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REPORT ON COMMUNICABLE EYE DISEASES  
AMONG ARAB REFUGEES IN JORDAN

by

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A SUMMARY OF THE ACTIVITIES OF THE HEALTH DIVISION OF THE UNITED  
NATIONS RELIEF AND WORKS AGENCY IN JORDAN IN RESPECT OF COMMUNICABLE  
EYE DISEASES

With the start of the UNRWA Mandate in 1950, the state of affairs in the field was as follows:-

1. No statistics were available on the incidence of infection of eye diseases amongst the Arab Refugees.
2. Poor sanitary condition in camps, with a meagre supply of water.
3. Lack of qualified ophthalmic nursing personnel (few trained persons from the time of the British Mandate).
4. The Public Health Activities were not fully organized and much was to be done for health education and creation of health awareness.
5. The majority of refugee population was not yet settled and were mostly living under tents.

The statistical reports from clinics, received by the Field Health Office until 1954 could only show "new eye cases" - "total eye cases."

The treatment adopted for infected eye cases (acute conjunctivitis and complicated trachoma cases) was as follows:-

Silver Nitrate- Copper Sulphate	
Argyrol	- Sulfathiazol Ointment
Protargol	- Sulfacetamide Solution

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The first scientific report on Eye Diseases sent to this field for guidance was Maxwell-Lyons' Report on Eye Diseases in Egypt - March 1951.

At the end of 1950, Professor Bietti of the University of Parma-Italy on behalf of WHO made a clinical survey on incidence of trachoma amongst Arab Refugees. Professor Bietti reported that the incidence of trachoma varied between sixty-six and ninety-four per cent in Jordan.

Classification of cases was according to McCallan classical four stages - he found that younger children suffer from stages I and II and older ages from stages III and IV.

No conjunctival smears were taken. The actual cause of blindness according to him was acute conjunctivitis - the latter disease is often superimposed on trachoma.

Professor Bietti quoted his impression that better food and hygiene are followed by improvement in clinical picture and even spontaneous recovery.

Trials of different Antibiotics and Chemotherapeutic agents, both locally and/or systematically were made by him and were repeated in schools on his recommendations under the supervision of Dr. Ferraris de Gaspere.

The findings, though very promising, were not conclusive. However, on the recommendation of Professor Bietti, the P.S. Ointment (Penicillin 2500 Un. and Streptomycin 2500 UN/Gm.) was introduced in therapy of trachoma and conjunctivitis in the Jordan Field since the end of 1951 and has been kept up to the present date.

The state of affairs has gradually improved in the field and personnel in charge of eye treatment have gained experience.

In 1954, the need was felt for more trained male nurses especially after some trained persons had resigned to join other organizations.

Arrangements were made with the St. John's Ophthalmic Hospital, Jerusalem, to give theoretical and practical training (three months' course) for male nurses from the Health Division.

This has continued satisfactorily and up to the present date twenty ophthalmic tamarjis have been trained and plans for further training are being made.

In 1956, Dr. Jamal Abdin, WHO Ophthalmic Consultant, EMRO, made a trachoma survey in Jordan (Refugees and non-refugees) and he submitted a plan for an anti-trachoma campaign. In this report, Dr. Jamal reports a high incidence of clinical trachoma (from fifty-three to ninety-three per cent).

However, the results of conjunctival smear examination in cases of clinical trachoma (T.I and T.II) revealed a low incidence of trachoma and a higher incidence of conjunctivitis due to other organisms (Morax Axenfeld, Koch-Weeks, Pneumococci, Gonococci, Staphylococci and Xerosis).

Late in 1956 a small group set up by the Medical Research Council and the Order of St. John's of Jerusalem in an attempt to isolate the virus by tissue culture carried on some work in trachoma (Dr. M. Gilkes) and came to the revolutionary conclusion that trachoma is not prevalent in Jordan and that when present it is relatively mild, and that the clinical picture of other communicable eye diseases could simulate the different stages of trachoma.

(In our opinion other regions than Jerusalem should be investigated on the same lines before any final plan for a campaign on trachoma is made).

Therefore for practical purposes and for scientific safeguard communicable eye cases should be taken as a total for statistical purposes.

#### CLINICAL FEATURES

Clinical features are those usually described in textbooks.

However patients only seek treatment when complications supervene (Trichiasis and ectropion).

#### EPIDEMIOLOGICAL INFORMATION - ROLE OF ENVIRONMENTAL SANITATION AND RELEVANT STATISTICS

No information is available about the prevailing organisms except from the surveys of Dr. G. Abdin and Dr. M. Gilkes; these are:

Morax Axenfeld  
Koch Weeks  
Pneumococci  
Gonococci  
Staphylococci and Xerosis

Dr. M. Gilkes states that:

(1) During the annual epidemic of acute conjunctivitis (from May to September) the already small number of inclusion positive cases was severely reduced.

(2) No case was found with inclusions where a clinical purulent or mucopurulent conjunctivitis was present.

(3) In cases with clinically free conjunctiva and clinical trachoma IV, no inclusions were found.

(4) The virus was not isolated in Jordan.

Seasonal variations: Communicable eye diseases are present in Jordan all over the year, but the incidence is greatly increased in summer months, the peak being in August or September.

#### SOCIO ECONOMIC FACTORS AND SANITATION

Communicable eye diseases are associated with dirt and one wonders whether the fly plays as important a role as that of personal hygiene (usually both go together). It is certain that many still ignore the essentials of hygiene, frequent washing of hands, face, each using his own towel (if there is a towel at all) are definitely practised only by few. Dirty handkerchiefs are still used to wipe the face and eyes. The scene of a mother wiping her babies' eyes with the edge of her dress or cloth covering her head is still a common one. Covers for cushions are not the rule and if existing are not washed frequently and are usually shared by different members of the family. Rubbing the eyes with dirty fingers is a common practice. Uncovered faces of babies exposed to flies is also a common sight. Poverty is definitely an important factor, but many of the better off do not practise healthy habits either. Dr. Boase reports that measles is the main cause of blindness in Jordan. The current belief is that water should not come in contact with the sick child and many leave the children's faces unwashed for a long time where all the filth accumulates. Also applying of eye shadow (Kohl) by a bone rod to the eyes of babies is a common practice.

It is true that the majority of refugees in camps are at present living in built units (quite a lot having private latrines) with an increase in the number of public latrines but:

- (1) Promiscuous defaecation is still common.
- (2) Very few have got running water and have to fill in tins their daily needs from the main source or from open canals. In many localities water supply is very poor.
- (3) In many places water is not chlorinated.

It should be mentioned that sanitation in camps has improved tremendously over the past few years and is far superior to the condition in villages but much remains to be done.

#### HEALTH EDUCATION

Seven Health Education workers are engaged by the Agency, one in each area (except Nablus area having two). These have had at least a three months' theoretical and practical training in Health Education and in the

major problems of the population. Many have got experience in community work.

The Health Education programme has been greatly developed over the past few years. Now most of the other Agency staff and many people know what is Health Education; cooperation of all concerned is easily sought.

It is no exaggeration to say that the sanitary conditions of camps in many aspects have been greatly improved due to this influence. Every year at the start of summer the so-called Anti-Fly Campaign and Clean-up Campaign are carried out in all camps.

Organized efforts are made to educate the public on the life cycle of the fly, on diseases transmitted by same and on how to prevent its breeding. Amongst other things the causes of ophthalmias and how to prevent them is taken care of very faithfully.

Activities go on in schools, general clinics, ophthalmic clinics, Maternal and Child Health Centres, market places, Community Development Centres, etc.

Talks, discussions by Health Education workers, medical officers, nurses, sanitary, food and welfare workers, camp leaders, ophthalmic tamarjis, demonstration of fly breeding (in jars), cinema shows, posters, slogans and other audio-visual aid materials are used liberally everywhere.

The efforts are very promising and we would venture to refer here to the table (A) we attribute the diminution of infection of eye cases in 1958 to these efforts. The decline so far obtained in 1959 is still more impressive.

School children are given special attention because of their influence on their families, and hence in summer courses for teachers some of the time is devoted to teaching the latter health education and its importance on the health of a nation.

During the winter months a campaign on "Nutrition" is carried out on the same lines.

#### RELEVANT STATISTICS AND EVALUATION OF THE PROGRAMME

The table attached hereto shows the incidence of all infections of eye diseases amongst refugees attending ophthalmic clinics per month over the past five years. From the table the following conclusion could be made. The 1958 attendance to clinics was lowest (vide above). In 1959 the number of cases so far is declining. The high peak of 1957 could be partly explained by the very hot summer and shortage of water.

A separate survey on the incidence of trachoma amongst school children was done during the present scholastic year by the School Medical Officer who worked in Nablus and Amman. Our comments on this Medical Officer is that he is efficient and that he has had lately a refresher course on eye diseases in St. John's Ophthalmic Hospital

The following are his findings:

<u>Area</u>	<u>Month</u>	<u>Number Examined</u>	<u>Trachoma Incidence</u>	<u>Percentage</u>
Nablus	October	2441	1272	52.1
"	November	3945	1144	29
"	December	4261	1150	26.9
Amman	January	2955	1163	39.3
"	February	1769	812	40
"	March	4953	1674	33.7
"	April	3080	941	30.5
"	May	5348	236	4.4

This shows a smaller percentage of incidence "clinical" trachoma than was reported by Dr. Abdin in 1956.

#### ADMINISTRATION OF THE PROGRAMME

Forty-six ophthalmic clinics operate in Jordan of which twenty are in official camps for a total population of 214,000 and twenty-six clinics are in villages served by a mobile medical team twice a week.

In each of the ophthalmic clinics an orderly trained in eye diseases (ophthalmic tamarji) is posted there giving daily care for eye cases (full-time job). The work is directly supervised by the camp or district nurse. All eye cases come directly to the ophthalmic tamarji, only very serious cases are referred to the Medical Officer for further prescription of systemic drugs, or referred to the ophthalmologist or ophthalmic hospital for specialized treatment or operation.

Unfortunately medical officers who usually have a great amount of clinical work are unable to supervise constantly the work of the ophthalmic tamarjis.

Ophthalmic tamarjis occasionally (whenever free) assume some duties in schools where they examine the eyes of school children and either give treatment in school or ask the head teacher to send the students to the clinic. They also take the opportunity while at school to give some talks on eye infections and how to prevent them.

As far as specialists and hospitalization are concerned, East and West Jordan have special arrangements.

In West Jordan, the St. John's Ophthalmic Hospital with its specialists serve the refugee population as well as the non-refugee population.

The School Health Teams have been contributing for diagnosis and treatment of eye cases among school children especially in remote village schools (where no Agency Medical Services are available). The suggestion that the orderly attached to the School Health Team should have ophthalmic training will be given full consideration.

Laboratories play no role in diagnosis or treatment of communicable eye diseases - neither in the clinic nor at the more specialized hospitals.

#### METHODS OF TREATMENT

At the St. John's Ophthalmic Hospital: Aureomycin Ophthalmic Ointment is used routinely for all cases.

##### At Agency Clinics:

For purulent cases:	Boric Acid swabs	)	
	Argyrol or Protargol	)	Several applications
	P.S. Ointment	)	
For trachoma cases:	Copper Sulphate or Zinc Sulphate drops		
	Pencillin-Streptomycin Ointment		
	Sulfacetamide Ointment		
	Yellow Oxide of Mercury Ointment		
	Argyrol Eye Ointment.		

Severe cases or cases with complications are given aureomycin on recommendation of ophthalmologists.

#### EVALUATION OF WORK CARRIED OUT AT PRESENT

In fact, no proper evaluation of the work in the field has been done. But from the statistics discussed above, it is suggested that all the work of the past years is starting to bear fruit.

General recommendations for improvement are to promote all the preventive measures, to stimulate health education and to find cases with communicable eye diseases.

I think it appropriate to point out that the virus involved has recently been isolated and that it is hoped that a vaccine will soon be available.

GENERAL TOTAL OF ACUTE CONJUNCTIVITIS & TRACHOMA EYE DISEASES  
PER MONTH

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YEAR	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER
1954					11179	16968	26124	31806	35960	35477	18080	13884
1955	15825	12470	13396	14413	12420	22760	22817	32192	41716	28338	24097	14110
1956	11489	14886	11941	15233	14473	13878	16961	38141	32451	27528	14411	8875
1957	9130	10566	9973	10681	13784	15040	25099	30284	32006	27702	13292	7629
1958	8680	6922	8022	12866	15061	13589	18365	24633	33045	21042	15164	11869
1959	9413	8370	9928	9065	6703							



RECORD OF TRACHOMA & CONJUNCTIVITIS INCIDENCE  
FROM 1954 - 1959

AREA & YEAR	January		February		March		Quarter		April		May		June		Quarter	
	Trach.	Conj.	Trach.	Conj.	Trach.	Conj.	Trach.	Conj.	Trach.	Conj.	Trach.	Conj.	Trach.	Conj.	Trach.	Conj.
<u>1954</u>																
Jerusalem Area											141	262	183	650	324	912
Nablus Area											1433	783	2256	1192	3689	1975
Hebron Area											301	179	545	392	846	571
Jericho Area											3787	3333	4575	3913	8362	7246
Amman Area											342	386	937	1848	1279	2234
Irbed Area											77	155	150	327	227	482
T O T A L	(No Records available during the 4 months)										6081	5098	8646	8322	14727	13420

	July		August		September		Quarter		October		November		December		Quarter		GRAND	TOTAL
	Trach.	Conj.	Trach.	Conj.	Trach.	Conj.	Trach.	Conj.	Trach.	Conj.	Trach.	Conj.	Trach.	Conj.	Trach.	Conj.	Trach.	Conj.
<u>1954</u>																		
J	285	1495	449	2781	703	2855	1437	7131	1332	2475	560	795	242	246	2134	3516	3895	11559
N	4096	3695	4426	4863	4125	5138	12647	13696	5728	4973	3178	1957	3421	1353	12327	8283	28663	23954
H	802	1161	892	2028	920	2028	2614	5217	692	1404	402	486	306	228	1400	2118	4860	7906
J	5202	5234	5175	5708	6397	7153	16774	18095	6661	7616	3830	3853	3474	2468	13965	13937	39101	39278
A	1987	1490	1240	3028	1659	3673	4886	8191	1392	2421	967	1411	715	901	3074	4733	9239	15158
I	142	535	203	1013	289	1020	634	2568	224	559	246	395	253	277	723	1231	1584	4281
	12514	13610	12385	19421	14093	21867	38992	54898	16029	19448	9183	8897	8411	5473	33623	33818	87342	102136

AREA & YEAR	1955															
	January	February	March	Quarter	April	May	June	Quarter	Trach.Conj.	Trach.Conj.	Trach.Conj.	Trach.Conj.				
Jerusalem Area	792	190	313	146	321	145	1426	481	250	177	188	139	245	457	683	773
Nablus Area	3882	1497	3143	905	3866	1089	10891	3491	3728	1119	2638	984	5262	2779	11628	4882
Hebron Area	440	217	268	175	208	248	916	640	168	141	231	305	600	614	1077	
Jericho Area	4390	1992	3645	2044	4138	2819	12173	6855	3925	3189	3511	3080	5346	4382	12782	10651
Amman Area	1111	902	934	585	637	489	2682	1976	644	503	583	552	1275	1379	2502	2434
Irbed Area	205	207	180	132	239	197	624	536	250	214	160	213	289	441	699	868
TOTAL	10820	5005	8483	3987	9409	4987	28712	13979	8965	5448	7221	5199	12722	10038	28908	20685

  

	1955																	
	July	August	September	Quarter	October	November	December	Quarter	Trach.Conj.	Trach.Conj.	Trach.Conj.	Trach.Conj.	Trach.Conj.	Trach.Conj.	Trach.Conj.	Trach.Conj.		
J	207	618	785	1472	1052	2128	2044	4218	761	1043	801	787	353	291	1915	2121	6068	7593
N	4573	4379	4665	6821	5889	6794	15127	17994	4948	4090	4604	2710	3783	2239	13335	9039	50981	35406
H	361	763	343	1702	409	2715	1113	5180	157	1065	151	648	101	251	409	1964	3052	8861
J	4435	4241	6105	5028	7613	7057	18153	16326	5850	6516	6474	4205	4021	1424	16345	12145	59453	45977
V	1014	1412	1505	2495	1854	4473	4373	8380	767	2381	1082	1602	844	551	2693	4534	12250	17324
I	258	556	366	905	515	1217	1139	2678	494	866	536	497	189	63	1219	1426	3681	5508
TOTAL	10848	11969	13769	18423	17332	24384	41949	54776	12977	15961	13648	10449	9291	4819	35916	31229	135485	120669

<u>AREA &amp; YEAR</u>	<u>January</u>		<u>February</u>		<u>March</u>		<u>Quarter</u>		<u>April</u>		<u>May</u>		<u>June</u>		<u>Quarter</u>	
	Trach.	Conj.	Trach.	Conj.	Trach.	Conj.	Trach.	Conj.	Trach.	Conj.	Trach.	Conj.	Trach.	Conj.	Trach.	Conj.
<u>1 9 5 6</u>																
Jerusalem Area	320	340	429	229	323	178	1072	747	573	206	448	360	457	619	1478	1185
Nablus Area	3396	1288	3249	1213	3130	1152	9775	3653	2879	838	3207	1532	2601	1091	8687	3461
Hebron Area	95	255	213	150	135	157	443	562	162	268	153	233	520	367	835	868
Jericho Area	3570	930	4421	2389	3540	1542	11531	4861	5933	2066	3131	2844	2834	2374	11898	7284
Amman Area	702	437	1821	559	802	685	3325	1681	1135	853	1136	951	1356	1188	3627	2992
Irbed Area	116	40	167	46	183	114	466	200	228	92	280	198	151	320	659	610
<b>T O T A L</b>	<b>8199</b>	<b>2990</b>	<b>10300</b>	<b>4586</b>	<b>8113</b>	<b>3828</b>	<b>26612</b>	<b>11704</b>	<b>10910</b>	<b>4323</b>	<b>8355</b>	<b>6118</b>	<b>7919</b>	<b>5959</b>	<b>27184</b>	<b>16400</b>

	<u>July</u>		<u>August</u>		<u>September</u>		<u>Quarter</u>		<u>October</u>		<u>November</u>		<u>December</u>		<u>Quarter</u>		<u>GRAND TOTAL</u>	
	Trach.	Conj.	Trach.	Conj.	Trach.	Conj.	Trach.	Conj.	Trach.	Conj.	Trach.	Conj.	Trach.	Conj.	Trach.	Conj.	Trach.	Conj.
<u>1 9 5 6</u>																		
J	406	518	848	2719	690	2243	1944	5480	619	1241	406	509	248	290	1273	2040	5767	9452
N	4079	3060	5185	6664	4078	5477	13342	15201	2692	2540	2228	1576	1694	877	6614	4993	38418	27308
H	450	399	448	2422	295	1513	1193	2974	395	978	174	352	112	291	681	1621	3152	6025
J	2100	2100	3452	4044	2743	3119	8295	9287	5495	6363	3080	3046	2161	1561	10736	10970	42460	32402
J	1338	1771	2678	8314	1310	9964	5326	20049	1397	4838	723	1389	366	764	2486	6950	14764	31672
J	62	653	221	1146	216	803	499	2602	316	654	199	729	133	378	648	1761	2272	5173
<b>T O T A L</b>	<b>8435</b>	<b>8525</b>	<b>12832</b>	<b>25309</b>	<b>9332</b>	<b>23119</b>	<b>30599</b>	<b>55593</b>	<b>10914</b>	<b>6000</b>	<b>4444</b>	<b>4161</b>	<b>27438</b>	<b>28135</b>	<b>106833</b>	<b>112032</b>		

<u>AREA &amp; YEAR</u>	<u>January</u>		<u>February</u>		<u>March</u>		<u>Quarter</u>		<u>April</u>		<u>May</u>		<u>June</u>		<u>Quarter</u>	
	Trach.	Conj.	Trach.	Conj.	Trach.	Conj.	Trach.	Conj.	Trach.	Conj.	Trach.	Conj.	Trach.	Conj.	Trach.	Conj.
<u>1957</u>																
Jerusalem Area	301	282	279	272	299	264	879	818	271	249	370	413	243	472	884	1134
Nablus Area	2499	1519	2798	1398	2344	1450	7641	4367	2584	1602	2502	1906	3046	2251	8132	5759
Hebron Area	98	209	161	159	125	145	384	513	168	198	108	159	129	194	405	551
Jericho Area	1788	1464	2581	1906	2029	2152	6398	5522	1914	2189	2946	3141	2030	2249	6890	7579
Amman Area	232	457	281	339	419	327	932	1123	519	591	658	814	1357	1702	2534	3107
Irbed Area	97	184	139	253	141	278	377	715	95	301	132	635	227	1140	454	2076
T O T A L .	5015	4115	6239	4327	5357	4616	16611	13058	5551	5130	6716	7068	7032	8008	19299	20206

	<u>July</u>		<u>August</u>		<u>September</u>		<u>Quarter</u>		<u>October</u>		<u>November</u>		<u>December</u>		<u>Quarter</u>		<u>GRAND</u>	<u>TOTAL</u>
	Trach.	Conj.	Trach.	Conj.	Trach.	Conj.	Trach.	Conj.	Trach.	Conj.	Trach.	Conj.	Trach.	Conj.	Trach.	Conj.	Trach.	Conj.
<u>1957</u>																		
J	511	1051	706	1304	619	1540	1836	3895	361	842	280	329	181	177	822	1348	4421	7195
N	4407	4557	4561	5787	4106	4849	13074	14793	3038	2905	2476	2381	1863	1470	7377	6756	36224	31675
H	169	550	244	1773	276	2370	689	4693	266	1261	96	289	51	148	413	1698	1891	7455
J	3751	3937	2329	2971	2355	3481	8435	10389	2928	4413	1392	2051	1066	1233	5386	7697	27109	31187
A	1712	2860	1692	6868	1335	9731	4739	19459	1345	9518	540	3051	363	980	2248	13549	10453	37238
I	362	1232	187	1862	257	1087	806	4181	309	516	249	158	74	23	632	697	2269	7669
	10912	14187	9719	20565	8948	23058	29579	57110	8247	19455	5033	8259	3598	4031	16878	31745	82367	122119

<u>AREA &amp; YEAR</u>	<u>January</u>		<u>February</u>		<u>March</u>		<u>Quarter</u>		<u>April</u>		<u>May</u>		<u>June</u>		<u>Quarter</u>	
	Trach.	Conj.	Trach.	Conj.	Trach.	Conj.	Trach.	Conj.	Trach.	Conj.	Trach.	Conj.	Trach.	Conj.	Trach.	Conj.
<u>1 9 5 8</u>																
Jerusalem Area	325	196	173	149	222	192	720	537	326	329	342	470	400	487	1068	1286
Nablus Area	2192	1302	2013	963	1822	1151	6027	3416	2985	1706	2493	1766	3156	2072	8634	5544
Hebron Area	117	178	78	140	129	213	324	531	164	262	196	262	155	310	515	834
Jericho Area	1639	1210	1353	1010	1544	1234	4536	3454	2104	1952	1631	1916	1323	1985	5058	5853
Amman Area	329	915	267	458	457	616	1053	1989	1277	1215	2890	2310	1066	1624	5253	5149
Irbed Area	184	93	207	111	292	150	683	354	286	260	346	439	476	535	1108	1234
<b>T O T A L</b>	<b>4786</b>	<b>3894</b>	<b>4091</b>	<b>2831</b>	<b>4466</b>	<b>3556</b>	<b>13343</b>	<b>10281</b>	<b>7142</b>	<b>5724</b>	<b>7898</b>	<b>7163</b>	<b>6576</b>	<b>7013</b>	<b>21636</b>	<b>19900</b>

	<u>July</u>		<u>August</u>		<u>September</u>		<u>Quarter</u>		<u>October</u>		<u>November</u>		<u>December</u>		<u>Quarter</u>		<u>GRAND TOTAL</u>	
	Trach.	Conj.	Trach.	Conj.	Trach.	Conj.	Trach.	Conj.	Trach.	Conj.	Trach.	Conj.	Trach.	Conj.	Trach.	Conj.	Trach.	Conj.
<u>1 9 5 8</u>																		
J	366	553	429	992	587	1255	1382	2800	376	716	327	438	308	335	1011	1489	4181	6112
N	3401	3682	4125	5083	4156	5619	11682	14384	2870	3092	3386	2670	2898	2101	9154	7863	35497	31207
H	207	420	241	1237	334	1860	782	3517	264	1013	158	367	107	272	529	1652	2150	6534
J	1922	2623	1832	3554	1800	4275	5554	10452	1098	2676	851	2055	881	1722	2830	6453	17978	26212
A	1197	2483	1615	3875	3082	8741	<del>5894</del>	15099	1784	6032	1105	3098	1227	1494	4116	10624	16316	32861
I	576	935	540	1110	524	812	1640	2857	595	526	386	323	330	194	1311	1043	4742	5488
	7669	10696	8782	15851	10483	22562	<del>26943</del>	49109	6987	14055	6213	8951	5751	6118	18951	29124	80864	108414

<u>AREA &amp; YEAR</u>	<u>January</u>		<u>February</u>		<u>March</u>		<u>Quarter</u>		<u>April</u>		<u>May</u>	
	Trach.	Conj.	Trach.	Conj.	Trach.	Conj.	Trach.	Conj.	Trach.	Conj.	Trach.	Conj.
<u>1 9 5 9</u>												
Jerusalem Area	293	179	225	166	172	181	690	526	283	235	135	76
Nablus Area	2243	989	1849	852	2423	1263	6515	3104	2336	1224	1694	741
Hebron Area	126	148	117	152	129	189	372	489	126	191	76	87
Jericho Area	2059	1345	1056	1434	994	1798	5907	4577	875	987	1204	834
Amman Area	838	897	983	1185	1107	1181	2928	3263	1101	1326	936	713
Irbed Area	219	77	178	173	211	280	608	530	259	122	174	33
<b>T O T A L</b>	<b>5778</b>	<b>3635</b>	<b>4408</b>	<b>3962</b>	<b>5036</b>	<b>4892</b>	<b>17020</b>	<b>12489</b>	<b>4980</b>	<b>4085</b>	<b>4219</b>	<b>2484</b>