### WORLD HEALTH ORGANIZATION



# ORGANISATION MONDIALE DE LA SANTE

# REGIONAL OFFICE FOR THE EASTERN MEDITERRANEAN

# BUREAU REGIONAL DE LA MEDITERRANEE ORIENTALE

# WHO INTER-REGIONAL TECHNICAL MEETING ON MALARIA ERADICATION TEHERAN, 1 - 6 MAY 1962

EM/ME-Tech.3(a)/45

29 April 1962 ENGLISH CNLY

A SYNCPSIS CF PROFESSOR S.N. POKROVSKY'S REPORT AT THE CONFERENCE ON MALARIA ERADICATION, TEHERAN, MAY 1-6, 1962

To Item 1: On Malaria Control Measures in the USSR and, in particular, in Frontier Areas

#### On malaria incidence in the USSR

In 1960 malaria was practically eradicated in the USSR. In 1961 360 primary applications and 138 parasite carriers were reported per 216,151 thousand persons. Of the total number of patients and parasite carriers, in 96 instances the infection had been contracted outside the territory of the USSR and was observed in Soviet people coming back from abroad and in foreigners coming to the USSR (Table 1).

Local cases of malaria in the USSR were reported in 123 communities. Among the imported cases, 67 cases were reported in Moscow in the complete absence of cases among the local population. Malignant reclaria was observed in 47 patients, of them 44 visitors from abroad, and quartan malaria was found in 17 patients. Among the latter, in six cases malaria was observed after blood transfusion.

### A short description of malaria control measures

In 1961 antimalarial measures were carried out along two lines detection of the source of infection with subsequent treatment of fetients and control of the vector in certain communities and certain areas.

In 1961 reinforced supervision was executed on the implementation of antimalarial control measures carried out both by the workers of parasitology service and by general medical workers. Farticular attention was paid to epidemiological surveillance and measures for active detection of patients were broadened. Mass blood survey examination of 5,536,800 persons has been carried out in 1961 and 138 parasite carriers were found. Blood analysis examination of putients with fever was widely done.

Active public sanitary workers were enlisted for carrying out the work. Treatment of patients and treatment of premises were done free of charge. It has become a routine practice to give an additional course of quinocid treatment after the attack treatment.

In areas not completely freed of malaria, as well as in areas where there was a danger of introduction of malaria in 1961, treatment of premises with residual insecticides was continued. In a number of instances, when a malaria patient appeared in an area where malaria had been eradicated, treatment of premises was resumed. Though the amount of treatment in 1961 was considerably reduced compared to previous years, 166,041,258 square metres were treated during the season.

## Incidence of malaria, and measures for its control and prophylaxis in the frontier areas

### 1. Malaria incidence

Among the republics of the USSR, six southern Union Republics have frontiers with countries participating at this meeting. These six republics are: the Uzbek SSR, the Tajik SSR, the Turkmen SSR, the Azerbaijan SSR, the Armenian SSR, the Georgian SSR.

Malaria incidence in these Union republics, the population of which had been severely affected by malaria in the past, has been practically eradicated now. In the overwhelming majority of places malaria has been completely absent for a number of years, and only in some communities occasional cases are reported (Table 2).

It will be seen in the Table that, in the frontier areas of these republics, occasional cases of malaria are reported.

In 1961 only two frontier areas of the Tajik SSR, Shaartuz and Kalay-Khumb, had a slightly increased incidence of malaria, that is, in eight communities of Kalay-Khumb area 29 patients were reported and in Shaartuz area in seven communities 31 patients were reported.

## 2. The peculiarities of the epidemiclogy of malaria in areas near the border of afghanistan, Iran and Turkey

The peculiarities of the epidemiclogy of malaria in these areas include the duration of the sesson of transmission (May-October), high temperatures allowing for rapid completion of sporogony in the vector, the presence of a significant number of anopheles-breeding places, a fair density of local vectors (A. superpictus and A. pulcherrimus) (mainly in the republics of the Central Asia) and A.M. sacharovi and other sub-species A. maculipennis (mainly in Transcaucasian republics). In the past malignant malaria was rather widely spread here, whereas at present only occasional cases are found - only three cases in the Tajik SSR.

### 3. Malaria control measures in the frontier areas

In order to prevent the development of conditions conducive to contraction of malaria infection and taking into account the existence of epidemiological pre-requisites both in the territory of the frontier areas of the USSR and abroad, treatment of communities with residual insecticides is widely carried out in thise areas, and in some places, according to epidemiological indications, chemoprophylaxis is done. In a number of areas delarvation of water collections is conducted as well as regular house-to-house rounds with thorough blood examination of the population (Table 3).

#### Conclusion

In order to secure stable well-being with regard to malaria in communities in the frontier areas we consider it expedient to co-ordinate measures of control on the basis of mutual rapid and effective information, strengthening of the local sanitary-epidemiological service and general network of medical institutions in the frontier area villages.

MALARIA INCIDENCE IN The USSR, 1961, COMPARED TO THAT IN 1960 (based on the data of the Statistical Department of the Public Health Ministry of the USSR)

		Total number of patients in 1960			Total number of patients in 1961		
	Republics	Primary applicat.	Parasite carriers	Total	Primery applicat.	Parasite carriers	Total
l.	RSFSR	122	14	136	148	19	167
2.	Ukreine	17	-	17	9	1	10
3.	Byelorussia	1	-	1	1	-	ı
4.	Uzbekistan	12	-	12	10	-	10
5.	Kazekh	44	10	54	14	7	21
6.	Georgia	15	-	15	21	3	24
7.	Azerbaijan	85	33	118	53	108	161
j.	Lithuania	-	-	-	-	-	-
9.	Moldavia	1.	_	1	1	-	1
10.	Latvia	_	_	-	2	-	2
11.	Kırghızıa	-	-	-	-	-	-
12.	Tajik	61	-	61	93	-	93
13.	Armenia	4	_	4	5	-	5
$1^{l_1}$ .	Turkmenia	6	-	6	3	-	3
15.	Estonia	-	-	-	-	-	-
	Total for the USSR	368	57	425	360	138	498

INCIDENCE OF MALARIA IN SIX OBUTHERN UNION REPUBLICS AND IN THEIR FRONTIER AREAS

Table 2

D	Incidence in indicated years							Border-line	
Republics	1934	1940	,	1956	1959	1960	1961	countries	
The Georgian SSR of them in frontier areas	494,976	102,818	107,168	808 4	67 2	15 2	2	Turke <b>y</b>	
The Armenian SSR of them in frontler areas	188,591	53,897	81,301	68	7 2	' 4 ' 1	5 1		
The Azerbaijan SSR of them in frontier areas	531,299	238,145	269,298	3,071 559	}	85 10	161 1	, and the second	
The Turkmen SSR of them in frontier areas	107,664	27,237	33,907	58 37	12	6 2	3 3		
The Uzbek SSR of them in frontier areas	J23,005	203,567	478,952	645 200	-	12	10	Afglanistun	
The Tajik SSR of them in frontier areas	104,226	72,224	85,061	1,305	63 52	61 49		afghunisten China	

Table 3

MALARIA CONTROL MEASURES IN TIL SCUTHERN UNION REPUBLICS

		Mosquito co		
Republic	Year	Larvicidal Area treated with BHC (in hectares)	Imagocidal surface treated with residual insecticides (in square metres)	No.of pursums examined with blood symmetricn
The Georgian	1961 1960 1959 1958	9,947.5 84,130 81,098	157,326 17,246 1 <b>6.240,7</b> 00 17,396,740	177,312 547,110 326,753 111,274
The Armenian	1961 1960 1959 1958	54.1 251 <b>.4</b> 3 358 <b>.</b> 8	79 <b>,550</b> . 64,700 683,020 1,846,489	3,737 19,877 10,971 19,256
The Azer- barjan SSR	1961 1960 1959 1958	163,288.2 61,576.1 95,550.0	43,251,960 42,324,060 41,663,397 36,422,973	1,062,373 1,558,485 1,292,598 937,499
Tre Turkmen SSR	1961 1960 1959 1958	67,999.41 38,149.59 86,280.185	7,721,766 9,483,000 15,526,960 11,146,109	135,430 115,790 125 733 123,908
The Uzbek	1961 1960 1959 1958	78,049 13,553.11	39,627,68 <b>6</b> 39,927,000 64,130,000 77,110,163	979.049 74,615 666,005
The Tajik	1961 1960 1959 1 <b>9</b> 58	307.9 54,933	97,564,221 9,756,424 13,338,419 18,927,890	237,557 115,715 526,063 499,951