870**	**6·296**	**3·029**	**5·414**	**4·843**	**11·120**	**178**	**9·320**	**104**	**16·167**	**2·483**	**77·468**	**18·469**

Notice ... ...

1940 Two Small-Pox cases (Sinai Governorate).

1941 No cases of Small-Pox notified.

1940 No Cholera cases or Deaths.

1941 " " " "

TABLE No. 11.—INCIDENCE OF INFECTIOUS DISEASES DURING 1939–1941

	1939			1940			1941		
	C.	D.	C.M.R.	C.	D.	C.M.R.	C.	D.	C.M.R.
Plague	169	59	34·9	491	238	48·4	14	6	42·9
Typhus	4,296	788	18·3	4,416	863	19·5	9,414	1,751	18·6
Typhoid and Paratyphoid	4,686	1,121	23·9	4,841	934	19·3	5,758	1,179	20·5
Scarlet Fever	81	5	6·1	105	3	2·8	91	—	—
C.S.F.	243	137	56·3	191	96	50·2	159	94	59·1
Diphtheria	1,962	905	46·6	2,433	1,178	48·4	4,037	1,932	47·8
Measles	10,588	2,795	26·4	14,967	3,581	23·9	9,769	2,870	29·3
Pulmonary T.B.	6,326	2,552	41·9	6,236	2,786	44·6	6,296	3,029	48
Other Forms of T.B.	17	449	—	30	455	—	84	503	—
Chicken-Pox	1,817	22	12	1,351	15	11	1,862	15	·8
Puerperal Septicæmia	462	321	69·3	489	340	62·5	461	344	74·6
Dysentery	2,387	379	15·5	2,205	385	17·4	3,447	509	14·7
Anthrax	16	4	2·5	22	5	22·7	22	5	22·6
Influenza	8,221	179	2·2	9,763	180	1·8	11,120	178	1·6
Encephalitis Lethargica	8	8	100	3	9	—	7	9	—
Whooping Cough	1,462	62	4·2	3,238	172	5·3	2,923	173	5·9
Parotitis (Mumps)	1,962	28	1·4	1,704	27	1·5	1,755	19	1·1
Undulant Fever	38	3	7·8	27	2	7·4	20	—	—
Leprosy	661	61	9·2	545	69	12·6	511	79	15·5
Rabies	33	32	96·9	21	35	—	30	34	—
Tetanus	478	293	61·5	476	310	65·1	433	314	72·5
Anti-Poliomyelitis	4	3	75	16	6	37·5	16	9	56·2
Dengue	3	—	—	3	—	—	—	—	—
Erysipelas	4,450	536	12	4,827	466	9·6	4,502	468	10·3
Malaria	14,527	62	42	13,444	68	·5	9,320	104	1·1
Epidemic Jaundice	1	—	—	—	—	—	3	2	66·6
Small-pox	—	—	—	2	—	—	—	—	—
Relapsing Fever	—	—	—	1	—	—	—	—	—
Pneumonia	—	—	—	3,545	4,939	—	5,414	4,843	69·2
Glanders	—	—	—	—	1	—	—	—	—
TOTAL	64,818	10,902	16·8	75,392	17,163	22·8	77,468	18,469	23·8

TABLE No. 12.—CASES OF TYPHUS IN EGYPT 1941

Governorates and Provinces	First Quarter		Second Quarter		Third Quarter		Fourth Quarter		TOTAL	
	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.
Cairo	62	8	62	20	33	5	11	1	168	34
Alexandria	67	13	97	30	4	2	2	2	170	47
Ismailia	—	—	—	—	—	—	—	—	—	—
Port Said	7	—	9	—	2	—	6	—	24	—
Damietta	—	—	—	—	—	—	—	—	—	—
Suez	—	1	1	1	2	—	1	—	4	2
Southern Desert Province	5	—	8	4	2	—	—	—	15	4
Western Desert Province	29	1	41	2	6	1	—	—	76	4
Sinai Province	—	—	—	—	—	—	—	—	—	—
Behera Province	843	166	859	186	78	15	55	17	1,835	384
Dakahlia Province	423	106	1,018	202	61	18	261	44	1,763	370
Gharbia Province	807	124	969	165	124	21	252	56	2,152	366
Menoufia Province	190	26	395	61	71	12	22	3	678	102
Kaliubia Province	99	13	115	22	35	7	1	1	250	43
Sharkia Province	247	44	353	65	56	19	32	7	688	135
Assuan Province	—	—	2	1	—	—	—	—	2	1
Assiut Province	66	10	70	18	15	3	20	4	171	35
Beni Suef Province	417	43	465	88	22	6	7	—	911	137
Fayoum Province	1	1	4	—	—	—	—	—	5	1
Girga Province	29	1	74	10	5	3	1	—	109	14
Giza Province	165	32	121	19	8	3	56	9	350	63
Minia Province	—	—	2	1	—	—	3	—	5	1
Qena Province	33	5	5	3	—	—	—	—	38	8
TOTAL	3,490	594	4,670	898	524	115	730	144	9,414	1,751

TABLE No. 13.—WEEKLY RATIOS OF TYPHUS CASES PER 100,000 POPULATION FOR 1939, 1940 AND 1941

No. of Week	1939		1940		1941	
	Case	Ratio	Case	Ratio	Case	Ratio
1	2	0·6	31	9·6	46	14·2
2	10	3·1	30	9·3	90	29·6
3	35	11·0	52	16·1	140	43·1
4	25	7·9	69	21·4	146	45·0
5	44	13·8	53	16·4	216	66·5
6	90	28·3	89	27·6	179	55·1
7	98	33·5	113	35·0	185	57·0
8	95	29·9	246	76·2	253	77·9
9	220	69·3	220	68·2	362	80·7
10	169	53·2	249	77·1	374	115·2
11	154	48·5	213	66·0	501	154·4
12	239	75·2	255	77·5	428	131·9
13	229	72·1	216	66·8	605	155·6
14	220	69·3	174	53·9	467	143·9
15	203	63·9	228	70·9	475	146·3
16	246	77·4	268	83·0	453	139·5
17	242	76·2	204	63·2	475	146·3
18	202	63·6	206	83·8	396	122·0
19	209	65·8	163	50·5	447	137·7
20	192	60·4	150	46·5	484	149·1
21	259	81·5	104	32·2	394	121·4
22	192	62·0	115	35·6	358	110·3
23	129	40·6	65	20·1	271	83·5
24	90	28·3	103	31·9	177	54·5
25	62	19·5	90	27·7	138	42·5
26	75	23·6	63	19·5	108	33·3
27	92	28·9	47	14·5	105	32·3
28	94	29·6	48	14·8	72	22·2
29	54	17·0	36	11·1	85	26·2
30	19	6·0	22	6·8	58	17·9
31	34	10·7	24	7·4	28	8·6
32	21	6·6	15	4·6	54	16·6
33	18	5·7	18	5·5	37	11·4
34	13	4·1	19	5·8	29	8·9
35	9	2·8	12	3·7	16	4·9
36	4	1·2	12	3·7	15	4·6
37	6	1·8	9	2·8	7	2·1
38	2	0·6	7	2·2	6	1·8
39	7	2·2	2	0·6	5	1·5
40	1	0·3	9	2·8	2	0·6
41	7	2·2	11	3·4	4	1·2
42	5	1·5	2	0·6	2	0·6
43	3	0·9	3	0·9	9	2·8
44	—	—	5	10·5	14	4·3
45	2	0·6	3	0·9	38	11·7
46	1	0·3	11	3·4	41	12·6
47	1	0·3	5	1·5	77	23·7
48	5	1·5	6	1·8	83	25·6
49	15	4·7	7	2·1	89	26·8
50	20	6·3	1	0·3	99	36·5
51	39	12·3	23	7·1	125	38·8
52	25	7·9	39	12·1	141	43·4

TABLE No. 14.—TYPHUS SPECIMENS TAKEN DURING 1941

	No. of Spec. sent to Labs. for W.F.			No. Positive			No. Negative			No. of Specimens Unfit for exam.		
	Living	Dead	Total	Living	Dead	Total	Living	Dead	Total	Living	Dead	Total
Cairo	6,705	—	6,705	207	—	207	6,477	—	6,477	21	—	21
Alexandria ...	261	—	261	181	—	181	80	—	80	—	—	—
Damietta	194	—	194	18	—	18	167	—	167	9	—	9
Port Said	279	—	279	18	—	18	259	—	259	2	—	2
Ismailia	—	—	—	—	—	—	—	—	—	—	—	—
Suez	694	5	699	8	—	8	678	5	683	8	—	8
... ...	79	—	79	22	—	22	53	—	53	4	—	4
Behera...	1,176	517	1,693	454	45	499	647	353	1,000	75	118	193
Gharbia	3,174	643	3,817	975	35	1,010	2,065	369	2,434	134	239	373
Menoufia	1,063	539	1,602	348	41	389	631	351	982	84	147	231
Dakahlia	1,423	520	1,943	394	34	428	792	386	1,178	237	100	337
Sharkia	254	211	465	210	6	216	41	180	221	3	25	28
Kaliubia	270	23	293	9	—	9	237	21	258	24	2	26
Giza	603	127	730	203	30	233	389	81	470	11	16	27
Fayoum	205	80	285	3	—	3	201	67	268	1	13	14
Beni Suef	608	47	655	274	5	279	294	28	322	40	14	54
Minia	419	12	431	58	3	61	357	2	359	4	7	11
Assiut	726	118	844	127	7	134	542	67	609	57	44	101
Girga	403	98	501	103	14	117	284	67	351	16	17	33
Qena	563	39	602	72	—	72	459	26	485	32	13	45
Assuan	153	24	177	4	—	4	131	13	144	18	11	29
TOTAL ...	**19,252**	**3,002**	**22,254**	**3,688**	**220**	**3,908**	**14,784**	**2,016**	**16,800**	**780**	**766**	**1,546**

TABLE No. 15.—GENERAL VACCINATION AGAINST PLAGUE IN GOVERNORATES AND MUDIRIAS, 1941

	No. of Cases	No. of Deaths	Total No. of Vac.	Cases notified			Contacts under observation	Rats trapped		Remarks
				Before Vac.	After Vac.	Type of cases		Alive	Dead	
Cairo	—	—	—	—	—	—	—	33,218	—	
Alexandria ...	—	—	—	—	—	—	10	3,477	36	
Damietta ...	—	—	25	—	—	—	25	—	—	
Port Said ...	10	5	24,138	10	—	—	5,869	8,346	51	
Ismailia	—	—	12	—	—	—	12	236		
Suez...	—	—	44	—	—	—	44	1,418	—	
Behera	—	—	—	—	—	—	—	—	—	
Gharbia	—	—	—	—	—	—	—	5,529	—	
Menoufia... ...	—	—	—	—	—	—	—	—	—	
Dakahlia ...	—	—	5	—	—	—	5	120	—	
Sharkia	—	—	—	—	—	—	—	—	—	
Kaliubia	—	—	—	—	—	—	—	—	—	
Giza	—	—	6	—	—	—	—	2,954	—	
Fayoum	—	—	—	—	—	—	—	—	—	
Beni Suef ...	—	—	283	—	—	—	270	—	—	
Minia	—	—	45	—	—	—	45	—	—	
Assiut	4	1	30,940	4	—	—	488	25,670	—	
Girga	—	—	305	—	—	—	302	6,319	—	
Qena	—	—	3	—	—	—	3	—	—	
Assuan	—	—	3	—	—	—	—	—	—	
TOTAL ...	**14**	**6**	**55,809**	**14**	—	—	**7,073**	**101,437**	**87**	

TABLE No. 16.—CULTURES AND FILMS SENT TO THE LABORATORIES TO BE EXAMINED FOR PLAGUE IN 1941

	No. of Agar cult.			Positive Agar cult.			No. of Films			Positive Films		
	From Cases	From Deaths	Total	From Cases	From Deaths	Total	From Cases	From Deaths	Total	From Cases	From Deaths	Total
Cairo	16	—	16	—	—	—	16	—	16	—	—	—
Alexandria	4	6	10	—	—	—	4	6	10	—	—	—
Damietta	—	—	—	—	—	—	—	—	—	—	—	—
Port Said	7	9	16	6	2	8	7	6	13	6	2	8
Ismailia	—	—	—	—	—	—	—	—	—	—	—	—
Suez	1	—	1	1	—	1	1	—	1	—	—	—
Frontiers	—	—	—	—	—	—	—	—	—	—	—	—
Behera	—	46	46	—	—	—	—	29	29	—	—	—
Gharbia	1	280	281	—	—	—	—	384	384	—	—	—
Menoufia	—	1	1	—	—	—	—	6	6	—	—	—
Dakahlia	—	6	6	—	—	—	—	4	4	—	—	—
Sharkia	—	184	184	—	—	—	—	146	146	—	—	—
Kaliubia	—	86	86	—	—	—	—	42	42	—	—	—
Giza	—	111	111	—	—	—	—	111	111	—	—	—
Fayoum	—	109	109	—	—	—	—	—	—	—	—	—
Beni Suef	—	32	32	—	—	—	—	16	16	—	—	—
Minia	—	41	41	1	2	3	—	20	20	—	—	—
Assiut	6	209	215	—	—	—	6	209	215	3	—	3
Girga	1	129	130	—	—	—	1	61	62	—	—	—
Qena	—	74	74	—	—	—	—	39	39	—	—	—
Assuan	—	25	25	—	—	—	—	19	19	—	—	—
TOTAL	**36**	**1,348**	**1,384**	**8**	**4**	**12**	**35**	**1,098**	**1,133**	**9**	**2**	**11**

TABLE No. 17.—VACCINATION AGAINST TYPHOID DURING 1941

	Number Vaccinated Twice		
	By Medical Officers	By Private Practitioners	TOTAL
Cairo	60,306	—	60,306
Alexandria	26,471	18,868	45,339
Prisons Department	—	42,617	42,617
Med. Services	—	11,424	11,424
Damietta	4,011	—	4,011
Port Said	1,317	113	1,430
Ismailia	415	57	472
Suez	1,396	393	1,789
Frontiers	5,511	—	5,511
Behera	10,001	15	10,016
Gharbia	7,006	1,031	8,037
Menoufia	6,024	120	6,144
Dakahlia	1,985	284	2,269
Sharkia	1,705	2	1,707
Kaliubia	2,236	105	2,341
Giza	2,424	35	2,459
Fayoum	898	—	898
Beni Suef	1,211	—	1,211
Minia	1,598	3,506	5,104
Assiut	5,252	—	5,252
Girga	8,602	—	8,602
Qena	3,217	18	3,235
Assuan	4,130	218	4,348
TOTAL	**155,716**	**78,806**	**234,522**

TABLE No. 18.—NUMBER VACCINATED BY ANATOXIN AGAINST DIPHTHERIA IN 1941

Governorate or Mudiria	Number Vaccinated Three times	No. of cases of Diphtheria after Inoculation	Complications
Cairo	149,361	190	
Alexandria	39,391	12	
Damietta	7,852	—	
Port Said	15,515	—	
Ismailia	1,281	—	
Suez	7,276	4	
Frontiers	407	—	
Behera	23,248	—	
Gharbia	25,688	—	
Menoufia	31,244	—	
Dakahlia	7,770	—	5 Local 118 General
Sharkia	10,033	—	
Kaliubia	7,935	—	
Giza	10,088	—	
Fayoum	17,665	—	
Beni Suef	12,765	—	6 Local
Minia	5,157	—	
Assiut	17,618	—	
Girga	19,225	—	
Qena	10,304	—	
Assuan	6,894	—	
TOTAL	**426,708**	**205**	

TABLE No. 19.—PROVINCES VACCINATED AGAINST SMALL-POX DURING 1941

Provinces Vaccinated	Population	Beginning of Vaccination	End of Vaccination	Number Vaccinated
Damietta	93,819	March 1941	May 1941	109,222
Sharkia	1,187,200	July 1940	March 1941	326,735
Kaliubia	641,800	March 1941	Sept. 1941	525,863
Fayoum	631,400	July 1940	Jan. 1941	564
Giza	1,217,100	May 1941		729,700
Minia	987,000	Sept. 1941		290,100
				1,982,184

Chapter III.—UNHEALTHY, INCONVENIENT AND DANGEROUS ESTABLISHMENTS

1.—*Applications for New Permits.*

The number of applications submitted for permits for new unhealthy establishments of the first class and dealt with by the Ministry in 1941 was 136, as compared with 132 in 1940.

The number of applications received this year for new permits for General and Cattle Markets was 12, as against 19 in the previous year.

Applications for new permits for establishments of the 1st class in the following Provinces and Governorates are excluded :—

(1) Dakahlia Province.

(2) Gharbia ,,

(3) Behera ,,

(4) Menoufia ,,

(5) Damietta Governorate.

These are being dealt with by the committee instituted in the Labour Department to facilitate the issue of permits.

2.—*Licensed Establishments actually working.*

The following table No. 20 shows the number of unhealthy establishments of the three classes actually licensed in Provinces and Governorates. The total number of these etablishments (excluding establishments in Alexandria) was 74,382 in 1941.

3.—*Ministerial Arrêtés issued for the Improvement of the Sanitary Conditions of Establishments.*

The Ministry of Public Health had adhered to a ruling previously givene by the Contentieux to the effect that new provisions for the improvement of sanitary conditions of establishments need not be issued by ministerial arrêtés except in cases where public health is threatened with serious danger ; otherwise the provisions will only be entered in the permits of the establishments and notified to licencees through administrative channels.

The contentieux, however, gave this year a legal opinion that sanitary conditions not originally included in the permits of establishments should be imposed by Ministerial Arrêtés, which opinion will henceforth be complied with.

4.—*Modifications in the Schedule of Establishments.*

(1) A Ministerial Arrêté issued on July 5, 1941, provided :—

(*a*) The addition of "Establishments for the Manufacture of Gas Masks" to class II, Category A, of the Schedule.

(*b*) The substitution of the title "Gypsum, homra, lime crushing mills" in Class II, Category A, of the Schedule by the following title :—

"Gypsum, homra, lime and glass crushing mills."

(2) A Ministerial Arrêté issued on November 3, 1941, provided the addition of the title "Establishments for scalding lupine." to class II, Category A, of the Schedule.

Table No. 20.—Number of Unhealthy, Inconvenient and Dangerous Establishments during 1941

Governorates and Provinces	Class I	Class II		Class III		Total
		A	B	A	B	
Alexandria	1,388	4,712	836	1,056	1,111	9,103
Cairo	1,924	10,147	—	3,688	—	15,759
Canal	303	1,071	42	220	188	1,824
Suez...	85	470	41	78	92	766
Damietta	223	662	72	62	276	1,295
Gharbia	804	5,721	913	671	514	8,623
Dakahlia	544	3,555	252	372	266	4,989
Behera	350	3,261	179	190	210	4,190
Sharkia	270	5,235	149	221	105	5,980
Kaliubia	107	2,307	152	247	88	2,901
Menoufia...	92	4,544	206	406	145	5,393
Giza	109	2,873	166	371	38	3,557
Beni-Suef	50	1,623	60	160	71	1,964
Fayoum	85	2,535	62	214	77	2,973
Minia	173	3,105	61	353	137	3,829
Assiut	143	3,688	162	429	90	4,512
Girga	66	2,612	110	252	163	3,203
Qena	106	1,207	44	236	92	1,685
Assuan	56	770	7	82	24	939
					Total... ...	83,485

Chapter IV.—FOOD CONTROL

The number of samples taken from all foodstuffs, including milk and its products, all over the country (except Cairo and Alexandria which issue separate reports) amounted to 67,207 as against 69,729 samples taken in 1940.

The decrease in number of samples taken this year is attributed to present conditions which led to a shortage in the supply of foodstuffs, especially those previously imported in large quantities from abroad.

Destruction of Foodstuffs Unfit for Human Consumption.

The following table shows the different quantities of foodstuffs and drinks destroyed during 1941 and the previous two years :—

	1941	1940	1939
Okes	155,734	136,923	109,290
Units	184,014	27,754	106,453
Bottles	7,947	5,906	14,059
Tins	24,766	62,860	90,985

From this table, the following conclusions may be drawn :—

(1) The great increase in the former two items (okes and units) was brought about by the fact that high prices of foodstuffs enticed dealers to refrain from destroying them on becoming unfit for consumption. Hence large quantities of fruits, vegetables, meat, fish, bread, flour and sweets were found deteriorated and were destroyed. The number of units of foodstuffs destroyed this year is seven times that of last year.

(2) On the other hand, the decrease in the number of tins of canned foods destroyed is due to shortage of imports although, in proportion with the quantities remaining in the country, this is considered great.

Proportion of Adulterated and Deteriorated Samples taken for Analysis.

In view of the present circumstances, a strict control of such foodstuffs as are liable to adulteration, e.g. butter, masli, flour, was exercised. As a result, the ratio of adulterated and deteriorated samples was less than in previous years. 3·9 per cent of the samples were found adulterated and 3·2 per cent deteriorated as compared with 5 per cent and 3·5 per cent respectively in 1940.

The highest percentage of adulteration in oils was in olive oil, being 10·4 per cent then followed linseed oil with 7·2 per cent and lettuce oil with 6 per cent.

The rate of adulteration in flour was 7·3 per cent ; in curdled milk 16·4 per cent ; and in cheese, it was 5·2 per cent. The rate of adulteration in vinegar was 13 per cent ; This was 8 per cent in cocoa and 10·1 per cent in spices. The highest rate of deterioration was found in preserved milk and its products, namely 40 per cent. Canned vegetables and fruit come next with 33·3 per cent.

Deterioration in cereals and beans was estimated at 33·3 per cent and in aerated water at 16·5 per cent. (*See* table No. 23 showing number of procès-verbaux drawn up).

Milk Control.

Since milk forms the principal natural diet, its control was given, as usual, special attention. 25,055 milk samples were taken this year as against 26,095 in 1940 and 24,457 in 1939.

6·6 per cent of the specimens taken for analysis were found adulterated as against 7·5 per cent in the previous year.

Regulations Governing Itinerant Vendors and Sale of Milk.

Much attention was paid to the control of itinerant vendors and to the application of the regulations governing the sale of milk where these are in force.

Considering the great improvement in the condition of foodstuffs and milk exposed for sale by itinerant vendors as a result of the application of the two regulations, the necessary steps have been taken to apply the itinerant vendors regulations to six more towns, and the milk regulations to five other towns (*vide* tables Nos. 24 and 25).

Contraventions for violation of provisions of the aforesaid regulations were drawn up as follows:—

12,811 contraventions against itinerant foodstuff vendors for lack of licence or for violating the regulations.

5,318 contraventions against milk vendors for lack of licence or for violating the regulations.

Number of licences issued to itinerant food vendors ...988

" " " " milk vendors 809

Control of Foodstuffs Imported from Abroad.

Tables No. 27 and No. 28 are a statement of the work carried out in this direction. Table No. 27 shows that 13,724 consignments were examined during the year as against 20,797 last year. Of 317 samples taken from these consignments, 52 were found deteriorated and 14 adulterated, a ratio of 16·5 per cent for the former and 4·46 per cent for the latter.

Although the number of imported consignments shows a decrease, the quantities condemned or refused admission into the country owing to unfitness for human consumption exceeded, on the whole, those of previous years. During this year, the quantities condemned or refused release weighed 267,318 kilogrammes as against 245,710 kilogrammes last year. This is due to many causes chiefly lack of shipping facilities, late arrival of consignments taking several months to reach their destination and the importation of goods of inferior quality or badly prepared on account of the general rise in prices of commodities.

It is clear from table No. 28 that no effort was spared in controlling imported good to safeguard the country against deteriorated foodstuffs.

Outbreaks of Food Poisoning.

There were 11 outbreaks of food poisoning this year as against 47 last year. Only two deaths were recorded as against 12 last year.

Table No. 26 gives details of the outbreaks and the foods causing the poisoning. There were two prominent outbreaks, one in the Boys and Girls Orphanages at Assiut as a result of eating cheese. Of 187 orphans partaking of this food, 62 developed symptoms of poisoning. Samples of vomit, stools and blood were taken from the cases and blood analysis gave positive results for 11 orphans (Gartner, B. Aertrycke, Salmonella). Investigation showed that the cheese was prepared in an unlicensed establishment not complying with the sanitary specifications.

The second important outbreak occurred in Farshout, Nag Hamadi District, Qena Province, after partaking of camel meat prepared with onions. 14 persons partook of this food and all developed symptoms of poisoning. Samples of vomit, stools and blood were taken as usual. Nine of the blood specimens were returned positive (B. Aertrycke and Salmonella).

Raising the Standard of Food Control Personnel.

In the Provinces, food control is undertaken by Food Inspectors graduated from the Sanitary Institute. To raise their technical standard, a higher course in Dietetics and Food Control Sciences has been set up for them in the Sanitary Institute. It will be attended in batches. 7 Food Inspectors composed the first batch to attend the course which commenced on March 1, 1941. Thus the proper control of foodstuffs throughout the country and the strict application of sanitary regulations will be ensured.

LEGISLATION

1.—*Food Project Law.*

It was stated in last year's report that the Contentieux, while examining the food project law, received from the Ministry of Commerce and Industry another project law dealing with adulteration and fraud in trade. It was decided to amalgamate the two project laws into one, and this was duly issued on September 16, 1941, under No. 48.

2.—*Decree* re *Colouring Matters permissible in Foodstuffs.*

On the advice of the Contentieux, the regulations governing colouring matters permissible in foodstuffs mentioned in last year's report will be issued by Decree as per Articles 5 and 6 of Law No. 48 issued on September 16, 1941, suppressing fraud and adulteration from trade.

3.—*Project Law Governing Itinerant Vendors.*

The Legislative Advisory Committee of the Ministry of Justice returned the project law governing itinerant vendors duly drawn up in legal form. This was submitted to the House of Deputies on October 15, 1941, according to provisions of Law No. 48 dated September 16, 1941.

4.—*Project Law dealing with Milk and its Products.*

As mentioned in last year's report, the Contentieux returned this project law for the purpose of issuing it by Decree in accordance with Articles 5 and 6 of the Adulteration and Fraud Law. This is being modified so as to include all milk products.

TABLE No. 21.—QUANTITIES OF FOODSTUFFS CONDEMNED AND NUMBER OF SAMPLES TAKEN AND THE RESULTS OF THEIR ANALYSIS DURING 1941

(This list does not include figures for Cairo and Alexandria Governorates and the Food Control Gangs at the Ports.)

Name of Article	Foodstuffs Condemned					Samples Taken					Percentage	
	Number	Bottle	Can	Derham	Oke	No. of Samples	Genuine	Adulterated	Unfit	Not Analysed	Adulteration	Unfitness
(a) *Fresh Foods.*												
Fruits and Vegetables	109,513	—	—	320	84,154	—	—	—	—	—	—	—
Fish	9	—	—	208	10,694	—	—	—	—	—	—	—
Meat	38	—	—	96	5,647	—	—	—	—	—	—	—
Other Fresh Foods	3,211	—	—	160	21,109	—	—	—	—	—	—	—
(b) *Cooked Foods*	19,686	—	—	128	8,554	6	6	—	—	—	—	—
(c) *Canned Foods.*												
Jams	—	72	322	288	19	8	7	—	1	—	—	12.5
Milk and its Products	150	7	619	—	27	5	3	—	2	—	—	40
Fruits and Vegetables	517	88	9,750	128	5,617	51	34	—	17	—	—	33·3
Meat	4	3	633	352	277	5	4	—	1	—	—	20
Fish	195	2	5,044	128	1,201	14	12	—	2	—	—	14·3
Other Canned Foods	10,596	1	465	80	1,981	28	28	—	—	—	—	—
(d) *Oils.*												
Olive Oil	—	2	—	176	485	550	419	57	74	—	10·4	13·5
Sesame Oil	—	—	—	96	47	1,896	1,782	77	35	(Broken) 2	4·1	2
Linseed Oil	—	—	—	96	437	767	651	55	61	—	7·2	8
Lettuce Oil	—	—	—	208	29	101	87	6	8	—	6·0	8
Safflower Oil	—	—	—	—	—	10	8	—	2	—	—	20
Cotton-seed Oil	—	—	—	176	612	548	540	—	8	—	—	1·5
Other Oils	—	—	—	352	79	221	219	2	—	—	—	1

(e) *Different Foods.*

Flour	—	—	—	200	1,658	2,958	2,854	91	13	—	3·1	0·5
Flour Products	18,876	15	4,486	240	3,761	2,872	2,661	210	1	—	7·3	0·04
Sweets and Chocolates	6,324	344	2,341	256	3,518	651	645	1	5	—	0·15	0·75
Sugar	769	—	—	304	389	526	515	10	1	—	2	0·2
Milk	—	—	—	—	—	—	—	—	—	—	—	—
Curdled Milk	90	—	—	—	481	866	713	142	—	11 (open)	16·4	—
Butter	12	—	8	176	48	4,196	3,650	102	444	—	2·5	10·5
Cream	—	—	—	352	13	72	68	3	1	—	4·2	1·4
Cheese	477	—	—	248	282	573	540	30	3	—	5·2	0·52
Masli	—	—	—	320	116	5,646	5,075	204	367	—	3·6	6·5
Margarine	—	—	—	80	193	84	79	—	5	—	—	6
Halawa Tahinia	—	—	92	352	313	1,249	1,230	19	—	—	1·5	—
Tea	—	—	65	32	7	4,037	4,014	23	—	—	0·6	—
Coffee	—	—	434	240	209	6,945	6,764	174	7	—	2·5	0·1
Cocoa	2	155	156	210	1	298	274	23	1	—	8	0·3
Vinegar	127	—	—	32	71	1,425	1,226	183	16	—	13	1·1
Aerated Waters	—	3,544	—	—	—	1,548	1,289	4	255	—	0·3	16·5
Alcoholic Liquors	—	486	—	200	527	891	855	12	24	—	1·3	2·7
Nonalcoholic Drinks	—	2,877	—	32	1,089	170	162	1	7	—	0·6	4·1
Seeds and Corns	—	—	—	—	621	6	3	1	2	—	16·7	33·3
Nuts and Almonds, etc.	—	—	10	320	481	7	7	—	—	—	—	—
Spices	—	120	304	32	84	2,129	1,914	215	—	—	10·1	—
Other kinds	13,418	231	37	144	887	793	758	35	—	—	4·4	—
GRAND TOTAL	**104,014**	**7,947**	**24,766**	**364**	**155,734**	**42,152**	**39,096**	**1,680**	**1,363**	**13**	**3·9%**	**3·2%**

TABLE No. 22.—NUMBER OF MILK SAMPLES TAKEN AND RESULTS OF ANALYSIS DURING 1941

Number of Samples	Genuine	Adulterated by addition of water	Adulterated by removal of fat	Adulterated by addition of water and removal of fat	Samples arrived at Labs. coagulated	Samples arrived at Labs. broken	Total percentage of adulteration	Percentage of adulteration by addition of water	Percentage of adulteration by removal of fat
25,055	23,352	725	898	29	17	34	6·6	3	3·5

TABLE No. 23.—NUMBER OF P.V. OF CONTRAVENTIONS DRAWN UP ACCORDING TO THE PENAL CODE

Number of P.V. drawn up according to Article 266 of Penal Code	Number of P.V. drawn up according to Article 347 of Penal Code	Number of P.V. drawn up according to Article 383 of Penal Code
18	2,957	953

TABLE No. 24

The number of P.V. drawn up against itinerant vendors during 1941 (Arrêté of the Ministry of Interior dated 31–1–1915) was 12,811.

The number of itinerant vendors licensed during 1941 was 988.

During the year, the regulations of the itinerant vendors were applied to the following towns :—

(1) Aga, Dakahlia Province.
(2) Kome-el-Noor, Dakahlia Province.
(3) El Hawamdiah, Giza Province.
(4) Awseem, Giza Province.
(5) El Badrasheen, Giza Province.
(6) Gezeeret Shandawile, Girga Province.

TABLE No. 25

The number of P.V. drawn up against milkmen under Arrêté of the Ministry of Interior dated 18–5–1925 for failure to carry out conditions of licences was 5,318.

The number of milkmen licensed during 1941 was 809.

The towns to which the Milk Regulations were applied during 1941 were :—

(1) El Maraghah, Girga Province.
(2) Gezeeret Shandawile, ,, ,,
(3) El Assirat, ,, ,,
(4) El Minshah, ,, ,,
(5) Bardees, ,, ,,

TABLE No. 26.—FOOD POISONING OUTBREAKS DURING 1941

(Blood specimens taken from patients were returned positive)

Serial No.	Date	Village	District	Kind of Food	Number of those who partook of the food	Number of those who fell ill	Positive	Dead
1	18– 2	Shaterzadah ...	Beni Suef ...	Rabbit...	6	6	1	—
2	18– 2	Baha	Beni Suef ...	Meat	4	4	2	—
3	17– 6	Kafr-el-Manashi.	Beba	(Kishk) curdled milk and meat broth ...	5	5	1	—
4	23– 6	Bani Kasim ...	Beba	Goose rice and soup...	1	1	1	—
5	28– 7	Bandar-el-Gharbia	Girga	Twisted udogh and masli	3	3	1	—
6	12– 8	Edfo-el-Bahariah.	Edfu	Meat broth	3	3	1	—
7	29– 9	Bandar Assiut ...	Assiut	White cheese	187	62	11	—
8	24–10	Port Said	Port Said ...	Meat and boiled macaroni	2	1	1	—
9	22–11	Farshout	Nag Hamadi ...	Cooked camel meat and onions	14	14	9	1
10	28–11	Port Said	Port Said ...	Kushari	5	1	1	—
11	29–11	Kherbetta	Kom Hamadah ...	Cooked mulukhia without meat	3	3	1	1

TABLE No. 27.—WORK ACHIEVED BY THE FOOD CONTROL GANGS AT ALEXANDRIA, PORT SAID, SUEZ AND DAMIETTA PORTS AND CAIRO DURING 1941

Gang	Consignments examined	Samples taken	Results of Analysis		
			Genuine	Deteriorated	Adulterated
Alexandria	6,241	115	87	21	7
Port Said	4,090	42	35	6	1
Suez...	2,257	83	62	16	5
Damietta	30	30	29	—	1
Cairo	1,106	47	38	9	—
TOTAL	**13,724**	**317**	**251**	**52**	**14**

TABLE No. 28.—CONCERNING THE FOOD CONTROL GANGS. AT ALEXANDRIA, PORT SAID, SUEZ AND DAMIETTA PORTS AND CAIRO

Showing foods condemned or refused entry into the country, being unfit for human consumption

Kinds of Food	Kilos	Cans	Units
(a) *Fresh Foods* :—			
Vegetables	53,959	—	—
Fruits	8,521	—	12
Meats	100	—	—
	62,580	—	**12**
(b) *Preserved and Canned Foods* :—			
Jams and Dried Fruits	36,335	—	489
Milk and its Products	—	1,741	27
Meats	658	543	1,166
Fish	2	57	—
Vegetables and Sauces	2	145	—
	36,997	**2,486**	**1,682**
(c) *Oils* :—			
Olive Oil	22,176	—	23
Linseed Oil	9,816	—	—
	31,992	—	**23**
(d) *Other Foods* :—			
Flour	2,443	—	—
Flour Products	35	106	—
Sweets and Chocolate	392	12	—
Sugar	2,817	—	—
Red Dutch Cheese	1,297	3	—
White Cheese	670	—	—
Butter	36	6	57
Masli Baladi	247	—	—
Fat and Margarine	15,336	50	50
Tea	5,136	35	33
Coffee	14,095	—	—
Wine	135	—	—
Seeds and Corns	55,641	—	—
Almonds and Nuts, etc.	130	—	—
Spices	21,801	—	—
Glucose	14,868	—	—
Alcoholic Drinks	—	751	—
Other Foods	670	—	—
TOTAL	**135,749**	**913**	**248**
GRAND TOTAL	**267,318**	**3,399**	**1,965**

Chapter V.—HEALTH INSPECTORATES

General.

The Health Inspectorates Section cooperated in the efforts of the other sections of the Ministry tending to promote the standard of health throughout the country. Divisional inspectors toured the various units (Health Inspectorates and Offices in Governorates and Provinces) to give the officials and employees the appropriate advice and direction and to investigate the complaints which had been received by the Ministry. As a result, the work is now running smoothly.

All village hospitals throughout the country have been converted into combined Health Units.

Medico-Legal Work.

During 1941, 33,455 accidental cases and 82,442 criminal cases were examined by the Medical officers of the Ministry throughout the country (the Frontiers Districts excluded) as compared with 34,069 accidental and 83,542 criminal cases in the previous year.

The following table No. 29 gives details of these cases.

TABLE No. 29.—MEDICO-LEGAL CASES IN PROVINCES AND GOVERNORATES DURING 1941

Governorates and Provinces	Slight Cases		Serious Cases		Fatal Cases		Total	
	Accid.	Crim.	Accid.	Crim.	Accid.	Crim.	Accid.	Crim.
Gharbia	2,151	6,792	465	748	473	216	3,089	7,756
Dakahlia	1,439	6,485	418	590	494	400	2,351	7,475
Sharkia	1,298	2,924	143	101	216	82	1,657	3,107
Behera	1,005	2,688	127	254	248	77	1,380	3,019
Menoufia	667	3,007	203	528	233	134	1,103	3,669
Kaliubia	959	1,461	174	132	219	84	1,352	1,677
Giza	473	1,900	69	99	130	42	672	2,041
Fayum	550	1,505	220	282	73	76	843	1,863
Beni Suef	487	2,566	259	220	166	31	903	2,817
Minia	808	3,149	224	392	220	209	1,252	3,750
Assiut	1,697	4,018	141	300	230	158	2,068	4,476
Girga	1,228	3,791	327	769	374	225	1,929	4,785
Qena	510	2,524	78	148	241	69	829	2,741
Assuan	204	820	52	97	72	22	328	942
Canal	1,696	1,738	279	95	88	60	2,063	1,893
Suez	1,045	821	17	8	81	44	1,143	873
Damietta	175	862	5	—	35	—	215	862
Alexandria	2,129	514	6,744	304	—	—	8,873	818
Cairo	1,337	27,643	57	135	2	—	1,396	27,778
TOTAL	**19,858**	**75,208**	**10,002**	**5,302**	**3,595**	**1,932**	**33,455**	**82,442**

Chapter VI.—HEALTH PROPAGANDA

Until January 23, 1941, the Propaganda Section was responsible for the health propaganda and village sanitation. Since that date, the Section has been concerned with health propaganda only.

Every effort was made to widen the scope of health propaganda amongst the masses by improvising new methods based on latest scientific developments.

The following is a statement of this year's activities :—

A.—Health propaganda was, in the past, limited to the rural population. It has, however, been found that town dwellers, including the upper classes, were in as much need of health education as the villagers. A systematic health propaganda programme was, therefore, planned to cover the whole population, taking into consideration the different methods of propaganda suitable for the different classes of the population according to their standard of education and general knowledge ; and also the fact that certain diseases are prevalent among certain classes and in certain localities.

(1) During the summer months, propaganda meetings were held daily after sunset in 12 public gardens in Cairo and suburbs. Great multitudes of the middle and poor classes availed themselves of the fresh air and the instructions given to them on health matters.

(2) Special meetings were arranged for students of religious institutions and schools.

(3) A large number of workmen and artisans of many syndicates attended cinematographic shows for health propaganda held in public halls kindly offered gratuitously by some local organisations and corporations.

(4) Periodical assemblies were organised in Cairo orphanages where suitable subjects were shown and illustrated by modern means of propaganda.

(5) Owing to the difficulty of importing new films and the very high cost of making films locally, this Ministry suggested the presentation of hygienic performances dealing with the different health problems to be attended by the middle and upper classes. The result was highly encouraging and very successful. On three occasions, the presentations were broadcasted.

(6) During fairs, feasts and public festivals where great crowds assemble, health propaganda films were shown and health lectures delivered in Cairo and the chief towns of provinces.

(7) Through the assistance of the chief administrative officials and senior inspectors of health in the provinces, monthly assemblies were organised in the chief towns. Arrangements were made to enable all clases of either sex to attend these meetings.

(8) Through the aid of the commanding officers of the army and police in Cairo, daily meetings were held where lectures illustrated by films were delivered to the great majority of these forces in the hope that, after their discharge from service, they will convey these hygienic instructions to their families and acquaintances.

(9) In conjunction with the Ministry of Education authorities, a committee was formed to plan a modern comprehensive programme of hygienic instruction for university students of both sexes, as well as for pupils of the primary and secondary schools. It is intended that the subjects should suit the general standard of the pupils, great stress being laid on practical facts.

(10) As regards broadcasts from the Egyptian State Broadcasting Station, particular attention is given to the following three points :—

(*a*) The subjects should be simple and intelligible, avoiding such complicated scientific details which might bore the listeners.

(*b*) The subjects should suit the season and deal with important matters or problems occupying the interest of the public at the time. This would be most effective.

(*c*) Inclusion of some psychological problems closely connected with public health.

B.—It was deemed advisable to annex a workshop to the Section for the repair of electrical and mechanical apparatus. The object is twofold : to preserve public money and to avoid any possible interruption of propaganda work. The project is now approved and will be executed during the year. An engineer will be appointed for supervision against a grade VI post which was assigned for a doctor.

C.—New activities and reforms were effected in the units as follows :—

(1) The maximum stay of a unit in any locality was 15 days. This period was considered too short for any useful work to be performed in the locality, whether in the form of treatment or propaganda. Besides, constant shifting overtaxed the officials. Hence it was decided that units would stay no less than 3 months in any one locality.

(2) Arrangement was concluded between this Ministry and the Ministry of Education whereby the units would start a periodical course of sanitary lectures among pupils of the compulsory education schools, each school receiving a lecture once a week.

(3) Some of the units in Cairo and the Provinces were charged with the sanitary supervision of refugees, including prophylactic vaccination against infectious diseases.

Hereunder is a statement of the activities of the units :—

TABLE No. 30

	No.	Attendance
1. Lectures broadcasted	24	—
2. ,, delivered by District M.Os.	13,074	—
3. Assemblies in bandars and chief towns of provinces	15	—
4. ,, in public gardens	133	1,000,000
5. ,, during fairs	20	40,000
6. ,, ,, feasts and societies' festivals	37	4,200
7. ,, in Azhar, schools, and orphanages	39	27,000
8. ,, for the army	42	25,000
9. ,, for the territorial army	14	12,000
10. ,, for the police forces	38	8,000
11. ,, for labourers	11	5,000
12. Pamphlets and circulars distributed	11,000	—
13. Illustrative posters distributed	350	—
14. Stage plays presented	3	—
Units' Activities		
1. Localities visited	486	—
2. Houses visited	29,588	—
3. Patients treated	125,112	—
4. Individuals vaccinated against typhoid	41,452	—
5. ,, ,, ,, diphtheria	13,582	—
6. Sanitary nuisances reported against which measures were taken	15,647	—
7. Schools visited and reported on	121	—
8. Ablutionary systems of mosques inspected	232	—
9. Birkas inspected and reported on	157	—
10. Cinematographic performances	2,103	—
11. Sanitary lectures delivered	3,052	—
12. Attendance at propaganda meetings	1,703,375	—
13. Attendance at lectures	1,701,451	—
14. Health societies constituted in provinces	34	—

Part II

Chapter VII.—QUARANTINE

1.—INTRODUCTORY

During the year, the scope of the Administration was extended so as to include, as from January 1941, the Hospitals of El Arish, Kosseir, Tor Health Office, the Passenger Control Offices at Alexandria, Port-Said and Suez Ports. El Sollum Hospital and the Passenger Control Offices of Kantara and Shellal were annexed to the Quarantine Administration as from June 19, 1941.

2.—HEALTH SITUATION IN THE PORTS

The table No. 31 hereunder shows the number of cases of infectious diseases notified in the ports during the year.

TABLE No. 31.

	ALEXANDRIA			PORT-SAID			SUEZ		TOR	KOSSEIR
	C.	D.	Imp.	C.	D.	Imp.	C.	Imp.	C.	C.
Diseases for which the International Sanitary Conventions provide the application of special measures										
Plague	—	—	—	10	5	—	—	—	—	—
Typhus	169	50	64	23	—	—	4	2	1	—
Small-pox	—	—	—	—	—	—	—	—	—	—
Dengue	—	—	—	—	—	—	—	—	—	—
Other Diseases										
Cerebro-spinal	24	9	3	—	—	—	6	—	—	—
Typhoid and Paratyphoid	1,244	281	142	70	—	1	119	4	—	1
Dysentery	449	71	6	10	—	—	165	—	11	52
Malaria	1,986	24	415	11	—	—	341	25	—	—
Tuberculosis	1,223	471	36	76	—	1	51	—	1	—
Tetanus	47	22	6	—	—	—	4	—	—	—
Scarlet Fever	28	—	—	3	—	—	—	—	—	—
Diphtheria	577	204	26	17	—	—	29	—	—	—
Measles	1,273	352	12	10	—	—	125	—	—	—
Influenza	5,282	13	368	5	—	—	225	—	—	8
Leprosy	21	2	7	2	—	—	1	—	—	—
Rabies	1	1	—	—	—	—	—	—	—	—
Mumps	97	—	3	47	—	—	14	—	—	—
Undulant Fever	3	—	—	—	—	—	—	—	—	—
Whooping Cough	315	7	10	4	—	—	16	—	—	—
Erysipelas	415	32	18	1	—	—	57	—	—	—
Chickenpox	397	—	7	8	—	1	22	—	—	—
Puerperal Fever	31	9	8	1	—	—	7	—	—	—
Acute Poliencephalitis	9	2	—	—	—	1	—	—	—	—
Broncho-pneum. and bronchitis	1,300	920	28	37	—	1	185	—	—	—
Encephalitis Lethargica	1	1	—	—	—	—	—	—	—	—
Fever (susp.)	—	—	—	10	—	6	—	—	—	—

On June 24, following the occurrence of a first case of plague, Port Said was considered as infected with plague. The last case occurred on August 23. In all, 10 cases and 5 deaths were reported. The Port was declared free from infection on November 17, 1941.

3.—INSPECTION OF VESSELS, PASSENGERS, DISEASES LANDED FROM 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.

Special attention was paid to arrivals from places against which Quarantine restrictions are in force. The following places were in this category:—

Locality	Disease
Hongkong, for passengers arriving by air	Cholera, small-pox.
India do	,, plague.
Macao do	,, small-pox.
Siam, Prov. Khoan Kaon, for passengers arriving by air	,,
Shanghai, for passengers arriving by air	,,
Algeria, Morocco, Tunis, Rumania	Typhus.
Agri Province, (Turkey)	Small-pox.
Amarah Province, Kirkuk Province, Diyalah Province, Sulaimaniyah Province (Iraq)	,,
Bangkok	,,
India	,,
Mecca (Hedjaz)	,,

The following is a list of countries considered as infected with yellow fever:—

Anglo-Egyptian Sudan.

Belgian Congo.

Cameroons under British Mandate.

French Equatorial Africa:

- Gabon.
- Moyen Congo.
- Ubanghi Chari.
- Tchad.

French West Africa:

- Dahomey, Guinea, Ivory Coast, Mauretania, Niger, Senegal, Sudan, Togoland (under French Mandate), Upper Volta.
- Gambia.
- Gold Coast.
- Portuguese Guinea.
- Nigeria.
- Sierra Leone.
- Togoland (under British Mandate).

In the course of the year, the following restrictions were enforced:

May	26	Spanish Guinea, on account of Yellow fever; Uganda, on account of Yellow fever.
August	12	Haifa (Palestine), on account of Plague, for arrivals by air routes.
,,	13	Afghanistan, for Cholera, by air route.
December	12	Mombassa and Nairobi (Kenya), for Plague, by air route.

Passengers arriving from yellow fever infected countries were required to produce a certificate of inoculation dated not less than 10 days and not more than 2 years on their arrival from an infected locality. Non-inoculated passengers were kept in isolation on arrival so as to complete six days from the date of their departure from the infected area.

The following restrictions were withdrawn:

December 21	Shanghai, for Cholera and Small-pox.
	Siam, for Cholera and Small-pox.
	Algeria, Morocco, Tunis, for Typhus.

Vessels coming from any of the infected localities are subjected to detailed medical inspection ; this is followed up by surveillance of passengers at their place of destination in Egypt for periods varying according to the incubation period of the diseases.

The following table No. 32 gives the details of the vessels dealt with in 1941.

TABLE No. 32

Port	Postal	Cargo	Tanker	Warship	Sailing	Var.	Total
Simple Medical Inspection							
Alexandria	70	750	157	67	257	7	*1,308
Port-Said	199	1,437	168	108	1,813	—	3,725
Suez	81	426	210	4	161	189	1,071
El-Tor	29	—	—	—	149	31	209
Kosseir	—	17	1	—	105	—	123
Damietta	—	—	—	—	114	—	114
Rosetta	—	—	—	—	74	—	74
Hurghada	1	68	41	—	49	1	160
Safagha	—	20	—	—	23	—	43
Kantara	—	—	—	—	237	—	237
Abukir	—	—	—	—	31	—	31
Shellal	192	72	—	—	—	—	264
Aswan Dam	—	152	—	—	18	—	170
Detailed Medical Inspection							
Alexandria	—	—	—	—	—	—	273
Port-Said	41	293	14	—	167	—	515
Suez	90	694	162	1	84	206	1,237
El-Tor	4	—	—	—	—	—	4
Damietta	—	—	—	—	7	—	7
Kantara	—	—	—	—	27	—	27

* 1,308 include number of vessels submitted to simple medical inspection amounting to 1,035 and detailed medical inspection amounting to 273.

Ships transiting the Suez Canal may, under certain conditions specified in the Quarantine regulations, be exempted from the Quarantine inspection after they have already been visited at Port-Said or Suez.

The vessels thus exempted were :

Suez ... ...199 vessels coming from Port-Said.

Port-Said ...164 vessels coming from Suez.

The Quarantine Office of Suez had to deal with 2 cases of quarantinable diseases, viz. small-pox, which were landed from vessels and isolated in the quarantine lazaret, namely :

March 13, one case (member of the crew) landed from S.S. "Sternland" coming from Bombay.

March 23, one case landed from S.S. Windsor Castle.

both cases were isolated at Moses Wells and left the lazaret in April completely cured.

The following table No. 33 shows the cases of other diseases landed from vessels for treatment :—

TABLE No. 33

	Alexandria	Port Said	Suez	Remarks
Infectious Cases :				
Dengue	—	—	6	
Mumps	1	—	50	plus few cases on 9 other vessels
Dysentery	22	—	75	
Measles	2	—	6	plus several cases on 10 other vessels
Chicken-pox	2	4	28	
Typhoid and Paratyphoid	—	2	9	
Jaundice	2	—	—	
Intestinal Fever	—	2	—	
Malaria	3	2	49	plus several cases on 9 other vessels
Pneumonia	3	5	10	plus several cases on 9 other vessels
Tuberculosis	1	14	12	
Bronchitis	—	7	—	
Influenza	1	4	44	plus few cases on 2 ships
Suspected Fever	17	15	—	
Diphtheria	—	—	2	
German Measles	—	—	8	
Scarlet Fever	—	—	1	plus several cases on a vessel
Cerebro-spinal Fever	—	—	4	plus several cases on 2 ships
Leprosy	—	—	1	
Surgical Cases	54	273	—	
Common Diseases	126			
Venereal diseases	24			
Skin Diseases	16			
Mental Diseases	5			
Ophthalmic Diseases	3			

TABLE No. 34.—CONTROL OF PASSENGERS

	Class I and II	Class III and IV	TOTAL
Landing :			
Alexandria	1,068	1,069	2,137
Port-Said	927	2,769	3,741
Suez	1,591	7,113	8,704
Kosseir	—	—	—
Hurghada	—	—	—
Safagha	—	—	754
Damietta	—	—	—
Embarking :			
Alexandria	43	62	105
Port-Said	280	246	526
Suez	3,041	4,920	7,961
Kosseir, Hurghada, Damietta	—	—	—
Transit :			
Alexandria	4	5	9

At Kantara, where the control is made of the passenger crossing the Egypt-Palestine frontier by rail, the total numbered 25,987 (including 22,467 passengers and 3,520 pilgrims), divided as follows :—

Passengers entering Egypt :	residents		12,677
,, ,, ,,	transit		3,377
Passengers leaving Egypt :	destination	Palestine	8,951
	transit		982

4.—CONTROL OF AERIAL NAVIGATION

As a result of the extension of the war to the Mediterranean, the terminal aerodromes and airports of the international air traffic were transferred from Alexandria to Cairo (Rod el Farag and Almaza aerodromes). Port-Said and Luxor aerodromes were also used as landing places.

At Luxor, the aeroplanes alight for the purpose of refuelling ; in the case of those arriving from the South, special precautions were taken to avoid any contact.

Towards the end of the year an organization was set up for the disinsectisation by means of " Pyrocide 20 " of all aircraft coming from the South.

The following table gives details of the aircraft dealt with during the year :—

TABLE NO. 35.—AIRFACT DEALT WITH DURING 1941

CAIRO :	
Rod el Farag	341 seaplanes
Almaza Aerodrome	637 airplanes.
PORT-SAID :	345 airplanes.

The passengers landed and embarked were as follows :

CAIRO :	Landing	Embarking
Almaza	2,956	3,073
Rod el Farag	3,850	—

As a routine practice, all aircraft coming from the South are disinsectised by means of " Pyrocide 20" at their first landing place (Almaza or Rod el Farag) and the insects found are forwarded to Fouad I Research Institute for identification. During the year 177 aircraft were disinsectised at Almaza. Of 67 insects found 66 were identified as insects (flies, etc.) and 1 as mosquito of the Culex Perengueus type.

Apart from the disinsectisation of aircraft, a permanent control of mosquito breeding places is carried out in a radius of three kilometres around the aerodromes at Alexandria (aerodrome and seaplane base), Rod el Farag, Almaza, Luxor (aerodrome and seaplane base). The larvae and adult mosquitoes found are forwarded to the Fouad I Research Institute for identification.

TABLE No. 36.—IDENTIFICATION OF INSECTS

	Alexandria	Almaza
I.—Number of specimens of larvae sent for identification	**535**	**105**
These include :		
Aedes Aegypti	452	1
Culex Laurenti	—	14
Culex pipiens...	52	55
Culex perengueus	—	19
Anophele	8	1
Anophele pharoensis	—	6
Theoboldia	6	7
Aedes Caspius	4	2
Non-identified	13	—
II.—Number of adult mosquitoes sent for identification	**86**	**295**
These include :		
Aedes Aegypti	49	4
Culex pipiens...	21	276
Culex pusillus	—	3
Aedes Caspius	1	2
Theobaldia	3	—
Anophele...	3	—
Culex Perengueus	3	10
Non-identified	6	—

5.—CONTROL OF PILGRIMAGE

A.—*Outward Movement.*

The pilgrim season of year 1359 of the Hegira (1940–1941 A.D.) was declared open on December 11, 1940.

On that date the usual measures were enforced for the control of the pilgrims arriving in Egypt and vessels transiting the Canal en route for the Hedjaz.

These measures remained in force until the departure of the last pilgrim ships from Suez, on January 2, 1941.

The measures include the vaccination of all pilgrims proceeding to the Hedjaz. Egyptian pilgrims are vaccinated before their departure against cholera, small-pox and typhoid fever. Foreigners arriving in Egypt non vaccinated have their vaccinations completed before being allowed to proceed further on their journey.

In 1941, all foreigners who transited Egypt en route for the Hedjaz entered Egypt via Kantara. Their number was very small : 391, mostly Palestinians (351) as compared with the previous year's (1 091). Three pilgrims (Indians) were found at Kantara not vaccinated against cholera and small-pox and the necessary action was taken.

The transport of Egyptian pilgrims was assured by the Misr Shipping Company which, in view of the extremely reduced number of pilgrims, allocated the S.S. "Kawsar" only for this transport.

The number of pilgrims who embarked at Suez were :

Egyptians	1,897
Foreigners	427
TOTAL	2,324

B.—*Homeward Movement.*

Yom Arafat coincided with January 7, 1941.

The first pilgrim ship arrived at El-Tor on January 26, and the second and last one left Tor on February 7. Thus the pilgrim season lasted 14 days only.

No vessel carrying foreign pilgrims transited the Canal in quarantine under Article 142 of the Convention.

The pilgrims landed at Tor numbered : 2,469 as compared with 10,990 for the preceding pilgrim season. These include :

Egyptians 2,047 and 422 foreigners of whom 385 were Palestinians.

All these pilgrims passed the statutory period in the lazaret.

20 patients were admitted to the hospitals : 8 were medical and 12 surgical cases. No deaths in the camp were reported.

No case of quarantinable disease was isolated.

In the laboratory of Tor 1,622 samples of stools were examined, including 170 specimens taken from members of ships' crews. The bacteriological examination revealed the presence of 8 vibrios; of these 7 were haemolytic and 1 non-haemolytic. 1 was agglutinating and 7 non-agglutinating.

Tor camp was closed on February 10, but the pilgrim season was not declared closed until February 25. During the period from February 10 to February 25, Moses Wells lazaret was kept available for the use of late pilgrims, but none arrived.

6.—ANT–PLAGUE WORK

The trapping and laboratory examination of rats captured has been a routine procedure in the ports of Alexandria, Port-Said and Suez for some years. In addition, a Commission exists in each of the three ports the duty of which consists of the control of the measures taken to render gradually rat proof all houses, shops, yards, stores, existing in the port area.

Table No. 37 gives numbers of rats caught, destroyed and examined in the ports.

Table No. 37

		Alexandria	Port-Said	Suez
Number and species of rats caught :				
R.N.	Town	1,726	4,225	756
	Port area	72	113	490
R.R.	Town	553	51	—
	Port area	577	84	138
A. Cahirinus	Town	75	—	—
	Port area	3	—	8
Rats killed or found dead		—	54 killed	21 found dead
Plague infected rats		—	—	—
Mice caught	Town	1,152	215	—
	Port area	38	141	—
Mice killed or found dead		—	45	—

TABLE No. 38.—FLEAS FOUND ON RATS CAUGHT

SPECIES	TOWN		PORT		TOTAL
	L.M.	X.Ch.	L.M.	X.Ch.	
ALEXANDRIA					
R. Norvegicus	2,263	6,750	102	961	10,076
R. Rattus	982	1,888	1,065	2,773	6,708
A. Cahirinus	1	10	1	58	70
					16,854
SUEZ					
R. Norvegicus	—	86	—	60	146
R. Rattus	—	—	—	7	7
A. Cahirinus	—	—	—	—	—
					153
PORT-SAID					
R. Norvegicus	1,545	11,219	111	1,065	**13,900**
R. Rattus					
A. Cahirinus					

No fleas were found after June.

As a result of war time conditions and the scarcity of materials used for fumigation, the Quarantine Administration concluded an agreement with the Imperial Chemical Industries (Egypt) S.A. whereby the said Company was authorised to fumigate vessels in Egyptian ports by means of Hydrocyanic gas, if same is required by the owners of the vessel.

The vessels fumigated by the Company receive an Exemption of Deratisation Certificate after the Quarantine Authority has satisfied itself of the result of the operation.

TABLE No. 39

PORT	Vessels deratised			Process of deratisation
	Steamers	Sailing and small craft	Total	
Alexandria	15 *	—	15	Clayton S02.
Port-Said	24 †	4	28	Clayton for steamers, Dutch Ovens for others.
Suez	8 ‡	15	23	Clayton.
Damietta, Rosetta and Kosseir	—	—	—	—

* Plus one partial deratisation.

† Plus 19 partial deratisation by means of small Clayton and Dutch ovens.

‡ Plus 1 partial deratisation.

TABLE No. 40.—CERTIFICATES OF EXEMPTION

PORT	Steamers	Sailing vessels and small craft	TOTAL
Alexandria	96	6	102
Port-Said	72	221	293
Suez	86	94	180
Kosseir	—	28	28
Damietta	—	42	42

RATS CAUGHT ON VESSELS

Alexandria. —No. of rats caught alive : 2 R. Norvegicus and 96 R. Rattus.
Rats found dead after fumigation : 277 R. Rattus.
The above rats were caught on 60 vessels.

Suez. —Rats found dead after fumigation : 3 R. Norvegicus and 116 R Rattus, 12 mice.
The above rats were found on 7 vessels.

Port-Said —Rats found dead after fumigation : 1 Norvegicus and 301 R. Rattus

7.—DISINFECTION

TABLE No. 41

	Alexandria	Port-Said	Suez	Tor
Disinfection by Chemical Means:				
Steamers disinfected	63	7	7	2
Barges and boats	2	569	2	—
Railway trucks	—	—	—	—
Cabins occupied by sick	—	11	—	—
Disinfection by Steam Pressure:				
Number of stovefulls	—	24	—	—
Effects: steamers	—	84	5	365 parcels
Effects: from pilgrims and crews	—	17	—	785
Effects: from Customs and Police	40 parcels	5	2	—
Effects: from Quarantine Adm.	—	—	—	172
Zamzam water	—	—	1	4

Control of water distribution to vessels in the ports :

	Alexandria	Port-Said	Suez
Routine laboratory examination of water supplies to vessels was maintained throughout the year :			
No. of specimens taken from taps	442	—	—
No. of specimens taken from water boats	151	329	279
Result of bacteriological examination :			
Fit for use :			
taps	410	—	—
water boats	129	279	239
Unfit for use :			
taps	32	—	4
water boats	22	50	40
No. of cisterns and water boats disinfected	53	24	32
Water purified	—	—	28

8.—CONTROL OF SKINS AND ANIMAL PRODUCTS AND DEBRIS

TABLE No. 42

	Alexandria		Port-Said		Suez		Tor	Kantara
	Imp.	Exp.	Imp.	Exp.	Imp.	Exp.	Exp.	Exp.
Skin & Hides :								
Big animals ... Kilos	137,075	780,220	64,501	64,015	42,835	55,866	205	22,000
Small animals ... Pieces	60	17,724	—	67,625	4,317	32,789	553	7,350
					transit	41 lots		
Wool : ... ... Kilos	74,791	1005,373	253,358	66,213	—	—	—	4,788
Hair ... ... ,,	968	—	3,078	—	—	124	—	—
Bones & Hoofs... ,,	—	35,000	—	—	—	—	—	262,888
Calcinated hair... ,,	—	15,250	—	—	—	—	—	179,876
Salted guts... ... ,,	2,728	16,335	—	12,083	—	—	—	11,954imp
Control of Rags, used clothes, etc. :—								
Rags : ... ... Kilos	6,305	518,326	1,083	12,773	—	—	—	393
Used clothes ... ,,	205	—	—	—	—	—	—	—
Old sacks (jute) ,,	—	—	—	29,252.5	—	—	—	—

9.—REGIONAL BUREAU

Owing to war-time conditions, it was decided, towards the end of December 1940, to suspend the working of the Bureau of Epidemiological Information for the Near East as a dependency of the Office International d'Hygiene Publique and to replace it by a special war time service.

The Quarantine Administration established—in March 1941—this service of exchange of epidemiological information to which the following countries formerly participating in the Regional Bureau adhered :

Egypt — Cyprus — Iraq — Malta — Palestine — Anglo-Egyptian Sudan — Transjordan.

After that date, the Quarantine Administration received from H.B. Majesty's Embassy, through the Egyptian Ministry of Foreign Affairs, successive proposals for the extension of that service to include other countries allied to Great Britain, as well as the Singapore Bureau of the League of Nations, through the Director of Medical services, Singapore. The additional countries which have adhered are :

Gibraltar — Aden — Uganda — Kenya — Tanganyika — Zanzibar — former Italian Colonies in East Africa-British Somaliland — Nigeria — Gold Coast —Gambia—Sierra Leone — Syria and Lebanon — French Equatorial Africa.

The service of exchange of information is working on the following lines : The information collected is inserted in a Weekly confidential bulletin which is sent either by air mail or ordinary post to the countries participating in the war time organization. Important information is wired to the countries interested.

Part III.—SOCIAL HYGIENE

Chapter VIII.—MATERNITY AND CHILD WELFARE

This year was honoured by the Royal visit of Her Majesty the Queen to the Child Welfare Centre at Old Cairo, and Her Majesty's appreciation of the work. The Royal visit was a great stimulant for the staff to spare no effort in attaining perfection.

During the year, every Child Welfare Centre was provided and equipped with a two-bed room for internal confinements of poor mothers the state of whose homes cannot ensure safe confinements. During puerperum, mothers receive good meals as well as clothes and material for themselves and their new born. This arrangement was made possible through funds from the sale of post stamps commemorating the anniversary of H.R.H. Princess Ferial's birthday.

Signs of malnutrition were observed on some attendants of Child Welfare Centres. It was decided to provide 25 of the poorer pregnant mothers with meals composed of meat, vegetables, rice, bread and fruit three times a week.

Last year, a new Child Welfare Centre was inaugurated under the Royal Patronage at Heliopolis. This is known as Princess Ferial's Dispensary. His Majesty's representative attended the event of its inauguration.

Another Children Centre was opened at No. 18, Sharia Spiro, Zeitoun (a suburb of Cairo), for the benefit of its inhabitants and those in the vicinity. A further Children Centre was set up in Helwan (another suburb of Cairo) in premises No. 17, Sharia Nubar Pasha, which was ceded to the Ministry by H.E. Mahmoud Khater Bey.

In order that the Mobile Welfare Centres may attain their designed objectives, the Ministry of Finance provided more credits to permit the appointment of a medical officer and a chemist to each of these units. Provincial Councils have been asked to do the same in respect of units under their control.

Measures for raising the standard of Dayas (*midwives*) : Permits of all dayas who may be found medically unfit on attaining the age of 60 will be cancelled. Steps are being taken to reexamine the medical standard of all dayas who will have passed four years since they were first licensed. The Dayas Permit Form has, however, been modified to the effect that it is valid for four years only.

M.Os. of the Children Welfare Centres are being delegated to the Faculty of Medicine to attend special courses on pediatrics with a view to raising. their technical standard. Four M.Os. have been delegated during the previous year.

TABLE No. 43.—DETAILS OF THE WORK CARRIED OUT BY THE CHILD WELFARE CENTRES IN EGYPT DURING 1941 AS COMPARED WITH 1940

	1941	1940
Old Pregnants	412,382	368,369
New Pregnants	103,988	100,286
Blood specimens taken for Wasserman Reaction	81,308	87,025
Positive for Wasserman Reaction	8,546	7,341
Children attending Centres	1,529,836	1,436,368
Circumcisions performed in Centres	4,436	4,372
Children vaccinated against Small-Pox	25,591	24,754
Children immunized against Diphtheria	28,498	20,848
Confinements undertaken by midwives	24,559	24,003
,, ,, ,, assistant midwives	56,370	54,096
,, ,, ,, medical officers	5,080	5,070
,, from outside (not registered)	18,762	17,164
Deliveries before arrival of C.W. staff	16,366	15,673
Total confinements	121,137	116,006
Expectant mothers removed to hospitals	3,235	3,144
Full term still births	781	743
Still births within first 3 months of pregnancy	244	242
,, ,, after 6 months	629	625
Maternal mortality due to child birth	36	29
Infantile mortality within first month of life	758	785
Medical officer visits to sick puerperals	3,163	3,127
Midwife visits to pregnants during 9th month	45,127	43,171
,, ,, puerperal mothers	471,809	451,568
Other visits	49,805	48,818
Visits to homes of pregnants by health visitors	39,248	35,248
,, ,, ,, ,, infants by health visitors	130,394	49,794
Cases of Eclampsia	288	217
,, Laceration of perineum	462	464
,, Placentitis	64	61
,, Puerperal sepsis	28	31
Urine samples	411,043	346,602
Post Parturition Albuminuria	8,214	8,214
Diabetic before delivery	177	367
Lectures delivered by medical officers	4,930	4,341
,, ,, ,, midwives	8,736	8,219
,, ,, ,, health visitors	6,483	6,419
Milk contributions to mother and baby	11,519	6,856
Garments contributed to mother and baby	2,923	2,636
Cloth material contributed to mother and baby	12,607 mtrs.	7,407 mtrs

FOUNDLINGS HOME

The following is a statement of Cairo Foundlings Home during the year :—

1.—Admitted during the year 1941		285
Remaining from previous year		424
2.—Died during the year		109
Discharged — adopted		56
removed to other homes		36
3.—Remaining on December 1941		508
With wet nurses	311	
In wards	197	

Chapter IX.—CHEST DISEASES

Incidence of Pulmonary Tuberculosis in Egypt.

During the period 1929–1940, a total of 30,293 cases were diagnosed positive for tuberculosis by the Chest Diseases Dispensaries. A further 5,598 positive cases were diagnosed during 1941 bringing the total number of positive tuberculosis cases diagnosed during the past thirteen years to 35,891. The following table gives the number of cases and deaths reported by the different units during 1941 :—

TABLE No. 44

Dispensary	Cases Diagnosed	Deaths Reported	Dispensary	Cases Diagnosed	Deaths Reported
Boulac	881	247	Mehalla El Kubra	207	55
Mobtadayan	821	132	Alexandria	331	98
Khalifa	564	259	Shebin El Kom	173	79
Tanta	358	59	Damietta	345	96
Mansoura	522	107	Fayoum	189	58
Zagazig	430	31	Assiut	233	43
Damanhour	426	72	Minia	118	26

The following table shows the geographical distribution of tuberculosis in Egypt :—

TABLE No. 45

Locality	Number of Patients	Locality	Number of Patients
Cairo	1,520	Gharbia...	834
Alexandria	343	Menoufia	265
Damietta	161	Dakahlia	591
Port Said	32	Sharkia	422
Canal, Suez, Ismailia	20	Kaliubia	119
Behera...	389	Beni Suef	44
Minia	124	Fayoum	181
Assiut	251	Qena	17
Gerga	21	Assuan	14
Oasis	3	Giza	247

Occupational Distribution of tuberculosis :—

Tradesmen 266 (4·8%) consisting of : 102 Foodstuff sellers.

15 Poultry and Cattle merchants.

44 Grocers.

29 Fruiterers.

76 Other trades.

Employees 321 (5·7%) consisting of: 66 Government employees.
62 Commercial employees.
21 Teachers.
172 Other occupations.

Workmen 1,527 (27·2%) consisting of: 49 cooks, 28 gatekeepers, 71 hairdressers 45 laundrymen, 95 drivers and conductors, 121 tailors, 75 shoemakers, 83 carpenters 33 painters, 50 building workmen, 69 workmen in firms, 73 weavers, 134 mechanics and tinsmiths, 66 printers and 344 workmen in other trades.

Farmers 1,122 (20%)

Students 139 (2·5%)

Unemployed 2,223 (39·7%) consisting of: 1,452 Idle at home
409 Children.
362 Unemployed.

1,362 deaths from tuberculosis were reported to the dispensaries this year. The following is their age-group distribution :—

Table No. 46

Age-group	Deaths	Age-group	Deaths
1– 5 years	39	25–35 years	389
5–15 ,, ...	123	35–45 ,, ...	199
15–25 ,, ...	450	Over 45 years	162

ANTI-TUBERCULOSIS PLAN

Constructional Measures.

A.—*Dispensaries.*

Credits were provided in Cairo Health Inspectorate's budget for the creation of a chest diseases dispensary within the Boulac Health Group. As the Saptieh Chest Diseases dispensary was located in that quarter since 1929, it was transferred to the Group on July 16, 1940, and the credits utilised in the creation of a new dispensary at Qena where it was badly needed, especially as no chest diseases dispensaries existed beyond Assiut in Upper Egypt, and the patients had to travel long distances and incur heavy expenses to attend Assiut dispensary for examination and treatment. Steps were taken to expedite the creation of the Qena dispensary which, it is hoped, will be opened early next year. This is in addition to the 14 dispensaries actually existing.

Considering the small number of patients attending the Shebin El Kom dispensary as compared with other dispensaries, it was proposed to set up a branch of that dispensary at Menou Government hospital — in one of the rooms of the out-patient departments —where treatment is carried out twice weekly. This branch was opened on August 23, 1941. Should the proposal prove successful, steps will be taken to create other similar branches.

B.—*In-patient Sections.*

The Ministry is pursuing the policy of providing chest diseases dispensaries with in-patient sections since these have proved useful and were much appreciated by the public. Steps have already been taken to create in-patient sections at Tanta and Assiut dispensaries which will be opened early next year.

The Frontiers Administration had asked for a ward of 20 beds for tuberculous patients to be provided in Kharga hospital. Measures are being taken to meet this request. A medical officer of Kharga hospital has been trained in tuberculosis work in the Chest Diseases units so that he will take charge of the work in that ward, which will be under the supervision of the Chest Diseases Section.

Sanatoria for Surgical Tuberculosis.

Preparation of a section for Osteo-Articular tuberculosis is under way and will be opened early next year. Her Highness Princess Khadiga Abbas Halim has kindly donated her palace at Helwan to be used as a hospital or sanatorium. It has been decided to turn it into a hospital for surgical tuberculosis. All the necessary constructional modifications to render the palace suitable for the purpose are being carried out.

Preventive and Social Measures.

Preventoria.

There are at present four preventoria : one in Cairo at Zeitoun District, another at Giza, a third at Assiut and a fourth at Alexandria. These preventoria are intended to accommodate children of tuberculous patients with a view to protecting them from infection.

Owing to present war time conditions, the Red Crescent Society took over the premises of the children preventorium at Alexandria as from September 22, 1941. All resident children had to be evacuated to other municipal asylums until the preventorium is transferred to some other town.

During the year, 167 children were admitted to these preventoria. 58 of them were contacts of fathers, 63 of mothers, 13 of brothers, 4 of sisters and 29 of other relatives. Of these, 18 children contracted infectious diseases, 27 intestinal affections, 13 chest diseases, 69 eye diseases, 68 skin diseases and 109 suffered from other diseases. All patients received prompt treatment.

Contacts.

Contacts of positive cases are examined by dispensaries to ensure that they are in good health. Moreover, they are visited in their homes by house visitors, under the supervision of dispensary medical officers, to give them the necessary advice and instructions.

The following table gives the number of contacts who visited the dispensaries during 1940 and 1941 and the number of those who were found suffering from tuberculosis :—

TABLE NO. 47

Year	Number of Contacts	Number of Children	Number of Adults	Number developed Tuberculosis
1940	6,194	2,879	3,315	182
1941	6,947	3,225	2,722	289

Professions Closely Connected with the Public.

In previous reports, the need was stressed for a legislation prohibiting tuberculous persons who, by nature of their work, come in contact with the public (e.g. food sellers, servants, workmen, etc.) from pursuing their occupations on account of the great danger which they present to the public. The Ministry of Interior and other competent authorities were approached with a view to executing the proposals detailed in previous reports. Until the legislation contemplated is issued and enforced, the dispensaries urge such patients to abstain from pursuing their occupations meanwhile offering them sufficient donations to cover their upkeep, clothing and lodging.

Donations.

A sum of L.E. 1,800 was contributed this year by the Ministry for the aid of poor tuberculous patients. Besides, municipal councils grant these dispensaries annual donations at the rate of between L.E. 200 and L.E. 300 per dispensary. Funds collected from these sources were distributed among destitute patients according to regulations in force as shown herebelow :—

TABLE No. 48

Dispensary	Donations Subscribed	Families Assisted	Dispensary	Donations Subscribed	Families Assisted
	L.E.			L.E.	
				3,124	762
Boulac, Cairo	849	105	Mehalla El Kubra ...	240	50
Mobtadayan, Cairo ...	591	100	Alexandria	168	37
Khalifa, Cairo	485	104	Shebin el Kom ...	267	50
Mansoura	298	199	Damietta	247	100
Tanta	324	44	Fayoum	267	28
Damanhour	324	118	Assiut	197	46
Zagazig	253	92	Minia	No donations subscribed	
	3,124	762	TOTAL	4,510	1,073

Some dispensaries receive, in addition, other donations, e.g. Tanta dispensary received 600 public-kitchen tickets which were distributed among 83 families of destitute patients. Tanta Municipality contributed a quantity of clothing material which was distributed to patients. Patients in Mehalla El Kubra dispensary received material for clothing contributed by the Misr Company for Cotton Ginning and Weaving in that town.

Providing Work and Aid to ex Patients.

It has been the policy of the Ministry to select the personnel required for the variou units from amongst ex-patients or their families. The object is to provide the patient with a livelihood or the relatives with means of supporting their patients. Moreover the presence of convalescents within the various units in the form of personnel brings them under constant medical observation and so eliminates the possibility of a relapse. Besides, they are given light jobs compatible with their state of health and are thus spared the need of taking up exerting occupations which would endanger their health for the sake of securing a living.

The following employees were appointed in the chest diseases units during the year :—

TABLE No. 49

	Appointed	
	In Sanatoria	In Dispensaries
1.—Cured or Convalescents	2	1
2.—Ex-employees in other departments dismissed on account of contracting tuberculosis but re-appointed in chest diseases units after arrest of disease	—	1
3.—Ex-employees in chest diseases units who developed tuberculosis while working, but resumed their work after arrest of disease	—	1
4.—Relatives of tuberculous patients appointed in chest diseases units to help their families	8	—

Protection of Students.

The protection of students against tuberculosis is still the chief concern of the Ministry. All students referred to dispensaries are examined and those found suffering from tuberculosis are at once admitted to sanatoria for early treatment, and notification is sent to the Control of School Hygiene, Ministry of Education. The same procedure also applies to students of the Fouad 1st and the Azhar Universities. Sanction of the financial authorities was obtained for the treatment of students of the Fouad 1st University at half fees in the third paying class in both Helwan and Abbassia sanatoria.

Therapeutic Measures.

Dispensaries.—Good results were obtained from the therapeutic and prophylactic measures adopted in the dispensaries. This is evident from the number of new patients which shows a marked increase. A large proportion of these gave positive results for tuberculosis. Suitable cases for sanatorial treatment are forwarded to these institutions. The rest are given domiciliary treatment. After discharge from the sanatoria, patients come under the medical observation and care of the dispensaries.

Financial aid was extended to destitute patients and their families. The field of this social service was extended to include feeding, clothing and rents. This had a remarkably gratifying effect on the patients who now attend the dispensaries regularly for treatment, having no longer to worry over the maintenance of their families. As a consequence, excellent results are now obtained from treatment.

14 dispensaries are now in operation in various localities in Egypt. During the year, these have been consulted by 101,957 new patients, 5,598 of whom were returned positive for tuberculosis. 296 or 5·3 per cent of the positive cases were children and the remaining 5,302 or 94·7 per cent were adults. 21,363 home visits were paid to patients by health visitors and 4,885 visits by medical officers

The various methods of treatment in use in the dispensaries and the results of each are shown herebelow.

1.—*Domiciliary Treatment.*

Hereunder is shown the results of home treatment of patients (patients given specific treatment, e.g. artificial pneumothorax or gold and sanatorial patients are not included).

Table No. 50

			Total Patients (new and old) of this year or previous years	Patients of the Year 1941
Total positive cases			4,658	2,126
Condition at first examination in the dispensary.	Sputum	Positive ...	3,328	1,500
		Negative ...	1,330	626
	Extent of Lesion	Unilateral ...	1,205	575
		Bilateral ...	3,453	1,551
		Cavitary ...	2,134	1,270
	Last Sputum	Positive ...	3,136	1,531
		Negative ...	1,522	587
Result of Treatment	Increase in weight		1,210	475
	Decrease in weight		1,251	595
	Stationary		1,146	493
	Dead		1,051	563
	Unable to work		1,514	768
	Able to walk		919	398
	Able to do light work		643	204
	Able to do full work		451	193

2.—*Treatment by Artificial Pneumothorax.*

In the previous annual report mention was made of the importance of this mode of treatment and the cases in which it was indicated. Below is shown the patients who received this treatment at the dispensaries and the results thereof.

TABLE No. 51

	Total No. of New and Old Patients of this year or previous years	Total No. of Patients of the Year 1941
Number of patients receiving A.P. treatment	11,730	415
,, of inductions	315	118
,, of refills	14,021	6,074
Condition of Patients Before Treatment		
Sputum — Positive	1,006	341
Sputum — Negative	167	74
Extent of Lesion — Unilateral	936	330
Extent of Lesion — Bilateral	217	85
Extent of Lesion — Cavitary	762	295
Cases of Haemoptysis	188	57
Unilateral artificial pneumothorax	1,120	393
Bilateral ,, ,,	53	23
Extra-Pleural pneumothorax	2	1
Cases in which A.P. was continued	929	326
Cases in which A.P. was stopped for following reasons :—		
Adhesions	12	25
Spread of disease in Contra lateral lung	79	28
Pleural effusion	56	17
Results of Treatment		
Sputum still positive	482	205
,, ,, negative	127	46
,, became negative	532	157
,, ,, positive	32	7
Increase in weight	691	230
Decrease in weight	212	88
Stationary	196	74
Dead	74	23
Unable to work	146	80
Able to walk	349	126
Capacity for work — Able to do partial work	337	133
Capacity for work — Able to do full work	267	53

Sanatoria and Dispensary In-Patient Sections.

On account of the large number of patients on the sanatoria waiting lists and the congested condition of these institutions and in view of the present war time conditions which tend to spread tuberculosis among the population, it was decided to increase the accommodation at Helwan and Abbassia sanatoria provisionally by 20 beds in each to accommodate tuberculous refugees, thus making a total of 470 beds in the former and 432 in the latter.

The population of Damietta have subscribed the necessary funds to increase the number of beds in the in-patient section attached to Damietta Dispensary and steps were taken to add 15 more beds bringing the total number to 35 beds.

Moreover it has been decided to reserve 5 beds in every in-patient section for the accommodation of acute or urgent cases requiring first-aid measures, *e.g.* cases of haemoptysis or acute tuberculous pneumonic cases in which artificial pneumothorax is urgently indicated.

Below is shown the total number of patients in both Helwan and Abbassia sanatoria and in-patient sections attached to Mansurah, Zagazig, Damietta and Fayoum Dispensaries.

TABLE NO. 52

	Helwan	Abbassia	Mansoura	Zagazig	Damietta	Fayoum
No. of patients on January 1, 1941	412	311	21	17	20	20
No. of patients admitted during 1941	1,240	880	60	35	80	40
No. of patients discharged during 1941	1,228	799	61	44	66	44
Condition of Patients Discharged						
A.—Before admission :						
(1) Sputum — Positive	918	675	42	28	52	44
(1) Sputum — Negative	310	124	19	16	14	—
(2) Extent of Lesion — Unilateral	521	423	36	35	51	16
(2) Extent of Lesion — Bilateral	662	376	25	9	15	8
(2) Extent of Lesion — Cavitary	611	442	38	36	25	20
(3) Range of Temperature — Normal	564	351	33	28	4	9
(3) Range of Temperature — Abnormal	664	440	28	16	62	35
B.—Treatment received :—						
General	177	791	36	16	65	38
Occupational	707	315	46	5	59	26
Gold — No. of patients	37	36	—	—	—	3
Gold — No. of injections	484	166	—	—	—	27
Tuberculin — No. of patients	2	—	—	—	—	—
Tuberculin — No. of injections	15	—	—	—	—	—
A.P. therapy — Inductions	410	327	25	23	35	24
A.P. therapy — Refills	6,288	5,384	1,887	475	977	257
Extra pleural pneumothorax	—	18	—	—	—	—
Phrenicectomy	97	53	—	—	—	—
Pleurotomy	13	4	—	—	—	—
Aspiration	136	104	6	2	—	2
Thoracoplasty	—	22	—	—	—	—
Cautery of adhesions	169	86	—	2	—	—
Complications	237	183	2	—	—	—
Various injections	5,965	5,272	—	—	—	197
C.—Cause of Discharge :—						
(1) Took leave but never returned	42	18	2	8	—	3
(2) Wished to leave because they refused treatment	502	6	2	3	—	—
(2) Wished to leave because they have reasonable excuses	35	298	11	9	4	15
(2) Wished to leave because they ordered by Dr.	531	355	46	24	61	24
D.—Conditions on Discharge :—						
(1) Weight — Increase	644	360	43	25	60	28
(1) Weight — Decrease	165	156	9	5	3	11
(1) Weight — Stationary	419	161	9	14	3	3
(2) Range of temperature — Normal	733	477	53	40	59	25
(2) Range of temperature — Abnormal	495	200	8	4	7	17
(3) Sputum — Still positive	743	359	30	12	44	38
(3) Sputum — Still negative	286	42	19	13	12	—
(3) Sputum — Became negative	174	199	12	17	10	6
(3) Sputum — Became positive	25	77	—	2	—	—
Successful A.P.	464	209	25	16	33	23
Unsuccessful A.P.	71	118	4	7	3	8
Improved	654	448	43	33	58	33
Worse	188	99	5	3	6	9
Stationary	268	130	11	8	2	4
Died	118	122	2	—	—	2
Capacity for Work :—						
Full work	52	16	3	1	—	—
Partial work	655	391	37	22	44	27
Unable to work	403	270	19	21	22	12
Average stay of patient (in days)	156	147	132	140	160	160
More than 6 months	385	152	15	13	31	24
Less than 6 months	843	647	46	31	37	20

Maritime Sanatorium at Alexandria.

183 patients were admitted this year and 169 were discharged. 35 were cured, 87 improved, 35 not improved, 12 were discharged in plaster, 83 received ultraviolet radiation, 47 had major operations, plaster applied to 32 cases and 358 X-ray films were taken A detailed report is contained in table No. 62.

Preparations for the erection of an orthopaedic block at Abbassia Hospital are in course of completion and it is hoped this will be ready to receive patients by the beginning of next year.

Anti-Tuberculosis Campaign in Egypt.

Details of the proposed scheme for combating tuberculosis in Egypt which was sanctioned by the Anti-Tuberculosis Committee and ultimately approved by the Ministry were given in the report for 1938. The problem, however, required re-consideration, and a special Committee was, therefore, appointed by the Ministry on November 17, 1940, to study the tuberculosis problem and lay down the necessary schemes for combating this disease. The Committee held ten meetings during which the problem was discussed in great detail and the effective measures for combating the disease were proposed.

The following is a summary of the anti-tuberculosis measures proposed by the Committee and duly approved by the Ministry :—

A.—*General Measures.*

(1) Combating unemployment and increasing wages.

(2) Improvement of housing conditions and planning of cities.

(3) Improvement the nutrition of the different classes of the public.

(4) Health propaganda.

(5) Protection of labourers from professional dangers.

(6) Combating endemic diseases.

B.—*Special Measures.*

1.—*The Tuberculosis Dispensaries.*

14 dispensaries only are now in existence in Egypt, whereas 100 dispensaries are required to meet the situation. Of these, 60 dispensaries should be well equipped (with an X-ray apparatus and laboratory) and 40 branch dispensaries (without X-ray unit or laboratory) in country districts.

2.—*Sanatoria and Hospital-sanatoria.*

The Sanatoria, of which there are two at present, are intended to accommodate tuberculous curable cases. The Hospital-sanatoria are reserved for the accommodation of advanced or acute cases. The total number of beds in these institutions is 1,000 whereas 6,500 beds are required.

3.—*Colonies or Isolation Hospitals for Advanced Cases.*

These should be established as soon as possible in the form of open-air camps, for the sake of simplicity and economy, and should be spacious enough to accommodate the largest possible number of advanced tuberculous cases.

4.—*Preventoria.*

For the children of tuberculous parents. A sufficient number must be created. For reasons of economy, these should be annexed to dispensaries administratively. 4 of these already exist in Egypt.

5.—*Village Settlements.*

For tuberculous patients. It is necessary to expedite the erection of these settlements in Egypt.

6.—*Charitable Anti Tuberculosis Institutions.*

Assisting the two societies in existence in Egypt, namely, the Egyptian Anti Tuberculosis Association and the Women Society for the Improvement of Health, to widen the scope of their activities and thus form a nucleus for a National Anti Tuberculosis Association. Inviting benevolent societies and wealthy people to contribute in this all important social field.

7.—*Combating Tuberculosis in Schools.*

This can only be achieved through the organisation of relations between the Ministries of Public Health and Education according to definite rules and the joint cooperation of the two Ministries.

8.—*Measures for Occupations closely Connected with the Public.*

Before licensing, a special examination of the chest of applicants must be carried out. This should be repeated once a year. Tuberculous persons should be forbidden from exercising their occupations.

9.—*Combating Bovine Tuberculosis.*

To prevent the spread of infection from animals to persons, all cattle must undergo a tuberculin test and diseased animals to be destroyed. Supervision of cattle sheds and improvement of their feeding. Careful inspection of meat and milk. Pasteurisation of milk and adoption of method of grading milk according to its degree of purity. Health propaganda among milkers, milk distributors and consumers. Vaccination of cattle against tuberculosis.

10.—*Vaccination of Persons Susceptible to Infection.*

The B.C.G. vaccination system should be introduced in Egypt for persons susceptible to infection and especially children of tuberculous parents.

The vaccine will have to be imported from abroad until such time when it can be prepared locally by the Public Health Laboratories.

11.—*Special Course in Tuberculosis.*

Special lectures on tuberculosis should be organised for medical students, and a post graduate course should be instituted in the Faculty of Medicine for this branch of medicine.

C.—*Anti-Tuberculosis Legislation and Regulations.*

(1) Laws and regulations dealing with public health reforms include: Legislation regulating housing, town-planning, abolition of unhealthy dwellings (slums) and improvement of crowded districts. Laws concerning employment, organisation of labour and prohibition of the employment of juveniles. Laws governing pasteurisation and adulteration of milk. Notification of Infectious diseases. Regulations concerning health statistics and surveys. Sanitary measures in schools.

(2) Laws and regulations governing tuberculous persons: Authority to examine patients. Provision of more health visitors. Compulsory treatment and duties of treating medical officers. Obligations of contacts and families of tuberculous patients. Sanitary measures in homes of tuberculous patients.

D.—*Other Anti-Tuberculosis Measures.*

Determining capacity of places assigned for treatment of tuberculous patients. Enactment of a law prohibiting spitting on the ground in roads and public places. Enactment of a law governing bovine and avian tuberculosis.

TABLE No. 53.—NUMBER OF T.B. POSITIVE CASES NOTIFIED BY THE DISPENSARIES DURING THE YEAR 1941
(*According to Residence*)

Unit	Cairo	Alexandria	Damietta	Port-Said	Canal, Suez, Ismailia	Behera	Gharbia	Menoufia	Dakahlia	Sharkia	Kalioubia	Giza	Beni-Suef	Fayoum	Minia	Assiut	Girga	Qena	Aswan	Oasis	TOTAL
Boulac Dispensary ...	609	12	1	1	1	4	13	41	2	25	35	86	3	9	4	14	4	10	7	—	**881**
Mobtadayan ,, ...	416	12	1	5	8	9	47	17	20	25	56	155	16	3	8	9	5	4	5	—	**821**
Khalifa ,, ...	493	4	—	1	2	3	12	6	4	8	12	5	4	1	2	—	2	2	2	1	**560**
Mansoura ,, ...	—	—	—	1	—	—	127	—	390	4	—	—	—	—	—	—	—	—	—	—	**522**
Tanta ,, ...	—	—	—	—	—	10	314	27	4	—	3	—	—	—	—	—	—	—	—	—	**358**
Damanhour ,, ...	—	—	—	—	—	350	76	—	—	—	—	—	—	—	—	—	—	—	—	—	**426**
Zagazig ,, ...	2	—	—	2	9	—	2	1	41	360	13	—	—	—	—	—	—	—	—	—	**430**
Mahalla El Kobra Dis.	—	—	—	—	—	—	203	—	4	—	—	—	—	—	—	—	—	—	—	—	**207**
Alexandria Dispensary	—	315	—	—	—	13	2	—	—	—	—	1	—	—	—	—	—	—	—	—	**331**
Shebin El Kom ,, ...	—	—	—	—	—	—	—	173	—	—	—	—	—	—	—	—	—	—	—	—	**173**
Damietta ,, ...	—	—	159	22	—	—	38	—	126	—	—	—	—	—	—	—	—	—	—	—	**345**
Fayoum ,, ...	—	—	—	—	—	—	—	—	—	—	—	—	21	168	—	—	—	—	—	—	**189**
Assiut ,, ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	220	10	1	—	2	**233**
Minia ,, ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	110	8	—	—	—	—	**118**
TOTAL	**1,520**	**343**	**161**	**32**	**20**	**389**	**834**	**265**	**591**	**422**	**119**	**247**	**44**	**181**	**124**	**251**	**21**	**17**	**14**	**3**	**5,598**

TABLE No. 54.—CASES REPORTED DEAD TO THE DISPENSARIES DURING 1941 ACCORDING TO AGES.

Dispensary	1-5 Years	5-15 Years	15-25 Years	25-35 Years	35-45 Years	Over 45 Years	TOTAL
Boulac	5	29	78	60	38	37	247
Mobtadayan ...	2	5	52	40	18	15	132
Khalifa	9	31	66	82	44	27	259
Tanta	3	4	19	20	8	5	59
Mansoura	—	8	36	28	19	16	107
Shebin El Kom	—	15	30	19	10	5	79
Mahalla El Kobra	—	4	20	19	8	4	55
Zagazig	3	1	9	8	6	4	31
Damanhour ...	5	4	28	24	5	6	72
Alexandria ...	—	6	35	30	10	17	98
Damietta	2	4	38	30	15	7	96
Fayoum	1	5	24	15	8	5	58
Assiut	8	6	7	4	6	12	43
Minia	1	1	8	10	4	2	26
TOTAL ...	**39**	**123**	**450**	**389**	**199**	**162**	**1,362**

TABLE No. 55.—MONTHLY NUMBER OF PATIENTS WHO ATTENDED THE VARIOUS CHEST DISEASES UNITS DURING THE YEAR 1941

Month	Number of Patients	Month	Number of Patients
January	8,512	July	8,748
February	9,490	August	8,070
March	11,141	September	7,150
April	9,367	October	5,862
May	10,129	November	8,164
June	8,805	December	6,519
		TOTAL	**101,957**

TABLE No. 56.—NUMBER OF NEW PATIENTS ATTENDING CHEST DISEASES UNITS DURING THE LAST FIVE YEARS AND RATIO OF INFECTION IN EACH.

Year	Number of New Patients	Positive for T.B.	Percentage
1937	66,063	3,546	5·4
1938	96,957	4,320	4·4
1939	113,296	4,933	4·3
1940	121,177	5,361	4·4
1941	101,957	5,598	5·4

TABLE No. 57.—NUMBER OF THE VARIOUS UNITS ATTACHED TO THE CHEST DISEASES SECTION FROM 1929

Year	Chest Diseases Dispen.	In-Patient Sections	Chest Sanatoria	T.B. Bone Sanatoria	Preventoria
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	4	2	1	4

N.B.—(1) Fouad Sanatorium Helwan has been attached to this Ministry since September 1934.
(2) Maritime Sanatorium Alexandria has been attached to this Ministry since September 1936.

TABLE No. 58.—LABORATORY WORK AT FOUAD SANATORIUM, HELWAN, AND ABBASSIA CHEST DISEASES HOSPITAL DURING THE YEAR 1941

UNIT	NEW PATIENTS											PATIENTS UNDER TREATMENT												
	Number of Patients	SPUTUM		URINE				STOOLS				SPUTUM		URINE				STOOLS					BLOOD MALARIA		Estimation of Album. in Urine
		Positive	Negative	Album.	Diab.	Bilharzia	Casts	Ankylos.	Ascaris	Bilharzia Mansoni	Amoeba	Positive	Negative	Album.	Diab.	Bilharzia	Casts	Ankylos.	Ascaris	Bilharzia Mansoni	Other Parasi.	Amoeba	Positive	Negative	
Fouad Sanatorium, Helwan	1,240	830	410	239	31	189	73	37	153	39	—	1,340	1,623	103	—	109	—	25	50	24	—	—	3	28	135*
Abbassia Chest Diseases Hospital	830	576	254	166	23	51	—	58	82	10	—	1,186	600	138	13	43	—	35	12	9	34	—	—	—	11†
TOTAL	**3,070**	**1,406**	**664**	**405**	**54**	**240**	**73**	**95**	**235**	**49**	—	**2,526**	**2,223**	**241**	**13**	**152**	—	**60**	**62**	**33**	**34**	—	**3**	**28**	**146**

* Red Blood Corpuscle 8
White „ „ 15

Blood Differential 65
Chest Fluid 109

Sp. + for Antif.... 158
Sp. — for Antif.... 1875

† Sp. + for Antif.... 394
Sp. — for Antif.... 493

TABLE No. 59.—ANNUAL REPORT OF X-RAY FILMS TAKEN AT FOUAD SANATORIUM, HELWAN, AND ABBASSIA CHEST DISEASES HOSPITAL DURING THE YEAR 1941

UNIT	Radiographs for Patients									Radiographs for Staff					TOTAL	Paper Film	Reduction Photo
	Chest				Bones and Other Parts				Teeth								
	10×12 inch	12×15 inch	24×30 cm.	30×40 cm.	10×12 inch	12×15 inch	24×30 cm.	30×40 cm.		10×12 inch	12×15 inch	24×30 cm.	30×40 cm.	Teeth			
Fouad Sanatorium, Helwan	139	467	—	—	6	9	—	—	27	7	29	—	—	6	690	784	174
Abbassia Chest Diseases Hospital	—	—	46	675	—	—	9	10	8	—	—	1	82	—	831	845	133
TOTAL	**139**	**467**	**46**	**675**	**6**	**9**	**9**	**10**	**35**	**7**	**29**	**1**	**82**	**6**	**1,521**	**1,629**	**307**

TABLE No. 60.—ANNUAL RETURN

(New T.B. Cases in the Dispensary) or (New Patients admitted to Sanatoria

New Cases Seeking Treatment (Dispensary)	T.B. Cases			Other Chest Diseases	Age Groups												Professions				
	Total	Sputum	X-Ray		From 1–9 years		From 10–19 years		From 20–29 years		From 30–39 years		From 40–49 years		From 50–59 years		Over 60 years		Vendors	Officials	Workmen	Peasants	Students
					M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.					
11·748	881	508	373	10·867	18	20	85	53	211	104	156	70	62	29	32	10	20	11	35	70	330	63	34
8·493	821	522	299	7·672	22	7	79	49	239	81	154	61	63	28	19	8	7	4	62	73	230	124	21
6·379	564	339	225	5,301	21	20	72	40	145	61	80	35	43	21	18	5	2	1	37	59	205	20	10
9·381	522	331	191	8·655	7	6	57	44	109	49	88	53	57	31	10	5	5	1	14	12	103	193	17
10·098	358	228	130	9·740	10	18	24	24	80	35	59	39	34	14	14	2	4	1	11	21	65	89	10
5·242	426	281	145	4·161	13	7	53	30	113	42	73	27	31	11	13	7	5	1	14	15	91	134	6
13·287	430	319	111	12·857	15	7	49	21	101	37	68	39	41	19	9	7	9	8	4	7	95	151	12
8·282	207	166	41	7·809	2	4	11	28	30	22	50	24	16	10	5	3	2	—	11	5	50	41	4
3·777	331	230	101	3·294	7	5	39	19	85	39	50	17	26	14	16	7	4	3	39	21	142	9	7
3·901	173	94	79	3·728	—	2	11	12	25	14	24	26	23	9	11	12	1	3	3	4	25	56	1
7·048	345	216	129	6·703	15	12	24	26	81	33	61	28	22	12	18	6	6	1	18	8	103	59	10
5·395	189	178	11	4·529	1	3	19	7	58	22	32	18	13	8	6	1	1	—	9	14	33	66	1
2·466	118	75	43	2·333	2	1	9	3	25	21	18	15	11	2	2	3	4	2	4	3	20	33	—
6·460	233	143	90	5·578	26	25	9	5	24	22	33	27	12	11	14	12	2	11	5	9	35	84	6
101957	**5·598**	**3·630**	**1·968**	**93·227**	**159**	**137**	**541**	**361**	**1·326**	**582**	**946**	**479**	**454**	**219**	**187**	**88**	**72**	**47**	**266**	**321**	**1·527**	**1·122**	**139**
462	13	10	3	—	—	2	—	1	—	2	1	1	—	4	2	—	—	—	—	—	1	6	—
1·240	1·188	872	316	52	12	9	145	114	392	146	210	73	71	20	25	7	12	4	88	105	325	179	95
886	880	732	142	6	14	8	116	48	346	81	111	31	67	20	24	9	4	1	66	154	242	139	73
OTAL. 2·126	2·068	1·604	458	58	26	17	261	162	738	227	321	104	138	40	49	16	16	5	154	259	567	318	168

Exam. of (Sanat).				Old Cases (Disp.)					Visits (Disp.)		Discharged Patients							Ability of V	
Teeth	Nose	Throat	Ears	Total	T.B. Cases	Under Observation	Contacts	Other Chest Diseases	Nurses Visits	M.O. Visits	Total	Sputum on Discharge		Improved	Stationary	Worse	Died	Complete	Partial
												Pos.	Neg.						
—	—	—	—	11·091	7·062	3·809	179	41	3·180	311	341	209	132	100	51	138	52	43	94
—	—	—	—	10·891	7·441	932	1·107	1·411	1·682	367	245	134	90	148	26	59	12	3	135
—	—	—	—	9·030	6·320	1·403	763	544	2·085	374	292	152	107	146	67	46	33	1	122
—	—	—	—	3·530	3·216	34	74	206	1·307	404	198	116	82	123	41	18	16	3	101
—	—	—	—	9·991	5·369	1·044	259	3·319	1·879	343	111	63	30	45	26	30	10	—	28
—	—	—	—	6·296	2·725	375	241	2·955	1·882	374	61	26	32	32	16	13	—	1	41
—	—	—	—	26246	8·198	2·753	1·368	13·927	1·225	309	126	69	57	56	48	22	—	—	33
—	—	—	—	10·499	3·879	994	679	4·947	1·507	383	69	53	16	17	37	13	2	—	30
—	—	—	—	5·920	4·463	975	365	117	1·566	258	52	29	16	12	22	11	7	—	25
—	—	—	—	4·607	3·428	779	46	354	611	302	45	18	27	28	—	17	—	—	29
41	—	—	—	6·350	3·264	489	339	2·258	1·326	382	140	89	51	100	24	14	2	6	52
—	—	—	—	2·985	1·478	262	171	1·074	1·699	371	44	38	6	33	4	5	2	3	27
—	—	—	—	2·738	1·407	424	89	818	686	318	17	11	6	7	4	6	—	—	5
—	—	—	—	4·170	3·173	477	175	345	1·418	389	20	15	5	11	4	5	—	—	11
41	—	—	—	**114344**	**61·423**	**14·750**	**5·855**	**32·316**	**21·363**	**4·885**	**1·761**	**1·022**	**657**	**858**	**370**	**397**	**136**	**60**	**733**
—	—	—	—	27	25	—	—	2	—	—	—	—	—	—	—	—	—	—	—
848	317	868	296	—	—	—	—	—	—	—	1·228	758	470	654	268	188	118	52	655
842	1·394	394	394	—	—	—	—	—	—	—	799	549	250	448	130	99	122	16	391
TOTAL. 1·690	1·711	1·262	690	—	—	—	—	—	—	—	2·027	1·307	720	1·102	398	287	240	68	1·046

	Helwan	Abbassia	Zagazig	Mansoura	Damietta	Fayoum
No. of patients on 1st January 1941	412	311	17	21	20	20
" " " admitted during the year	1·240	800	35	60	80	40
" " " discharged during the year	1·228	799	44	61	66	44
Average stay ... ... (days)	156	147	140	132	160	160

Disp.)	Classes (Sanat.)				New contacts Disp.			Cases under Observation (Disp.)	Hæmoptysis	Sputum Examination					X.-Ray Examination					
																		Old Patients		
Cases admitted to Sana.	1st	2nd	3rd Special	3rd Gratis	Children	Adults	T.B. Contacts			Total of Sputum	Sputum of New Cases		Sputum of Old Cases		Total of X-Ray	New Cases		Positive	Under Observ.	
											No.	Pos.	No.	Pos.		No.	Pos.	No.	No.	Pos.
346	—	—	—	—	455	584	19	681	70	2·434	1·770	508	664	84	1·797	1·296	558	320	181	19
295	—	—	—	—	325	444	40	138	53	1·285	1·170	522	115	41	599	545	352	45	9	7
279	—	—	—	—	462	428	40	138	74	1·549	1·068	339	481	119	770	622	432	129	19	6
216	—	—	—	60	189	268	31	158	70	1·423	832	331	591	242	682	563	380	116	3	1
103	—	—	—	—	224	223	30	326	50	1·126	841	228	285	67	581	446	272	123	12	1
17	—	—	—	—	198	259	8	134	5	882	683	281	199	60	633	560	426	60	13	2
126	—	—	—	35	231	285	34	317	59	1·741	1·152	319	589	105	1·099	932	405	163	4	—
59	—	—	—	—	165	174	14	63	36	447	269	166	178	—	348	272	207	67	9	9
58	—	—	—	—	318	301	16	83	8	1·114	570	230	544	178	425	413	331	11	1	5
44	—	—	—	—	87	147	6	42	3	777	382	94	395	103	340	219	169	26	15	—
98	—	—	—	80	230	316	38	154	29	874	478	216	316	121	757	493	236	172	72	17
48	—	—	—	40	80	86	—	140	39	354	540	178	214	118	96	52	34	43	1	—
9	—	—	—	—	61	81	3	56	10	356	293	75	63	301	233	199	88	31	3	—
18	—	—	—	—	100	126	10	63	36	738	521	143	217	56	374	349	233	17	8	—
1·718	—	—	—	**215**	**3·225**	**3·722**	**289**	**2·493**	**542**	**15·500**	**10·569**	**3·630**	**4·931**	**1·595**	**3·734**	**6·961**	**4·123**	**1·323**	**450**	**62**
3	—	—	—	—	—	—	—	—	—	23	14	10	9	2	13	13	—	—	—	—
—	5	71	304	860	—	—	—	—	467	4·297	1·218	872	3·079	1·456	1·343	329	311	968	46	—
—	5	66	178	631	—	—	—	—	399	3·408	815	566	2·593	1·538	1·618	879	851	731	8	1
—	10	137	482	1·491	—	—	—	—	866	7·705	2·033	1·438	5·672	2·994	2·961	1·208	1·162	1·699	54	1

Treatment				Operations												Deaths	REMARKS
Gold	Other Injections	Exercise Treatment	General Treatment	Aspiration	Intrapleural Pneumothorax		Internal Pneumonolysis	Phrenic Operations	Extrapleural Pneumothorax		Plombage, Oleothorax	Thoracoplasty	Thoracotomy	Drainage	Bronchoscopy or Bronchography		
					Induction	Refills			Induction	Refills				Pleural / Lung			
—	—	—	—	3	—	585	—	—	—	—	—	—	—	—	—	247	Boulac Dispensary.
—	—	—	—	7	38	1·414	—	—	—	—	—	—	—	—	—	132	Mobtadayan „
—	—	—	—	7	—	991	—	—	—	7	—	—	—	—	—	259	Khalifa „
—	—	—	2·359	6	28	1·887	—	—	—	—	—	—	—	—	—	107	Mansoura „
—	—	—	—	24	22	1·044	—	—	—	—	—	—	—	—	—	59	Tanta „
—	—	—	—	4	9	584	—	—	—	—	—	—	—	—	—	72	Damanhour „
—	—	30	4·209	13	33	3·174	—	—	—	—	—	—	—	—	—	31	Zagazig „
—	232	660	3·219	30	5	308	—	—	—	—	—	—	—	—	—	55	Mehalla El Kobra „
—	—	—	—	5	11	640	—	—	—	—	—	—	—	—	—	98	Alexandria „
—	—	—	45	—	—	230	—	—	—	—	—	—	—	—	—	79	Shebin El Kom „
63	99	54	79	12	42	977	—	—	—	—	—	—	—	—	—	96	Damietta „
68	197	—	—	7	24	599	—	—	—	—	—	—	—	—	—	58	Fayoum „
—	—	—	—	11	18	310	—	—	—	—	—	—	—	—	—	26	Minia „
—	—	—	2·773	5	4	160	—	—	—	—	—	—	—	—	—	43	Assiut „
131	**528**	**744**	**12·684**	**134**	**234**	**13·103**	—	—	—	**7**	—	—	—	—	—	**1·362**	... ... TOTAL
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	Menouf Branch annexed to Shebin El Kom disp.
272	7·668	173	238	116	439	5·693	192	84	—	—	6	—	12	—	9	—	Fouad Sanatorium Helwan
186	5·794	74	339	120	340	5·985	109	77	19	—	—	19	2	7	6	—	Abbassia Chest Diseases Hospital.
458	**13·462**	**247**	**577**	**236**	**779**	**11·678**	**301**	**161**	**19**	—	**6**	**19**	**14**	**7**	**15**	—	

Table No. 61—Annual Return on the

	Discharged	Diseases contracted by Children during residence						Result of Mantoux test in the Child		New Childre								
										Details of their Relative Patients								
										Condition				Relation				
		Other diseases	Skin	Ophthalmic	Chest	Intestinal	Stomach	+	−	Lesion: Sput.	Lesion: X.R.	Alive	Died	Other relative	Sister	Brother	Mother	Father
Zeitoun Preventorium...	56	37	10	22	5	12	13	30	15	17	53	53	—	—	—	2	22	2
Giza Preventorium	26	10	9	5	7	7	1	10	—	15	15	29	1	—	—	3	21	
Alexandria Preventorium	56	31	14	22	—	3	4	23	—	15	2	14	3	—	—	—	3	2
Assiut Preventorium	29	31	35	20	1	5	—	1	50	17	52	55	1	29	4	8	17	
Total	**167**	**109**	**68**	**69**	**13**	**27**	**18**	**64**	**65**	**64**	**122**	**151**	**5**	**29**	**4**	**13**	**63**	**5**

	Zeitoun	Giza	Alex.	Assiut
N.B.—No. of children on January 1, 1941	92	44	33	25
,, ,, ,, admitted during the year ...	53	30	23	61
,, ,, ,, discharged ,, ,, ,, ...	56	26	56	29
,, ,, ,, on Dec. 31, 1941...	89	48	—	57

Table No. 62.—Annual Return of Cases Treate

Out-Patient Section

Total	New Patients: Under 5 years M.	Under 5 years F.	From 5-10 years M.	From 5-10 years F.	Over 10 years M.	Over 10 years F.	Rickets	T.B. Spine	T.B. Bones and Joints	Other Diseases	Old Patients: Total	Rickets	T.B. Spine	T.B. Bones and Joints	Other Diseases	Treatment: By Electricity	By Ultra Violet	Minor Operations	Dressings	X-Rays
31	7	4	—	1	8	11	4	4	6	17	58	20	—	1	37	—	29	1	7	
26	4	1	2	—	6	13	3	1	1	21	89	36	—	1	52	—	52	—	27	1
57	10	4	4	3	16	20	2	5	8	42	115	49	—	—	66	—	67	—	69	1
59	3	5	3	4	16	28	1	2	3	53	96	32	—	1	63	—	54	—	28	1
33	5	4	2	—	8	14	1	3	1	28	45	30	—	—	15	—	42	—	8	1
50	9	5	2	—	13	21	—	4	2	44	86	21	—	—	65	—	33	—	50	1
45	3	3	3	1	23	12	3	2	4	36	65	23	—	—	44	—	23	—	28	2
41	5	4	2	1	13	16	1	4	7	29	112	34	—	—	78	—	59	—	10	1
77	3	6	4	1	22	11	3	—	6	38	100	33	—	1	66	—	65	1	17	1
34	9	4	1	—	14	6	—	4	3	27	145	6	—	1	108	—	86	1	81	1
59	9	2	5	6	19	19	1	—	18	40	134	44	—	16	74	—	55	—	110	2
35	6	3	1	5	10	10	—	3	12	20	99	26	2	8	63	11	23	1	101	1
517	**73**	**55**	**29**	**22**	**168**	**180**	**19**	**32**	**71**	**395**	**1·144**	**384**	**2**	**29**	**729**	**11**	**588**	**4**	**566**	**1**

N.B.—No. of patients on 1st January 1941 49
,, ,, admitted during the year 183
,, ,, discharged during the year... ... 169
,, ,, on Dec. 31, 1941 63

RK OF THE PREVENTORIA DURING 1941

ed																								
	Ages																							
ove ears	10 years		9 years		8 years		7 years		6 years		5 years		4 years		3 years		2 years		1 year		Less than one year		No. of New Children
M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	
—	—	—	1	—	—	1	4	3	3	2	6	3	5	—	3	3	4	2	—	3	4	6	53
—	—	—	—	—	—	—	1	1	2	2	1	—	4	—	1	3	1	1	2	—	6	5	30
—	—	2	1	—	—	3	3	2	1	1	1	1	1	1	3	2	—	—	—	—	—	—	23
—	—	—	—	—	1	—	6	7	3	7	4	4	1	5	2	3	3	4	2	2	3	3	61
—	—	2	2	—	1	4	14	13	9	12	12	8	11	6	9	11	8	7	4	5	13	14	167

ALEXANDRIA MARITIME SANATORIUM DURING 1941

	In-Patient Section																						
	New Patients											Discharged					Treatment						
	Under 5 years		From 5-10 year		Over 10 years		T.B. Spine	T.B. Hip	T.B. Knee	T.B. Other Joints	Other Diseases	Total	Cured	Improved	Stationary	Discharged in Plaster	By Electricity	By Ultra Violet	Major Operations	Plasters	X-Rays	
	M.	F.	M.	F.	M.	F.																
14	1	2	1	2	5	3	6	4	—	2	2	9	5	3	—	1	—	—	3	—	23	January
5	2	—	—	—	2	1	1	3	—	—	1	10	2	4	2	2	—	—	—	1	17	February
15	1	—	4	1	3	6	7	1	2	2	3	4	2	1	1	—	—	10	6	6	30	March
18	—	2	3	3	4	6	3	—	3	7	5	10	3	2	3	2	—	6	5	2	28	April
20	1	3	6	1	7	2	6	2	1	7	4	16	3	5	8	—	—	—	4	—	19	May
16	4	—	1	2	4	5	7	2	2	1	4	57	2	40	12	3	—	—	2	5	52	June
18	1	2	3	1	7	4	5	1	1	3	8	14	7	6	—	1	—	—	2	5	22	July
19	1	2	3	—	8	5	5	2	3	3	6	12	5	6	—	1	—	—	7	—	25	August
12	2	—	1	—	7	2	—	1	2	4	5	9	9	6	2	—	—	—	5	4	20	September
11	2	2	2	—	4	1	3	3	1	2	2	9	3	5	1	—	—	33	4	1	9	October
19	2	1	5	1	6	4	3	3	2	5	6	5	1	1	2	1	—	16	9	8	42	November
16	3	3	—	3	4	3	5	2	1	2	6	14	1	8	4	1	—	18	—	—	21	December
183	20	17	28	14	61	42	51	24	18	38	52	169	35	87	35	12	—	83	47	32	308	Total

Chapter X.—LEPROSY

It was in 1927 that leprosy in Egypt was first given serious consideration by this Ministry. A Medical Officer was detailed to study anti leprosy measures in India and the Philippines where these were of long standing. Medical Officers have since been sent from time to time for the same purpose.

On February 25, 1929, the first out-patient leprosy clinic was opened in Cairo. This was later coupled by an in-patient section annexed to the clinic for the isolation of such lepers as required hospital treatment. Since then, out-patient leprosy clinics have been set up in the chief towns of provinces with branch clinics to serve surrounding districts. Plans were prepared for the construction of a leprosy colony at Abu Zaabal for the isolation of all lepers.

So far, the anti leprosy campaign was administratively under the supervision of the Endemic Diseases Section. With the increase of leprosy units, however, it was decided in 1937 to divorce leprosy work from the Endemic Diseases Section and create a separate section under the title " Leprosy and Tuberculosis Control Section " hitherto also a branch of the former Section. Later on, this new section had to undergo a further separation for, towards the end of 1940, it was decided to split it into two Sections ; and since that time leprosy has become the responsibility of the Leprosy Control Section.

Leprosy Units.

The units of the Section are located as follows :—

(1) The Leprosy Colony at Abu Zaabal.

(2) The Cairo Leprosy Hospital, with branch clinics at Embaba, Kara-Midan and Kaliub.

(3) The Leprosy Clinic at Tanta, with branches at Zifta, Mehalla el Kubra, Kallin and Kafr el Zayat.

(4) The Leprosy Clinic at Zagazig, with branches at Abu Hammad, Shebin el Kanater, Minia el Kamh and Abu Kebir.

(5) The Leprosy Clinic at Shebin el Kom, with branches at Menouf, Ashmoun, Benha, Quesna and Batanoun.

(6) The Leprosy Clinic at Mansoura, with branches at Damietta, Simbellawein, Sherbin and Dekernis.

(7) The Leprosy Clinic at Alexandria, with branches at Damanhour, Idko, Rosetta Mahmoudia, Kafr el Dawar and Abu Hommos.

(8) The Leprosy Clinic at Minia, with branches at Beni Mazar, Abou Kirkas, Samallout and Mallawi.

(9) The Leprosy Clinic at Suhag, with branches at Tema, Akhmim, Tahta and Girga.

(10) The Leprosy Clinic at Qena, with branches at Luxor, Kous, Deshna and Nag Hamadi.

Leprosy Colony at Abu Zaabal.

Constructional works were started on this Colony in 1930. In view, however, of the great number of lepers and lack of accommodation everywhere, it was decided to open the Colony for lepers in mid 1933 before drinking water and light installations were completed. By the end of 1933, 81 lepers were resident in the Colony. There were 300 lepers at the end of 1941.

The policy is to keep the Colony self supporting as much as possible. Able lepers are encouraged to take a hand in the domestic activities of the Colony. Small workshops were provided to teach and train lepers in such manual occupations as may be useful in the Colony. Large areas of land surrounding the Colony have been prepared by lepers for the cultivation of the necessary vegetables and fruit to substitute supplies purchased from contractors. All the necessary agricultural tools and cattle were supplied by the Ministry.

At the end of the year, a sum of L.E. 600 was provided for the purchase of raw material required for the various occupations, e.g. tailoring, shoe-making, carpentry, painting, upholstry and agriculture. It is hoped that the time will come when the products will meet the requirements of the Colony and nothing will be purchased from outside. Even the tools for repairs will be produced so that, in the long run, expenditure will be brought to a minimum. On the other hand, experience showed that these occupations had a good physical effect on the residents of the Colony. They no longer feel the monotony of their lonely life. Moreover, the biannual clinical and bacteriological examinations showed clearly that the general health of the lepers was greatly improved as a result of these manual occupations.

Nor were the recreation, entertainment and education of the lepers overlooked. Performances were given from time to time. Patients were supplied with books, newspapers and magazines. The school which had been created in the Colony was supplied with the necessary equipment and books. Teaching is undertaken by professional lepers. A large number of young residents are now able to read, write, do arithmetic and recite Koran. A few can now recite the whole Koran.

Cairo Leprosy Hospital.

As mentioned before, this was first opened in 1929 as an out-patient clinic to which an in-patient section was later annexed. This latter now contains 155 beds as against 25 beds when first started. At the end of the year, there were 172 in-patients, all females. They, too, were entertained occasionally, and were supplied with material required for sewing and needlework. Young girls are also taught to read, write and to recite Koran. With the exception of food which is prepared by healthy persons, all household work, i.e. washing, cleaning, etc., is carried out by the patients.

The question of moving the Cairo Leprosy Hospital to Abu Zaabal Colony is receiving serious consideration. It is suggested that by bringing female lepers to live inside the Colony, life would be the more nearer to natural. Lepers might then be permitted to marry, but their offspring would be placed under careful observation so that none would develop leprosy.

Out-Patient Clinics.

Besides the Abu Zaabal Colony and Cairo Hospital, there are eight base out-patient clinics in the chief towns of provinces as mentioned earlier. Each has a number of branches serving the surrounding districts. There are 48 centres of treatment in all. The Medical Officer and nursing staff of the base clinic proceed on certain days of the week to the branch clinics by means of an ambulance provided with all the equipment necessary for treatment and examination. The railways are used whenever one of these ambulances get out of order. Contacts are regularly examined either in their homes or in clinics so that early infections are promptly dealt with.

Number of Patients.

During the year, 1,387 new patients presented themselves to the various clinics for examination. Of these, 728 were returned positive for leprosy as compared with 2,302 patients and 995 positive cases during the previous year. The total number of patients examined by all the leprosy clinics since the campaign was first started in 1929 until the end of 1941 was 19,009. Of these, 9,154 patients were returned positive. The remainder were found suffering from other skin diseases and were referred to the special hospitals.

Accurate measures are adopted in the control of lepers. Every positive case discovered by any clinic is recorded in a card showing the place of birth, residence, occupation, date of examination and type of disease. At the end of every month, the cards are forwarded to central administration for the purpose of control ; records of all leprosy patients throughout the country being kept therein. Thus, of the 9,154 patients returned positive by the various clinics until 1941, 2,199 were recorded by more than one clinic. The actual number of positive lepers in all the clinics is, therefore, 6,955.

Treatment.

Lepers, as any other patients, are susceptible to other diseases which, unless treated early, would render the treatment of leprosy futile. So, on presenting themselves to the clinics, they are examined for and treated from any other ailment as well. Patients in the Colony and Cairo Leprosy Hospital are operated upon by their Medical Officers when this is necessary. A dentist and an oculist visit these institutions regularly to treat the patients.

Drugs used in the Treatment of Leprosy.

(1) Hydnocarpus. This is first given in a dose of 0·5 cc. which is increased by 0·5 cc. every injection until a maximum dose of 5 cc. is reached. This is then maintained. Treatment is given once or twice weekly.

(2) Iodized Ethyl Ester of Hydnocarpus oil. This is used as above.

(3) Ethyl Ester of Hydnocarpus oil (not iodized). Used as above. A local inflammation of the tissues is, however, a characteristic.

(4) Methylene Blue solution (1%) given intravenously in doses of 1–10 cc. once or twice weekly. Although it dissolves leprous nodules in certain cases, it disfigures the body—the conjunctiva and leprous nodules in particular—by colouring it blue, hence it is refused by the patients.

(5) Chalmougra oil capsules. Three capsules are given daily by mouth. Continual use causes dyspepsia and gastritis.

(6) Potassium Iodide solution. This is given orally in 1/3 gramme doses to be increased according to toleration of patient. Pain in the joints and inflammation of the gums were observed. It has a fairly good effect on neural cases. Its administration is limited to special cases under strict supervision.

Chemical and bacteriological examination of patients showed that, of all the above-mentioned drugs, hydnocarpus oil was the most effective, caused no inflammation of the tissues and was the cheapest.

Treatment of Leprous Nodules.

(1) Paint with 1 : 1 trichloracetic acid solution.

(2) Injection of hydnocarpus oil or its iodized ethyl esters in the nodules.

(3) Surgical removal of the larger nodules.

The patients showed great satisfaction with the treatment of nodules, the removal of which improved their general appearance.

Treatment of Ulcers.

Special attention is given by the Medical Officers to the treatment of ulcers, superficial or perforating. The appropriate disinfectant solution, e.g. eusol, mercurochrome, trypaflavine, etc., is given according to the condition of the ulcer.

TABLE No. 63.—NUMBER OF LEPROSY UNITS SINCE 1929

Year	Main Units	Branches
1929	1	—
1930	3	—
1931	5	—
1932	5	4
1933	6	8
1934	6	8
1935	6	10
1936	6	12
1937	6	15
1938	9	15
1939	10	21
1940	10	33
1941	10	38

TABLE No. 64.—NUMBER OF NEW PATIENTS WHO ATTENDED ANTI-LEPROSY UNITS DURING THE LAST FIVE YEARS ENDING 1941, AND PERCENTAGE OF POSITIVE CASES.

Year	No of New Patients	No. of Positives	Percentage
1937	1,759	888	50
1938	2,172	1,047	50
1939	2,198	1,059	48
1940	2,299	995	43
1941	1,387	728	52

Chapter XI.—VENEREAL AND SKIN DISEASES

General Statistics.

The number of new patients suffering from venereal or skin diseases during 1941 was 148,194 as against 145,801 in 1940. It shows an obvious increase although no new units were created during the year. This is significant of the patients' appreciation of the clinics. There is, however, great need for more units throughout the country to bring treatment within easy reach of patients.

The number of times of attendance at these units was 639,503 in 1941 as against 622,220 in 1940.

(a) *Gonorrhoea.*

During 1941, there were 35,535 new patients suffering from gonorrhoea as against 32,712 in 1940. The increase is not unnatural considering the present war time conditions.

(b) *Syphilis.*

14,954 new cases were recorded as against 16,292 in 1940.

(c) *Other Venereal Diseases.*

There were 65,721 as compared with 68,432 in 1940.

Technical Work.

It was observed that treatment technique was not uniform in all the venereal diseases clinics. A Committee including professors of the Foad University amongst its members was convened to draw up new instructions for the diagnosis and treatment of gonorrhoea and syphilis.

TABLE No. 65.—NUMBER OF NEW CASES AND VISITS TO THE SKIN AND VENEREAL DISEASES UNITS DURING 1941

Locality of Clinic	New Cases						Number of Visits						Total		
	Male			Female			Male			Female					
	Under 16 years	Over 16 years	Total	Under 16 years	Over 16 years	Total	Under 16 years	Over 16 years	Total	Under 16 years	Over 16 years	Total	New Cases	Old Cases	No. of Visits
Sayeda Zeinab	1,987	5,935	7,922	2,364	6,784	9,148	10,615	31,823	42,438	13,266	39,772	53,038	17,070	95,476	112,546
Saptia	2,621	7,711	10,332	2,813	7,674	10,487	3,002	51,667	54,669	4,951	63,199	68,150	20,819	122,819	143,638
Gamalia	85	4,588	4,673	151	5,798	5,949	106	39,805	39,911	1,374	41,435	42,809	10,622	82,720	93,342
Port-Said	2,231	2,359	4,590	2,655	2,709	5,364	1,975	10,812	12,787	3,292	18,153	21,445	9,954	34,232	44,186
Suez...	516	921	1,437	421	1,136	1,557	334	6,388	6,722	582	5,732	6,314	2,994	13,036	16,030
Damanhour	2,208	2,509	4,717	2,486	2,317	4,803	1,755	7,059	8,814	2,135	10,723	12,858	9,520	21,672	31,192
Tanta	674	2,228	2,902	1,220	1,483	2,703	847	10,755	11,602	2,361	11,869	14,230	5,605	25,832	31,437
Mahalla el Kobra	403	752	1,155	398	429	827	887	5,645	6,532	809	4,740	5,549	1,982	12,081	14,063
Mansoura	607	1,241	1,848	570	1,739	2,309	766	8,789	9,555	2,507	20,067	22,574	4,157	32,129	36,286
Zagazig	2,115	2,302	4,417	2,300	2,442	4,742	766	2,236	3,002	823	2,040	2,863	9,159	5,865	15,024
Shebin el Kom	1,393	1,818	3,211	1,348	1,944	3,292	2,316	10,028	12,344	2,428	12,603	15,031	6,503	27,375	33,878
Fayoum	1,018	1,716	2,734	898	1,473	2,371	7,126	10,296	17,422	7,184	13,257	20,441	5,105	37,863	42,968
Beni-Suef	1,885	1,537	3,422	1,802	867	2,669	1,098	13,494	14,592	1,253	4,878	6,131	6,091	20,723	26,814
Minia	1,669	1,257	2,926	2,028	1,293	3,321	1,168	12,895	14,063	1,432	5,985	7,417	6,247	21,480	27,727
Assiut	1,016	1,959	2,975	1,183	2,037	3,220	1,090	6,470	7,560	1,875	6,328	8,203	6,195	15,763	21,958
Suhag	620	1,144	1,764	538	1,048	1,586	1,148	3,493	4,641	1,009	3,144	4,153	3,350	8,794	12,144
Girga	425	1,246	1,671	365	835	1,200	782	2,888	3,670	832	1,275	2,107	2,871	5,777	8,648
Qena	208	847	1,055	600	1,206	1,806	314	3,277	3,591	1,087	3,780	4,867	2,861	8,458	11,319
Nag' Hammadi	418	737	1,155	565	493	1,058	331	4,044	4,375	620	3,018	3,638	2,213	8,013	10,226
Benha	535	759	1,294	491	645	1,136	1,034	2,651	3,675	1,059	4,521	5,580	2,430	9,255	11,685
Sannures	521	1,355	1,876	918	3,401	4,319	414	2,075	2,489	825	3,543	4,368	6,195	6,857	13,052
Tahta	192	516	708	124	956	1,080	1,898	1,406	3,304	1,410	1,807	3,217	1,788	6,521	8,309
Mit Ghamr	874	1,229	2,103	913	1,447	2,360	1,721	3,592	5,313	2,345	7,104	8,449	4,463	13,762	18,225
TOTAL	**24,221**	**46,666**	**70,887**	**27,151**	**50,156**	**77,307**	**41,483**	**251,578**	**293,071**	**55,459**	**287,973**	**343,432**	**148,194**	**636,503**	**784,697**

TABLE No. 66.—NUMBER OF VENEREAL DISEASES CASES TREATED AT THE SKIN AND VENEREAL DISEASES CLINICS DURING THE YEAR 1941

Clinic	Gonorrhoea						Syphilis												Other Diseases					
	Acute		Chronic		Total		Primary		Secondary		Tertiary		Latent		Hereditary		Nervous		Total		Chancroid		Other Venereal Diseases		Total	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
Sayeda Zeinab ...	1·198	1·512	2·020	4·460	3·218	5·972	219	14	205	92	36	30	117	191	39	79	1	—	617	406	346	137	3·741	2·654	4·087	2·791
Saptia	2·780	350	942	5·216	3·722	5·566	883	158	789	143	45	8	655	838	66	107	15	3	2·453	1·257	920	78	3·237	3·586	4·157	3·664
Gamalia	2·331	1·305	903	4·182	3·234	5·487	460	18	177	97	18	5	153	168	18	19	5	1	831	368	480	35	128	59	608	94
Port-Said	393	29	53	484	440	513	43	4	48	26	4	1	40	64	25	31	5	2	165	128	161	1	3·811	4·729	3·972	4·730
Suez...	357	402	6	3	363	405	101	—	45	4	9	2	68	119	10	12	—	—	233	137	7	—	834	1·015	841	1·015
Damanhour	157	111	24	206	181	317	34	8	49	41	121	59	69	328	58	47	1	2	322	485	76	10	4·128	3·991	4·204	4·001
Tanta	310	122	189	221	499	343	293	5	39	27	57	57	47	101	18	20	4	3	458	213	24	—	1·921	2·147	1·945	2·147
Mahalla el Kobra...	206	57	25	84	231	141	51	3	56	32	7	8	60	66	24	24	2	—	200	133	—	—	724	553	724	553
Mansoura	273	40	16	923	289	963	40	5	39	20	50	28	51	271	37	37	1	2	218	363	101	10	1·241	970	1·342	980
Zagazig	283	52	1	1	284	53	45	1	36	37	17	35	12	96	6	11	6	—	122	180	27	—	3·377	3·519	3·604	3·519
Shebin el Kom ...	171	62	68	398	239	460	46	5	38	30	55	38	38	101	64	28	4	2	245	204	12	2	—	—	12	2
Fayoum	135	74	36	55	171	129	56	4	141	117	102	94	9	22	5	5	4	2	317	244	—	—	2·246	1·998	2·246	1998
Beni-Suef	315	15	2	138	317	153	92	4	51	31	17	20	4	8	4	13	—	1	168	77	160	—	2·774	2·442	2·934	2·442
Minia	159	42	47	141	206	183	93	10	88	43	21	25	25	59	40	50	4	3	271	190	4	—	2·446	2·947	2·450	2·947
Assiut	151	28	17	60	168	88	47	5	134	118	32	42	136	288	3	1	8	2	360	456	6	—	—	—	6	—
Souhag	100	1	3	15	103	16	19	1	79	72	20	43	1	5	98	81	2	2	219	204	13	—	—	—	13	—
Girga	79	6	12	11	91	17	145	8	105	57	92	142	—	1	31	25	1	2	374	235	—	—	1·206	948	1·206	948
Qena	57	—	12	—	69	—	6	2	52	43	13	25	21	30	19	39	6	5	117	144	—	—	16	14	16	14
Nag' Hammadi ...	80	9	24	38	104	47	62	2	72	42	62	38	80	169	51	57	15	1	342	309	1	—	722	711	723	711
Benha	62	14	9	153	71	167	9	—	10	20	25	30	29	60	9	14	3	—	85	124	31	—	110	8	141	8
Sannures	103	217	11	18	114	235	45	42	20	12	37	37	—	19	8	11	—	—	110	121	9	—	—	—	9	—
Tahta	32	4	13	—	45	4	10	—	30	29	59	62	3	22	80	86	—	—	182	199	—	—	418	250	418	250
Mit Ghamr	55	23	12	21	67	4	32	5	7	4	23	16	55	108	62	41	4	1	183	175	—	—	—	—	—	—
TOTAL	9·787	4·475	4·445	16·828	14·232	21·303	2·821	364	2·310	1·137	922	845	1·673	3·134	775	838	91	34	8·602	6·352	2·378	273	33·180	32·541	3·558	32·814

TABLE No. 67.—NUMBER OF PATIENTS WHO COMPLETED THEIR COURSE OF TREATMENT AT THE VENEREAL DISEASES CLINICS AND WHO CEASED TO ATTEND BEFORE COMPLETION OF THEIR TREATMENT DURING THE YEAR 1941

Clinic	Patients who Completed Treatment													Patients who Ceased to Attend before Completion of their Treatment									
	Gonorrhoea			Syphilis			Other Diseases			Grand Total	Percentage			Gonorrhoea			Syphilis			Other Diseases			Grand Total	Percentage		
	M.	F.	Total	M.	F.	Total	M.	F.	Total		Gon.	Syph.	Other Dis.	M.	F.	Total	M.	F.	Total	M.	F.	Total		Gon.	Syph.	Other Dis.
Sayeda Zeinab	4·361	7·312	11·673	685	416	1·101	3·699	2·694	6·393	19·167	53	26	87	3·790	5·012	8·732	395	286	681	245	287	532	9·945	19	13	12
Saptia	1·915	2·512	4·427	175	94	269	2·105	2·041	4·146	8·842	47·5	4·6	11·2	—	—	—	—	—	—	—	—	—	—	—	—	—
Gamalia	2·484	3·796	6·280	516	293	809	591	88	679	7·768	80·8	10·4	8·7	212	210	422	202	160	362	7	2	9	793	53·5	45·6	1·1
Port-Said	24	84	108	10	21	31	2·951	3·513	6·464	6·603	6	1·8	66	644	819	1·463	517	458	975	632	868	1·500	3·938	14·7	9·8	17
Suez	170	198	368	—	—	—	600	748	1·348	1·716	48	—	73	89	112	201	52	33	85	175	238	413	699	26	23	22
Damanhour	43	27	70	96	188	284	3·872	3·654	7·526	7·880	88	3·5	95·5	113	274	387	229	215	444	119	122	241	1·072	36·1	41·4	22·4
Tanta	207	143	350	310	145	455	1·728	1·828	3·556	4·361	8·03	10·4	81·5	292	200	492	148	68	216	217	319	536	1·244	39·5	17·3	43
Mahalla el Kobra ...	59	3	62	122	80	202	724	553	1·277	1·541	4	13	83	23	43	66	34	11	45	—	—	—	111	59	41	—
Mansoura	60	74	134	19	32	51	913	793	1·706	1·891	10·7	5·4	73·4	165	689	854	280	263	543	429	187	616	2·013	68·2	51·4	26·6
Zagazig	22	4	26	10	19	29	9	8	17	72	13·5	15	3	262	45	307	107	135	242	3·367	3·511	6·878	7·427	81	39	97·7
Shebin el Kom	90	33	123	—	—	—	1·693	1·475	3·168	3·291	3·7	—	96·3	48	103	151	80	58	138	225	181	406	695	21·7	19·8	58·5
Fayoum	13	16	29	28	35	63	18	18	36	128	23	41·5	28	249	204	453	252	269	521	310	331	641	1·615	28	32	39
Beni-Suef	126	28	154	8	11	19	1·135	718	1·853	2·026	32·8	7·7	34·5	119	56	175	81	31	112	875	860	1·735	2·022	37·2	45·7	32·3
Minia	13	3	16	3	8	11	1·200	1·800	3·000	3·027	0·5	0·3	99·1	168	156	324	214	134	348	1·229	1·132	2·361	3·033	10·6	11·1	78·7
Assiut	7	—	7	—	—	—	1·600	1·350	2·950	2·957	2·7	—	90·9	78	122	200	252	316	568	160	162	322	1·090	80	69·6	9·5
Souhag	20	9	29	80	120	200	13	—	13	242	24·3	47·1	100	83	7	90	139	84	223	—	—	—	313	75·6	52·7	—
Girga	45	7	52	—	—	—	1·220	982	2·202	2·254	48	—	97	40	10	50	313	187	500	—	—	—	550	46	80	—
Qena	11	—	11	41	65	106	122	122	244	361	15	39	9	58	—	58	76	79	155	933	1·684	2·617	2·830	85	61	91
Nag' Hammadi ...	113	49	162	304	271	575	684	675	1·359	2·090	95	80	90	6	3	9	83	68	151	38	75	113	273	5	20	10
Benha	17	104	121	28	35	63	13	—	13	197	30	29	80	18	30	48	50	57	107	26	—	26	181	13	48	22
Sannures	99	213	312	68	67	135	9	—	9	456	89·6	58·4	100	15	22	37	52	44	96	—	—	—	133	10·4	41·6	—
Tahta	39	4	43	75	115	190	400	200	600	833	87	50	—	6	—	6	107	84	191	28	40	68	265	13	50	10
Mit Ghamr	14	14	28	—	2	2	263	297	560	590	25·2	0·6	23	6	9	15	53	28	81	329	410	739	835	13·5	22·6	30·4
TOTAL	9·952	14·633	24·585	2·578	2·017	4·595	25·562	23·557	49·119	78·294	—	—	—	6·414	8·126	14·540	3·716	3·068	6·784	9·344	10·409	19·753	41·077	—	—	—

TABLE No. 68.—TREATMENT DURING THE LAST FIVE YEARS

Year	No. of Clinics	New Patients	No. of Visits
1937	17	100,753	715,767
1938	20	111,447	793,488
1939	20	143,660	907,996
1940	23	145,801	622,220
1941	23	148,194	636,503

TABLE No. 69.—DISTRIBUTION OF BEDS, 1941

Hospital	1st Class	2nd Class	3rd Class Spec.	3rd Class Ord.	Children	Opth. Bran	Total Beds for Patients	Beds for Staff	Total No. of Beds
Hod el Marsoud	—	—	10	260	—	—	270	6	276
Gabbari	—	—	20	180	—	—	200	9	209
TOTAL	—	—	**30**	**440**	—	—	**470**	**15**	**485**

TABLE No. 70.—NUMBER OF IN AND OUT PATIENTS TREATED AND THEIR VISITS DURING THE YEAR 1941

Hospital	In-Patients	Out-Patients	No. of Visits
Hod el Marsoud	4,069	3,430	13,489
Gabbari	2,104	476	2,858
TOTAL	**6,173**	**3,906**	**16,347**

Chapter XII.—MENTAL DISEASES

The Mental Diseases Hospitals of Abbassia and Khanka are still suffering from the overcrowding of patients. During the year 1941, the average number of patients in residence amounted to 4,612 whereas the number of available beds stood at 3,334. The number of cases admitted during the year was 2,454. Those in residence on December 31, 1940, were 4,599 making a total of 7,053. The cases discharged as recovered and relieved were 1,440, those deceased numbered 885, those discharged as not insane were 86, and those discharged for various other reasons numbered 198. Thus the discharges totalled 2,609, those remaining in the hospitals up to December 31, 1941, were 4,444, i.e. leaving 1,110 patients over and above the beds available.

The maximum number of patients admitted during the callendar months of the year amounted to 266 in May, the minimum number was 148 in December.

The effects of war were felt in more than one direction. Supplies became more difficult, even as regards local purchase ; Italian prisoners of war of all ranks were treated at the Abbassia Hospital. One of the R.A.F. Maintenance Units established itself in the vicinity of Khanka Hospital, and is being supplied with light and water from this hospital,

The number of patients deceased amounted to 885, out of whom 289 died within three months of admission and 67 died of senility.

The ages of patients admitted ranged between 10 and 80 to 90 years. The maximum number was for those whose ages ranged between 20 and 25 years. As regards the physical condition of patients on admission 29·7 per cent were physically poor and 8·2 per cent were very poor.

The pellagra cases admitted during the year numbered 585, almost half being from Upper Egypt and the other half from Lower Egypt. Their maximum number during the calendar months amounted to 63 in May, while the lowest number was 22 in September.

In addition to his duties, the Director of the Division has examined and reported on 187 accused persons sent by the Procurer General of whom 51 were involved in capital crimes, and has also made reports on 66 other inmates who subsequent to their admission were found to have been accused of violating the law, thus making a total of 253 reports. He also examined 126 officials and employees suspected of mental trouble and reported on their cases.

20,758 cases were locally treated for physical ailments, 1,433 for eye diseases and 1,359 for dental diseases.

6,019 epileptic fits were recorded during the year. Artificial feeding was resorted to in 6,466 times without accident.

The year under review did not end without unhappily recording two suicides and one fatal accident. The cases of suicide were one in Abbassia where the patient set fire to himself, the other in Khanka where the patient strangled himself. The fatal accident took place in Khanka when the patient in a fit of severe excitement threw himself roughly to the ground off the dining table causing himself severe injuries that resulted in his death.

Convulsion therapy was continued with the use of Tetracor or Cardiazol. 177 cases suitable for this method were treated. The results obtained were 29 recovered or markedly improved, 22 slightly improved, the rest showing no improvement.

The work in the out-patients clinic in Abbassia Hospital continued, 34 cases having been examined and treated.

In addition to local lectures on nursing delivered to the staff, lectures in Abbassia Hospital were also delivered to the senior students of the Faculty of Medicine, and lectures in psychology and psychiatry in its various aspects were also given to the students sitting for the Diploma in Psychological Medicine and Neurology recently instituted in Foad I University.

Part IV

Chapter XIII.—GENERAL HOSPITALS

Number of Hospitals.

The number of Government General Hospitals was 72 during the year. Of these, 20 are situated in the Governorates and chief towns of provinces. The remaining 52 are situated in bandar towns. There are, besides, 3 general diseases clinics. A new hospital was opened during the year at Dessouk Bandar. All village hospitals have been attached to the Health Inspectorate Section for supervision.

Hospital Accommodation.

The total number of hospital beds this year was 6,969. Of these, 6,050 beds are reserved for patients and 919 for the personnel.

Attendance.

Part of the hospital accommodation was reserved to accommodate possible air raid casualties. Hence the number of persons treated during the year in the in and out-patient departments was less than before. There were 93,029 in-patients and 2,596,697 out-patients. 2,142,282 visits were paid by patients to out-patient clinics.

Surgical Operations.

Surgical treatment in hospitals is satisfactory. The number of surgical operations show a decrease this year corresponding with the number of patients treated. 30,890 operations were performed in the in-patient departments and 81,781 in the out-patient, making a total of 112,671 as compared with 37,815, 80,198 and 118,013 respectively during last year.

X-Ray.

X-Ray examination and treatment were carried out in a satisfactory way but again there were fewer patients this year. These were 30,226 in all as against 47,088 last year.

Deaths.

6,943 deaths were recorded amongst the 93,029 in-patients or a ratio of 7·46 per cent.

Expenditures.

The total cost of upkeep of all general and district hospitals during 1941 was L.E. 341,779·805 mills. or 0·255 milliemes daily per patient. The average stay of patients in hospital was 14·4 days as against 0·188 milliemes and 13·2 days last year.

TABLE No. 71.—NUMBER OF HOSPITALS IN EXISTENCE FROM 1931–1941

Year	Hospitals in Provinces and Governorates	Hospitals in Districts	Village Hospitals	Out-Patient Clinics
1931	19	38	34	—
1932	19	43	46	—
1933	19	44	49	—
1934	19	45	50	1
1935	19	45	50	3
1936	19	45	50	3
1937	20	48	60	3
1938	20	48	62	3
1939	20	48	62	3
1940	20	51	62	3
1941	20	52	—	3

Table No. 72.—Number of Beds

Year	No. of Beds	
1932	6,077	
1933	6,482	
1934	5,309	Kasr el Aini Hospital has been detached from the Ministry.
1935	5,852	
1936	5,964	
1937	6,341	
1938	6,822	
1939	6,979	
1940	6,926	The Lock Hospital has been detached from the Section.
1941	6,969	Village Hospitals have been detached from the Hospitals Section.

Table No. 73.—Detailed Distribution of Hospital Accommodation

Hospital	1st Class	2nd Class	3rd Class Special	3rd Class Ordinary	Children	Ophth. Branch	Total Beds for Patients	Beds for Staff	Total No. of Beds
King's, Cairo	—	—	—	376	—	—	376	81	457
Demerdash	6	14	—	259	7	44	330	156	486
Alexandria	1	6	18	761	52	60	898	120	1,018
Port-Said	2	2	12	165	13	—	194	14	208
Suez	4	11	—	169	—	25	209	17	226
Damietta	2	2	—	90	—	35	129	14	143
Damanhour	—	2	—	112	2	—	116	6	122
Tanta	—	4	—	218	2	—	224	28	252
Mansoura	—	—	—	196	6	—	202	9	211
Mit Ghamr	—	—	—	30	—	13	43	6	49
Zagazig	1	3	—	183	23	—	210	20	230
Shebin el Kom	—	2	—	88	—	—	90	3	93
Benha	—	—	—	108	6	—	114	3	117
Kalioub	—	—	—	74	—	—	74	4	78
Fayoum	—	1	—	100	—	—	101	4	105
Beni Suef	—	—	—	98	—	—	98	4	102
Minia	1	1	—	83	12	—	97	3	100
Fikria	—	—	—	22	—	13	35	4	39
Maghagha	—	—	—	—	—	—	—	—	—
Assiut	—	4	—	189	11	—	204	18	222
Mallawi	—	—	—	16	—	11	27	4	31
Sohag	—	2	—	94	—	—	96	6	102
Tahta	—	—	—	26	—	—	26	2	28
Qena	—	1	—	90	—	—	91	5	96
Luxor	6	6	—	38	10	25	85	16	101
Esna	—	1	—	52	—	24	77	10	87
Assuan	—	2	—	45	—	28	75	3	78
Ismailia	—	—	—	46	—	8	54	12	66
Dilingat	—	—	—	23	—	12	35	7	42
Kafr el Dawar	—	—	—	27	—	8	35	9	44
Rashid	—	—	—	28	—	12	40	9	49
Shubrakhit	—	—	—	21	—	12	33	9	42
Idfina	—	—	—	44	—	—	44	6	50
Kom Hamada	—	—	—	29	—	11	40	9	49
Dessouk	—	—	—	35	—	12	47	10	57
Mahalla el Kobra	—	—	—	114	—	—	114	13	127
Samannoud	—	—	—	40	—	8	48	7	55
Carried forward	23	64	30	4,089	144	361	4,711	651	5,362

TABLE No. 73 *(contd.)*

Hospital	1st Class	2nd Class	3rd Class Special	3rd Class Ordinary	Children	Ophth. Branch	Total Beds for Patients	Beds for Staff	Total No. of Beds
Brought forward	23	64	30	4,089	144	361	4,711	651	5,362
El-Tayeba	—	—	—	32	—	15	47	2	49
Sherbin	—	—	—	24	—	12	36	3	39
Fareskour	—	—	—	23	—	8	31	9	40
Senbellawin	—	—	—	28	—	12	40	10	50
El-Manzala	—	—	—	31	—	—	31	7	38
Aga	—	—	—	36	—	16	52	7	59
Dikernes	—	—	—	47	—	8	55	10	65
Belbeis	—	—	—	24	—	12	36	9	45
Fakous	—	—	—	23	—	12	35	8	43
Minieh el Kamh	—	—	—	26	—	8	34	5	39
Tala	—	—	—	24	—	12	36	6	42
Ashmoun	—	—	—	28	—	12	40	7	47
Menouf	—	—	—	36	—	16	52	10	62
Zawiet el Naoura	—	—	—	32	—	—	32	6	38
Shebin el Kanater	—	—	—	27	—	12	39	9	48
Al Saff	—	—	—	24	—	12	36	10	46
Al Ayat	—	—	—	47	—	8	55	10	65
Itsa	—	—	—	35	—	—	35	7	42
El-Wasta	—	—	—	25	—	12	37	9	46
Beba	—	—	—	29	—	12	41	10	51
Beni Mazar	—	—	—	32	—	8	40	5	45
Al Fashn	—	—	—	24	—	11	35	6	41
Samalout	—	—	—	40	—	—	40	8	48
Dairout	—	—	—	30	—	12	42	10	52
Al Badary	—	—	—	23	—	8	31	8	39
Sahel Selim	—	—	—	23	—	8	31	9	40
Abu Tig	—	—	—	31	—	8	39	7	46
Akhmim	—	—	—	27	—	12	39	6	45
Al Baliana	—	—	—	24	—	12	36	9	45
Girga	—	—	—	20	—	12	32	9	41
Dishna	—	—	—	25	—	8	33	9	42
Kous	—	—	—	22	—	12	34	10	44
Nag' Hammadi	—	—	—	28	—	14	42	10	52
Kom Ombo	—	—	—	22	—	—	22	3	25
Edfou	—	—	—	27	2	14	43	5	48
TOTAL	**23**	**64**	**30**	**5,088**	**146**	**699**	**6,050**	**919**	**6,969**

Treatment.

The following table No. 74 shows the number of in and out-patients treated in the various hospitals and clinics during the last five years.

TABLE No. 74

Year	No. of In-Patients	No of Out-Patients	No. of Attendances to Out-patients Section of Hospitals	Patients treated in Village Hospitals	Attendances at Village Hospitals
1937	128,599	2,715,995	5,149,402	1,108,799	2,371,075
1938	126,246	2,963,106	5,493,277	1,109,018	2,393,079
1939	131,068	3,275,350	5,907,039	1,239,119	2,705,883
1940	104,475	3,015,066	5,435,477	1,175,477	2,671,104
1941	93,029	2,596,697	2,142,282	—	—

Table No. 75 gives details of the hospitals and patients treated therein during the year 1941.

TABLE No. 75.—HOSPITALS AND PATIENTS TREATED THEREIN DURING 1941

Hospital	In-Patients						Out-Patients	
	Treated during the Year	Discharged during the year				Remaining	New Cases	No. of Visits
		Cured	Relieved	Not improved	Died			
King's	3,770	1,874	1,010	704	122	60	96,148	112,818
Demerdash	5,062	2,767	1,647	205	265	178	128,828	130,000
Alexandria	17,529	3,881	9,229	2,387	1,326	706	240,941	228,907
Port-Said	2,771	1,092	869	488	192	130	56,582	56,900
Suez...	2,702	1,027	1,264	68	215	128	38,797	33,424
Damietta	1,308	560	658	24	50	16	38,085	26,048
Damanhour	2,126	937	942	23	160	64	58,321	55,715
Tanta	4,178	2,295	1,260	113	374	136	55,640	26,457
Mansoura	3,138	1,633	1,195	35	192	83	73,796	30,472
Mit Ghamr	1,037	670	202	18	126	21	48,282	24,733
Zagazig	3,155	1,719	1,003	124	233	76	41,904	31,659
Shebin el Kom ...	1,617	860	551	13	144	49	531,073	42,358
Benha	1,463	784	498	35	115	31	38,622	9,257
Kaliub	765	326	322	4	78	35	34,998	29,942
Fayoum	2,008	1,296	350	46	237	79	37,574	23,261
Beni Suef	893	401	339	8	105	40	11,215	34,468
Minia	1,592	1,294	141	32	60	65	34,175	34,942
Fikrieh	467	242	168	2	38	17	30,582	40,096
Maghagha	—	—	—	—	—	—	27,332	31,925
Assiut	3,386	2,331	494	156	291	114	10,526	48,729
Mallawi	580	397	98	10	59	16	37,055	28,193
Souhag	1,176	632	336	60	118	30	35,695	21,886
Tahta	618	266	274	2	61	15	37,625	16,138
Qena	1,051	673	267	19	64	28	27,473	18,059
Luxor	474	268	134	9	46	17	21,427	18,017
Esna	591	401	121	13	40	16	23,143	14,008
Assuan	636	312	273	6	31	14	22,174	31,910
Ismailia	958	643	196	1	94	24	19,051	13,301
Dilingat	330	111	186	1	25	7	18,276	18,998
Kafr el Dawar ...	1,000	541	330	9	85	35	37,263	25,647
Rashid	521	259	132	84	38	8	19,144	21,046
Shubrakhit	632	265	248	64	39	16	15,824	14,040
Idfina	673	250	372	16	19	16	663	13,069
Kom Hamada ...	367	268	49	8	34	8	22,633	19,019
Dessouk	999	724	142	21	88	24	37,965	45,360
Mahalla Kobra ...	1,908	984	753	16	112	43	88,328	59,913
Samanoud	518	408	63	2	29	16	24,001	30,104
El Taiba...	732	521	168	2	28	13	28,463	25,002
Sherbin	670	348	226	8	64	24	29,093	17,991
Fareskour	684	529	110	5	22	18	30,780	15,452
Simbellawin	585	427	99	2	47	10	29,297	12,417
Manzalla	700	501	114	3	66	16	33,224	20,153
Aga	578	370	59	107	32	10	18,948	16,324
Dikernes	494	172	258	30	22	12	24,348	18,893
Belbeis	508	392	53	2	48	13	26,632	21,493
Fakous	638	475	75	17	52	19	24,952	8,550
Minieh el Kamh ...	461	357	62	4	38	—	29,839	8,794
Tala	598	313	226	1	48	10	30,417	16,637
Ashmoun	793	503	230	1	49	10	24,398	15,877
Menouf	948	703	114	22	87	22	32,306	13,552
Zawiet el Naoura	427	304	80	3	34	6	17,983	8,662
Shebin el Kanater	898	563	238	19	63	15	19,851	13,749
Al Saff	456	296	98	6	41	15	20,075	32,984
Al Ayat	709	337	284	9	54	25	25,939	23,216
Itsa	722	581	78	13	41	9	22,438	11,973
Al Wasta	454	241	152	7	38	16	16,959	13,685
Beba	453	352	35	7	42	17	20,632	17,277
Beni Mazar	808	648	58	10	55	37	28,258	24,117
Carried forward ..	85,315	42,324	28,933	5,104	6,276	2,678	2,256,673	1,828,017

TABLE No. 75 *(contd.)*

Hospital	In-Patients						Out-Patients	
	Treated during the Year	Discharged during the Year				Remaining	New Cases	No. of Visits
		Cured	Relieved	Not improved	Died			
Brought forward...	85,315	42,324	28,933	5,104	6,276	2,678	2,256,673	1,828,017
Al Fashn...	578	326	147	9	72	24	21,041	23,004
Samalout	667	344	235	3	63	22	27,613	28,600
Dairout	881	333	377	18	105	48	35,781	26,285
El Badari	375	328	23	2	15	7	27,470	33,340
Sahel Selim	313	191	93	1	23	5	24,843	20,136
Abou Tig	964	449	374	9	107	25	40,634	34,505
Akhmim	446	291	101	6	42	6	10,607	20,409
Al Baliana	367	173	147	6	33	8	26,198	28,880
Girga	615	506	41	—	53	15	27,862	28,219
Dishna	539	332	164	7	19	17	20,482	12,944
Qous	597	311	209	22	41	14	21,091	14,707
Nag'-Hammadi ...	578	193	313	4	52	16	26,496	21,803
Kom Ombo	278	201	46	6	19	6	16,735	9,884
Edfou	516	217	247	—	23	29	13,171	11,549
TOTAL	**93,029**	**46,519**	**31,450**	**5,197**	**6,943**	**2,920**	**2,596,697**	**2,142,282**

Operations and X-Ray Examinations.

The following table No. 76 shows the number of operations and X-Ray examinations performed in the hospitals during the last 5 years.

TABLE No. 76

Year	In-patients operations	Out-patients operations	Total	X-Ray exams.
1937	49,351	67,186	116,537	33,837
1938	46,827	78,779	125,606	47,216
1939	50,115	86,511	136,626	65,591
1940	37,815	80,198	118,013	47,088
1941	30,890	81,781	112,671	30,226

Deaths.

The following table No.77 shows the number of in-patients treated in the hospitals during the last five years and the number of deaths and death-rate in each year.

TABLE No. 77

Year	No. of In-Patients	No. of Deaths	Death-rate per cent
1937	128,599	6,276	4·88
1938	126,246	6,724	5·32
1939	131,068	7,056	5·38
1940	104,475	6,822	6·53
1941	93,029	6,943	7·46

The Construction Programme.

The following table No. 78 shows the hospitals that were constructed and those remaining under construction.

TABLE No. 78

Mudiria or Governorate	District Hospitals	
	Constructed	Under Construction
BEHERA	Dilingat. Kafr el Dawar. Rashid. Shubrakhit. Idfina. Kom Hamada.	Teh-el-Baroud. Abu Homos. Al Atf.
GHARBIA	Dessouk. Mahalla el Kobra. Sherbin. Samanoud. Taieba	Kafr El Zayat. Belkas. Talkha.
DAKAHLIA	Fareskour. Simbellawin. Manzala. Aga. Dekernes.	
KALIUBIA	Shebin El Kanater.	Toukh.
SHARKIA	Belbeis. Fakous. Minia Kamh.	
MENOUFIA	Ashmoun. Tala Zawiet-el-Naoura. Menouf.	Quesna.
CANAL	Ismailia.	
BENI SUEF	Wasta. Beba.	
FAYOUM	Itsa.	Sinoures.
MINIA	Beni Mazar. Samalout. Fashn.	
ASSIUT	Dairout. Badari. Sahel Selim. Abu Tig.	Manfalout Abnoub. Wlaga.
GIRGA	Girga. Akhmim. Baliana.	
QENA	Dishna. Qous. Nag' Hammadi.	
ASSUAN	Edfou. Kom Ombo.	

Venereal Diseases.

The following table No. 79 shows the number of prostitutes treated in the General and District Hospitals during the year 1941.

TABLE No. 79

Gonorrhoea	1,062
Syphilis	256
Other Diseases	97
TOTAL	**1,415**

The following table No. 80 shows the total number of patients treated for the venereal diseases in the General and District Hospitals during the year 1941.

TABLE No. 80

In-Patient Sections			Out-Patient Sections		
Gonorrhoea	Syphilis	Total	Gonorrhoea	Syphilis	Total
1,265	580	1,845	3,999	10,838	14,837

Chapter XIV.—OPHTHALMIC HOSPITALS

New Units.

During this year, two ophthalmic departments were opened in the general hospitals at Ayat and Dekernis, thus making the total number of ophthalmic units 89 of which 74 are permanent and 15 travelling.

1942-1943 Budget Proposals.

It is proposed to provide the following in the 1942-1943 budget:—

(1) Ophthalmic department in the Boulac Health Group, Cairo.

(2) Ophthalmic treatment in six village health units at El Bagour, Sobk El Dahak, Shamma, El Quanayat, El Badrashein and Mit Kenana villages.

Ophthalmic treatment is being extended to all parts of the country according to a scheme prepared by the Ministry which is gradually executed as funds are made available in the budget.

Clinical Work.

The following table shows the clinical work carried out in the year 1941 as compared with that of 1940:—

TABLE NO. 81

	1940	1941
New Patients	1,512,459	1,431,858
In-Patients	37,573	36,272
Operations	372,697	327,529
Attendance of out-patients ...	9,556,327	8,970,642

The number of patients who were found blind in one or both eyes, excluding cataract cases causing blindness, was 64,756, i.e. 3·9 per cent of all patients examined at the ophthalmic hospitals. By adding the cataract cases causing blindness, the rate becomes 4·1 per cent. Acute ophthalmias form 81 per cent of all causes of blindness. The gonococcus is still the predominant factor of infection with acute ophthalmias; its ratio to total microbes being 42 per cent.

Age of Patients.

Of a total of 1,431,858 new patients treated, 102,193 or 7·13 per cent were under the age of one year; 447,589 or 31·26 per cent from one to 15 years of age; 379,840 or 26·52 per cent from 16 to 30 years of age; and 827,429 or 57·78 per cent from one to 30 years of age. This indicates that the masses appreciate the importance of ophthalmic treatment for infants, children and youths.

School Clinics.

Ophthalmic examination, inspection and treatment are at present carried out in 41 Government primary schools in Cairo, Alexandria and the Provinces.

Of 12,065 pupils examined, 99 per cent were found suffering from trachoma in its various stages. About 31·59 per cent of these were in the serious stages, namely, trachoma I and II. As a result of ophthalmic treatment, however, this latter rate fell to 9·5 per cent.

It is to be observed that, in Government schools, a more accurate estimate of the prevalence of trachoma amongst pupils can be obtained as inspection and treatment therein are carried out regularly on pupils remaining under the constant supervision of the treating doctors.

Other Services.

Besides the above, ophthalmologists also pay regular visits to the following hospitals and institutions for the examination and treatment of eye cases :—

Leprosy colony and hospital at Abu Zaabal and Siyufia.

Mataria children dispensary.

Fever hospitals at Abbassia and Embaba.

Mental hospitals at Abbassia and Khanka.

Home for weaned babes.

Ophthalmologists are also occasionally sent to the Frontiers Districts.

During Pilgrimage, a medical mission including an ophthalmologist is sent to Mecca and Medina to examine and treat gratuitously all pilgrims irrespective of their nationalities.

Accommodation.

The total number of beds in all the ophthalmic units was 2,133.

Post-Graduate Course of Ophthalmology.

The number of medical officers of the ophthalmic section who attended the post-graduate course of ophthalmology in 1941 was 15. Of these, 7 were examined in Apri 1941 in the preliminary course and 4 passed. 9 were examined in October and 4 passed. Of 7 medical officers who were examined in November 1941 in the secondary course, 2 passed.

Providing Ophthalmic Hospitals with Modern Apparatus.

Ophthalmic hospitals are regularly supplied with modern apparatus and instruments to keep pace with new developments in the ophthalmic field.

Chapter XV.—PHARMACIES

Private Pharmacies.

14 permits for new private pharmacies were granted by the Ministry this year. 13 of these belonged to Egyptian subjects (10 owned by qualified pharmacists and 3 by non-pharmacists), and one belonged to a foreign pharmacist. 4 pharmacies were closed down.

The total number of pharmacies remaining is 492 of which 409 are owned by Egyptians (261 by qualified pharmacists and 148 by non-pharmacists), and 83 are owned by foreign subjects (44 by qualified pharmacists and 39 by non-pharmacists).

Pharmacies Annexed to Public Health Offices.

The number of pharmacies annexed to public health offices this year remains the same as in 1940, namely 14. These are intended to dispense medicines in localities where no pharmacies exist.

Night Service Pharmacies at Cairo.

There were 7 night service pharmacies this year as against 8 in 1940. These dispensed 6,357 prescriptions as against 7,474 in the previous year. Specialities and patented medicines are excluded as these are issued without prescriptions.

Students of Pharmacy.

47 students of the Egyptian School of Pharmacy and 22 students of foreign schools were authorised by the Ministry this year to pass the statutory period of training in pharmacies as against 26 and 16 respectively in 1940.

Simple Drug Stores.

21 permits for opening simple drug stores were granted by the Ministry as follows :—

7 in Cairo, 3 in Alexandria, 1 in Suez, 2 in Sharkia, 1 in Dakahlia, 2 in Menoufia, 3 in Gharbia, 1 in Giza and 1 in Assiut. 8 permits were cancelled : 2 in the Canal Governorate, 1 in Cairo, 1 in Dakahlia, 2 in Gharbia, 1 in Kaliubia and 1 in Gerga.

Poisonous Drug Stores.

6 permits for dealing in poisonous substances were granted to drug stores : 4 in Cairo and 2 in Alexandria, and 14 were cancelled : 11 in Cairo, 1 in Alexandria and 2 in the Canal Governorate. 8 permits for trading in agricultural and industrial substances were granted; 7 in Cairo and 1 in Alexandria : and 8 were cancelled : 6 in Cairo, 1 in Alexandria and 1 in the Canal. Two permits for trading in stupefacient drugs were granted : 1 in Cairo and 1 in Alexandria, and 1 permit in Cairo was cancelled.

Medical Practitioners who Prepare Prescriptions in their Private Clinics.

The number of medical practitioners who prepare prescriptions in their clinics for their private patients was 20 distributed as follows :—

Gharbia	5	Giza	2
Behera	2	Fayoum	1
Menoufia	1	Beni Suef	1
Dakahlia	1	Minia	1
Sharkia	1	Gerga	1
Kaliubia	3	Qena	1

Registration of Egyptian Specialities.

38 permits for preparation and sale of Egyptian specialities were granted during 1941, and 40 specialities were refused registration. The total number of registered Egyptian specialities is 568.

Violation of the Law.

32 cases of contravention were brought before the courts by the Ministry. Of these, 183 were for trading in poisonous drugs without permits, 7 for practising pharmacy without authorisation and 134 were against pharmacists and assistant-pharmacists for violating the Law.

TABLE No. 82.—SHOWING QUANTITIES OF STUPEFACIENTS IMPORTED INTO EGYPT AND EXPORTED THEREFROM DURING 1941

	Quantities Imported		Quantities Exported	
	Kg.	Gr.	Kg.	Gr.
Opium and its preparations	2	236	—	—
Morphine and its salts	—	162	—	—
Eucodal and its salts	—	—	—	—
Cocaine and its salts	—	981	—	—
Cannabis Indica (Tinc. and Ext.)...	—	—	—	—

TABLE No. 83.—QUANTITIES OF STUPEFACIENTS CONFISCATED FOR ILLICIT IMPORT AND EXPORT

Opium...	1159 kilos.
Cannabis Indica	1340 ,,
Heroin	—

TABLE No. 84.—QUANTITIES OF STUPEFACIENTS CONSUMED FOR MEDICINAL PURPOSES

Opium and its preparations	4 kilos
Morphine and its salts	1 ,,
Cocaine and its salts	1 ,,
Cannabis Indica...	3 ,,

Part V.—ENDEMIC DISEASES

Chapter XVI.—ANKYLOSTOMA AND BILHARZIA

New Units.

A new health unit attached to Minia Provincial Council was opened on April 26, 1941, for the treatment of parasitic and other diseases.

Treatment.

1,013,704 new patients attended the units during the year under review as compared with 1,649,697 in 1940. The decrease is due to the dispatch of 15 units to Fayoum Province to undertake the anti-bilharzia campaign. For the most part of 1941, these units were engaged in the treatment of patients. This decrease is, however, compensated by an increase in the number of injections given to patients which amounted to 4,002,735, or an increase of 401,842 over 1940.

The number of anthelmintic doses was 500,117 as against 503,065 in the previous year or 2,948 doses less than in 1940.

Treatment of Territorial Force.

The treatment of men of the Territorial force was continued during the year. The number of men examined was 11,834 as against 5,797 last year. The number of injections given was 84,261 as compared with 39,918 in 1940; and the number of anthelmintic doses was 6,314 as against 4,160 in 1940.

Mixing Chenopodium Oil with Molasses.

Some units have tried a method of mixing chenopodium oil with molasses to render it palatable to patients, especially children. Should the method prove satisfactory, it will be introduced in the other units.

Treatment of Malaria.

As a step towards expanding the treatment of malaria, laboratory assistants of ankylostoma units have been trained in the technique of blood examination for malaria.

Treatment of Pellagra.

The number of diagnosed pellagra cases during the year was 14,470 of which 10,293 were treated. Of 16,001 cases diagnosed in 1940, 13,601 cases were treated.

Post Graduate Courses.

Five medical officers were delegated to attend post graduate courses in the Faculty of Medicine. Three of them are designated to attend a 3-month refreshment course in internal diseases, one to attend a one-year course in tropical diseases and one to attend a one-year course in Oto-Rhino-Laryngology.

Intoxication and Fatal Cases.

Of the patients attending ankylostoma units, 8 suffered from intoxication as shown below :—

1 case from Tartar emetic.
2 cases ,, Carbon tetrachloride.
1 case ,, Male fern.
4 cases ,, Chenopodium oil.

All the cases were treated and recovered.

Only one fatal case was recorded and this was not attributed to faulty treatment.

Treatment of Refugees.

Following air raids on Alexandria a large number of the population took refuge in the surrounding districts of Behera Province. The Ankylostoma school clinic No. 2 was therefore transferred from Karmous, Alexandria, to Abu Homos and together with the Ankylostoma unit at Kafr El Dawar and the Ankylostoma Hospital at Damanhour undertook the treatment of the refugees in their vicinity.

Prophylaxis.

Precautions against parasitic infection were the subject of much propaganda carried out by the ankylostoma units. The patients were lectured daily. A total of 28,268 lectures were delivered during 1941. Endemic Diseases Inspectors questioned patients at random to find out how much they have benefited by the lectures and they obtained good results. This is in addition to lectures and films dealing with parasites shown by the Propaganda Section.

Expenditure.

The total expenditure for 1941, including Central Office and ankylostoma provincial council units, amounted to L.E. 63,017.

Providing Patients with Sandals.

As an encouragement to bilharzia patients to continue treatment, a few thousand sandals were obtained from the committee in charge of the scheme for issuing barefooted persons with sandals for distribution to patients on completion of their treatment. Distribution of sandals was begun in the Ankylostoma hospitals at Helwan and Hawamdia.

Anti Bilharzia Law.

The Anti Bilharzia Law was issued under No. 58 of 1941, and was published in the Official Journal No. 146 of 16/10/1941.

The following is the French text :—

Loi No. 58 de 1941 relative à la lutte contre la Bilharziose

Nous, Farouk 1er, Roi d'Egypte

Le Sénat et la Chambre des Députés ont adopté ;

Nous avons sanctionné et promulguons la loi dont la teneur suit :

Art. 1.—La présente loi sera applicable aux localités qui seront désignées par arrêté du Ministre de l'Hygiène Publique publié au " Journal Officiel ".

Art. 2.—Toute personne âgée de 18 ans devra, dans les six mois qui suivent la date de la publication de l'arrêté prévu à l'article précédent, se présenter à l'hôpital qui sera affecté par le Ministère de l'Hygiène Publique au traitement de la bilharziose, aux fins de se faire examiner pour savoir si elle est atteinte de cette maladie.

Art. 3.—Les membres d'une même famille habitant la même maison pourront demander le déplacement chez eux du médecin accompagné de l'infirmière, aux fins de prendre les échantillons nécessaires à l'analyse, contre le paiement à l'Etat d'un droit s'élevant à une livre égyptienne.

Art. 4.—Les personnes que l'examen aura prouvé en être atteintes seront tenues de se présenter à l'hôpital de la ville ou du village dans les délais qui leur seront fixés pour suivre le traitement conformément aux règles établies à cet effet.

Elles devront également, après l'achèvement du traitement, se présenter à l'hôpital dans le délai qui leur sera fixé aux fins d'être réexaminées. S'il résulte de l'examen qu'elles sont encore atteintes de la maladie, elles devront subir un nouveau traitement.

Si leur état nécessite leur traitement hors de la ville ou du village où elles résident, le Ministère de l'Hygiène Publique est tenu de les transporter à l'hôpital le plus proche pour achever leur traitement.

Art. 5.—Le père de tout enfant qui n'aura pas atteint l'âge de 18 ans ou la personne qui en a la garde devra le présenter à l'hôpital aux fins de l'examen visé à l'article 2 et veiller à la continuation du traitement conformément aux dispositions de l'article précédent.

Art. 6.—Sont dispensées du traitement prévu aux deux articles précédents les personnes qui auront subi le traitement de la bilharziose et produit, dans le délai fixé à l'article 2, un certificat médical attestant ce fait ou attestant qu'elles suivent encore le traitement. Elles devront se présenter à l'hôpital dans le délai qui leur sera fixé aux fins de les faire réexaminer, et, si nécessaire, subir le traitement.

Art. 7.—Les personnes ne pouvant, pour raison de santé se présenter à l'hôpital aux délais fixés par les articles précédents aux fins d'être examinées ou de continuer leur traitement seront tenues de produire un certificat médical attestant cet empêchement ou d'en aviser, par lettre recommandée, la direction de l'hôpital du lieu de résidence.

Le médecin de l'hôpital fixera à ces personnes les délais auxquels elles devront se présenter aux fins d'examen et de continuation du traitement.

Art. 8.—Il est interdit aux personnes travaillant dans la navigation fluviale et à la pêche du poisson d'eau douce de s'adonner à leurs travaux durant tout le temps qu'elles sont atteintes de la bilharziose.

A cet effet, elles seront tenues de se présenter, une fois par an, aux jour et lieu qui leur seront fixés par le Ministère de l'Hygiène Publique aux fins d'examen et de traitement de celles qui seront trouvées atteintes de bilharziose.

Elles ne pourront se faire servir ou accompagner par aucun des leurs ou par d'autres atteints de bilharziose, à moins qu'ils n'aient subi le traitement conformément aux dispositions de l'article 4.

Art. 9.—Toute contravention aux dispositions de la présente loi sera punie d'un emprisonnement ne dépassant pas quinze jours et d'une amende n'excédant pas L.E. 5 ou de l'une de ces deux peines.

Art. 10.—Les médecins du Ministère de l'Hygiène Publique désignés pour l'exécution de la présente loi auront la qualité d'officier de police judiciaire pour constater toute contravention à ses dispositions.

Art. 11.—Nos Ministres de l'Hygiène Publique et de la Justice sont chargés, chacun en ce qui le concerne, de l'exécution de la présente loi.

Nous ordonnons que la présente loi soit revêtue du sceau de l'Etat, publiée au " Journal Officiel " et exécutée comme loi de l'Etat.

Fait au Palais d'Abdine, le 9 Ramadan 1360 (30 septembre 1941).

Par le Roi **FAROUK**

Le Président du Conseil des Ministres,
HUSSEIN SIRRY.

Le Ministre de la Justice,
MAHMOUD GHALEB.

Le Ministre de l'Hygiène Publique,
HAMED MAHMOUD.

(*Traduction.*)

Chapter XVII.—MALARIA

1.—*Units.*

Their number remains the same as in 1940, namely, 9 stationary and 6 travelling. The Teh El Baroud, Behera Province, and Abu Kebir, Sharkia Province, stations were not completed. Where necessary, outposts were set up and work carried out on the same lines as elsewhere.

2.—*Blood Specimens and Results.*

A total of 142,853 blood specimens were examined by the Malaria units. 12,944 or 9·06 per cent of the specimens taken from new cases and relapses were returned positive. Tables Nos. 85, 86 and 87 give the distribution of specimens according to attendance at the various malaria units and outposts, suspected persons in dwellings, and persons undergoing a general examination in Lower Egypt, the Canal and Suez Governorates; Upper Egypt and the Southern and Western Desert Governorates; and throughout the whole country. Patients examined in Government hospitals and other treatment institutions are not included. It is noteworthy that the ratio of positive results in all three tables is much higher in the first group (attendance at the malaria units) than in the other groups. This is attributed to the fact that patients generally report to the malaria units only when they are suffering from fever, whereas the other groups are either suspected cases or undergoing a general examination.

TABLE NO. 85.—SPECIMENS TAKEN IN LOWER EGYPT AND CANAL AND SUEZ GOVERNORATES

Specimens taken from	No. of Specimens	New Infection	Relapse	Total	Ratio
					%
Attendance at Malaria units and branches	22,625	1,127	6,119	7,246	33·02
Suspected persons in dwellings	18,709	634	947	1,581	8·4
Persons undergoing a general examination	63,078	737	1,503	2,240	3·5
TOTAL	**104,412**	**2,498**	**8,569**	**11,067**	**10·5**

TABLE NO. 86.—SPECIMENS FROM UPPER EGYPT, SOUTHERN AND WESTERN DESERT GOVERNORATES

Specimens taken from	No. of Specimens	New Infection	Relapse	Total	Ratio
					%
Attendance at Malaria units and branches	5,463	315	822	1,137	30·8
Suspected persons in dwellings	11,459	89	159	248	2·14
Persons undergoing a general examination	21,519	205	287	492	2·28
TOTAL	**38,441**	**609**	**1,268**	**1,877**	**4·9**

TABLE NO. 87.—SPECIMENS TAKEN FROM THE WHOLE COUNTRY

Specimens taken from	No. of Specimens	New Infection	Relapse	Total	Ratio
					%
Attendance at Malaria units and branches	28,088	1,442	6,941	8,382	29·8
Suspected persons in dwellings	30,168	723	1,106	1,829	6·06
Persons undergoing a general examination	84,597	942	1,790	2,732	3·3
TOTAL	**142,853**	**3,107**	**9,837**	**12,944**	**9·06**

Of 11,916 specimens taken by Government hospitals and ankylostoma units and examined by the Fouad 1st Institute and Hospital for Tropical Diseases, 2,612 or 21·9 per cent were returned positive for malaria.

3.—*New Cases and Relapses.*

From table No. 87, it appears that of a total of 12,944 cases returned positive by malaria units and branches, 3,107 or 24 per cent were new and 9,837 relapses. Of a total of 2,612 cases returned positive by Government hospitals and ankylostoma units, 627 were new cases which, added to the above new cases, make a total of 3,734.

4.—*Forms of Malaria,*

Of a total of 11,067 positive malaria cases discovered in Lower Egypt and the Canal and Suez Governorates, 6,861 were benign and 4,206 malignant. 1,141 cases of the former, and 1,490 cases of the latter were new, and the remainder were relapses or a ratio of 63·1 per cent for the former and 36·8 for the latter. (*Vide* table No. 94). No cases of the quartan type were ever recorded.

As to Upper Egypt and the Southern and Western Desert Governorates, of 950 benign cases recorded, 289 were new and of 765 malignant cases, 249 were new. 162 cases of the quartan type were recorded of which 61 were new. This gives a ratio of 50·4 per cent for benign, 40·8 per cent malignant and 8·7 per cent quartan out of a total of 1,877 positive cases.

It is observed that, contrary to last year, the malignant type was less prevalent this year in proportion to the benign type. The quartan type is endemic in Fayoum Province, the Baharia, Dakhla and Kharga oases. Table No. 96 gives the total incidence of Malaria in Lower and U per Egypt.

5.—*Monthly Incidence of Malaria.*

Tables Nos. 97 and 98 show the monthly incidence of Malaria in both Lower and Upper Egypt.

6.—*Malaria Cases and Deaths in Provinces and Governorates.*

Table No. 99 gives the number of Malaria cases and deaths recorded during 1940 and 1941. This shows that the number of cases recorded this year was less than that of last year by 4,124 cases, whereas the number of deaths was more by 36 deaths.

7.—*Malaria and Enlargement of the Spleen.*

Examination of the spleen by the malaria units in Lower Egypt and the Canal and Suez Governorates disclosed that of 6,341 persons not infected with malaria, 1,232 or 19·42 per cent had enlarged spleens; of 2,656 benign cases, 2,313 or 83·3 per cent had enlarged spleens and of 869 malignant cases, 537 or 61·7 per cent had enlarged spleens. (Table No. 100).

In Upper Egypt and the Southern and Western Desert Governorates, examination disclosed that of 813 uninfected persons, 46 or 5·65 per cent had enlarged spleens; of 67 benign cases, 17 or 25·37 per cent had enlarged spleens and of 48 malignant cases 14 or 29·16 per cent had enlarged spleens.

8.—*Control of Breeding Places of Malaria Borne Anopheles.*

Special attention was paid by the malaria units and outposts to mosquito breeding places. Tables Nos. 101 and 102 demonstrate the extent of the activities in both Lower and Upper Egypt. Where anopheles pharoensis, sergenti, or culex pipiens or bilharzia snails breed, specially in filaria infected localities, the breeding places are considered most dangerous and are reported at once to the Public Services Department for extermination.

9.—*Control Methods.*

The same temporary methods were adopted in the control of newly discovered breeding places, namely, spraying of paris green powder, mazot, removal of weeds or filling in. A total of 1,112·980 kilogrammes of paris green and 126·750 tons of mazot were used for this purpose in Lower and Upper Egypt (*vide* table No. 105).

The permanent method of disposing of breeding places by filling in was undertaken by the Village Sanitation Department from its own credits. During the year 1940–1941, some 39 birkas measuring 36 feddans, 1 kirat and 15 sahms in area were filled in. This took 140,607 cubic metres of earth and cost L.E. 8,915·379 mills. (*vide* table No. 106). 65 birkas measuring 50 feddans, 14 kirats and 18 sahms were filled in during 1941–1942 by that Department. 265,389 cubic metres of earth were used which cost L.E. 25,873·850 mills. (*vide* table No. 106).

Where breeding places exist within the property of the Irrigation Department, the Egyptian State Railways or other Government Departments, these are advised to exterminate the breeding places by filling in, treating with anophelicides or by removal of weeds.

A covered drain was also constructed by that Department during 1941–1942 for the drainage of subsoil water in El Zerbi Village, Sennouris District, Fayoum Province. This is a concrete drain pipe, 20 centimetres in diameter and 587 metres long, laid through the village with four inspection chambers at equal intervals. This drain cost L.E. 695·424 mills. which were met by funds at the disposal of the Malaria Commission.

10.—*Filaria.*

Further research work was carried out this year. Special attention was paid to places where larvae of the culex pipiens species were discovered. Table No. 108 gives the number of blood specimens taken for Filaria in Lower and Upper Egypt and the results of examination.

11.—*Treatment and Drugs.*

The same methods of treatment were used. Drugs were administered to all registered malaria cases. Drugs were also distributed for protective purposes. Table No. 107 gives the quantities of quinine, atebrin, plasmochin, euquinine, iron, etc., distributed.

12.—*Application of Malaria Law No. 1 of 1926.*

This was not applied to other localities than those mentioned in previous years.

13.—*Law No. 103 of 1929 regulating the filling in of ponds and preventing the creation of burrow-pits.*

No cases were discovered necessitating the application of this Law.

14.—*Restricting Rice and Sugar-cane Cultivations.*

Only three arrêtés were issued restricting the cultivation of rice and sugar-cane this year. The first dated April 10, 1941, and published in the Official Journal No. 51 of April 28, 1941, was in connection with the Canal Zone. The second dated September 13, 1941, and published in the Official Journal No. 131 of September 25, 1941, was in connection with Alexandria ; and the third dated May 3, 1941, and published in the Official Journal No. 57 of May 8, 1941, was in connection with Inshas Royal Estates.

15.—*Propaganda.*

As in previous years, the symptoms of malaria, the means of its propagation and the protective measures were made known to the public. The Propaganda Section of this Ministry also cooperated in this direction. A theatrical performance was given showing the causes of infection, the protective measures and treatment which impressed the public immensely.

16.—*Complaints.*

All complaints received prompt action, particularly those dealing with the presence of waste water in the vicinity of habitations. Where the subject of the complaint was the existence of stagnant water, the growth of weeds in canals, subsoil water or leakage of drainage pipes, the competent inspection of irrigation was notified for action. Where the burrow-pits were caused by other departments, e.g. Egyptian State Railways, the Roads or Irrigation departments, these were asked to remove the cause of the complaints. Action was taken to prevent the draining of agricultural lands or water systems of public establishments in adjoining swamps.

17.—*Rice Cultivation Research.*

The result of the experiment which was repeated this year on the lines adopted during the previous two years was successful. The spraying of paris green powder at the intake of the main irrigation canal feeding the rice cultivation greatly affected the breeding of malaria borne anopheles.

TABLE No. 88.—DISTRIBUTION OF BLOOD FILMS EXAMINED FOR MALARIA IN LOWER EGYPT AND THE GOVERNORATES OF CANAL AND SUEZ.

Category	No. of Specimens	Positive			Percentage
		New	Relapses	Total	
1.—Patients visiting Stations and their Branches	22,625	1,127	6,119	7,246	32·2
2.—Suspected cases from persons at their residence	18,709	634	947	1,581	8·4
3.—General examination	63,078	737	1,503	2,240	3·5
TOTAL	**104,412**	**2,498**	**8,569**	**11,067**	**10·0**

TABLE No. 89.—DISTRIBUTION OF BLOOD FILMS EXAMINED FOR MALARIA IN UPPER EGYPT AND THE GOVERNORATES OF SOUTHERN AND WESTERN DESERTS.

Category	No. of Specimens	Positive			Percentage
		New	Relapses	Total	
1.—Patients visiting Stations and their Branches	5,463	315	822	1,137	20·8
2.—Suspected cases from persons at their residence	11,459	89	159	248	2·14
3.—General examination	21,519	205	287	492	2·28
TOTAL	**38,441**	**609**	**1,268**	**1,877**	**4·9**

TABLE No. 90.—DISTRIBUTION OF BLOOD FILMS EXAMINED FOR MALARIA IN UPPER EGYPT AND LOWER EGYPT, CANAL AND FRONTIERS DISTRICTS.

Category	No. of Specimens	Positive			Percentage
		New	Relapses	Total	
1.—Patients visiting Malaria Stations and their Branches	28,088	1,442	6,941	8,783	29·8
2.—Suspected cases taken from persons at their residence	30,168	723	1,106	1,829	6·06
3.—General examination	84,597	942	1,790	2,732	3·2
TOTAL	**142,857**	**3,107**	**9,837**	**12,944**	**9·06**

TABLE No. 91.—DISTRIBUTION OF BLOOD FILMS FROM GOVERNMENT HOSPITALS AND ANKYLOSTOMA UNITS.

Governorate or Province	Hospitals			Ankylostoma Units		
	No. of Specimens	Positive	Percentage	No. of Specimens	Positive	Percentage
Behera	138	47	34	300	76	25
Gharbia	688	169	24·5	1,729	288	17
Dakahlia	308	107	34·3	792	181	22·5
Canal	—	—	—	43	10	25
Suez	1	—	—	—	—	—
Sharkia	314	96	30·5	621	138	22
Kaliubia	184	21	11·4	882	99	11
Menoufia	726	161	22·1	731	91	15
Frontiers Districts	4	—	—	—	—	—
Fayoum	132	40	33·3	759	159	23·5
Giza	1,094	378	34	5	1	20
Beni Suef	102	51	50	109	32	33
Minia	447	111	24·83	48	7	14
Cairo	28	4	14	931	93	11
Alexandria	—	—	—	—	—	—
Damietta	140	45	30	8	7	87
Assiut	186	167	34·3	—	—	—
Girga	39	5	12·8	—	—	—
Qena	29	10	34	36	16	45
Assuan	14	—	—	36	2	5·5
TOTAL	**4,874**	**1,412**	**29**	**7,042**	**1,200**	**17·5**
TOTAL OF ANKYLOSTOMA UNITS	**7,042**	**1,200**	**17·5**	—	—	—
GRAND TOTAL	**11,916**	**2,612**	**21·1**	—	—	—

TABLE No. 92.—AGE DISTRIBUTION OF MALARIA CASES IN LOWER EGYPT, THE CANAL AND SUEZ GOVERNORATES DURING 1941

Province or Governorate	Children under 1 year			From 1 to 15 years			From 16 to 36 years			Above 36 years		
	No. of Specimens	Positive	Ratio	No. of Specimens	Positive	Ratio	No. of Specimens	Positive	Ratio	No. of Specimens	Positive	Ratio
			%			%			%			%
Behera...	657	51	7·75	16,961	1,360	8	8,099	967	11·9	2,014	294	14·5
Gharbia	338	32	9·7	8,203	743	9	4,290	488	11·3	1,528	149	9·7
Dakahlia	36	15	48	8,711	676	7·7	4,333	445	10·2	1,610	104	6·4
Sharkia	155	25	17·6	6,052	967	15·5	5,419	971	17·9	1,659	275	16·5
Kaliubia	26	—	—	1,878	427	22·9	2,890	633	21·9	865	256	29·5
TOTAL	**1,211**	**123**	**10**	**41,806**	**4,173**	**9·9**	**25,031**	**3,504**	**14**	**7,676**	**1,078**	**14·04**
Canal and Suez Governorates	691	37	4·2	10,305	815	7·8	9,063	937	10·3	4,688	284	6·05
GRAND TOTAL	**1,903**	**160**	**8**	**52,111**	**4,988**	**9·1**	**34,094**	**4,441**	**13·02**	**12,364**	**1,362**	**11·01**

TABLE No. 93.—AGE DISTRIBUTION OF MALARIA CASES IN UPPER EGYPT AND THE SOUTHERN AND WESTERN DESERT GOVERNORATES DURING 1941

Province or Governorate	Children under 1 year			From 1 to 15 years			From 16 to 36 years			Above 36 years		
	No. of Specimens	Positive	Ratio	No. of Specimens	Positive	Ratio	No. of Specimens	Positive	Ratio	No. of Specimens	Positive	Ratio
			%			%			%			%
Fayoum	201	3	1·48	15,895	648	4·07	6,488	303	4·67	4,247	189	4·45
Giza	23	1	4·34	3,929	279	7·1	1,800	103	5·72	511	32	6·26
Assuan	15	—	—	1,790	3	16	190	3	1·57	119	—	—
Frontiers	—	—	—	—	—	—	—	—	—	—	—	—
TOTAL	**239**	**4**	**1·67**	**21,614**	930	**4·3**	**8,478**	**409**	**4·82**	**4,877**	**221**	**4·5**
Governorates of Southern and Western Deserts	—	—	—	2,654	287	10·8	145	25	17·24	50	3	6
GRAND TOTAL	**239**	**4**	**1·67**	**24,268**	**1,217**	**5·01**	**8,623**	**434**	**5·03**	**4,927**	**224**	**4·5**

Table No. 94.—Number of Cases according to Species in Lower Egypt and the Canal and Suez Governorates during 1941

Province or Governorate	Total of Specimens	Total of Positive Cases	Ratio	Benign Tertian			Ratio to Pos.	Malignant Tertian			Ratio to Pos.	Quartan Malaria			Ratio to Pos.
				No.	New	Relap.		No.	New	Relap.		No.	New	Relap.	
			%				%				%				
Behera	31,672	2,788	8·7	2,062	461	1,601	73·9	726	105	621	26	—	—	—	—
Gharbia	14,359	1,402	9·8	610	61	549	43·9	792	102	690	56·5	—	—	—	—
Dakahlia	14,690	1,250	8·4	834	737	797	67·2	416	43	373	32·2	—	—	—	—
Menoufia	13,285	2,238	16·8	1,622	1,857	1,437	72·4	616	91	525	27·9	—	—	—	—
Kaliubia	5,659	1,316	23·2	1,124	125	999	85·4	192	13	179	14·5	—	—	—	—
Total	**79,665**	**8,994**	**11·2**	**6,252**	**869**	**5,383**	**69·5**	**2,742**	**354**	**2,388**	**30·4**	—	—	—	—
Canal Zone	24,747	2,073	7·5	609	272	337	32·5	1,464	1,136	328	67·4	—	—	—	—
Grand Total	**104,412**	**11,067**	**17·7**	**6,861**	**1,141**	**2,720**	**63·1**	**4,206**	**1,490**	**2,716**	**36·8**	—	—	—	—

Table No. 95.—Number of Cases according to Species in Upper Egypt and the Governorates of Southern and Western Deserts during 1941

Province or Governorate	Total of Specimens	Total of Positive Cases	Ratio	Benign Tertian			Ratio to Pos.	Malignant Tertian			Ratio to Pos.	Quartan Malaria			Ratio to Pos.
				No.	New	Relap.		No.	New	Relap.		No.	New	Relap.	
			%				%				%				%
Fayoum	26,831	1,143	4·2	559	144	415	48·8	450	99	351	39·3	134	35	99	11·7
Giza	6,263	415	6·6	301	81	220	72·5	112	27	85	97·4	—	—	—	—
Assuan	2,498	6	0·2	4	2	2	61·6	2	1	1	33·3	—	—	—	—
Total	**35,592**	**1,565**	**4·3**	**864**	**227**	**637**	**54·5**	**564**	**127**	**437**	**36·1**	**134**	**35**	**99**	**8·5**
Frontiers	2,849	315	9·04	86	62	24	26·1	201	122	79	63·8	28	26	2	8·2
Grand Total	**38,441**	**1,877**	**4·8**	**950**	**289**	**661**	**50·4**	**765**	**249**	**516**	**40·8**	**162**	**61**	**101**	**8·7**

TABLE NO. 96.—NUMBER OF CASES ACCORDING TO SPECIES IN LOWER AND UPPER EGYPT AND IN CANAL AND FRONTIERS DISTRICTS DURING 1941

Region	No. of Specimens	Total of Positive Cases	Ratio	Benign Tertian			Ratio to Pos.	Malignant Tertian			Ratio to Pos.	Quartan Malaria			Ratio to Pos.
				No.	New	Relapses		No.	New	Relapses		No.	New	Relapses	
			%				%				%				%
Lower Egypt and Canal Zone ...	104,412	11,067	10·7	6,861	1,141	5,720	63·1	4,206	1,490	2,716	36·8	—	—	—	—
Upper Egypt and Frontiers Districts	38,441	1,877	4·8	950	389	661	50·4	765	249	516	40·8	162	61	101	8·7
TOTAL	**142,853**	**12,944**	**9·02**	**7,811**	**1,430**	**6,381**	**61·2**	**4,671**	**1,739**	**3,232**	**36·6**	**162**	**61**	**101**	**8·7**

TABLE NO. 97.—MONTHLY DISTRIBUTION OF MALARIA CASES IN LOWER EGYPT AND THE GOVERORATES OF CANAL AND SUEZ DURING 1941

Month	Total of Specimens	Total of Rositive Cases	Benign Malaria			Ratio per Cent	Malignant Malaria			Ratio per Cent
			No.	New	Relapses		No.	New	Relapses	
January	5,812	448	130	29	101	2·5	318	68	250	6·1
February	5,451	344	99	9	90	1·8	245	78	167	4·6
March	8,239	344	183	21	162	2·2	161	80	81	1·9
April	7,978	384	289	47	242	3·6	95	43	52	1·1
May	8,541	562	497	68	429	5·8	65	32	33	0·7
June	8,54›	899	809	117	692	9·4	90	34	56	1·05
July	9,146	1,032	934	104	830	10·2	98	27	71	1·07
August	11,542	1,647	1,216	173	1,043	10·53	431	137	294	3·7
September	11,153	1,732	1,093	233	860	7·7	639	201	438	5·7
October	9,873	1,691	866	189	677	8·7	825	285	450	8·3
November	10,704	1,353	518	99	419	4·8	835	309	526	7·8
Dece.nber	8,058	631	227	52	175	2·8	404	196	208	5·05
TOTAL	**104,412**	**11,067**	**6,861**	**1,141**	**5,720**	**6·57**	**4,206**	**1,490**	**2,716**	**4·02**

TABLE No. 98.—MONTHLY DISTRIBUTION OF MALARIA CASES IN UPPER EGYPT AND THE GOVERNORATES OF SOUTHERN AND WESTERN DESERTS

Month	Total of Specimens	Total of Positive Cases	Benign Tertian				Malignant Tertian				Quartan Malaria			
			No.	New	Relap.	Rate per Cent	No.	New	Relap.	Rate per Cent	No.	New	Relap.	Rate per Cent
January	1,942	309	145	24	121	7·4	127	16	111	6·5	37	9	28	1·9
February	2,418	268	112	25	87	4·6	99	29	70	4·9	57	8	49	2·3
March	3,616	246	126	29	97	3·4	102	22	80	2·6	18	3	15	0·5
April	4,505	98	44	22	22	0·9	43	10	33	0·85	11	8	3	0·2
May	4,136	88	60	31	20	1·4	15	7	8	0·3	13	13	—	0·3
June	3,289	82	55	22	33	2·4	24	8	16	1·45	3	1	2	0·1
July	2,487	122	81	33	48	3·2	27	13	14	1·08	14	11	3	0·5
August	3,108	143	100	25	75	3·2	38	9	29	1·1	4	3	1	0·1
September	3,685	134	89	17	72	2·4	45	6	39	1·2	—	—	—	—
October	3,168	95	53	17	36	1·6	42	19	23	1·3	—	—	—	—
November	3,992	196	48	25	23	1·2	143	71	72	3·6	5	5	—	—
December	2,695	97	37	19	18	1·4	60	37	23	2·8	—	—	—	—
TOTAL	**38,441**	**1,877**	**950**	**289**	**661**	**2·47**	**765**	**247**	**518**	**1·99**	**162**	**61**	**101**	**0·42**

TABLE No. 99.—NUMBER OF MALARIA CASES AND DEATHS NOTIFIED TO STATISTICAL DEPARTMENT DURING THE YEARS 1940–1941

Governorate or Province	1940		1941		Difference	
	Cases	Deaths	Cases	Deaths	Cases	Deaths
Behera	629	7	720	8	+ 91	+ 1
Gharbia	1,335	3	768	9	— 567	— 6
Dakahlia	515	1	178	1	— 337	—
Sharkia	2,596	7	565	5	—2,031	— 2
Kaliubia	2,013	5	1,256	4	— 757	— 1
Menoufia	238	4	147	3	— 91	— 1
Fayoum	1,102	3	484	—	— 618	— 1
Giza	370	2	138	1	— 232	— 3
Beni-Suef	116	3	56	2	— 60	— 1
Minia	235	—	89	3	— 146	+ 3
Assiut	187	5	72	2	— 115	— 3
Girga	36	1	21	3	— 15	+ 2
Qena	135	1	225	3	+ 90	+ 2
Assuan	17	—	5	—	— 12	—
Cairo	582	7	168	16	+ 86	+ 9
Alexandria	759	12	1,211	22	+1,152	+ 10
Frontiers Districts	2,549	7	2,017	22	— 562	+ 15
TOTAL	**13,444**	**68**	**9,320**	**104**	**—4,124**	**+ 36**

TABLE No. 100.—SPLENIC INDEX COUNT IN LOWER AND UPPER EGYPT, THE CANAL ZONE AND THE FRONTIERS DISTRICTS DURING 1941

Province or Governorate	Malaria Unit	Persons not Suffering from Malaria			Persons Suffering from Benign Malaria			Persons Suffering from malignant Malaria		
		No.	Positive	Ratio	No.	Positive	Ratio	No.	Positive	Ratio
				%			%			%
Behera ...	Idku ... ... / Kafr El Dawar	2,450	225	9·1	810	595	71·4	200	160	8
Dakahlia ...	Faraskur... ... / Kafr Abu Nasir	1,615	1,007	62·3	650	623	95·8	193	192	99·4
Gharbia ...	Dissouk ... ... / Kafr El Sheikh	—	—	—	—	—	—	—	—	—
Kaliubia	Toukh	—	—	—	1,142	1,095	97·4	190	185	97·3
Sharkia ...	Belbeis	—	—	—	—	—	—	—	—	—
Canal ...	Ismailia	2,276	—	—	72	—	—	286	—	—
Suez... ...	Suez...	—	—	—	—	—	—	—	—	—
	TOTAL ...	**6,341**	**1,232**	**19·42**	**2,656**	**2,313**	**83·3**	**869**	**537**	**61·7**
Giza ...	Giza	449	5	1·03	62	14	22·58	43	12	28
Fayoum ...	Fayoum ... / Abshway... ...	364	41	11·26	5	3	65	5	2	40
	TOTAL ...	**813**	**46**	**5·65**	**67**	**17**	**25·37**	**48**	**14**	**29·16**

TABLE No. 101.—NUMBER OF INSPECTIONS OF MOSQUITO BREEDING PLACES IN LOWER EGYPT AND IN CANAL AND SUEZ GOVERNORATES DURING 1941

Province or Governorate	Unit	Burrow Pits	Railway Ditches	Unburnt Brick Paddles	Wells and Sakias	Drains	Canals and Irrigation Water Courses	Ponds	Marshes	Rice Cult.	Sug.-cane Cult.	Samar Cult.	Other Places
Behera	Idku	589	—	—	—	1,550	774	8	160	10	—	—	540
	Kafr El Dawar	158	30	18	63	3,164	545	10	6	14	10	—	—
Dakahlia	Faraskour	—	—	—	—	202	25	13	3	3	—	—	—
	Kafr Abu Nasir	52	67	—	16	322	90	721	138	82	—	—	—
	El Mansourah	—	—	—	1	36	—	17	—	—	—	—	—
Gharbia	Dessouk	—	—	—	—	124	13	58	—	1	—	—	—
	Kafr El Sheikh	8	5	—	—	312	—	240	125	20	—	—	—
Kaliubia	Toukh	—	138	—	28	—	—	684	253	377	—	—	—
Sharkia	Inshas	19	24	—	120	1,296	—	228	—	3	—	—	—
	Bilbeis	10	13	—	5	207	23	429	3	42	—	—	—
Canal	Ismailia	513	143	—	5	3,506	488	3,251	138	8	2	48	—
Suez	Suez	115	15	—	—	4,270	197	199	—	—	—	—	—
	TOTAL	**1,464**	**435**	**18**	**238**	**14,989**	**2,155**	**5,958**	**826**	**560**	**12**	**48**	**540**

TABLE No. 102.—NUMBER OF INSPECTIONS OF MOSQUITO BREEDING PLACES IN UPPER EGYPT AND THE SOUTHERN AND WESTERN DESERT GOVERNORATES DURING 1941

Province or Governorate	Unit	Burrow Pits	Railway Ditches	Unburnt Brick Paddles	Wells and Sakias	Drains	Canals & Irrigation Water Courses	Ponds	Rice Cult.	Marshes	Sugar-Cane Cultivation
Assuan	Assuan	368	—	—	700	254	—	—	—	50	—
	Kom Ombo	25	—	—	7	526	—	930	—	549	3
	El Dirr	600		—	760	7	—	176	—	78	—
Fayoum	Fayoum	—	17	317	27	536	21	530	20	42	—
	Abshway	—	109	127	—	1,326	172	195	93	142	—
Giza	Giza	105	—	3	6,343	613	76	639	4	15	—
Southern Desert Governorate	Kharga Oasis	2	—	—	23	—	12	11	7	—	—
	Dakhla „	3	—	2	—	4	8	13	16	3	—
Western Desert Governorate	Baharia „	—	—	—	—	—	—	—	—	—	—
	TOTAL	**1,103**	**126**	**449**	**7,860**	**3,173**	**289**	**8,164**	**140**	**879**	**3**

TABLE No. 103.—NUMBER OF BIRKAS HARBOURING EITHER LARVAE OF ANOPHELES, CULEX PIPIENS, OR BILHARZIAL SNAILS IN LOWER EGYPT AND CANAL ZONE

Province or Governorate	Malaria Station	No. of Birkas Exam.	Birkas Free of Larvae		Birkas Harbouring Anopheles Larvae								Birkas Harbouring Bilharzia Snails		Birkas Harbouring Culex Pipiens	
					Phar.		Malticolour		Sergenti		Other Spec.					
			No.	Rate per cent	No.	Rate per cent	No.	Rate per cent	No.	Rate per cent	No.	Rate per cent	No.	Rate per cent	No.	Rate per cent
Behera	Idku	540	327	60·55	385	71·2	—	—	—	—	3	55	—	—	—	—
	Kafr El Dawar	41	37	90·2	2	4·87	—	—	—	—	2	4·87	—	—	—	—
Dakahlia	Faraskour	32	19	59·3	3	—	—	—	1	3·12	4	12·14	4	12·44	1	3·12
	Kafr Abu Naser	22	6	27·27	6	27·27	1	4·54	—	—	2	9·09	—	—	7	31·8
Gharbia	Dissouk	60	27	48·32	29	48·32	4	6·66	—	—	—	—	—	—	—	—
	Kafr El Sheikh	43	26	34·88	15	34·88	1	4·67	—	—	—	—	2	4·67	1	2·33
Kaliubia	Toukh	58	11	18·96	11	18·96	14	24·13	—	—	—	—	8	13·8	24	41·3
Sharkia	Belbeis	71	45	63·39	55	77·46	47	66·2	—	—	—	—	16	22·53	11	14·78
Canal	Ismailia	139	8	4·67	121	87·05	25	18	20	14·39	57	41	31	22·3	44	31·65
Suez	Suez	8	6	75	1	13·5	5	32·5	1	12·5	1	12·5	1	12·5	2	25
	TOTAL	**1,014**	**512**	**25·4**	**628**	**61·7**	**98**	**9·6**	**22**	**2·1**	**69**	**6·8**	**62**	**6·6**	**90**	**8·8**

TABLE No. 104.—NUMBER OF BIRKAS HARBOURING LARVAE OF ANOPHELES AND CULEX PIPIENS, AND BILHARZIA SNAILS IN UPPER EGYPT AND SOUTHERN DESERT GOVERNORATE

Province or Governorate	Malaria Station	No. of Birkas Exam.	Birkas Free of Larvae		Birkas Harbouring Anopheles Larvae								Birkas Harb. Belharzia Snails		Birkas Harb. Culex. Pip.	
					Phara.		Multi.		Serg.		Other Spec.					
			No.	Rate per cent	No.	Rate per cent	No.	Rate per cent	No.	Rate per cent	No.	Rate per cent	No.	Rate per cent	No.	Rate per cent
Assuan	Assuan	20	3	15	18	90	14	70	—	—	—	—	4	20	1	5
	Kom Ombo															
	El Dirr															
Assiut	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Beni Suef	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Fayoum	Fayoum	32	3	29·9	12	37·5	16	50	—	—	4	12·5	4	12·5	—	—
	Abshway	35	12	34·29	8	22·8	10	28·5	6	17·14	19	54·3	—	—	—	—
Giza	Giza	173	97	56·06	26	15·03	12	6·93	—	—	56	23·3	—	—	—	—
Southern Desert Governorate	Kharga Oasis	7	6	85·7	2	28·57	—	—	—	—	2	28·57	—	—	3	43
	Dakhla ,,	15	13	86·9	3	33·33	—	—	1	6·66	1	6·66	3	33·33	4	26·6
	TOTAL	**282**	**142**	**47·87**	**69**	**34·8**	**52**	**18·7**	**7**	**2·8**	**82**	**28·9**	**11**	**3·9**	**8**	**3**

TABLE No. 105.—QUANTITIES OF PARIS GREEN AND MAZOUT CONSUMED THROUGHOUT THE YEAR 1941

District	Province or Governorate	Station	Paris Green in Kilograms	Mazout in Tons
LOWER EGYPT AND CANAL ZONE	Behera	Idku	58·530	11·550
		Kafr El Dawar	570·000	2·644
	Dakahlia	Faraskour	51·500	3·464
		Kafr Abu Nassir	—	—
	Gharbia	Dessuk	8·000	0·100
		Kafr El Sheikh	33·550	9·000
	Kaliubia	Toukh	35·000	67·500
	Sharkia	Belbeis	153·600	3·722
	Canal	Ismailia	109·800	24·195
	Suez	Suez	93·000	4·575
		TOTAL	**1,112·980**	**126·750**
UPPER EGYPT	Assuan	Assuan	—	—
		Kom Ombo	—	—
		El Dirr	24·000	0·485
	Fayoum	Fayoum	70·000	8·817
		Abshway	29·000	1·600
	Giza	Giza	20·000	8·040
		TOTAL	**143·000**	**18·942**
		GRAND TOTAL	**1,255·980**	**145·692**

TABLE No. 106.—BIRKAS FILLED IN DURING THE YEAR 1941

1940–1941

Province	No. of Birkas	Total Area F.	Total Area K.	Total Area S.	Vol. of Soil in C. Metres	Total Cost L.E. M.	Remarks
Behera	9	6	8	22	21,230	1,208·946	
Dakahlia...	6	10	6	6	36,614	2,787·006	
Gharbia	11	7	11	20	33,034	2,508·244	
Sharkia	9	8	18	21	31,781	1,470·955	
TOTAL ...	**35**	**32**	**21**	**21**	**122,659**	**7,975·151**	
Beni Suef	3	1	14	4	12,760	634·136	On account of Prov. Council.
Giza	1	1	13	14	5,188	306·092	
TOTAL ...	**4**	**3**	**3**	**18**	**17,948**	**940·228**	
GRAND TOTAL	**39**	**36**	**1**	**15**	**140,607**	**8,915·379**	
			1941-1942				
Behera	6	9	—	1	41,885	5,216·112	
Dakahlia	14	10	17	8	44,749	4,421·542	
Gharbia	15	11	14	12	53,712	5,311·220	
Menoufia	7	2	13	14	22,223	1,867·505	
Kaliubia	17	10	5	15	45,770	5,860·873	
TOTAL ...	**59**	**44**	**3**	**2**	**208,339**	**22,677·252**	
Beni Suef	4	3	9	1	40,766	2,296·832	From Provincial Council Funds.
Giza	2	3	2	15	16,284	899·766	
TOTAL ...	**6**	**6**	**11**	**16**	**57,050**	**3,196·598**	
GRAND TOTAL	**65**	**50**	**14**	**18**	**265,389**	**25,873·850**	

TABLE No. 107.—TOTAL QUANTITIES OF DRUGS DELIVERED FOR TREATMENT AND PROTECTION DURING THE YEAR 1941

A.—*For Treatment.*

Quinine (2 Grains)	156,888	Tablets
,, (5 ,,)	264,775	,,
,, (Chocolate)	49,695	,,
Plasmochin (Simpl 1 c.c.)	7,798	,,
,, (,, 2 ,,)	4,240	,,
,, (Comp. ½ ,,)	57,202	,,
,, (,, 1 ,,)	51,581	,,
Atebrin	7,278	,,
Asperin	1,590	,,
Grom	3,315	Grains
Euquinin	1,217	,,
Gemsa Tincture	13,250	
Cidar Oil	1,960	
(Zeiloul)	2,260	
Methylic Alcohol	1,900	

B.—*For Protection.*

Quinine (2 Grains)	3,057	Tablets
,, (5 ,,)	16,472	,,
,, (Chocolate)	488	,,
Plasmochin (Comp. 1 c.c.)	20	,,
Atebrin	30	,,

TABLE No. 108.—NUMBER OF BLOOD FILMS EXAMINED FOR FILARIASIS AND THEIR RESULTS IN LOWER AND UPPER EGYPT AND GOVERNORATES OF CANAL ZONE AND FRONTIERS

Province	No. of Films	Positive	Percentage	Remarks
			%	
Dakahlia	404	12	3	Faraskour, Mit Nagi and Damas.
Kaliubia	150	1	0·66	Moushtohor and Magoul.
Sharkia	100	1	1	El Shakr, Markaz Mina El Kamh.
TOTAL	**654**	**14**	**1·6**	
Giza	700	13	1·85	Saft El Laban and Kafr Ghatati and Kirdasa.
TOTAL	**700**	**13**	**1·85**	
GRAND TOTAL	**1,354**	**27**	**1·07**	

PART VI

Chapter XVIII.—SUMMARY OF THE WORK OF THE PUBLIC HEALTH LABORATORIES

1.—*Bacteriological Section.*

The total number of specimens examined bacteriologically in the Central, Provincial and Branch Laboratories during the year 1941 was 508,673.

2.—*Pathological Section.*

2,084 specimens were examined during the year under review in this Section and the Branch Pathological Laboratory, Alexandria.

3.—*Chemical Section.*

The total number of samples examined chemically in the Central Laboratories during the year 1941 was 110,970.

4.—*Water Section.*

(*a*) *Bacteriological Service.*

The total number of samples of water, aerated water, ice and syrup examined by this Section during the year 1941 was 7,831.

(*b*) *Chemical Service.*

During the year some 780 samples of water have been subjected to chemical analysis.

5.—*Antirabic Institute and Hospital.*

During the year 1941, 9,085 patients attended the Institute; out of these 6,885 were fully treated.

6.—*Serum and Vaccine Institute.*

The following vaccines and sera have been prepared during the year 1941 :—

(1) T.A.B.	699,975 ccs.	
(2) Anti-Plague Vaccine	199,250 ,,	
(3) Cholera Vaccine...	37,600 ,,	
(4) Gonococcus Vaccine	104,450 ,,	
(5) Diphtheria prophylactic (Formol Toxoid)	9,000 boxes, each box for one person.	
(6) Calf Lymph Vaccine	11,790,000 doses.	
(7) Diphtheria Antitoxin	727 ampoules,	10 ccs. containing 4,000 Intern. Units.
(8) Serum Anti-Tetanus	1,357 ,,	2 ccs. containing 3,000 Intern. Units.
	152 ,,	9·5 ccs. containing 3,000 Intern. Units.
	107 ,,	10 ccs. containing 1,500 Intern. Units.
(9) Dry Poison of Serpents (supplied to the South African Institute for Medical Research, Johannesburg, for preparation of Anti-Venum Serum).	40 cgrs.	
(10) Anti-Scorpion Serum	The Institute is undertaking the preparation of this Serum.	

Chapter XIX.—SUMMARY OF THE WORK OF FOUAD 1st INSTITUTE AND HOSPITAL FOR TROPICAL DISEASES

I.—PARASITOLOGY DEPARTMENT

1.—*Schistosomiasis.*

A.—*Prevention.*

During the summer of last year, a series of experiments were carried out at Tanan area (Kaliubia Province) to determine the best method for applying copper sulphate. This was finally accomplished by spraying a concentrated solution. The advantage of this method is the even distribution of the drug without disturbance of the stream. After treatment, the canals were under careful observation and regular examination every two weeks.

After three months, a few Planorbis snails were found at the end of one canal. It must be mentioned here that some miskas at the end of this canal were fed occasionally from another source, Khalig Mazhar, which had not been treated.

Early this year, it was decided to resulphate the area just before the beginning of the winter closure using a 10 per 1,000,000 copper sulphate solution which was to be left in the streams throughout the period (40 days). Before treatment, the water was let into the canals by means of an Archimedean screw (Tambour) up to the required level and then the concentrated solution was sprayed; paying particular attention to the places where weeds and grass grew heavily.

Specimens of water were chemically examined 24 hours later and showed the following results:—

(1) Area without grass at intake ... ... 1·8 p.p.m.

(2) Grass area ... ... 2·8 p.p.m.

Regular survey was made every fortnight by means of wire nets. No snails were found alive. Result of analysis of specimens of water was as follows:—

(1) Intake of El Bagouria ... ... Traces.

(2) Grass area ... ... 1·5 p.p.m.

A month later the canal was examined with nets but no snails were found alive. At the end of the winter closure, fresh water was allowed in and survey showed no living snails. Only a great quantity of dead shells was seen floating on the surface of the water.

Three months later, a few large live snails (Planorbis) were found. Wire nets gave much better results than palm-leaf traps due to the fact that Planorbis snails are mainly surface feeders. In canals and drains where there is sufficient nutrition they do not move to look for food and do not go down to the bottom of the canal where traps are placed.

The practical application of this method on a large scale, however, needs consideration.

B.—*The Effect of Copper Sulphate Solution on Snail Eggs.*

10 pts. per million copper sulphate solution were put in a jar (*a*) containing clusters of Bulinus eggs attached to a palm-leaf. Another jar (*b*) containing eggs in fresh water was used as a control.

After 5 days, the solution was replaced by fresh water and examination of the eggs showed the following:-

Jar (*a*)	(1) 1 clutch	containing	24	eggs	... ...	3 hatched.
	(2) 1 ,,	,,	28	,,	....	10 ,,
Jar (*b*)	(1) 1 ,,	,,	21	,,	... ...	21 ,,
	(2) 1 ,,	,,	21	,,	... ...	21 ,,

This result is interpreted by the fact that the eggs in a single clutch grow at different rates and the eggs with advanced development suffered from the copper sulphate owing to the thinness of the gelatin mass surrounding the developing snails.

C.—*Effect of Copper Filings on Planorbis Snails.*

Copper filings from the Government Workshops were obtained in large quantities. They consisted of pure copper and brass filings. 200 grams were put in a gauze bag and placed in a receptacle containing 20 Planorbis and 20 Bulinus snails. At the same time a control basin containing the same number of snails was observed. For three months no result could be obtained.

It was then decided to try the copper filings in one of the ponds containing a large number of Planorbis snails and masses of algae and water lentil (Lemna gibba). The snails were regularly examined and their number registered. Negative results were obtained.

D.—*Experiments on the Breeding of the Snails.*

Six Limnae snails hatched on January 1, 1941, were put into a jar and provided with plants for food. The water was changed regularly and the snails observed every other day.

The snails laid the first eggs on March 30, 1941, that is to say three months after birth. It was also observed that from a clutch of 26 eggs all hatched but two.

The same observation was made on Bulinus and Planorbis snails and it was found out that the period necessary for the growth of these snails from egg to egg varied from 10–12 weeks according to temperature. The details will be published later.

2.—*Other Parasites.*

A.—*The Incidence of Oxyuriasis (Enterobius vermicularis) among Children in Cairo*

Hall, 1937, has devised an anal swab for use in the diagnosis of oxyuriasis. (It consisted of a glass rod held in a test tube by a perforated cork). The tip of the rod is covered with a small square of cellophane held by a wide rubber band. The swab acts both as a swab and a scraper. It picks up eggs effectively. The cellophane is transferred after use to a slide, a drop of caustic soda N/10 was put and covered by a coverslip applied for microscopical examination.

This swab was adopted in the examination of children from different institutes in Cairo with the following results:—

TABLE No. 109

Hospital	Age group	Total examined	Positive	Percentage
				%
Ankylostoma Unit, Cairo	Below 5 years	7	1	14·28
	6–10 ,, ...	65	37	56·00
	11–15 ,, ...	133	85	63·90
Child Welfare Centres	Below 5 years	300	110	36·66
	6–10 ,, ...	214	111	51·8
	11–15 ,, ...	98	62	63·2

It would be seen from the above table the variation of incidence in the different age groups in the different individuals being more frequent in the ages from 11–15 years.

B.—*Prohemistomum vivax, a Human Parasite.*

In 1941, a patient was admitted to the Endemic Diseases Hospital complaining of severe debility and diarrhœa without tenesmus or blood of eight months duration. On examination of the stools, curious trematode eggs were noticed under the microscope and I was called to identify them. I made several measurements of the eggs. I found the average was 100 × 60 which fitted the measurement of the eggs of several holostomes.

The patient died 5 days later and postmortem was carried out. About 2,500 living Prohemistomum vivax, a trematode transmitted to the final host through eating fish, were found.

C.—*The effect of Washing by Mechanical Brushes Citrus Fruits Contaminated with Ascaris Ova.*

The fruits used in these experiments were brought from Gabal Asfar sewage farm. They consisted of oranges, mandarines and sweet lemons. The experiments were carried out at the request of the committee for the disinfection of fruits from Gabal Asfar sewage farm. The problem is summarized in the fact that all the fruits which drop from the orange groves at the farm are destroyed (a procedure which incurrs heavy losses) owing to the fact that they are considered a source of infection of ascaris to the consumer. They were, however, examined closely and were found to be contaminated with ascaris and oxyuris ova respectively.

The danger of infection with ascaris depends on the age of the ova whereas in the case of oxyuris, the infection is direct.

Experiments were carried out to find the best means for cleaning these fruits and making them suitable for human consumption. Ordinary washing under tap water did not remove all the ova from the fruits whereas scrubbing with the common nail brush under running water was enough to remove all of them. Mechanical brushes are effective in removing the ova too.

Then the question of dealing with all the fruits dropping from the trees was considered. It was found out that there were certain machines in the possession of the Ministry of Commerce which were used for cleaning the fruits for export.

The operation of these machines included the following steps:—

(1) The fruits brought from the groves pass through the machine under a spray of water on the brushes for cleaning.

(2) They then pass through a tank of water containing 4–5 per cent of borax where they stay from 4–5 minutes.

(3) Another spray of water is allowed to remove the borax.

(4) Saw dust is let in followed by hot air to complete the dryness of the fruits.

(5) Another set of brushes work to remove any saw dust left on the fruits.

(6) The procedure of sorting.

This process required modification and, therefore, arrangements were made to guarantee a continuous flow of water in the borax tank for the elimination of the drug, so long as the fruits were no longer exported.

An emulsion of ascaris ova was sprayed on 200 oranges brought from the sewage streams of Gabal Asfar. They were then introduced into the machine.

Specimens of the washed fruits were examined for ascaris ova and were found negative, whereas control specimens showed numerous ova.

Boiling water killed ascaris ova in 1–2 seconds, but it was found that boiling water affected the fruits in such a way that their appearance interfered with marketing.

These experiments together with identical bacteriological tests proved that this machine could be used with advantage and it was decided by the Committee to transfer it from Benha to the Sewage farm for this purpose.

This operation saved large sums of money for the Government and prevented the tremendous amount of waste of useful fruits.

II.—BIOCHEMICAL SECTION

1.—*An Intravenous Laevulose Test.*

(1) An intravenous laevulose test for hepatic function was studied.

(2) The intravenous laevulose test is found valuable and more delicate when $5\frac{1}{3}$ cc. of a 50 per cent solution of laevulose per kilogram body weight is injected and the blood laevulose is determined at intervals thereafter, the estimation of the total blood sugar is unreliable.

(3) Impairment of the glycogenic function of the liver results in a high rise and slower decline of the blood laevulose values.

(4) This test compares favourably with the galactose tolerance test (Published Jour. Egypt, Med. Ass. Vol. 25 No. 5, 6, 1942).

2.—*The Effect of Therapeutic Antimony on the Kidney.*

In the present work, the effect of therapeutic doses of antimony on the functional capacity of the kidney was investigated.

The following kidney efficiency tests were used :—

(1) Urine examination (chemical and microscopical).

(2) Urea concentration test. (McLean).

(3) Urea concentration test. (Van Slyke).

(4) The water test. (Volhard).

(5) The concentration test of the kidney.

(6) The ferrocyanide excretion test.

(7) The pyrochatechin disulphonate of soda kidney function test (Khalil et al).

11 patients used in this investigation were injected with tartar-emetic.

The results showed the following :—

(*a*) In 11 patients with normal kidney function tests before treatment, none showed any disturbance of function at the end of treatment.

(*b*) 5 cases with double hydronephrosis, 3 cases of unilateral hydronephrosis and 7 cases of hypertension with chronic nephritis were also treated.

The results of these cases and of others are still under investigation.

III.—BACTERIOLOGICAL SECTION

The following are the main bacteriological investigations carried out in the Section :—

1.—*Blood Examination.*

(a) *Kahn Test.*

This test is the main test still done for the in-patients as well as for cases under research problems in the out-patient.

It is still done in conjunction with the Wassermann's reaction.

The varying results given by the Kahn test in cases of jaundice during the presence of the disease, and after the condition clears is still under investigation.

(b) *Blood Culture.*

This is done in cases of fevers and also in cases of Catarrhal Jaundice.

2.—*Urine Examination.*

(*a*) *Urine Culture.*

This is done in cases of post-bilharzial cystitis to determine the active micro-organisms. Various preparations of the sulphanilamide group are being tried in this condition. The work is still under investigation and will be published later.

(*b*) *Auto Vaccine.*

Auto vaccine is prepared for cases of post-bilharzial cystitis with bacterial infection. Good results are obtained in cases with *B. Pyocyaenous* and Enterococci infection; while cases with *B. coli* infection prove to be very resistant to treatment.

The following lists represent the results of the various samples examined during the year 1941 :—

1.—*Blood Examination.*

(*a*) *Kahn Test.*

Total number examined...	1,352
Positive samples	122 (9 %)

(*b*) *Blood Cultures.*

Total number examined...	4
Positive Enterica	1

2.—*Urine Examination.*

(*a*) *Urine Cultures in P.B. Cystitis.*

(Catheter samples)

Total number examined...	242
Negative samples	177
Positive for *B. coli*	30
,, ,, *B. Para colon*	16
, ,, *B. Pyocyaneous*	6
,, ,, *B Friedländer*	7
,, ,, *Enterica*	6

(*b*) *Auto-Vaccines.*

Auto-Vaccines are prepared in cases of P.B. Cystitis with Bacterial infection. Two cases of infection é *B. Pyocyaneous* are treated é auto vaccine with good results. Two cases of *B. coli* infection are treated é auto-vaccine without any encouraging results.

3.—*Stool Examination.*

Total number examined...	191
Negative samples	181
Positive for B. Shiga	2
,, ,, B. Flexener...	2
,, ,, B. Morgan No. 1	3
,, ,, Enterica	2
,, ,, Tubercle Bacilli	1

4.—*Examination of Sputum for T.B.*

Total number examined...	137
Negative samples for T.B.	115
Positive samples for T.B.	15
Samples unfit for examination	7

5.—*Urethral Discharges for Gonorrhœal Infection.*

Total number examined...	12
Positive for Gonococci	5
Negative for Gonococci	7

6.—*Nasal Discharges and Scraping for Leprosy.*

Total number examined...	4
Negative samples	3
Positive ,, ...	1

IV.—CLINICAL REPORT

Out-Patients.

Treatment of the out-patients from helminthic infections was carried out in the Institute during the first seven months of the year 1941. As from August 1, 1941, it was done in the Ankylostoma Hospital No. 20 at Fom El Khalig. where out-patients were examined by the medical officers of the Institute, and microscopic examination was carried out by the laboratory assistants of the Institute in collaboration with the staff of the Ankylostoma hospital. Only such cases as were needed for the problems under investigation were transferred to the Institute. The results of treatment are tabulated below in two separate tables one for the first seven months and the second for the latter 5 months of the year. This being done owing to the difference in the schemes planned for the re-examination and follow up of the cases in the out-patient clinic of the Institute and that of the Ankylostoma Hospital.

Plan of Treatment.

(1) Schistosomiasis: Tartar emetic 6 per cent solution intravenously for 9, 11 or 13 injections or more until infection was eliminated. Examination of specimens was repeated every month to detect relapses or new infection. Examination of specimens after the 5th injection was done during January and February only.

(2) Ankylostoma infection was treated by carbon tetrachloride in a maximum dose of 5 c.c. for adults of 60 or more kilos of weight or over given with 90 c.c. saturated solution of magnesium sulphate on an empty stomach.

(3) Ascariasis treated by chenopodium oil 2·5 c.c. being the maximum dose for an adult of 60 kilos given in 90 c.c. of saturated solution of mag. sulphate.

(4) Mixed cases of Ankylostoma and Ascaris infection : The patient was first treated for Ascaris as explained in Para. (3) above and then for Ankylostoma as in Para. (2).

(5) Oxyuris treated by carbon tetrachloride as in Ankylostoma.

(6) Taenia and Heterophyes were treated by filix mass. Patients were instructed to take a purge on the previous day and were allowed a light supper. The drug is taken the following morning on an empty stomach. The dose being 4 cc. for an adult of 60 kilos taken in four small doses each one every 10 minutes in gelatine coated capsules. 90 cc. of saturated solution of mag. sulph. being given 20 minutes after the last dose.

Pellagra.

Total number of cases during 1941 is 82 cases.

(1) *Monthly incidence.*

January	3	May	16	September	4
February	9	June	5	October	—
March	13	July	8	November	2
April	18	August	3	December	1

(2) *Infection with Parasites.*

Number of cases free from parasites 10

TABLE No. 110

Urine	Stools	Cases
		cases
S.h.	Ankylostoma	15
S.h.	—	10
—	Ankylostoma	9
—	,, + Ascaris	6
—	,, + ,, ...	5
S.h.	Sch. mansoni	5
—	S.m.	3
—	Ankylostoma + Ascaris + S.h....	2
—	,, + ,, + S.m.	2
S.h.	,, + ,, + S.m.	2
S.h.	Ascaris + S.m.	2
S.h.	Ankylostoma + Ascaris + S.h.	2
S.h.	S.h.	2
—	S.h. + Ascaris	2
—	S.m. + ,, ...	2
—	Ascaris	3

Total number of pellagra cases infested with parasites : 72.

(3) *Reflexes.*

24 cases é exaggerated reflexes.

2 ,, ,, lateral sclerosis, Babiniski extensor.

1 case é diminished reflexes (positive Was.+).

(4) *Glossitis* : 7 cases.

(5) *Smooth Tongue* : in 40 cases.

(6) *Diarrhoea* : in 48 cases, two é dysenteric symptoms, one of which was found to be infected é S.m. and the other é Ent. hyst. vegetative.

(7) *Anaemia* : 6 cases of pellagra which were not infected é Ankylostoma worm were anaemic, haemoglobin being less than 50 per cent. 3 of these cases had *Sch. mansoni* and the other 3 negative for all parasites, all were hypochromic microcytic anaemia.

(8) *F.T.M.* : was done in 12 cases, the results were as follows :—

1 case achylia.

6 cases hypochlorhydria.

1 case marked hypochlorhydria.

2 cases hyperchylia.

2 cases normal acidity.

Dysenteries.

The cases complaining of dysenteric symptoms are examined for E. hstiolytica veg. and cysts, *Bilharzia mansoni* and *haematobium*, *Heterophyes* and *Giardia Lamblia*. The stools were cultured for the presence of any dysentery producing micro-organisms in cases which were found negative for the fore-mentioned parasites or in acute dysenteric attacks suspicious of bacillary dysentery.

The results of the positive cases were as follows :—

(1) *Bilharzial Dysentery* :

(*a*) S. mansoni ... ... 72 cases.
(*b*) S. haematobium ... ... 41 ,,
(*c*) S. man. and haem. ... 6 ,,

(2) *E. histolytica vegetative* :

It was found in 33 cases. Hepatitis in 4 cases.
17 of these cases were negative for E. histolytica after 6 Emetine inj.
6 positive for E. hist. cysts after 6 Emetine inj.
1 positive for E. hist. veg. after 6 Emetine inj.
but became negative after 10 injections.
9 cases did not attend treatment.

(3) *E. histolytica cysts* :

Found in 45 cases complaining of dysenteric symptoms acute or chronic.
9 cases became negative after 6 injections of Emetine 0·06 each.
6 ,, ,, ,, ,, Carbarsone.
2 ,, ,, ,, ,, Enterovioforme.
1 case still positive after 6 injections of emetine. 0·06 each.
but became negative after carbarsone.
2 cases still positive after enterovioforme, but became negative after carbarsone.
The rest of the cases did not attend for treatment.

(4) *Giardia Lamblia* :

Was found in 11 cases, 4 of these were cured é atebrin.

(5) *Bacillary dysentery* :

The number of positive cases and the responsible organisms are as follows :—
(*a*) B. Flexner ... ... 3 cases.
(*b*) B. Shiga... ... ... 2 ,,
(*c*) B. Morgan No. 1 ... ... 2 ,,
(*d*) B. Paratyphoid B ... ... 2 ,,

In-Patients.

A.—*Anæmia* :

(1) *Ankylostoma Anæmia.*

A study on the effect of calcium salts and vitamin C on the rate of absorption of iron in Ankylostoma anaemia has been carried out. The study comprised haemoglobin, red cells and serum examinations. The results will be published later, after admission of the work as a thesis for the mastership of science.

(2) *Pernicious Anaemia.*

One case of pernicious anaemia was met with.

M.M.S. a male aged 48 years came to the out-patient department complaining of general weakness, giddiness, palpitations on exertion preventing the patient from sustaining any physical effort. A month previous to admission he had an attack of diarrhœa (3–4 stools daily) with blood and mucus accompanied by tenesmus which lasted 4 days only and subsided spontaneously. He gave history of passing through alternate periods of good health and liver illness during which every one of the above symptoms was present. Remissions occurred usually during the colder season and lasted several months. He had three such remissions.

Skin, nails and mucous membranes were very pale. Tongue pale and fissured but not glazed. Slight icteric tinge, no haemorrhages or glands, sternum tender on percussion, slight oedema affecting the dorsum of both feet, the ankles and the skin up to the middle of the legs.

Patches of leukoderma are present over the dorsal aspect of the terminal phalanges of both hands, both palms, and both feet and the back.

Heart : Normal in size. A systolic murmur is heard over the praecordium, most marked over the pulm. area. Liver enlarged (+) but not cirrhotic. Spleen enlarged (++++) reaching the middle line, but not crossing it. Percussion indicated enlargement also upwards. Other systems normal. Nervous system normal.

Haematological Findings :

Hb. 30 per cent, R.B.Cs 1.375.000, Megaloblast 1, Normoblast 1, Myelocytes 5, Reticulocytes 1·6 per cent, D.I. 7·65 u. (The diameter of individual cells varied between 9 and 4·6 u). V.I. 1·30, Fragility 0·36–0·46. Platelets 64,000. W.B.Cs. 3000 E. 0 per cent, N. 69 per cent. L. 15 per cent. M. 9 per cent.

Malaria parasites negative/After adrenaline negative.

Sternal Puncture : Megaloblastic reaction. Total 150,400. Icterus index : 12 units. Takata Ara negative. W.R. negative. F.T.M. Achylia Gastrica.

The marked enlargement of the spleen in this case, in the absence of evidence of Cirrhosis of the liver could not be explained by Addison's anæmia. Chronic malaria infections was looked for. Films and thick drops were negative both before and after an adrenaline injection. The therapeutic test was resorted to and quinine hydrochloride was given to the patient, watch being kept on his reticulocytic count ; no crises occurred. A reticulocytic count of 16 per cent, however, was attained on the 6th day of feeding with 400 grams of liver daily.

An interesting observation was the recession of the spleen but not quite to normal. Later this year (1942) the patient was observed during an exacerbation and the spleen was seen to have enlarged once more to its size prior to treatment with liver last year.

(3) *Myelosclerotic Anaemia: ? syphilitic.*

One case of myelosclerotic anaemia was met with. Pt. Z. 5. A widow of 50 years, Outstanding complaint was repeated attacks of epistaxis mainly during the colder months. and 3 attacks of haemoptysis. Generalised bone aches for 3 or 4 years was the other main complaint. She has 4 children alive and healthy and has lost 4 others at the ages 14, 7, 4 and 3 years and there is history of an abortion at 2 months 15 years ago.

Positive Clinical Findings:

Pt. has a malar flush and shows peticheal haemorrhages over the front of the chest and on the arms. The lower part of the sternum is slightly tender. Tourniquet test is positive. A musical systolic murmur is present over the apex, the pulmonary and aortic area. It loses its musical character and is unaccompanied by either pulsations or thrills. The pulse is 92 full and regular and the blood pressure is 170/110.

The liver is enlarged to the extent of 4 fingers from the C.M. to the Ant. Ax. lines. The borders well defined and somewhat sharp.

The Spleen comes down to one finger below the umbilicus and is distinctly hard, but preserves its normal contour.

The respiratory urinary and nervous systems are free.

On performing sternal puncture, it was found that sterum was hard. Penetration into the marrow cavity could not be effected.

Investigations: Urine: free. Stools: Neg. for ova.

Serological: W.R.: Neg. Kahn: ++++. I.I.: 5 units.

Haematological: Hb. 75 per cent /R.B.Cs.: 3875000. Erythroblasts: 1 per cent. Normoblasts.: 2 per cent. D.I. 7·8 U. V.I. 1·14. Fragility: 0·46 to 0·36. Platelets: 42,900.

W.B.Cs, Total 10·40. E. 5 N. 75 L. 15 per cent. M. 5

Myelocytes: 2 per cent. Malaria parasites: Negative.

Coagulation: 6 min.

Bleeding time: 4 min.

Clot retraction: not complete in 24 hours.

X-Ray examination showed dense osteosclerosis in the bones in the neighbourhood of the joints and to a less extent in the shafts of the bones. The sclerosis is of glazed homogeneous type.

The Haematological findings in this case, presence of erythroblasts, normoblasts and of myelocytes in small numbers, are those of a leuco-cerythroblastic anaemia. The age of the patient, the X-ray findings, giving no evidence of carcinomatosis of the bones or myelomata, exclude conditions giving rise to a leuco-erythroblastic anaemia other than osteosclerosis occurring in the middle aged, namely myelosclerosis.

The supposed relationship between syphilis and some cases of myelosclerosis with the positive Kahn reaction suggests that syphilis may be the aetiological factor in this case.

Unfortunately it has not been possible to give antisyphilic treatment to this case and watch the effect of such treatment upon the bony changes and the haematological picture.

(4) *A case of chronic Myeloid Leukaemia in a child of 10 years*:

A case of chronic Myeloid Leukaemia is described as occurring in a boy of 10 years of age. It is an addition to the 31 cases of chronic myeloid leukaemia occurring in children, reported in the literature up to 1938.

(Published Trans. Egypt. Med. Assoc. Vol. 25, 1942).

(5) *Ovalocytosis* :

One case of ovalocytosis, the 1st in Egypt was met with.

The patient Z.Z.A. a boy of 17 of very dark complexion, the son of white parents, was admitted to the hospital with jaundice.

Blood picture:

Hb : 22 percent R.B.Cs. : 1,200,00 W.B.Cs. : 2000 E. : 6 per cent

N : 62 „ L : 20 per cent M : 12 per cent

94·9 per cent of his red cells were elliptical. Two other members of his family, one from his own generation and the other of a younger generation were examined for the same trait and investigated along the lines outlined in the literature. The results of these investigations will be published separately.

B.—*Hepato-splenomegaly in Bilharziasis.*

TABLE No. 111

Urine	Stools	Total	En. Liver	En. Sp.	En. Liver and En. Sp.	Anæmia
S.h.	—	1,390	455	39	755	20
—	S.b.	31	—	1	12	1
—	S.m.	72	15	2	53	3
S.h.	S.h.	95	26	2	57	11
S.h.	S.m.	84	14	—	66	9
S.h.	S.h. and m.	12	2	—	4	—
	TOTAL	1,684	519	44	927	44

In this table we include cases of enlarged liver, enlarged spleen or enlarged liver and spleen together. Cases of anæmia with Hb. less than 50 per cent — associated with Bilharzial infection alone — are also included.

This table shows the number of out-patients from January 1, 1941, to July 31, 1941.

C.—*Jaundice.*

(1) The effect of tartar emetic treatment on the liver and its relation to jaundice :

(*a*) Therapeutic courses of tartar emetic as used in the treatment of Bilharzia were given to cases of jaundice mainly parenchymatous (one group é previous history of antimony treatment and another without). The results of this experiment agree with those of Salah and Hassan who used mainly Foadin in their study and show definitely that these doses of trivalent antimony do not lead to further disturbance of an already damaged liver cell. On the contrary improvement in the clinical condition as well as in the degree of jaundice é the liver function test occurred in the majority of these cases in spite of antimony treatment. One can, therefore, conclude that these courses do not injure a healthy liver.

(*b*) A comparative study of the seasonal incidence of 2 groups of jaundiced patients ; one with previous antimony treatment within one year and the other without showed definitely the same frequency in the various years and their frequency agrees with the seasonal prevalence of catarrhal jaundice in this country. This supports the suggestion that even cases of jaundice following antimony treatment belong to the hepatocatarrhal group rather than toxic in nature.

(*c*) A comparative study of these 2 groups as regards the mechanism of jaundice showed that the frequency of parenchymatous damage to the liver is similar in the 2 groups suggesting a similar æteological factor. If the jaundice following antimony was toxic in nature due to this drug one would expect the mechanism to be parenchymatous in every case.

(*d*) Analysis of 14 cases dying from tartar emetic treatment was obtained from the Medico-Legal Department revealed no case in which jaundice was present and no case in which evident pathological liver damage was demonstrated.

N.B.—A full report of this work is under publication in the Journal of the Egyptian Medical Association.

(2) Bilirubin in the C.S.F. in a case of chronic obstructive jaundice (Pancreatitis) with tabes dorsalis :

A male patient aged 45 was transferred to the Institute from the Ankylostoma hospital for treatment from jaundice. The jaundice was chronic and of gradual onset and progress, and clinical signs of tabes dorsalis were present. On drawing C.S.F. fluid from the patient for cytological examination and protein estimations, it was found that the C.S.F. was definitely tinged and yellow coloured, the colour on further investigation proved to be due to bilirubin.

The choroidal plexuses are selectively impervious to bile pigments, and the presence of bilirubin in the C.S.F. fluid could not be adequately explained except by the probable affection of the choroidal system by the syphilitic process. The presence of bilirubin in the C.S.F. of this case however, raised interest in the subject and all cases of jaundice with an icterus index of 150 units or above, coming to the Institute, have been Lumbar punctured and the C.S.F. examined. The subject is still under investigation.

D.—*Filariasis.*

Examination of hydrocele fluid :

The biochemical composition of the hydrocele fluid was examined in a number of cases to find out if there is any difference between the fluid of filarial cases and that of other cases. Also the variations in the composition of the fluid in different stages of the disease judged by the size of the hydrocele and other clinical data were investigated.

For this purpose, the village of Kafr-Ghataty was visited several times with the object of detecting cases of hydrocele of filarial origin. The work was carried out as follows :—

(1) Clinical examination for evidence of filarial manifestations associated with hydrocele. In most of the cases we have got such evidence in the form of attacks of lymphangitis, elephantiasis, chyluria, glands or nodules in the spermatic cord, etc.

(2) Tapping the hydrocele fluid and obtaining specimens for the biochemical and bacteriological examinations.

(3) Examinations of blood for *Microfilaria bancrofti.*

(4) Examination of urine for Bilharzia Ova.

The results of clinical and biochemical examinations are tabulated as follows :—

TABLE 112.—RESULTS OF CLINICAL EXAMINATION

Case	Age	Hydrocele	Filarial Manifestations
1	30	Right	Attacks of lymphangitis, elephantiasis of right lower limb.
2	38	Left	Enlarged groin glands.
3	40	,, ...	Attacks of lymphangitis, elephantiasis of scrotum. Enlarged groin glands.
4	22	Bilateral	———
5	32	,, ...	Enlarged groin glands. Nodules in spermatic cord.
6	42	Right	Nodules in spermatic cord.
7	40	Left	,, ,, ,, ,, and testis.
8	30	Bilateral	Attacks of lymphangitis, enlarged glands.
9	26	Right	Elephantiasis of both lower limbs.
10	28	Left	Attacks of lymphangitis.

TABLE 113.—RESULTS OF BIOCHEMICL EXAMINATION OF HYDROCELE FLUID

Case	Side	Duration	Sp. Gr.	Chlorides mgm. %	Totals Proteins	Albumin gm. litre	Globulin	Cholestrol mgm. in 1 grm.	Total fat grm. %
1	R.	5 years	1,022	495	6·6 gm./litre ...	3·5	3·0	154	2·0
2	L	2 ,, ...	1,020	480	6·3 ,, ...	4·0	2·3	—	4·2
3	L.	½ ,, ...	1,020	480	7·0 ,, ...	4·5	2·5	—	—
4	L	1 ,, ...	1,020	450	6·5 ,, ...	4·0	2·5	—	3·2
4	R.	2 months	1,020	485	6·8 ,, ...	4·7	2·1	—	—
5	L.	2 years	1,021	475	6·0 ,, ...	3·6	2·4	—	9·2
5	R.	4 ,, ...	1,025	480	6·4 ,, ...	3·9	2·5	—	10·0
6	R.	3 months	1,032	460	7·2 ,, ...	5·0	2·2	—	—
7	L.	9 ,,	1,020	465	6·6 ,, ...	4·2	2·4	—	7·1
8	R.	1½ years	1,020	440	7·0 ,, ...	4·0	3·0	—	3·6
8	L.	2 ,, ...	1,024	455	6·4 ,, ...	3·7	2·7	160	7·4
9	R.	6 months	1,030	485	7·4 ,, ...	4·1	3·3	—	3·2
10	L.	2½ ,, ...	1,036	485	8·9 ,, ...	6·0	2·9	—	—

Cases 3, 4, 5, 8 and 10 had micro filaria in blood.

In none of the cases were micro filaria found in hydrocele fluid.

Chapter XX.—SUMMARY OF THE WORK OF THE MEMORIAL OPHTHALMIC LABORATORY, GIZA

For the purpose of reviewing the scientific work carried out in the Memorial Ophthalmic Laboratory, it is convenient to consider what has been accomplished under the following four main headings:—

1.—*Post-Graduate Instruction.*

In the past, the Post-Graduate instruction and training of all doctors wishing to join the Ophthalmic Service of the Public Health Ministry has been carried out in the Laboratory and the adjoining Fuad I. Ophthalmic Hospital, and only those candidates who passed the Primary and Final examinations conducted locally by the teaching staff were finally accepted for such service. Now, however, on the creation of the Diploma of Medical and Surgical Ophthalmology, Faculty of Medicine, Cairo, it has been decided that only holders of such a diploma would be accepted for Government Ophthalmic Service. With this change in the regulations, the Laboratory is still continuing to give post-graduate instruction in ophthalmology but the courses of instruction have had to be considerably revised.

2.—*Pathological Section.*

The number of pathological specimens sent to the Laboratory annually continues to increase and in addition, during the year 1941, there has been a considerable increase in the bacteriological work and the number of pathological examinations which have had to be made.

As usual, much interesting material has been met with.

3.—*Clinical Section.*

Many cases of more than usual clinical interest have been investigated at the Laboratory. Routine clinical work is carried out in the adjoining Fuad I. Ophthalmic Hospital.

4.—*Research Section.*

Subjects of bacteriological and pathological interest as well as those of clinical and surgical interest have again received careful consideration. The new treatment of the acute ophthalmias by means of M. & B. 693 has proved a great success and, if applied early enough, should be the means of preventing much blindness. The corneal lesions in trachoma respond just as strikingly to similar treatment. Much experimental work on the aetiology of trachoma has also been continued throughout the year and a full record of all research work accomplished will be found in the Report of the Laboratory published separately.

Part VII.—APPENDICES

Appendix I.—MEDICAL PERMITS

TABLE No. 114.—NUMBER OF PRACTITIONERS OF THE MEDICAL AND ALLIED PROFESSIONS AT THE END OF THE YEAR 1941 AS COMPARED WITH THAT OF THE YEAR 1940.

Profession	At the end of 1940	At the end of 1941
Medical Practitioners	3,705	3,798
Veterinary Surgeons	427	433
Dental Surgeons	480	489
Dentists without diplomas*	129	127
Pharmacists	942	976
Asst. Pharmacists*	337	337
Midwives	604	648

* No permits are now issued to persons of these two categories.

TABLE No. 115.—NUMBER OF PERSONS AUTHORISED TO PRACTISE THEIR PROFESSION IN EGYPT DURING THE LAST FIVE YEARS.

Profession	1937	1938	1939	1940	1941
Medical Practitioners	138	149	142	113	139
Veterinary Surgeons	26	28	24	38	8
Dental Surgeons	20	26	20	11	13
Pharmacists	29	28	53	46	45
Midwives	20	36	15	44	45
Dayas ... Green Permits ...	189	204	226	288	197
Dayas ... White Permits	3	2	1	2	2
Barbers	5	1	2	5	9

TABLE No. 116.—NATIONALITIES OF PERSONS AUTHORISED TO PRACTISE MEDICAL PROFESSIONS DURING 1941.

Profession	Egyptians	Greeks	French	Total
Medical Practitioners	137	2	—	139
Veterinary Surgeons	7	—	1	8
Dental Surgeons	13	—	—	13
Pharmacists	44	1	—	45
Midwives	45	—	—	45

TABLE No. 117.– ORIGIN OF MEDICAL DIPLOMAS THE HOLDERS OF WHICH WERE AUTHORISED TO PRACTISE MEDICAL PROFESSIONS DURING 1941

Profession	Egypt	France	Syria	Switzerland	Greece	TOTAL
Medicine	114	15	4	4	2	139
Veterinary	7	1	—	—	—	8
Dental Surgery	12	—	1	—	—	13
Pharmacy	22	13	9	1	—	45
Midwifery	45	—	—	—	—	45

TABLE No. 118.—ORIGIN OF MEDICAL DIPLOMAS OF EGYPTIAN PRACTITIONERS WHO WERE AUTHORISED TO PRACTISE MEDICAL PROFESSIONS DURING 1941

Profession	Faculty of Medicine, Cairo	French Universities	Swiss Universities	Syrian Universities	Greek Universities	TOTAL
Medicine	114	14	4	4	1	137
Veterinary Surgery	7	—	—	—	—	7
Dentistry	12	—	—	1	—	13
Pharmacy	22	13	1	8	—	44
Midwifery	45	—	—	—	—	45

TABLE No. 119.—RESULT OF THE STATE EXAMINATIONS HELD DURING 1941 FOR MEDICAL PRACTITIONERS, PHARMACISTS AND DENTAL SURGEONS HOLDING FOREIGN DIPLOMAS FOR THE PURPOSE OF OBTAINING PERMITS TO PRACTISE THEIR PROFESSIONS IN EGYPT

Examination	Number	Egyptians		Foreigners		TOTAL	
		Passed	Failed	Passed	Failed	Passed	Failed
Medicine	37	7	11	4	15	11	26
Pharmacy	22	7	13	—	2	7	15
Dentistry	18	1	13	—	4	1	17

Appendix II.—MEDICAL COMMISSIONS

Central Medical Commission.

The number of medical certificates issued by the Central Medical Commission during 1941 was 20,041, i.e. 612 certificates more than in 1940. Of this number, 8,217 medical certificates dealt with leaves granted to Government officials reporting sick. These consisted of 5,264 pensionable and temporary officials and 2,953 hors cadre employees.

Of those granted sick leaves by the Central Medical Commission or by the Cairo Medical Officers of Health and approved by the Central Medical Commission, 2,037 pensionable and temporary officials and 657 hors cadre employees were found suffering from medical diseases and 1,079 pensionable and temporary officials and 610 hors cadre employees were found suffering from surgical and ophthalmic diseases.

Herebelow are the diseases accounting for the sick leaves and the ratio of their prevalence :—

TABLE No. 120

Disease	Pensionable and Temporary Officials		Hors Cadre Employees	
	Number	Ratio to Total	Number	Ratio to Total
		%		%
Bronchi and Lungs	240	8	82	6
Heart and Blood Circulatory System	244	8	37	3
Stomach and Intestines	106	3	41	3
Liver	107	3	22	2
Kidney and Cystis	184	6	50	4
Neurasthenia and Mental Diseases	103	3	52	4
Nervous System	103	3	21	2
Anaemia and General Debility	260	9	62	5
Rheumatism	206	7	78	6
Fevers	175	6	91	7
Nose and Larynx	144	5	58	3
Other Medical Diseases including T.B.... ...	165	5	83	7
Eye Diseases	180	6	67	5
Appendicitis	39	1	12	1
Ear and Dental Diseases	94	3	27	2
Urinary System and Stones	40	1	15	1
Surgical Operations	417	13	281	22
Various Fractures	135	4	163	13
Minor Surgical Operations (Fistula, piles, hernia and hydroceles)	174	6	45	4

37,689 officials and employees were granted from 1–10 days sick leave by Cairo Medical Officers of Health and by Markaz and Sanitary Outposts in all the Provinces and Governorates during the year 1941. Of these, 29,956, or 79 per cent suffered from medical diseases; 4,150 or 11 per cent suffered from surgical diseases; and 3,585 or 10 per cent suffered from ophthalmic diseases. The total number of days of sick leave granted to the pensionable and temporary officials only amounted to 119,543.

908 pensionable and temporary officials and 565 hors cadre employees in Cairo only were granted from 1–10 days sick leave by the Central Medical Commission or by Cairo Medical Officers of Health. 122 pensionable and temporary officials and 70 hors cadre employees were examined by the Central Medical Commission but were not granted any sick leave.

480 pensionable and temporary officials and 476 hors cadre employees were examined by other Provincial and Governorate Medical Commissions but were not granted any sick leave.

3,679 pensionable and temporary officials and 2,208 hors cadre employees were granted from 11 to 30 days sick leave and over by the Central Medical Commission and by Cairo Medical Officers of Health.

The Central Medical Commission granted 36 pensionable and temporary officials longer sick leaves terminating by retirement on pension; and pronounced 447 hors cadre employees medically unfit for further service. 25 pensionable and temporary officials and 105 hors cadre employees were pronounced fit for further service.

A total of 7,904 candidates for Government service or educational missions abroad were examined by the Central Medical Commission. These consisted of 4,429 candidates for permanent or temporary posts, 6 for educational missions and 3,469 for hors cadre posts.

78·5 per cent of the first group and 60·1 per cent of the last group passed the medical examination. Of the 20·1 per cent failures in the first group, 16·9 per cent failed in vision —myopia accounting for most of them; 2·9 per cent for defects of the urinary system —albumin or traces thereof being the main cause; 1 per cent for heart diseases—with incompetency of the heart as the main complaint, and 0·7 per cent for other diseases, e.g. varicoceles, hydroceles not treated or removed by operation, deformation, debility or respiratory diseases.

Of 57 candidates for private pilot licence "A" examined by the Central Medical Commission during 1941, 45 were found fit (39 in the first examination, 5 in the second and 1 in the third examination). 11 of the 12 failures were examined once and one was examined twice.

5 candidates for passenger pilot licence "B" were examined and all were found fit in the first examination.

Out of 80 private pilots examined for renewal of licences, 77 were found fit (73 in the first examination and 4 in the second examination). The three failures were examined once.

Of 43 passenger pilots examined for renewal of licences, 40 were found fit (37 in the first examination and three in the second). The three failures were examined once.

Provincial and Governorate Medical Commissions.

A total of 30,533 medical certificates were issued by the Provincial and Governorate Medical Commissions during the year; i.e. an increase of 4,421 certificates over those of ast year.

Table No. 121.— Classification of Diseases Contracted by Officials and Employees for which Sick Leaves have been Granted by the Central Medical Commission and Provincial Medical Commissions during 1941

Diseases

Medical Diseases

	1 Nose and Larynx		2 Bronchi and Lungs		3 Heart and Cir. System		4 Stomach and Intestines		5 Liver		6 Kidney and Bladder		7 Nervousness		8 Mental Diseases		9 Nervous System and Cereb. and Cord		10 Anæmia and General Debility		11 T.B.		12 Syphilis		13 Rheumatism		14 Fevers		15 Other Medical Diseases		Total	
	P. & T.	H.C.	P. & T.	H.C.	P. & T.	H.C.	P. & T.	H.C.	P. & T.	H.C.	P. & T.	H.C.	P. & T.	H.C.	P. & T.	H.C.	P. & T.	H.C.	P. & T.	H.C.	P. & T.	H.C.	P. & T.	H.C.	P. & T.	H.C.	P. & T.	H.C.	P. & T.	H.C.	P. & T.	H.C.
Cairo	144	38	240	82	244	37	106	41	107	22	184	50	42	4	61	48	103	21	260	62	70	33	3	4	206	78	175	91	92	46	2·037	657
Governorates and Provinces ...	143	61	367	367	252	136	326	238	178	63	283	165	156	84	11	9	41	56	571	570	33	53	1	73	575	397	161	132	258	248	3·356	2·652

Surgical and Ophthalmic Diseases

	1 Eye Diseases		2 Ear Diseases		3 Appendicitis		4 Hernia		5 Fistula		6 Piles		7 Hydroceles		8 Urinary System and Stones		9 Other Surgical Operations		10 Fractures		11 Dental Diseases		Total	
	P. & T.	H.C.	P. & T.	H.C.	P. & T.	H.C.	P. & T.	H.C.	P. & T.	H.C.	P. & T.	H.C.	P. & T.	H.C.	P. & T.	H.C.	P. & T.	H.C.	P. & T.	H.C.	P. & T.	H.C.	P. & T.	H.C.
Cairo	180	67	28	12	39	12	31	15	67	8	66	15	10	7	10	15	417	281	135	163	66	15	1·079	610
Governorates and Provinces ...	216	237	47	35	25	33	25	88	73	63	124	134	22	32	82	77	556	1·150	176	423	75	31	1·421	2·303

N.B.—P. = Permanent. T. = Temporary. H.C. = Hors Cadre.

TABLE No. 122.— MEDICAL EXAMINATIONS BY THE CENTRAL MEDICAL COMMISSION AND PROVINCIAL MEDICAL COMMISSIONS DURING THE YEAR 1941

Object of Medical Examinations																										Causes of Rejection of Candidates applying for Entry to Service																	
Number of Cases																										Diseases																	
For Admission to Service								Candidates for Missions				For Sick Leave				Invaliding				For Determination of Age		Other Examinations				Total	Defective Vision		Urinary System		Respiratory System		Circulatory System		Nervous System		Digestive System		Other Systems		Total			
Permanent and Temporary				Hors Cadre								Granted		Refused		Unfit		Fit																											
Fit	Unfit	Rejected in 1st Session	Rejected in 2nd Session	Fit	Unfit	Fit	Unfit	Rejected in 1st Session	Rejected in 2nd Session	P. & T.	H.C.	P. & T.	H.C.	P. & T.	H.C.	P. & T.	H.C.	P. & T.	H.C.	P. & T.	H.C.	Com. of Pension	M. Auth. Nafars	Other Cases P. & T.	Other Cases H.C.		P. & T.	H.C.	P. & T.	H.C.	P. & T.	H.C.	P. & T.	H.C.	P. & T.	H.C.	P. & T.	H.C.	P. & T.	H.C.	P. & T.	H.C.
3·754	479	435	133	8·781	8·181	6	—	—	—	9·911	7·830	610	554	102	4·213	76	1·305	82	1·120	104	39	761	2·098	50·574	830	6·055	136	1·598	3	47	53	205	1	9	—	7	24	260	1·047	8·181		

N.B.—P. = Permanent. T. = Temporary. H.C. = Hors Cadre.

Appendix III.—CENTRAL STORES

Inspite of difficulties arising from the prevailing war time conditions, the Central Stores managed to procure the latest instruments, apparatus and drugs and to supply same to the various units of the Ministry.

Some economy had, however, to be exercised to such an extent as will not affect the smooth running of the work in these units.

Specifications of articles put into adjudication are being modified from time to time according to recommendations of the technical officials.

In addition, the Central Stores were able to supply the following new units with the necessary equipment and apparatus :—

Different departments of the Boulac Health Group.

Fever Hospital at Zifta.

A ward for surgical tuberculosis at the Abbassia Chest Diseases Hopital.

A hospital steamer at Derr.

Anti Bilharzia units.

2 Ophthalmic departments in District Hospitals.

A Malaria Station.

3 Dental Clinics.

A Skin Diseases Clinic.

Supplying the equipment required for the combination of Village Hospitals and Health Offices.

Equipment of the Vaccine and Serum Institute at Agouza.

The Work of the Central Stores is briefly shown in the following figures :—

Table No. 123

Kind of Work	1940	1941	Decrease	Increase
Receipt Vouchers	18,377	12,068	6,309	—
Issue Vouchers	65,285	37,734	—	2,449
Claims	1,317	1,227	90	—
Correspondence Outward	129,655	131,001	—	1,346
,, Inward and forms	133,417	135,970	—	2,553
Postal parcels received	3,523	7,020	—	3,497
,, ,, despatched	10,526	13,371	—	2,845
Workshop labour (No. of articles repaired)	121,766	84,112	37,654	—
,, ,, (No. of articles newly made)	95,337	250,112	—	154,775
Railway parcels despatched	87,302	66,668	20,634	—
,, consignments received	42,113	73,046	—	30,933

New Units from January 1st to December 31, 1941 :—

1 District Hospital at Dekernes.
1 Fever ,, at Zifta.
2 Ophthalmic Branches at El Ayyat and Dekernes district hospitals.
1 Sanitary travelling unit No. 1 belonging to El Minia Provincial Council.
3 Leprosy Branch clinics at El Mahmoudieh, Nag-Hammadi and Abu Hommos.

Opening the following Sections at Boulac Health Group :—

1 Children Welfare Dispensary.
1 Chest Diseases Dispensary.
1 Venereal Diseases Clinic.
1 Ankylostoma and Bilharzia Clinic.
1 Central Pharmacy.

Contracts concluded in 1941 as compared with 1940 :—

TABLE No. 124

	1940	1941	Decrease	Increase
General adjudications	224	311	—	87
Local offers	295	322	—	27
Contracts	461	447	14	—
Local orders	705	638	67	—
Foreign orders	66	45	21	—
Forms 50 C.G. (payment form)	3,132	2,844	288	—
Questions submitted to the Contract Board	748	897	—	149
Meetings held by the Contract Board	173	172	1	—
Tenders submitted in general adjudications	1,113	1,265	—	152
Agreements	4	4	—	—
Miscellaneous orders	197	61	136	—
Tenders submitted in local adjudications	1,477	784	693	—

Appendix IV.—BUDGET

1.—Details of Budget Grants and Expenditure

TABLE No. 125

	Budget Grants		Actual Expenditure	
	1940	1941	1940	1941
	L.E.	L.E.	L.E.	L.E.
TITLE I				
Salaries, Wages and Allowances	991,500	936,136	896,289	916,743
TITLE II				
General Expenses...	1,117,561	1,081,970	902,230	1,012,064
TITLE III				
New Works	143,950	120,700	16,654	44,497
TOTAL	**2,253,011**	**2,138,806**	**1,815,173**	**1,973,304**

TABLE No. 126.—II.—DETAILS OF POSTS

	General Sections		Endemic Diseases Sections		Curative Medicine Sections		Preventive Medicine Sections		Social Hygiene Sections		Central Admin.		Branches		TOTAL	
	1940	1941	1940	1941	1940	1941	1940	1941	1940	1941	1940	1941	1940	1941	1940	1941
Technical Posts:																
Permanent...	139	140	52	52	595	590	322	318	192	191	—	—	—	—	1,300	1,291
Temporary...	64	68	107	98	183	182	363	354	145	136	—	—	—	—	862	838
Adm. and Clerical Posts:																
Permanent...	—	—	—	—	—	—	—	—	—	—	295	288	172	172	467	460
Temporary...	—	—	—	—	—	—	—	—	—	—	187	187	286	293	473	480
Hors Cadre Staff	592	641	1,040	969	3,736	3,665	1,099	1,084	2,113	2,036	—	—	—	—	8,580	8,395
TOTAL	795	849	1,199	1,119	4,514	4,437	1,784	1,756	2,450	2,363	482	475	458	645	11,682	11,464

Appendix V.—SUMMARY OF REPORT ON THE STATE OF PUBLIC HEALTH IN ALEXANDRIA CITY DURING 1941

1.—Population 737,800

2.—Births :

(*a*) Alive :	Egyptians	Foreigners
Males	9,994	464
Females	9,534	431
	19,528	895
	20,423	

or 27·7 per thousand population.

(*b*) Still-births :

are estimated at 1 per thousand population.

3.—Deaths :

	Egyptians	Foreigners
Males	8,515	949
Females	7,029	520
	15,544	1,469
	17,013	

or 23·2 per thousand population.

4.—Infantile Mortality : 3,946

or 193 per thousand births.

5.—Deaths among children from 1-5 years old 4,862

or 295 per thousand of their total.

6.—Infectious Diseases :

Cases 15,318

Deaths 2,477

or 20·8 cases per thousand population and 16·2 deaths per hundred cases.

Appendix VI.—REPORT ON THE WORK OF CAIRO CITY HEALTH INSPECTORATE

Population.

The estimated mid-year population of Cairo in 1941 was 1,398,200.

Births.

During the year, 63,099 births were recorded in Cairo (still-births excluded) with an excess of 3,580 births over the previous year, or a birth-rate of 45·1 per thousand population. Table No. 127 shows the number of births distributed on the various Qisms and their rates per thousand of population.

Still-Births.

The number of still-births registered during the same period was 1,310, or a rate of 20·76 per thousand births as compared with 1,304 in 1940.

Deaths.

During 1941, a total of 41,205 deaths were recorded in Cairo. 1,410 of these, however, were non-residents of Cairo leaving 39,795 deaths for Cairo proper, with an increase of 3,095 over the previous year. This gives a death-rate of 28·5 per thousand of population as compared with 26·9 in 1940; 25·9 in 1939; 27·8 in 1938 and a mean death-rate of 25·9 for the five years (1935–1939).

Infantile Mortality.

12,434 children under one year of age died during 1941 with an increase of 752 deaths over the previous year, or a rate of 197 per thousand births for the whole city as compared with 196 in 1940; 190 in 1939; 204 in 1938 and a mean death-rate of 195 for the five years (1935–1939).

Diseases Causing Infantile Mortality.

Diarrhœa and enteritis are the principal diseases affecting children. They were responsible for 6,873 deaths out of a total of 12,434 or 55·28 per cent of deaths among children. General diseases follow with 3,032 deaths or 24·38 per cent. Marasmus and general debility caused 1,506 deaths or 12·11 per cent. Chest diseases caused 604 deaths or 4·86 per cent. 419 deaths were due to infectious diseases or a rate of 3·37 per cent.

Death Inquiries.

The total number of uncertified deaths which required investigation was 23,755 or 59·6 per cent of the total deaths of Cairo. District medical officers examined 8,442 or 35·6 of the uncertified deaths. District Mowallidas examined 14,608 or 62·3 per cent of the total number of uncertified deaths. The remainder were examined by Dayas and village sanitary barbers.

Infectious Diseases.

16,612 cases of infectious diseases were notified during the year (excluding 1,061 outside cases) as compared with 14,632 cases in 1940, 11,517 in 1939, 12,322 in 1938 and 14,138 in 1937. Cairo deaths due to infectious diseases totalled 4,584 during 1941 or 11·5 per cent of the total deaths as compared with 10·3 per cent in 1940, 7·5 per cent in 1939 and 8·4 per cent in 1938. The increase was due to an outbreak of diphtheria. Table No. 128 gives the number of cases and deaths distributed among Cairo Districts.

Influenza.

1,358 cases of Influenza with 28 deaths were notified during the year or a ratio of 0·97 and 0·02 respectively per thousand of population as compared with 1,851 cases and

30 deaths in 1940 (a ratio of 1·3 and 0·02) ; 1,937 cases and 36 deaths in 1939 (a ratio of 0·698 and 0·011) ; and 1,498 cases and 36 deaths in 1938 (a ratio of 1·127 and 0·37).

Tuberculosis.

The total number of cases notified during 1941 was 2,876, i.e. a ratio of 2·06 per thousand population. There were 1,308 deaths or 0·9 per thousand of population.

Child Bearing Mortality.

The number of deaths attributed to confinement was 161 or 2·5 per thousand births as compared with 2·1 in 1940, 2·6 in 1939 and 1938 and 2·5 in 1937. Puerperal fever was responsible for 57 deaths or 0·9 per thousand births as compared with 0·8 in 1940, 0·7 in 1939, 0·9 in 1938, 1·6 in 1937 and 1·9 in 1936. The number of mothers who died within a fortnight of confinement (excluding puerperal fever cases) was 104 as compared with 117 in 1940, 113 in 1939, 98 in 1938, 82 in 1937 and 124 in 1936. The following is the distribution of these deaths according to causes: Eclampsia 21, Eclampsia before confinement 5, metrorrhagy after confinement 12, metrorrhagy before confinement 3, placenta previa 8, abortion with haemorrhage 6, embolism 1, rupture of the uterus 6, heart failure 7, Cesarian operation 2, septicaemia after confinement 7, shock after confinement 3, kidney diseases 6, infectious diseases 6, difficult labour 3 and 8 from other diseases.

Disinfection.

The total number of rooms disinfected during the year was 88,467 of which 33,231 were disinfected by the Abbassia disinfecting station and the remaining 55,236 by Fom El Khalig disinfecting station.

TABLE No. 127.—POPULATION AND VITAL STATISTICS OF CAIRO AND ITS DISTRICTS IN 1941 AS COMPARED WITH AVERAGE FIGURES OF PREVIONS YEARS

	Population	Number of Deaths	Death-rate per 1000 of Population	Number of Births	Birth-rate per 1000 of Population	Number of Infantile deaths (0–1) years	Infantile Mortality rate per 1000 of Births
Ezbekia	57,400	1,235	21·5	1,863	32·5	284	152
Abdine	89,400	1,960	21·9	2,711	30·3	514	190
Sayeda I	71,000	2,594	36·5	4,426	62·3	855	193
Sayeda Ii	66,800	1,790	26·8	2,654	39·7	610	230
Khalifa	80,200	2,587	32·3	3,475	43·3	823	237
Darb el Ahmar	87,200	2,386	27·4	3,809	43·7	744	195
Mousky	27,400	637	23·2	1,038	37·9	197	190
Bab el Sharia	94,000	2,569	27·3	4,215	44·8	755	179
Gamalia	80,000	2,458	30·7	3,860	48·3	809	210
Abbassia	135,500	3,080	24·5	5,169	41·2	848	164
Shoubra	130,700	3,978	30·4	7,377	56·4	1,333	181
Rod-el-Farag	127,400	3,178	24·9	5,664	44·5	985	174
Boulac I	83,200	3,102	37·3	4,919	59·1	1,002	204
Boulac II	53,400	1,617	30·3	2,356	44·1	489	208
Old Cairo	72,200	2,541	35·2	3,571	49·5	944	264
Heliopolis	55,900	1,141	20·4	1,693	30·3	257	152
Zeitoun	43,800	1,521	34·7	2,188	50·0	523	239
Helwan	52,700	1,421	27·0	2,111	40·1	462	219
TOTAL FOR CAIRO...	**1,398,200**	**39,795**	**28·5**	**63,099**	**45·1**	**12,434**	**197**
1940	1,366,400	36,700	26·9	59,519	43·6	11,682	196
1935–1939	6,726,800	174,237	25·9	283,268	42·1	55,262	195
1930–1934	5,985,200	161,380	27·0	262,979	43·9	53,252	203
1925–1929	4,791,050	154,195	32·2	226,318	47·2	51,761	229
1920–1924	4,043,356	133,151	32·9	197,243	48·8	46,702	237

TABLE No. 128.—DISTRICT DISTRIBUTION OF THE PRINCIPAL INFECTIOUS DISEASES 1941

District	Population	Small-pox		Relapsing fever		Cerebro-Spinal fever		Typhus fever		Typhoid fever		Scarlet fever		Diphtheria		Measles		Total		Pulmonary Tuberculosis		Malaria	
		Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths
Ezbekia	57,400	—	—	—	—	5	2	3	—	122	24	4	—	101	16	21	4	256	46	106	39	11	1
Abdine	89,400	—	—	—	—	3	—	5	2	198	34	13	—	139	50	27	16	385	102	213	99	22	—
Sayeda I	71,000	—	—	—	—	4	3	9	2	105	26	1	—	109	44	32	14	260	89	198	127	21	3
Sayeda II	66,800	—	—	—	—	6	2	5	2	134	17	6	—	82	26	61	16	294	63	145	65	20	—
Khalifa	80,200	—	—	—	—	1	1	8	4	131	46	—	—	92	40	28	18	260	109	197	114	9	—
Darb-el-Ahmar	87,200	—	—	—	—	6	3	14	3	108	21	—	—	146	52	27	15	301	94	203	83	16	—
Mousky	27,400	—	—	—	—	2	1	1	—	64	12	1	—	36	14	8	2	112	29	78	31	3	—
Bab-el-Sharia	94,000	—	—	—	—	4	2	8	1	138	28	2	—	144	47	32	3	328	81	167	73	13	—
Gamalia	80,000	—	—	—	—	10	7	14	1	129	18	—	—	152	57	20	11	325	94	181	79	25	—
Abbassia	125,500	—	—	—	—	13	8	30	4	414	56	6	—	173	57	85	16	721	141	223	83	285	2
Shoubra	130,700	—	—	—	—	5	3	19	5	240	50	3	1	219	77	76	17	562	153	259	79	47	2
Rod-el-Farag	127,400	—	—	—	—	3	2	11	2	187	31	3	—	211	73	66	24	481	132	180	53	76	—
Boulac I	83,200	—	—	—	—	6	3	12	3	96	22	2	—	116	47	73	15	305	90	287	101	13	—
Boulac II	53,400	—	—	—	—	4	2	6	2	53	15	—	—	59	22	68	40	190	81	116	77	7	—
Old Cairo	72,200	—	—	—	—	3	1	15	2	102	18	—	—	75	16	78	44	273	81	86	44	42	1
Heliopolis	55,900	—	—	—	—	5	1	3	1	170	36	16	—	80	23	20	3	294	64	62	43	25	1
Zeitoun	43,800	—	—	—	—	2	—	4	—	88	10	1	—	53	14	28	5	176	29	71	39	18	2
Helwan	52,700	—	—	—	—	—	—	1	—	55	9	1	—	21	7	12	2	90	18	104	79	9	—
TOTAL FOR CAIRO	1,398,200	—	—	—	—	82	41	168	34	2,534	473	59	1	2,008	682	762	265	5,613	1,496	2,876	1,308	668	12

TABLE No. 129.—DISTRIBUTION OF UNCERTIFIED DEATHS AND DEATH INQUIRIES IN THE VARIOUS DISTRICTS IN 1941

Districts	Uncertified Deaths						
	TOTAL	Investigated by District M.O.	Investigated by District Mowallidas (Hakimas)	Investigated by Village Sanitary Barbers	Investigated by Village Dayas	District Totals	Percentage of uncertified deaths to total deaths
Ezbekia	1,235	129	324	—	—	453	36·7
Abdine	1,960	513	311	—	—	824	42·0
Sayeda I	2,594	828	982	—	—	1,810	69·8
Sayeda II	1,790	414	493	—	—	907	50·7
Khalifa	2,587	750	1,124	—	—	1,874	72·5
Darb el Ahmar	2,386	630	1,383	—	—	2,013	84·4
Mousky	637	150	155	—	—	305	47·9
Bab el Sharia	2,569	551	1,097	—	—	1,648	64·1
Gamalia	2,458	533	565	—	—	1,098	44·7
Abbassia	3,080	150	503	—	—	653	21·2
Shoubra	3,978	942	1,831	22	6	2,801	70·4
Rod-el-Farag	3,178	469	1,214	—	—	1,683	53·0
Bulac I	3,102	490	1,640	—	—	2,130	68·7
Boulac II	1,617	706	523	—	—	1,229	76·0
Old Cairo	2,541	361	1,210	170	21	1,762	69·3
Heliopolis	1,141	207	305	—	—	512	44·9
Zeitoun	1,521	405	670	—	—	1,075	70·7
Helwan	1,421	214	278	431	55	978	68·8
TOTAL FOR CAIRO	**39,795**	**8,442**	**14,608**	**632**	**82**	**23,755**	**59·7**

TABLE No. 130.—TYPHOID CASE AND DEATH RATES IN CAIRO DISTRICTS IN 1941

Districts	Estimated Population at mid-year	Number of Cases recorded	Case-rate per 1000 of Population	Number of Deaths	Death-rate per 1000 of Population	Case Mortality Ratle per cent
Ezbekia	57,400	122	2·125	24	·418	19·7
Abdine	89,400	198	2·215	34	·380	17·2
Sayeda I	71,000	105	1·479	26	·366	24·8
Sayeda II	66,800	134	2·001	17	·254	12·7
Khalifa	80,200	131	1·633	46	·574	35·1
Darb el Ahmar	87,200	108	1·239	21	·241	18·5
Mousky	27,400	64	2·336	12	·438	18·8
Bab el Sharia	94,000	138	1·466	28	·298	20·3
Gamalia	80,000	129	1·613	18	·225	14·0
Abbassia	125,500	414	3·299	56	·446	13·5
Shoubra	130,700	240	1·836	50	·383	20·8
Rod el Farag	127,400	187	1·468	31	·243	16·6
Boulac I	83,200	96	1·154	22	·264	22·9
Boulac II	53,400	53	0·993	15	·281	28·3
Old Cairo	72,200	102	1·413	18	·249	17·6
Heliopolis	55,900	170	3·041	36	·644	21·2
Zeitoun	43,800	88	2·909	10	·228	11·4
Helwan	52,700	55	1·044	9	·171	16·4
TOTAL FOR CAIRO	**1,398,200**	**2,534**	**1·812**	**473**	**·338**	**18·7**

TABLE No. 131.—TYPHUS CASE AND DEATH RATES IN CAIRO DISTRICTS IN 1941

District	Population	Number of cases recorded	Case-rate per 1000 of Population	Number of Deaths	Death-rate per 1000 of Population	Case Mortality Rate per cent
Ezbekia	57,400	3	·052	—	—	—
Abdine	89,400	5	·056	2	·022	40
Sayeda I	71,000	9	·127	2	·028	22·2
Sayeda II	66,800	5	·075	2	·030	40
Khalifa	80,200	8	·100	4	·50	50
Darb el Ahmar	87,200	14	·161	3	·034	21·4
Mousky	27,400	1	·036	—	—	—
Bab el Sharia	94,000	8	·085	1	·011	12·5
Gamalia	80,000	14	·175	1	·013	7·1
Abbassia	125,500	30	·239	4	·032	13·3
Shoubra	130,700	19	·145	5	·038	26·3
Rod el Farag	127,400	11	·086	2	·016	18·2
Boulac I	83,200	12	·144	3	·036	25·0
Boulac II	53,400	6	·112	2	·037	33·3
Old Cairo	72,200	15	·208	2	·028	13·3
Heliopolis	55,900	3	·054	1	·018	33·3
Zeitoun	43,800	4	·091	—	—	—
Helwan	52,700	1	·019	—	—	—
TOTAL FOR CAIRO... ...	**1,398,200**	**168**	**·120**	**34**	**·024**	**20·2**

TABLE No. 132.—DIPHTHERIA CASE AND DEATH RATES IN CAIRO DISTRICTS IN 1941

Districts	Population	Number of cases recorded	Case-rate per 1000 of Population	Number of Deaths	Death-rate per 1000 of Population	Case Mortality Rate per cent
Ezbekia	57,400	101	1·760	16	·279	15·8
Abdine	89,400	139	1·555	50	·559	36·0
Sayeda I	71,000	109	1·535	44	·620	40·4
Sayeda II	66,800	82	1·228	26	·389	31·7
Khalifa	80,200	92	1·147	40	·499	43·5
Darb el Ahmar	87,200	146	1·674	52	·596	35·6
Mousky	27,400	36	1·314	14	·511	38·9
Bab el Sharia	94,000	144	1·532	47	·500	32·6
Gamalia	80,000	152	1·900	57	·713	37·5
Abbassia	125,500	173	1·378	57	·454	32·9
Shoubra	130,700	219	1·676	77	·589	35·2
Rod el Farag	127,400	211	1·656	73	·573	34·6
Boulac I	83,200	116	1·394	47	·565	40·5
Boulac II	53,400	59	1·105	22	·412	37·3
Old Cairo	72,200	75	1·039	16	·222	21·3
Heliopolis	55,900	80	1·431	23	·411	28·8
Zeitoun	43,800	53	1·210	14	·320	26·4
Helwan	52,700	21	·398	7	·133	33·3
TOTAL FOR CAIRO... ...	**1,398,200**	**2,008**	**1·436**	**682**	**·488**	**34·0**

TABLE No. 133.—MEASLES CASE AND DEATH RATES IN CAIRO DISTRICTS IN 1941

Districts	Population	Number of Cases recorded	Case-rate per 1000 of Population	Number of Deaths	Death-rate per 1000 of Population	Case Mortality Rate per cent
Ezbekia	57,400	21	·366	4	·070	19·0
Abdine	89,400	27	·302	16	·179	29·3
Sayeda I	71,000	32	·451	14	·197	40·6
Sayeda II	66,800	61	·913	16	·240	26·2
Khalifa	80,200	28	·349	18	·224	64·3
Darb el Ahmar	87,200	27	·310	15	·172	55·6
Mousky	27,400	8	·292	2	·073	25·0
Bab el Sharia	94,000	32	·340	3	·032	9·4
Gamalia	80,000	20	·250	11	·138	55.0
Abbassia	125,500	85	·677	16	·127	18·8
Shoubra	130,700	76	·581	17	·130	22·4
Rod el Farag	127,400	66	·518	24	·188	36·4
Boulac I	83,200	73	·877	15	·180	20·5
Boulac II	53,400	68	1·273	40	·749	58·8
Old Cairo	72,200	78	1·080	44	·609	54·4
Heliopolis	55,900	20	·358	3	·054	15·0
Zeitoun	43,800	28	·639	5	·114	17·8
Helwan	52,700	12	·228	2	·038	16·7
TOTAL FOR CAIRO... ...	**1,398,200**	**762**	**0·545**	**265**	**·190**	**34·8**

TABLE No. 134.—CEREBRO-SPINAL FEVER CASE AND DEATH RATES IN CAIRO DISTRICTS IN 1941

Districts	Population	Number of Cases recorded	Case-rate per 1000 of Population	Number of Deaths	Death-rate per 1000 of Population	Case Mortality Rate per cent
Ezbekia	57,400	5	·087	2	·035	40·0
Abdine	89,400	3	·034	—	—	—
Sayeda I	71,000	4	·056	3	·042	75·0
Sayeda II	66,800	6	·090	2	·030	33·3
Khalifa	80,200	1	·012	1	·012	100·0
Darb el Ahmar	87,200	6	·069	3	·034	50·0
Mousky	27,400	2	·073	1	·035	50·0
Bab el Sharia	94,000	4	·042	2	·021	50·0
Gamalia	80,000	10	·125	7	·088	70·0
Abbassia	125,500	13	·104	8	.064	61·5
Shoubra	130,700	5	·038	3	·023	60·0
Rod el Farag	127,400	3	·024	2	·016	66·7
Boulac I	83,200	6	·072	3	·036	50.0
Boulac II	53,400	4	·075	2	·037	50·0
Old Cairo	72,200	3	·042	1	·014	33·3
Heliopolis	55,900	5	·089	1	·018	20·0
Zeitoun	43,800	2	·046	—	—	—
Helwan	52,700	—	—	—	—	—
TOTAL FOR CAIRO... ...	**1,398,200**	**82**	**·059**	**41**	**·029**	**50·0**

TABLE No. 135.—SCARLET FEVER CASE AND DEATH RATES IN CAIRO DISTRICTS IN 1941

Districts	Population	Number of Cases recorded	Case-rate per 1000 of Population	Number of Deaths	Death-rate per 1000 of Population	Case Mortality Rate per cent
Ezbekia	57,400	4	·070	—	—	—
Abdine	89,400	13	·145	—	—	—
Sayeda I	71,000	1	·014	—	—	—
Sayeda II	66,800	6	·090	—	—	—
Khalifa	80,200	—	—	—	—	—
Darb el Ahmar	87,200	—	—	—	—	—
Mousky	27,400	1	·036	—	—	—
Bab el Sharia	94,000	2	·021	—	—	—
Gamalia	80,000	—	—	—	—	—
Abbassia	125,500	6	·048	—	—	—
Shoubra	130,700	3	·023	1	·008	33·3
Rod el Farag	127,400	3	·024	—	—	—
Boulac I	83,200	2	·024	—	—	—
Boulac II	53,400	—	—	—	—	—
Old Cairo	72,200	—	—	—	—	—
Heliopolis	55,900	16	·286	—	—	—
Zeitoun	43,800	1	·023	—	—	—
Helwan	52,700	1	·019	—	—	—
TOTAL FOR CAIRO	**1,398,200**	**59**	**·042**	**1**	**·001**	**1·7**

TABLE No. 136.—MALARIA CASE AND DEATH RATES IN CAIRO DISTRICTS IN 1941

Districts	Population	Number of Cases recorded	Case-rate per 1000 of Population	Number of Deaths	Death-rate per 1000 of Population	Case Mortality Rate per cent
Ezbekia	57,400	11	·192	3	·052	27·3
Abdine	89,400	22	·246	1	·011	4·5
Sayeda I	71,000	21	·296	4	·056	19·0
Sayeda II	66,800	20	·299	3	·045	15·0
Khalifa	80,200	9	·112	3	·037	33·3
Darb el Ahmar	87,200	16	·183	1	·011	6·3
Mousky	27,400	3	·109	—	—	—
Bab-el-Sharia	94,000	13	·138	2	·021	15·4
Gamalia	80,000	25	·313	—	—	—
Abbassia	125,500	285	2·271	30	·239	10·5
Shoubra	130,700	47	·360	7	·054	14·9
Rod-el-Farag	127,400	76	·597	7	·055	9·2
Boulac I	83,200	19	·228	5	·060	26·3
Boulac II	53,400	7	·131	—	—	—
Old Cairo	72,200	42	·582	2	·028	4·8
Heliopolis	55,900	25	·447	2	·036	8·0
Zeitoun	43,800	18	·411	2	·046	11·1
Helwan	52,700	9	·171	3	·057	33·3
TOTAL FOR CAIRO	**1,398,200**	**668**	**·478**	**75**	**·054**	**11·2**

Abbassia Fever Hospital.

The number of admissions to the Fever Hospital, Cairo, during 1941 was 13,474 as compared with 11,765 in 1940 and 9,105 in 1939.

Of these, 6,182 were males and 2,570 females. The remainder, i.e. 4,722 were persons accompanying patients.

Table No. 137 gives details of infectious diseases isolated during 1941. The following tables deal with some of these diseases separately.

Table No. 137.—Abbassia, Fever Hospital 1941

No. of Item	Item	Typhoid	Para-Typhoid	Diphtheria	Typhus	Influenza	Scarlet Fever	Measles	Dysentery	Chicken-Pox	Puerperal Fever	Tetanus	Whooping Cough	Malta Fever	Pneumonia	Tuberculosis	Cerebro Spinal Fever
1	No. of cases investigated	1,515	351	1,199	191	1,320	12	158	23	80	60	49	49	4	338	109	Please see table No. 144
2	No. of cases cured	1,297	330	853	156	1,320	12	126	21	80	48	30	43	4	253	105 cent to T.B.	
3	No. of cases died...	218	21	346	35	—	—	32	2	—	12	19	6	—	85	4	
4	Mortality rate per cent in 1941 ...	14·4	5·9	28·8	18·3	—	—	20·3	8·8	—	20	38·8	12·2	—	25·1	—	
5	Mortality rate per cent in 1940 ...	13·7	7·1	35·5	15	3	—	18·2	5	—	25	47·6	2	6·6	28·6	12·2	
6	Mortality rate per cent in 1939 ...	20·4	6·0	30·5	21·2	—	—	11·8	18	—	—	5·8	3·7	—	32·8	—	
7	No. of cases sent by Health Offices ...	350	66	240	58	195	2	36	4	51	3	2	5	—	96	—	
8	No. of cases sent by Government or by [illegible] bodies	442	148	390	70	859	3	90	14	24	52	37	28	—	139	—	
9	No. of cases sent by private practitioners	634	111	424	49	149	6	25	2	3	5	10	11	—	80	—	
10	No. of cases admitted to hospital at their own request	89	26	145	14	117	1	7	3	2	—	—	5	—	83	—	
11	No. of cases sent under mistaken diagnosis	731	322	23	133	1,180	7	51	11	3	4	9	23	—	319	109	

TABLE No. 138.—AGE, SEX AND MORTALITY RATE OF TYPHOID CASES

AGE	Males			Females			TOTAL		
	No. of cases	No. of deaths	M.R. %	No. of cases	No. of deaths	M.R. %	No. of cases	No. of deaths	M.R. %
Less than 5 years	169	29	17·2	95	22	23·2	264	51	19·3
5–10 years	171	15	8·8	115	20	17·4	286	35	12·2
10–15 years	150	8	5·3	52	7	13·5	202	15	7·4
15–20 years	125	18	14·5	64	9	13·1	189	27	14·3
20–25 years	146	13	8·9	56	9	16·0	202	22	10·9
25–30 years	95	14	14·7	44	11	25·0	139	25	18·0
30–40 years	100	20	20·0	42	6	14·3	142	26	18·3
40–50 years	35	4	11·4	17	5	29·4	52	9	17·3
More than 50 years	24	4	16·7	15	4	26·7	39	8	20·5
TOTAL	**1,015**	**125**	**12·3**	**500**	**93**	**18·6**	**1,515**	**218**	**14·4**

TABLE No. 139.—AGE, SEX AND MORTALITY RATE OF PARATYPHOID CASES

AGE	Males			Females			TOTAL		
	No. of cases	No. of deaths	M.R. %	No. of cases	No. of deaths	M.R. %	No. of cases	No. of deaths	M.R. %
Less than 5 years	14	2	14·3	11	2	18·2	25	4	16
5–10 years	22	1	4·5	20	2	10·0	42	3	7·1
10–15 years	25	—	—	27	3	11·1	52	3	5·8
15–20 years	45	2	4·4	18	1	5·6	63	3	4·8
20–25 years	48	1	2·1	15	—	—	63	1	1·6
25–30 years	28	1	3·6	13	—	—	41	1	2·4
30–40 years	24	1	4·2	7	1	14·3	31	2	6·5
40–50 years	23	2	8·7	—	—	—	23	2	8·7
More than 50 years	10	2	20	1	—	—	11	2	18·2
TOTAL	**239**	**12**	**4·2**	**112**	**9**	**8**	**351**	**21**	**5·9**

TABLE No. 140.—AGE, SEX AND MORTALITY RATE OF TYPHUS CASES

AGE	Males			Females			TOTAL		
	No. of cases	No. of deaths	M.R. %	No. of cases	No. of deaths	M.R. %	No. of cases	No. of deaths	M.R. %
Less than 5 years	4	2	50	—	—	—	4	2	50
5–10 years	3	—	—	1	—	—	4	—	—
10–15 years	5	2	40	5	0	—	10	2	20
15–20 years	12	1	8·3	9	1	11·1	21	2	9·5
20–25 years	32	4	12·5	5	1	20	37	5	13·5
25–30 years	19	3	15·6	9	3	33·3	28	6	21·4
30–40 years	30	6	20	11	2	18·2	41	8	19·5
40–50 years	21	—	—	8	2	25	29	2	6·5
More than 50 years	12	6	50	5	2	40	17	8	47
TOTAL	**138**	**24**	**17·4**	**53**	**11**	**20·8**	**191**	**35**	**18·3**

TABLE No. 141.—AGE, SEX AND MORTALITY RATE OF DIPHTHERIA CASES

AGE	Males			Females			TOTAL		
	No. of cases	No. of deaths	M.R. %	No. of cases	No. of deaths	M.R. %	No. of cases	No. of deaths	M.R. %
Less than 5 years	504	168	33·3	413	121	29·1	917	289	31·5
5–10 years	107	25	23·4	81	18	22·2	188	43	22·9
10–15 years	20	4	20·0	23	3	13·0	43	7	16·3
15–20 years	7	1	14·3	9	2	22·2	16	3	18·8
20–25 years	4	—	—	7	—	—	11	—	—
25–30 years	2	—	—	8	2	25·0	10	2	20·0
30–40 years	3	—	—	2	1	50·0	5	1	20·0
40–50 years	4	—	—	5	1	20·0	9	1	11·1
More than 50 years	—	—	—	—	—	—	—	—	—
TOTAL	**651**	**198**	**30·4**	**548**	**148**	**27·0**	**1,199**	**346**	**28·8**

TABLE No. 142.—AGE, SEX AND MORTALITY RATE OF MEASLES CASES

AGE	Males			Females			TOTAL		
	No. of cases	No. of deaths	M.R. %	No. of cases	No. of deaths	M.R. %	No. of cases	No. of deaths	M.R. %
Less than 5 years	58	16	27·6	55	15	27·3	113	31	27·4
5–10 years	20	—	—	11	1	9·1	31	1	3·2
10–15 years	4	—	—	4	—	—	8	—	—
15–20 years	1	—	—	3	—	—	4	—	—
20–25 years	1	—	—	1	—	—	2	—	—
TOTAL	**84**	**16**	**19·0**	**74**	**16**	**21·6**	**158**	**32**	**20·3**

TABLE No. 143.—AGE, SEX AND MORTALITY RATE OF SCARLET FEVER CASES

AGE	Males	Females	TOTAL
Less than 5 years	1	—	1
5–10 years	1	4	5
10–15 years	1	1	2
15–20 years	—	1	1
20–25 years	—	1	1
25–30 years	—	—	—
30–40 years	1	—	1
40–50 years	1	—	1
TOTAL	**5**	**7**	**12**

Cerebro-Spinal Fever.

(1) No. of cases ... ... 127 90 male cases. 37 female cases.

(2) Out of these cases :—

(*a*) Cases diagnosed	pneumococcal meningitis	... 11	8 males,	3 females,	all died	
(*b*) ,, ,,	tuberculous	,, 22	18 ,,	4 ,,	,,	
(*c*) ,, ,,	staphylococcus	,, 2	1 ,,	1 ,,	,,	
(*d*) ,, ,,	influenzal	,, 5	2 ,,	3 ,,	,,	
(*e*) ,, ,,	streptococcal	,, 3	2 ,,	1 ,,	,,	
(*f*) ,, ,,	nonspecific	,, 4	2 ,,	2 ,,	,,	
(*g*) ,, ,,	meningococcal	,, 80	57	23	,,	34 died

TABLE No. 144.—AGE, SEX AND MORTALITY RATE OF CEREBRO-SPINAL CASES

AGE	Males			Females			TOTAL		
	No. of cases	No. of deaths	M.R. %	No. of cases	No. of deaths	M.R. %	No. of cases	No. of deaths	M.R. %
Less than 5 years	7	1	14·3	7	4	57·1	17	5	35·8
5–10 years	6	1	16·7	3	3	100	9	4	44·4
10–15 years	6	2	33·3	5	1	20	11	3	27·3
15–20 years	7	3	42·8	2	1	50	9	4	44·4
20–25 years	12	7	58·3	3	1	33·3	15	8	53·3
25–30 years	7	3	42·8	2	—	—	9	3	33·3
30–40 years	8	4	50	1	—	—	9	4	44·4
40-50 years	3	2	66·7	—	—	—	3	2	66·7
More than 50 years	1	1	100	—	—	—	1	1	100
TOTAL	**57**	**24**	**42·1**	**23**	**10**	**43·5**	**80**	**34**	**42·5**

A.—Passengers.

During 1941, 10,562 passengers arrived from infected countries, as compared with 9,781 in 1940. Of this number, 2 passengers arrived *via* Alexandria, 14 *via* Port Said, 167 *via* Suez, 6,794 *via* Kantara 1,206 by car *via* Ismailia and 2,370 passengers arrived by air. Of these, 2,376 landed at Almaza and Rod El Farag and 3 at Port Said.

Besides, 6,642 passengers arriving from the Sudan through Shellal were observed for small-pox and meningitis.

With the exception of 42 passengers who could not be traced, allthe passengers were observed for the regulation period making a ratio of 99·6 per cent observed.

B.—Pilgrims.

The total number of Egyptian pilgrims during the year 1359 H. (1941) was 520 as compared with 1,595 in 1358 H. (1940). All pilgrims were observed for the regulation period and all were in good health with the exception of 3 pilgrims who were admitted to the Abbassia Fever Hospital one with dysentery and two with suspected fever later diagnosed malignant malaria. All recovered in due course and were discharged after specimens taken from them were returned negative for cholera.

Of a total number of 520 pilgrims leaving for the Hedjaz, 24 did not return for the following reasons :—

1 died at Hedjaz.

1 left for India.

22 did not return from the Hedjaz.

In addition, 12 pilgrims from other than Cairo Districts were observed and found in good health.

12 foreign pilgrims were also observed and found in good health.

Personnel of El Tor Lazaret Mission numbering 61 were observed and found in good health.

POLICE HEALTH OFFICE

The strength of Cairo Police in 1941 was 8,871 men of all ranks. The following is a summary of the work carried out by the Police Health Office during the year :—

Medical Work.

Policemen examined for sick leaves	780
Other police personnel examined for sick leaves	1,310
Medico-Legal reports	29,147
Motor-car drivers and cabmen examined	3,376
Policemen and Guards examined for appointment	301

Sanitary Work:

Inspections of Police units	41
Number of men vaccinated against small-pox	181
,, ,, ,, ,, typhoid (2 injects.) ...	7,723

The most prevalent diseases among non-commissioned officers and men were rheumatism, contusion, wounds, intestinal colic and bronchitis. The number of cases of these diseases were : 628, 417, 406, 364 and 312 respectively.

The diseases prevalent amongst officers and civilians were : bronchitis, rheumatism, tonsilitis and gastritis. The number of cases of these diseases were 226, 197, 108 and 100 respectively.

26 Police N.C.Os. and men sent to the fever hospital were diagnosed typhoid and para-typhoid. 949 persons were put under observation for infectious diseases during the year.

UNHEALTHY ESTABLISHMENTS

Under Law No. 13 of August 1904 and Arrêté of the Ministry of Interior of 29th August of the same year, the following establishments were licensed during the year :—

Class of Establishment	Saha	Zabt	Total
I	107	143	250
II	1,051	429	1,480
III	426	77	503
TOTAL	**1,584**	**649**	**2,233**

Under Law No. 1 of 1904, 72 cinemas, theatres and establishments of other kind: were inspected during 1941.

Of 15,410 establishments inspected during 1941, 11,687 were found satisfactory and 3,723 unsatisfactory.

3,629 procès-verbaux of contravention were drawn up against owners of establishments exploited without licences during 1941, 1,630 against owners of establishments lacking sanitary conditions, making a total of 5,259.

GENERAL SANITATION

The activities of the Sanitation Section during 1941 can be summarised as follows

1.—*Water:*

Samples of water have been regularly taken from the different sources of water supply of the City, Giza and Helwan in order to ensure its purity. Samples of water have also been taken from taps in different parts of the City.

2.—*Complaints.*

The number of complaints received and dealt with during the year was 2,209 of which 1,191 concerned mosquitoes, 594 concerned deficient sanitary installations in houses, 401 concerned fencing waste lands and cleaning of streets, and 23 concerned quack doctors.

3.—*Anti Malaria.*

64 anti mosquito gangs were formed. Up till the end of July 1941, 400 tons of mazot were used in treating moquito breeding places. After that date, these gangs were attached to the Malaria Section of the Ministry.

4.—*Quack Doctors Squad.*

Quack doctors and ambulant vendors who sell drugs without licences have been successfully chased by this squad. 26 procès-verbaux have been drawn up against offenders who were sentenced to fines, imprisonment and confiscation of drugs.

5.—*Mosques.*

9 water systems of mosques were connected to main sewers. 7 were repaired and opened for use. One was closed for incomplete sanitary repairs.

6.—*Cemeteries.*

Approval was given of the site of a new cemetery for the Greek Orthodox community at Heliopolis.

7.—*Water Systems of Private Buildings.*

10 plans of water systems of private buildings in Helwan which were forwarded by the Tanzim Department were approved.

TABLE No. 145

Procès-verbaux drawn up in accordance with articles of the Egyptian Penal Code shown opposite	Art. 347	2,065
	Art. 266	1
	Art. 383	40
No. of Procès-verbaux drawn up against milk vendors under Arrêté of Ministry of Interior dated 18-5-1925		1,469
No. of Procès-verbaux drawn up in accordance with the Arrêté of Cairo Governorate dated March 27, 1911 *re* markets		915
No. of Procès-verbaux drawn up in accordance with the Arrêté of the Ministry of Interior dated January 31, 1915, *re* Itinerant vendors		611
No. of Procès-verbaux drawn up in accordance with law No. 48–1941		929

Milk vendors licensed 560
Itinerant milk vendors licensed 5

TABLE No. 146.—NUMBER OF SAMPLES OF MILK TAKEN DURING 1941 AND THE RATE OF ADULTERATION THEREOF

Number of Samples	Adulterated Samples							Total number of adulterated samples	Number of genuine samples	Percentage of adulteration
	Skimmed		Addition of water		Skimmed and water added		Deteriorated			
	No.	Rate of adult.	No.	Rate of adult.	No.	Rate of adult.				
20,060	856	4·3 %	1,148	5·7 %	437	2·2 %	1	2,442	17,618	12·2 %

TABLE No. 147.—SHOWING NUMBER AND QUANTITIES OF FOODSTUFFS DESTROYED WITH OWNERS' CONSENT AND NUMBER OF SPECIMENS TAKEN

Articles of Food	Foodstuffs Destroyed				Specimens Taken				Percentage of Adulteration	Percentage of Decomposition	Remarks
	Number	Litre	Tin	Oke	No of Specimens	Genuine	Adulterated	Decomposed			
A.—*Fresh Foodstuffs*:											
Fruits and vegetables	31,380	—	—	50,135	—	—	—	—	—	—	
Fish	—	—	—	57,355	—	—	—	—	—	—	
Meats	116	—	—	1,996	—	—	—	—	—	—	
Other origins, e.g. slaughtered Poultry	5,016	—	—	14,125	—	—	—	—	—	—	
B.—*Cooked or Prepared Foods*:	68,547	—	—	16,424	—	—	—	—	—	—	
C.—*Preserved Foods*											
Jam	—	—	—	—	—	—	—	—	—	—	
Milk and Products	—	—	487	—	—	—	—	—	—	—	Preserved foodstuffs include tinned, dehydrated, salted, smoked, or pickled foods.
Vegetables and fruits	—	—	20,432	—	—	—	—	—	—	—	
Meats, preserved and salted ...	—	—	543	1,068	31	29	—	2	—	6·5 %	
Salted fish and sardines... ...	—	—	11,585	6,505	—	—	—	—	—	—	
Other articles of foods, e.g. pickles	—	—	—	194,625	3	3	—	—	—	—	
D.—*Oils*:											
Olive oil											
Sesame oil											
Linseed oil											
Lettuce oil	—	—	—	—	494	376	36	82	7·3 %	16·6 %	Destroyed oil is included with the masli.
Oat oil											
Cotton-seed oil											
Other oils fit for food											

E.—*Various Foods*:

Flour	—	—	—	39	456	434	12	10	2·6 %	2·2 %	
Flour preparations (*e.g.* bread)	98,609	—	—	10,124	690	615	75	—	10·9 %	—	
Confectionary (miscellaneous)	20,945	—	—	573,075	—	—	—	—	—	—	
Sugar	—	—	—	—	233	—	—	—	—	—	
Milk and Cream	766	—	—	23,605	20,060	17,618	2,442	—	12·2 %	—	
Sour milk	—	—	—	—	50	36	11	3	22 %	6 %	
Butter and cream	—	—	—	—	626	540	44	42	7%	6·7 %	
Molasses and crushed sesame	—	—	—	29,375	46	45	—	1	—	2·2 %	
Cheese, old cheese and olives...	—	—	—	207,415	244	147	25	72	10·2 %	29·5 %	
Spices: ginger, salep, canella bark	—	—	—	—	631	530	101	—	16 %	—	
Masli, natural, artificial and oils	—	—	—	15,255	769	694	67	8	8·7 %	1 %	Quantities destroyed include masli and oils, specimens taken from masli only.
Eggs	309,051	—	—	—	—	—	—	—	—	—	
Halawa	—	—	—	—	86	—	—	—	—	—	
Tea	—	—	—	—	1,387	1,343	44	—	3·2 %	—	
Coffee	—	—	—	—	2,451	2,220	231	—	9·4 %	—	
Cocoa, tea, coffee	—	—	—	27	210	205	5	—	2·4 %	—	
Vinegar	—	—	—	5·5	468	398	68	2	14·5 %	·4 %	Quantities destroyed include cocoa, tea and coffee, specimens taken from cocoa only.
Mineral waters, sugar-cane juice and syrup	—	16,724·5	—	—	937 / 1,289	937 / 1,196	—	93	—	7·2 %	
Alcoholic liquors and fermented sugar-cane juice	—	139,205	—	—	1,955	1,889	8	58	4 %	2·9 %	
Ice-cream	—	—	—	—	142	31	—	111	—	78·2 %	
Ice	—	—	—	—	157	149	—	8	—	5 %	
Dried foodstuffs, etc.	—	—	—	—	43	24	—	19	—	44·2 %	
Condiments	—	—	—	—	365	304	61	—	16·7 %	—	
Mastic and chewing gum ...	—	—	—	—	25	20	5	—	20 %	—	
Colouring matters	50	—	—	—	33	26	7	—	21·2 %	—	
Dirty paper and cigarette ends	—	—	—	7,205	—	—	—	—	—	—	
Used bottle capsules	31,246	—	—	—	—	—	—	—	—	—	
Utensils unfit for use	32,625	—	—	—	—	—	—	—	—	—	
Vanilin and baking powder ...	—	—	—	—	31	15	16	—	51·6	—	