



Communicable Diseases Intelligence

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Editor

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VIRUSES, CHLAMYDIAS, COXIELLAS, RICKETTSIAS AND MYCOPLASMAS REPORTING SCHEME:

In this period (2 August to 15 August 1990) there were 1196 reports processed.

Coxsackievirus B2 was isolated from a 2-month-old male infant with meningitis.

Enterovirus type 71 was isolated from two patients, both female. No clinical information or age was given for one. The other, an 11-month-old infant, presented with skin/mucous membrane disease.

PATHOGENS REPORTING SCHEME

In July, 14 reports of Campylobacter jejuni were received. All were isolated from faecal specimens of patients with gastro-intestinal disease. Six reports were in children less than 4 years of age, the remaining reports were from patients aged 15-64 years.

Seven reports of Cryptosporidium sp identified in faecal specimens of patients with gastro-intestinal disease (2 cases were in the 1-4 year age group, the remainder were in the 15-24 year age group).

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Five positive blood culture reports were received for July from Toowoomba Base Hospital from patients with septicaemia. The following organisms were isolated:

- Streptococcus milleri from a 47-year-old female patient;
- Streptococcus sanguis in a 6-year-old female patient with febrile convulsions;
- Haemophilus influenzae type b in a female less than 12 months of age;
- Escherichia coli in a female in the 65-74 year age group;
- Staphylococcus aureus from a male patient in the 65-74 year age group.

One case of meningitis was reported in a female aged 2 years. Streptococcus pneumoniae was isolated from the CSF.

Bordetella pertussis diagnosed in a 5-year-old male patient with a lower respiratory tract infection. B. pertussis was identified by serology using an ELISA technique.

OVERSEAS BRIEFS

1. TYPHOID IN JAMAICA

An outbreak of typhoid in the western parts of the island has been reported recently. In the week ending 18 August 4 fatalities were reported from the parish of Westmoreland and an unspecified number of cases in the parish of St. Elizabeth. There have been unconfirmed reports of cases in the capital, Kingston.

2. CHOLERA IN TUVALU

The government of Tuvalu has reported an outbreak of cholera (serotype Ogawa) occurred during early July. Cases were recorded on two outer islands (names unspecified), with a single case reported from the capital, Funafuti. To date, four fatalities have been attributed to this outbreak.

3. CHOLERA IN THE USSR

An outbreak of cholera during July, at a camping site in Stavropol, has recently been reported. A total of 45 cases were registered. The infection source is considered to have been a nearby natural spring which had become contaminated by the camp-site sewerage system. No cases were detected among residents of Stavropol city.

INFLUENZA UPDATE FROM THE NATIONAL WHO INFLUENZA REFERENCE CENTRE
CSL - No 3 week commencing 20 AUGUST 1990

Australia

There is still no indication of significant influenza activity anywhere in Australia. Two further virus isolates, both reported to be Type A, H3, have been received from the Brisbane State Health Laboratory and are under study.

A type B isolate received from Perth has now been typed as a B/Yamagata/16/88-like virus.

New Zealand

Further influenza virus isolates were reported in New Zealand during July. Wellington has reported the greatest activity with 17 isolates in June and a further 28 in July - all typed in New Zealand as Type A, H3N2 viruses. A smaller number of isolates have been reported from Auckland (6 Flu A) and Christchurch (2 Flu A, 1 Flu B) for July and a shipment of viruses has been despatched to CSL from Dunedin.

Worldwide

The following update (23 August) was received from the Centres for Disease Control, Atlanta:

During the summer months when little if any influenza activity occurs in the United States, influenza is usually peaking in the Southern Hemisphere. This report updates international influenza activity occurring since March 1990.

For the past two years Papua New Guinea has reported influenza activity in March. This year activity peaked on 15 March, but sporadic cases continued to be reported in May. The majority of the isolates from the PNG outbreaks have been identified as influenza A (H1N1), with only one A (H3N2) isolate identified.

Outbreaks of influenza occurred in Chile (Santiago and the southern part of the country) and Brazil (Rio de Janeiro) beginning in April, peaking in May and waning in June. Isolates typed have been A (H3N2). In Brazil, sporadic cases of influenza B have continued at a rate of one case/week since the end of February.

Reports have been received by the WHO from Malaysia, New Zealand, Australia and South Africa which relate influenza activity occurring during the months of May and June. Malaysia reports 3 sporadic cases of influenza A (H1N1) and one case of influenza B. Seventeen isolates of A (H3N2) have been identified from the North Island of New Zealand (June).

Although influenza activity in Australia usually occurs during the late summer months (Northern Hemisphere) little activity has been reported this year. Only three A (H3N2) isolates and one B isolate have been made to date. South Africa's first isolate of the season was influenza B on 18 June. Subsequently 22 cases have been identified, 16 were influenza B and 6 were A (H3N2).

The most recent communication from the WHO (10/8/90) indicates that outbreaks of influenza B are currently ongoing in South Africa and that 100 cases of influenza (untyped) have been reported in Madagascar.

HIV/AIDS RESEARCH REGISTER, AUGUST 1990

This register contains brief details on HIV/AIDS related projects that have been, or are being, conducted within Australia. The register covers research in Australia between 1986 and 1990. It has been compiled by the AIDS Policy and Programs Branch, Commonwealth Department of Community Services and Health.

Copies are available from:

Secretary,
Commonwealth AIDS Research Grants Committee,
Department of Community Services and Health
GPO Box 9848
CANBERRA ACT 2601

INFECTION CONTROL GUIDELINES- AIDS AND RELATED CONDITIONS

AUSTRALIAN NATIONAL COUNCIL ON AIDS BULLETIN NO. 7 JUNE 1990

The fourth, and most recent edition, of the guidelines is now available as a 27 page booklet from:

AIDS Education Section
Department of Community Services and Health
GPO Box 9848
CANBERRA ACT 2601

The major topics covered are:

1. Human Immunodeficiency Virus- pathogenesis
- disease caused by HIV
2. The Epidemiology of HIV Infection/AIDS
3. Laboratory tests used in the diagnosis of HIV infection
4. Guidelines for prevention of HIV transmission in Health Care Settings and the Workplace
5. Application of Universal Precautions
6. Occupational Health and Personnel Management
7. Questions and Answers about HIV infection

MALARIA IN QUEENSLAND - 1989, 1990

(Contributed by the Director-General, Queensland Department of Health)

1989

In the calendar year 1989, 561 cases of malaria were notified to the Department of Health under Division III of the Health Act 1937-1988. This is an increase of 68% over 1988 compared with the previous increase of 16% between 1987 and 1988 (Table. 1).

Table 1: Queensland malaria cases 1980-1989

SPECIES	YEAR									
	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
P. vivax	169	113	143	137	155	120	121	166	201	253
P. falciparum	30	43	79	67	201	91	154	113	123	295
P. falciparum and										
P. vivax	0	1	3	3	4	4	1	2	4	8
P. malariae	0	1	1	0	0	4	0	3	1	0
P. Ovale	0	1	0	1	0	0	0	2	0	3
Unknown	0	1	1	2	29	6	1	1	3	2
TOTALS	199	160	227	210	389	225	277	287	332	561

While the size of the increase reflects the growing importance of malaria as a disease in both tropical and temperate countries, analysis of the data indicates that the cause of the increase in notifications is an exacerbation of a trend detected in recent years and relates largely to an increasing number of visitors from Papua New Guinea to both the Torres Strait Islands and the Queensland mainland (Table 2.).

Table 2: Cases of malaria according to residential factors - Queensland 1984 - 1989

	1984	1985	1986	1987	1988	1989
A. <u>Residents in Australia</u>						
Australian Aborigines and Torres Strait Islanders	29	7	22	14	18	41
Natural born Australians and European migrants	82	77	72	90	156	158
Other migrants- Unknown (including cases probably resident in Australia with information incomplete)	--	-	19	23	-	32*
Sub-total	111	101	117	136	185	249

B. Visitors to Australia from

Vietnam	1	4	2	1	-	-
Papua New Guinea	267	101	152	139	127	278
Other countries	10	19	6	11	20	34**
Sub-total	278	124	160	151	147	312
Total	389	225	277	287	332	561

* Other migrants 1989: Australians ex PNG 9, PNG Nationals 22, Indonesia 1
= Total 32

** Other visitors 1989 infections acquired in: PNG 10, Solomon Is. 8, India 4,
Indonesia 3, Africa 3, Not stated 2, Vanuatu 2, Burma 1, Asia
unspecified 1 = Total 34

As in previous years there were two distinct groups of malaria cases detected in Queensland - those arising from residents and visitors (Table 2.).

Two hundred and sixty five (265) cases of malaria were diagnosed at Thursday Island in 1989 compared with 68 in 1988. Of these 232 were *P. falciparum* and 33 *P. vivax* infections. Thus the increase in cases reported from the Torres Strait Islands area (197) accounts for 86% of the increase in notifications for 1989. The increase in infections in Torres Strait Islanders was due mainly to *P. falciparum*, the number increasing from 6 in 1988 to 26 in 1989 while *P. vivax* infections only increased from 12 to 15 in the same period. Fifteen (15) cases of introduced malaria were reported from the Torres Strait area, comprising 9 cases of *P. falciparum* and 6 cases of *P. vivax*. As in previous years introduced cases occurred only on Saibai and Boigu Islands. Ten (10) of the introduced cases occurred in residents of Torres Strait ethnic origin and 5 in Papuans permanently domiciled on Saibai Island. Considering the number of infected Papuan visitors and the prevalence of Anopheline vectors on Saibai and Boigu throughout the year, the small number of introduced cases together with the absence of endemic malaria indicates the importance of the visitor treatment program.

Papua New Guinea continues to be the main source of infection for Australian residents (Table 3.). This is not surprising considering the number of Australians employed there, and its proximity as a tourist destination. Last year it was suspected that India might become a significant source of infection for Australians but there was no increase in the number of infections from that country in 1989.

Table 3: Queensland malaria cases 1989

SPECIES	SOURCE COUNTRY				TOTAL
	PAPUA NEW GUINEA	SOUTH EAST ASIA** & S-W PACIFIC EX PNG**	*OTHER	UNKNOWN	
P.vivax	195	27	23	8	253
P.falciparum	268	11	15	1	295
Species unknown			1	1	2
Mixed Pf & Pv	8				8
P.ovale			2	1	3
TOTAL	471	38	41	11	561

* Included in total number of cases under "OTHER"

falciparum: Australia (Torres) (9), Africa unspecified (3), Kenya (2), Zambia (1);
 vivax: Australia (Torres) (7), India (6), Philippines (3), Africa unspecified (2), Asia unspecified (2), Kenya (1), Pakistan (1), Venezuela (1)
 ovale: Africa unspecified (2); Plasmodium species not identified: India (1)

** Included in South east & S-W Pacific ex PNG

falciparum: Solomon Is. (7), Vanuatu (2), Indonesia (1), Burma (1)
 vivax: Solomon Is. (13), Indonesia (8), Vanuatu (5), Malaysia (1)

Considering the large number of Australians who visit overseas countries where malaria is endemic and where chloroquine resistant strains of *P. falciparum* have been reported, there appears no justification to change current prophylactic advice viz prevention of man/mosquito contact and the use of malaria chemoprophylactic drugs.

1990

Between January and June 1990, there have been three documented outbreaks of introduced malaria in the Torres Strait, accounting for 17 cases in all (5 *P. vivax* and 12 *P. falciparum*).

Outbreak 1: Between 20 January and 3 February, 1990 eight cases of malaria (4 *P. vivax* and 4 *P. falciparum*) in residents of Saibai Island were investigated. Four *P. falciparum* and 2 *P. vivax* were found to have been introduced. Two cases of *P. vivax* were imported. There were no indigenous cases. The outbreak response was a limited blood slide survey (all slides were negative), insecticide space spray of the village and limited larviciding and an education programme directed at on-site staff and residents. The outbreak was epidemic in nature, limited to a group of houses surrounding the canteen. No index case was identified. Infected immune Papuan visitors overnight and use the canteen regularly.

Outbreak 2: Eight cases of malaria were diagnosed in residents of Darnley Island between 19 January and 8 March. Five cases of *P. falciparum* were found to be introduced. Three cases were imported. There were no indigenous cases. The cases were scattered throughout the community with no more than one infected person per household. A limited blood slide survey (all slides negative), insecticide space spraying and larviciding and passive case detection was undertaken. No index case was identified but 95 PNG visitors stayed for an average time of 2 weeks from 1 January and 6 March. The source could have been an infected PNG visitor. No further cases of introduced malaria have been recorded since 8 March.

Outbreak 3: Fourteen (14) cases (7 *P. vivax*, 6 *P. falciparum*, 1 mixed) were diagnosed from Saibai Island residents from 24 April to 7 May 1990. Investigation showed 6 cases to be introduced (3 *P. falciparum* 3 *P. vivax*), another 5 cases may have been introduced. The cases centred in the "Papuan" village section of Saibai. The response was follow-up and radical cure of cases, passive case detection (no further cases) and a child spleen survey of the "Papuan" village (6/20 enlarged spleen). Insecticide space spraying and larviciding was limited due to persistent heavy rain.

One male aged 40 died of falciparum malaria in May 1990. Transmission appears to have occurred at the same time as the other introduced cases. Although this person overnighed in PNG 20 days prior to onset of symptoms, the likelihood of the case being introduced cannot be excluded.

No index case was found but PNG visitors overnight regularly in this section of Saibai. Despite the spleen survey result; the clustering of transmissions and the lack of introduced cases after 2 May makes this outbreak a limited epidemic in nature. There have been no further introduced cases since 7 May.

CDI Editorial Comment:

Definitions of the types of malaria cases mentioned above are:

1. Introduced - a case in which it can be proved that the infection first step (direct secondary) of local transmission subsequent to a proved imported case.
2. Imported - a case in which the infection was acquired outside the area in which it was found, implying that its origin can be traced to a known malarious area.
3. Indigenous - a case that is natural to an area or country, i.e. not introduced, and where it cannot be disproved that it originated from recent local transmission.

REFERENCE: Malaria - Principles and Practice of Malariology
 Edited by Wernsdorfer, WH & McGregor, Sir I

WORLD MALARIA SITUATION - 1988

(Based on WER 1990; 25:189-194 and 26:200-202)

Overview

Indigenous malaria continues to occur in some 100 countries or areas (Map 1). Excluding the WHO African Region where reporting is fragmentary and irregular, the trends in individual countries of the different regions vary, but an upward trend in the number of malaria cases reported in the Americas and some Asian countries is clearly visible. Some 83% of the total number of cases reported annually to WHO (excluding the African Region) are concentrated in Afghanistan, Brazil, China, India, Mexico, Philippines, Sri Lanka, Thailand, Viet Nam. Within these countries malaria shows a marked focalisation.

Of a total world population of about 5011 million people (1988), 2988 million (59%) live in areas free of malaria (it never existed, disappeared or was eliminated by antimalaria campaigns and the malaria-free situation has been maintained). A population of 1599 million people (32%) live in areas where endemic malaria was considerably reduced or even eliminated but transmission was reinstated and the situation is unstable or deteriorating. These latter areas include zones with the most severe malaria problems which developed following major ecological or social changes. They comprise only about 1% of the world population. Areas where endemic malaria remains basically unchanged and no national antimalaria programme was ever implemented, are inhabited by 474 million people (9%), mainly in tropical Africa.

The global incidence of malaria is estimated to be in the order of 110 million clinical cases annually with some 270 million people being infected.

Table 1: Number of malaria cases (in thousands) reported by WHO Regions 1981-1988
(The total does not include the WHO African Region due to the insufficiency and irregularity of reporting)

WHO Region	1981	1982	1983	1984	1985	1986	1987	1988 ^c
Africa ^{b,c}	6 754	6 042	2 726	4 420	3 373	3 046	3 309	3 285
Americas	638	718	831	931	911	951	1 019	1 100
South-East Asia	3 566	2 964	2 731	3 004	2 521	2 689	2 823	2 645
Europe	60	66	71	60	32	45	27	8
Eastern Mediterranean	207	308	305	335	391	610	564	602
Western Pacific	3 464	2 487	1 839	1 361	1 066	786	758	704
Total (excluding Africa)	7 935	6 543	5 777	5 691	4 921	5 081	5 191	5 059

a Information provided doesn't cover the total population at risk in some instances.

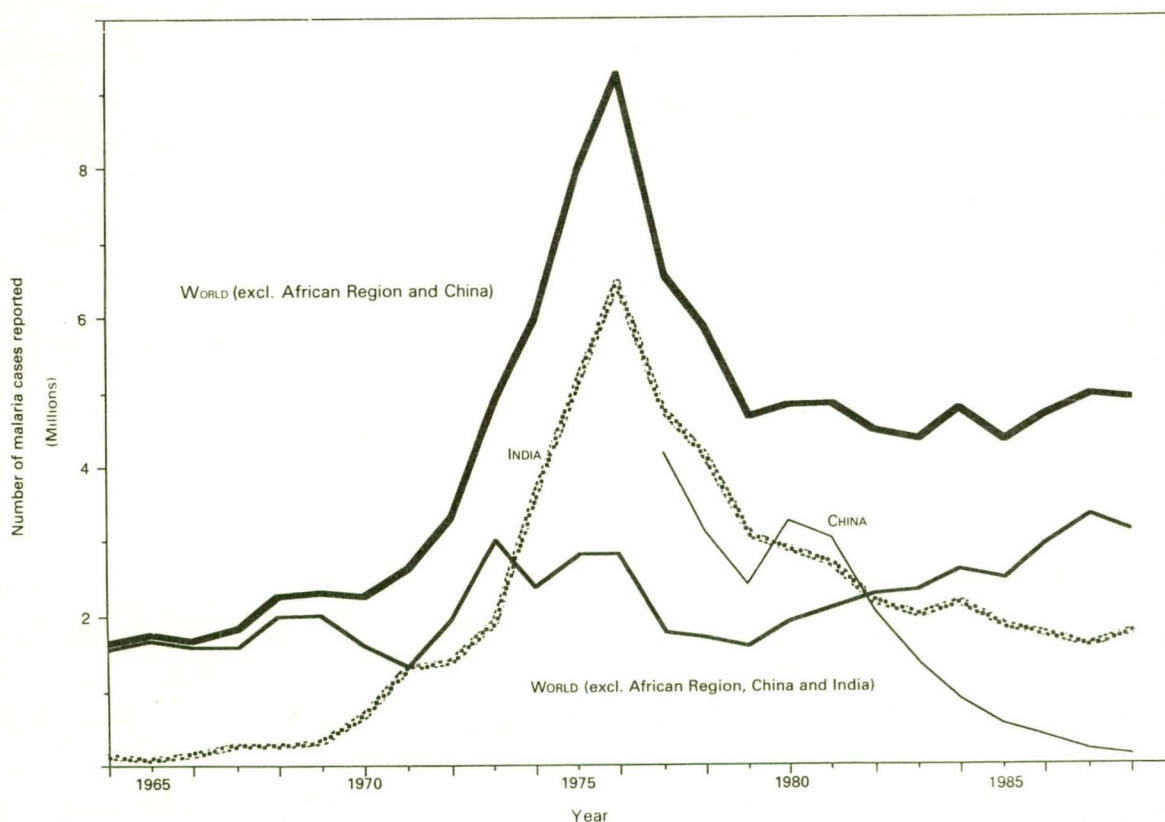
b Mainly clinically diagnosed cases.

c Incomplete figures

WHO receives very limited and irregular reports on malaria deaths, mostly from non-endemic areas. Antimalaria services in endemic countries have concentrated on measuring infection and have not paid sufficient attention to the reporting of malaria mortality. In Africa, there is apparently great variability and there are indications that, at least in some areas, general infant and malaria-specific mortality may be declining.

One of the important problems, the resistance of *Plasmodium falciparum* to drugs, has been spreading further and there are only a few countries from which it has not been reported. However, this phenomenon has mostly a focal distribution especially in West Africa. Therefore, chloroquine can still be an effective drug as it gives a clinical cure in large areas of the world. The present distribution of areas where chloroquine-resistant *P. falciparum* has been reported is shown in Map 2.

Figure 1: Number of malaria cases reported, 1964-1988



Africa

In Africa north of the Sahara, the total number of cases reported decreased from 1467 in 1987 to 1061 in 1988. The Libyan Arab Jamahiriya and Tunisia are considered free from malaria transmission, with only imported cases being reported. In Egypt, 225 cases were detected (33 in 1987), 218 of them being falciparum infections originating from Sinnuris District in El Faiyum Governorate. In Algeria, imported malaria cases rose from 57 in 1987 to 164 in 1988, but indigenous malaria remained rare (7 vivax cases). In Morocco the number of cases detected in 1988 was 550 (1287 in 1987); 435 were of local origin - all *P. vivax* - (Fez Province 117, Khouribga 104, Meknes 79, Chefchaouen 32, Taounate 26, Larache 17, Tanger 15). Ten other provinces reported 8 or fewer local cases.

In Africa south of the Sahara, 2-7 million cases per year are reported, but taking into account the number of infections expected according to the degree of endemicity one can estimate that about 90 million clinical malaria cases may occur every year, and that prevalence of infection may be in the order of 250 million parasite carriers. Endemicity varies greatly from place to place. It reaches the highest levels in the world, with very large areas classified as holoendemic (forest or savannah, altitude up to 1000m, rainfall over 2000 mm/year). In areas of lower endemicity marked seasonality and quasi-cyclic occurrence of heavy rains lead occasionally to epidemics or serious exacerbations of endemicity.

One of the major constraints is the lack or shortage of trained personnel for the organisation of programmes.

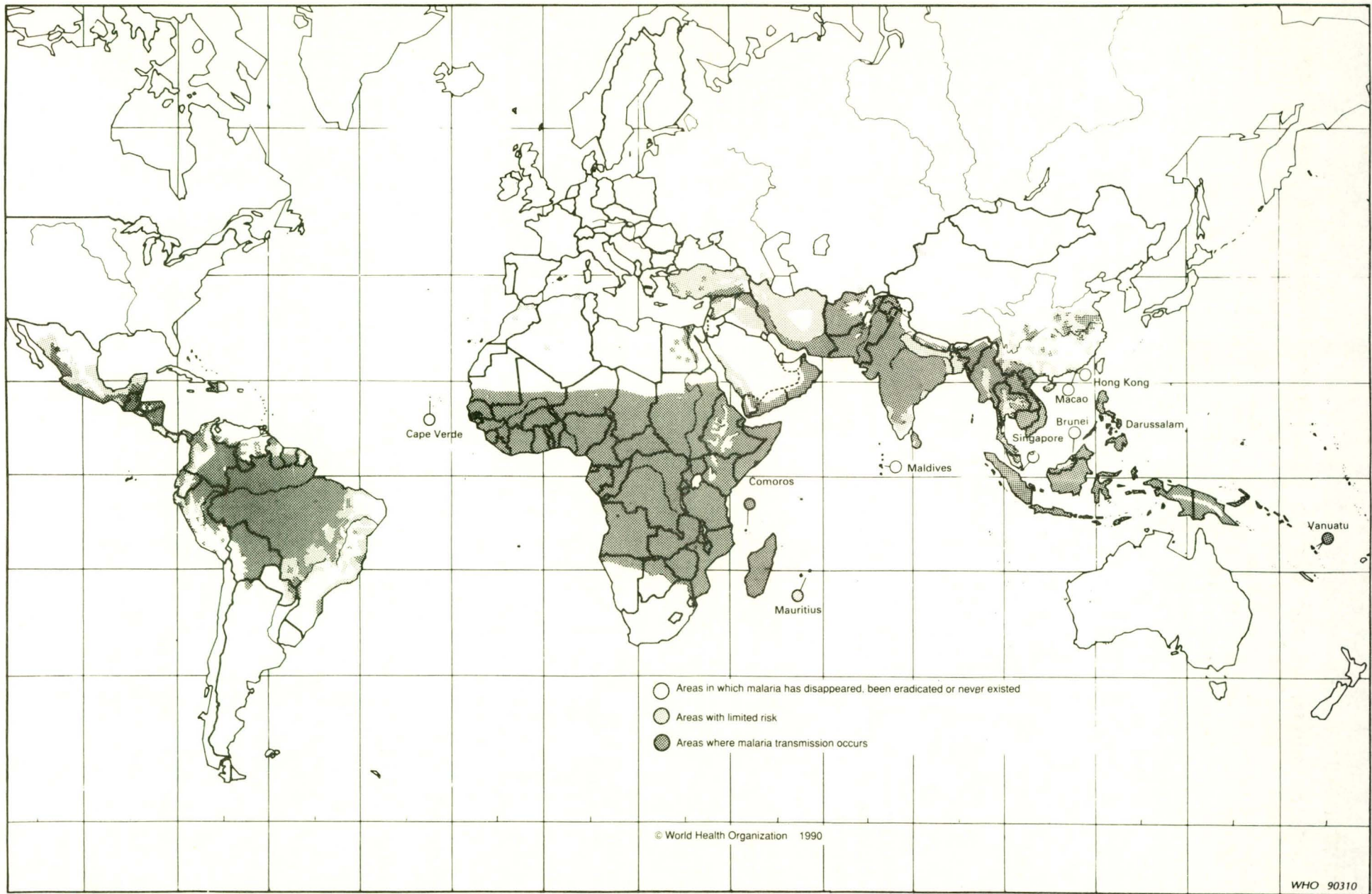
The WHO Regional Committee for Africa adopted the policy to encourage the development of malaria control within the framework of primary health care at district level. The aim is to prevent and reduce malaria mortality by providing prompt diagnosis or recognition and adequate treatment of malaria cases through the basic health services and primary health care. This implies the creation of efficient referral systems for the management of severe and complicated cases as well as for treatment failures.

The Americas

Since 1974, when only 269000 malaria cases were recorded, the number of cases detected every year has been rising continually with 1 100 000 cases reported in 1988 compared with 1 019 000 in 1987, 951000 in 1986 and 911000 in 1985. More than half of the cases were registered in Brazil (51%); 21% originated from the Andean countries; 12% were from Central America and 11% from Mexico.

Vivax malaria continued to predominate in the Americas (64% of all infections). Its relative prevalence is 99.9% in Mexico and 95.7% in Central America. In Brazil, the Dominican Republic, French Guiana, Guyana, Haiti, & Suriname, *P. falciparum* predominates; 73% of all falciparum infections detected in the Americas occurred in Brazil.

Map 1. Epidemiological assessment of the status of malaria, 1988



North America (including Mexico). Malaria is endemic only in Mexico, where cases increased from 18000 in 1976 to 116000 in 1988; 150 were falciparum infections, principally from Oaxaca State.

Caribbean. The malaria problem is limited to the Dominican Republic, where cases decreased from 1400 in 1986 to 1100 in 1988, and to Haiti where the number of cases recorded decreased from 17000 in 1985 to 12000 in 1987 and 1988.

Central America. Overall, the number of cases declined from 189000 cases in 1984 to 112000 in 1987, increasing again in 1988 with 129000 cases reported. Incidence rose by 94% in Nicaragua and by 47% in Honduras. The situation continued to improve in El Salvador with a reduction from 96000 cases in 1980 to 9100 in 1988 (falciparum infections from 16000 to 230).

South America (Andean subregion). This region (Bolivia, Colombia, Ecuador, Peru, Venezuela) reported 235000 malaria cases in 1988, nearly half of the cases occurring in Colombia (101000). An important rise in the incidence was recorded in Venezuela.

Falciparum cases were not recorded in Peru; their relative frequency was 33% in Colombia, 31% in Venezuela, 25% in Ecuador, and 7% in Bolivia.

South America (French Guiana, Guyana, Suriname). During recent years, migration and border traffic have reestablished or exacerbated malaria transmission in the coastal plains previously freed from malaria. The number of malaria cases multiplied from year to year between 1983 (5100 cases) and 1988 (41000 cases). Guyana is the most affected country, with 36000 cases and an annual incidence of 47 per 1000 (Suriname, 9 per 1000; French Guiana, 37 per 1000).

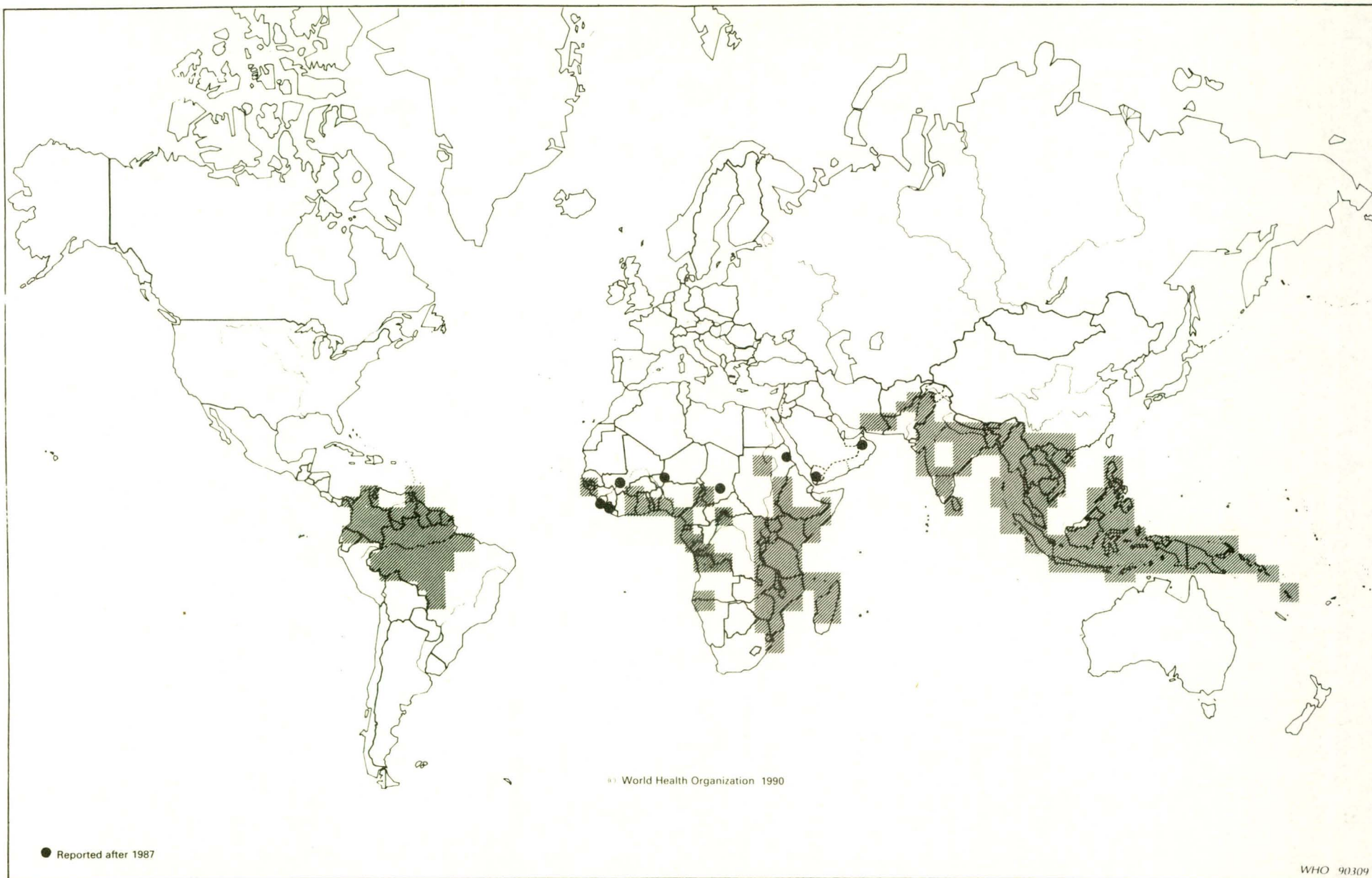
South America (Brazil). About 45% of the 142 million inhabitants live in originally malarious areas; 43 million (67%) of these live in areas where transmission has been interrupted. In 1988, Brazil reported 560000 cases (509000 in 1987), or 51% of all cases in the Americas, although its population at risk represents just 23% of the population of this continent living in malarious areas; 51% of the malaria cases are falciparum infections, 545000 cases (97% of all cases) were recorded in the Amazonian region. Within this region Para, Rondonia and Maranhao, reported 80% of all cases recorded in Brazil.

South America (southern zone). In this subregion (Argentina, Chile, Paraguay and Uruguay) malaria is endemic only in Paraguay and in a small area in northern Argentina. In both countries, the malaria situation improved in 1988.

Asia

Asia west of India. No indigenous malaria was detected in Bahrain, Cyprus, Israel, Jordan, Kuwait, Lebanon and Qatar; no active foci were found in the United Arab Emirates.

Map 2. Areas where chloroquine resistant Plasmodium falciparum has been reported



In the Syrian Arab Republic, indigenous malaria (vivax only) was limited during 1987 to 3 main foci: Aleppo-Hassan Kabir (86 cases), Lattakia (27), Malkiya (north-east border) on the Dejala River (20). In Saudi Arabia, the malaria situation improved considerably and the most affected areas (Tihama Region) recorded a reduction from 11000 cases in 1987 to 4000 cases in 1988.

In Pakistan, the number of cases continued to decrease from 90000 in 1986 and 64000 in 1987 to 50000 in 1988.

The relative prevalence of falciparum infections was about 80% in Baluchistan. 50% in Sind, 26% in Punjab and 21% in the North West Frontier Provinces. In Oman, surveys carried out in protected areas showed malaria prevalence rates of 1.1% in the coastal area, 1.4% in the foothills, and 0.7% in the oases.

In Iraq, the number of cases recorded increased from 3700 in 1987 to 6800 in 1988 - all vivax cases except for 108 imported falciparum infections. Nearly all the cases occurred in a few new important foci in previously malaria-free areas of Erbil and Tamin Provinces (Northern Region). Only some 200 were detected in the central and southern region, most of them imported.

In the Islamic Republic of Iran, the number of cases increased in the south-eastern parts of the country.

In Afghanistan, some 40% of the blood specimens were found positive between 1985 and 1987. High morbidity rates were recorded in Laghman, Kunar, Jalalabad, Ghaziabad, Kunduz, Imamsahib, Taloquan and Faizabad units.

In Yemen, antimalaria activities carried out as part of the primary health care system do not yet cover the whole country.

Middle South Asia

The overall situation remained relatively static in spite of a further decrease in the number of cases reported.

In Bangladesh, about 33000 cases were recorded in 1988 (36000 in 1987 and 41000 in 1986), some 64% of which were falciparum infections (49% in 1985). The majority of cases were reported from the districts of Cox's Bazar, Bandarban, Rangamati and Khagrachari. Out of a total of 20600 falciparum cases, 20400 occurred in Chittagong Division alone.

In Bhutan, malaria incidence, although decreasing, is still very high.

In India, the number of confirmed cases increased by 7% with 1.78 million cases recorded in 1988. About 46% of the states reported a decrease of malaria; others such as Andhra Pradesh, Goa, Gujarat, Karnataka, Maharashtra and Rajasthan, recorded a rise. Falciparum cases in 1988 (34%) were slightly less than in 1987 (37%).

The *P. falciparum* containment programme continued in north-east India, large parts of Orissa and parts of Andhra Pradesh, parts of Bihar and West Bengal, parts of Madhya Pradesh and Maharashtra, and in a few districts of Rajasthan, Gujrat, Tamil Nadu, Karnataka as well as the Andaman and Nicobar Islands.

In Maldives, no indigenous malaria cases have been detected since 1984. Serological investigations have indicated that malaria is disappearing.

In Nepal, the situation continued to improve with 24000 cases reported (42000 in 1985). Outbreaks occurred in Dhanusha, Sindhuli and to a lesser extent in Dadeldhura District. The latter outbreak was due to *P. falciparum*.

In Sri Lanka, malaria incidence rose sharply from only 38500 malaria cases in 1982 (37000 *P. vivax*, 1500 *P. falciparum*) to 676 000 (493000 *P. vivax*, 183000 *P. falciparum*) in 1987. During 1988, the number of cases detected decreased to 380000, 94000 of them being falciparum infections. However, the number of blood examinations decreased also, from 1.95 million in 1987 to 1.33 million in 1988.

Eastern Asia and Oceania

Australia, Brunei, Darussalam, the Democratic People's Republic of Korea, Hong Kong, Japan, Macao, Mongolia, the Republic of Korea, Singapore, large areas of China and most of Oceania are considered free from malaria.

In Hong Kong, indigenous cases continue to occur sporadically in the border areas or other rural areas. There was one such case (*vivax*) in 1988.

In Singapore, 4 introduced cases were reported in 1988; the foci were promptly eliminated by appropriate remedial measures.

In China, malaria incidence continued to decrease with 134000 cases reported in 1988. Incidence decreased markedly in most endemic areas. However, in Hainan Province it increased by 21% compared with 1987, and focal outbreaks occurred in some areas of Yunnan, Guangdong, Guangxi, Guizhou Provinces/Autonomous Region. In the Provinces of Anhui, Jiangsu, Henan and Jiangxi, the major endemic areas of central China, the incidence decreased by 44% to 71% compared with 1987; there were 57000 cases accounting for 43% of the total cases recorded. The distribution of indigenous falciparum malaria was confined to 5 provinces/autonomous regions. In Hainan and Yunnan, the number of falciparum cases increased, accounting for 37% and 21% of the confirmed cases, respectively. In Guizhou Province and in Guangxi Autonomous Region, the distribution of falciparum malaria in 1988 did not change much. There were only 59 falciparum cases recorded in Anhui Province. Of the total number of cases registered in 1988, 66% were confirmed, among them about 11600 falciparum infections (13%).

In Indonesia, where the situation had improved in Java and Bali during recent years, incidence increased again in 1988; 32000 malaria cases were detected although the case-finding activities seem to be deteriorating slowly. The proportion of falciparum cases increased from 42% in 1987 to 46% in 1988. Malaria control activities in the outer islands are limited to areas of socio-economic importance.

In Malaysia, successful malaria control has been maintained in the peninsula, and in Sarawak. In Sabah, however, 37000 cases were reported in 1988, compared with 26000 in 1987.

In Myanmar, the Lao People's Democratic Republic, Papua New Guinea and Vanuatu, the malaria situation has not changed significantly during the past few years.

In Thailand, the number of malaria cases increased from 322000 cases in 1987 to 344000 in 1988, and one of the major problems continues to be the increasing frequency of falciparum strains highly resistant to chloroquine and sulfadoxine/pyrimethamine.

In the Philippines, where the malaria incidence had risen by nearly 50% from 1986 to 1987, the malaria situation seems to have stabilised; 155000 cases were reported in 1988 (154000 in 1987). In 1988, an integrated malaria programme was established.

In the Solomon Islands, 64000 malaria cases were detected in 1988 compared with more than 72000 in 1987. The decrease was noticed particularly in the Central Province. About 60% of falciparum infections are resistant to chloroquine, most of them at RI level; RII and RIII resistant strains are rare.

In Viet Nam, the overall malaria incidence did not vary much although its distribution changed. Whereas there was a decrease in the number of malaria cases in the midland and coastal plain areas, incidence increased in the mountainous zones, particularly in the central high plateau as well as the provinces neighbouring China, the Lao People's Republic and Cambodia. Among the reasons for this deterioration are technical and operational problems, lack of personnel and population movements to new development zones and gold mines.

Europe, including Turkey and the USSR

Endemic malaria (*P. vivax* only) occurs mainly in the south-eastern part of Turkey and in a few other foci in the that country. Comparing the situation in 1987 and 1988, a decrease in the number of cases has been reported. In the USSR, indigenous malaria exists in some limited foci, mainly in the Azerbaijan and Tadjik Soviet Socialist Republics. Overall, 338 indigenous and introduced vivax malaria cases were recorded in the USSR during 1987. The number of imported malaria cases recorded in Europe continued to grow and it is thought that the actual number is considerably higher than the number of cases reported.

CDI MAILING LIST

To facilitate the efficient maintenance of the CDI mailing list please provide written notification of any address changes, deletions or additions to:

CDI mailing list
Communicable Diseases Section
Commonwealth Department of
Community Services & Health
GPO Box 9848
CANBERRA ACT 2601.

AUSTRALIA - COMMUNICABLE DISEASES INTELLIGENCE
 VIRAL IDENTIFICATIONS FROM CONTRIBUTING LABORATORIES
 BASED ON DATE OF REPORTING

PERIOD 2/8/90 TO 15/8/90

- | | |
|---|---|
| 1. CODE 018 - MICROBIOL DIAG UNIT, UNI MELB (VIC) | 2. CODE 019 - FAIRFIELD HOSP (VIC) |
| 3. CODE 065 - STATE HEALTH LAB (WA) | 4. CODE 066 - PRINCESS MARGARET HOSP (WA) |
| 5. CODE 110 - INST OF MED & VET SCIENCE (SA) | 6. CODE 111 - ROYAL CHILDRENS HOSP (VIC) |
| 7. CODE 112 - INST CLINICAL PATH & MED RES (NSW) | 8. CODE 113 - PRINCE HENRY/PRINCE OF WALES HOSP (NSW) |
| 9. CODE 114 - ROYAL ALEXAND RA CHILDRENS HOSP (NSW) | 10. CODE 115 - STATE HEALTH LAB (QLD) |
| 11. CODE 116 - WODEN VALLEY HOSPI(ACT)TAS) | 12. CODE RHH - ROYAL HOBART HOSPITAL (TAS) |

	018	019	065	066	110	111	112	113	114	115	116	LDS	RHH	TOTAL
0100 ADENOVIRUS NOT TYPED	0	0	1	6	3	3	9	1	1	4	0	0	0	28
0101 ADENOVIRUS TYPE 1	0	2	0	0	2	0	1	0	0	0	0	0	0	5
0103 ADENOVIRUS TYPE 3	0	0	0	0	0	0	2	0	0	0	0	0	0	2
0104 ADENOVIRUS TYPE 4	0	1	0	0	1	0	1	0	1	0	0	0	0	4
0105 ADENOVIRUS TYPE 5	0	1	0	0	0	0	0	0	0	0	0	0	0	1
0108 ADENOVIRUS TYPE 8	0	1	0	0	0	0	0	0	0	0	0	0	0	1
0110 ADENOVIRUS TYPE 10	0	0	0	0	1	0	0	0	0	0	0	0	0	1
0111 ADENOVIRUS TYPE 11	0	1	0	0	0	0	3	0	0	0	0	0	0	4
0142	0	1	0	0	0	0	0	0	0	0	0	0	0	1
0144	0	1	0	0	0	0	0	0	0	0	0	0	0	1
0199 ADENOVIRUS TYPING PENDING	0	0	0	0	1	6	2	1	1	0	0	0	0	11
0201 INFLUENZA A VIRUS	0	0	0	0	0	0	1	0	1	0	0	0	0	2
0203 INFLUENZA B VIRUS	0	0	0	0	0	0	1	0	1	0	0	0	0	2
0301 PARAINFLUENZA VIRUS TYPE 1	0	3	0	1	1	1	0	0	0	0	0	0	0	6
0302 PARAINFLUENZA VIRUS TYPE 2	0	2	0	0	0	2	0	0	0	0	0	0	0	4
0303 PARAINFLUENZA VIRUS TYPE 3	0	0	0	0	0	3	1	0	0	2	0	0	0	6
0399 PARAINFLUENZA VIRUS TYPING PEN	0	0	0	0	0	4	0	0	0	0	0	0	0	4
0400 RESPIRATORY SYNCYTIAL VIRUS (R	0	60	0	41	73	75	17	2	12	38	2	0	6	326
0500 RHINOVIRUS (ALL TYPES)	0	4	0	0	0	7	1	1	0	1	0	0	0	14
0600 MYCOPLASMA PNEUMONIAE	0	1	0	0	8	0	6	0	0	0	0	0	0	15
0816 COXSACKIEVIRUS A16	0	2	0	0	0	0	0	0	0	0	0	0	0	2
0902 COXSACKIEVIRUS B2	0	0	0	0	0	0	0	0	1	0	0	0	0	1
0903 COXSACKIEVIRUS B3	0	0	0	0	0	0	0	0	1	0	0	0	0	1
0905 COXSACKIEVIRUS B5	0	0	0	0	0	0	1	0	0	0	0	0	0	1
1000 ECHOVIRUS NOT TYPED	0	0	0	0	2	0	0	0	0	0	0	0	0	2
1001 ECHOVIRUS TYPE 1	0	0	0	0	0	0	0	0	1	0	0	0	0	1
1011 ECHOVIRUS TYPE 11	0	0	0	0	0	0	1	0	1	0	0	0	0	2
1022 ECHOVIRUS TYPE 22	0	2	0	0	0	0	0	0	0	0	0	0	0	2
1025 ECHOVIRUS TYPE 25	0	1	0	0	0	0	0	0	0	0	0	0	0	1
1028 ECHOVIRUS TYPE 28 = RHINO VIRU	0	0	0	0	0	0	0	0	6	0	0	0	0	6
1100 POLIOVIRUS NOT TYPED	0	0	0	0	0	0	0	5	0	0	0	0	0	5
1101 POLIOVIRUS TYPE 1	0	2	0	0	0	0	3	0	1	0	0	0	0	6
1102 POLIOVIRUS TYPE 2	0	1	0	0	0	0	2	0	0	0	0	0	0	3
1200 MUMPS VIRUS	0	1	0	0	0	0	0	0	0	0	0	0	0	1
1300 HERPES VIRUS GROUP - NOT TYPED	0	0	0	0	0	0	1	1	0	0	0	0	0	2
1301 HERPES SIMPLEX VIRUS - NOT TYP	0	0	0	1	0	0	22	0	0	2	0	4	0	29
1302 EPSTEIN-BARR VIRUS (EB VIRUS)	0	2	0	0	18	0	12	1	2	0	0	0	0	35
1303 VARICELLA-ZOSTER VIRUS	0	2	4	0	1	0	1	0	1	0	0	0	0	9
1306 HERPES SIMPLEX TYPE 1	0	36	2	0	21	0	4	6	1	33	0	0	0	103
1307 HERPES SIMPLEX TYPE 2	0	45	6	0	19	0	26	15	0	44	0	0	0	155
1401 COXIELLA BURNETII	0	0	0	0	0	0	2	2	0	0	0	0	0	4
1502 PICORNIA VIRUS - NOT TYPED = E	0	0	0	0	0	0	2	9	0	10	0	0	0	21
1521 MEASLES VIRUS	0	6	0	0	0	0	0	0	0	0	0	0	0	6
1522 RUBELLA VIRUS	0	3	0	0	0	0	1	1	0	0	0	0	0	5
1532 HEPATITIS B ANTIGEN	0	11	7	0	6	0	20	6	1	23	0	0	0	74
1535 HEPATITIS A ANTIBODY	0	1	0	0	5	0	0	0	0	0	0	0	0	6
1536 HEPATITIS C VIRUS	0	0	0	0	0	0	0	0	0	0	0	5	0	5
1541 CHLAMYDIA A - C. TRACHOMATIS	16	0	7	0	18	0	12	2	0	28	0	8	4	95
1555 PAPOVAVIRUS GROUP (PAPILLOMA -	0	1	0	0	0	0	0	0	0	0	0	0	0	1
1556 CHV - CYTOMEHALOVIRUS	0	31	0	7	0	3	3	5	6	7	0	0	1	63
1563 CORONAVIRUS	0	2	0	0	0	0	1	0	0	0	0	0	0	3
1564 ROTAVIRUS	0	8	0	23	17	9	7	7	6	0	0	0	0	77
1565 CALICI VIRUS	0	0	0	0	0	0	1	0	0	0	0	0	0	1
1571 ENTEROVIRUS TYPE 71 (BCR)	0	1	0	0	0	0	1	0	0	0	0	0	0	2
1599 ENTEROVIRUS TYPING PENDING	0	0	0	0	0	2	0	6	2	0	0	0	0	10
9902 POXVIRUS GROUP NOT TYPED	0	1	0	0	0	0	0	0	0	0	0	0	0	1
9992 ROSS RIVER VIRUS	0	3	0	0	0	0	5	0	0	0	0	0	0	8
9993 ASTROVIRUS	0	0	0	0	0	7	1	0	0	0	0	0	0	8
9994 SMALL VIRUS (LIKE) PARTICLE	0	1	0	0	0	0	0	0	0	0	0	0	0	1
TOTAL	16	241	27	79	197	122	174	71	47	192	2	17	11	1196

AUSTRALIA - COMMUNICABLE DISEASES INTELLIGENCE

VIRAL IDENTIFICATIONS FROM CONTRIBUTING LABORATORIES BY STATE OF CONTRIBUTING LABORATORY

PERIOD 2/8/90 TO 15/8/90

NSW: ICPMR; PHH POW; RACH; ST GEORGE HOSP, KOGARAH; ROYAL NEWCASTLE HOSP.
 VIC: FAIRFIELD; RCH; MDU, UNI MELB
 QLD: STATE LAB, BRIS; TOOWOOMBA PATH LAB; ROYAL BRIS HOSP.
 WA: STATE LAB, PERTH; PMH.
 SA: IMVS.
 TAS: ROYAL HOBART HOSP; DIAGNOSTIC SERVICES, LAUNCESTON; LAUNCESTON GEN HOSP;
 DIAGNOSTIC SERVICES, HOBART; HOBART PATH; MERSEY GEN HOSP, LATROBE.
 ACT: W VH.

	NSW	VIC	QLD	WA	SA	TAS	ACT	TOTAL
0100 ADENOVIRUS NOT TYPED	11	3	4	7	3	0	0	28
0101 ADENOVIRUS TYPE 1	1	2	0	0	2	0	0	5
0103 ADENOVIRUS TYPE 3	2	0	0	0	0	0	0	2
0104 ADENOVIRUS TYPE 4	2	1	0	0	1	0	0	4
0105 ADENOVIRUS TYPE 5	0	1	0	0	0	0	0	1
0108 ADENOVIRUS TYPE 8	0	1	0	0	0	0	0	1
0110 ADENOVIRUS TYPE 10	0	0	0	0	1	0	0	1
0111 ADENOVIRUS TYPE 11	3	1	0	0	0	0	0	4
0142	0	1	0	0	0	0	0	1
0144	0	1	0	0	0	0	0	1
0199 ADENOVIRUS TYPING PENDING	4	6	0	0	1	0	0	11
0201 INFLUENZA A VIRUS	2	0	0	0	0	0	0	2
0203 INFLUENZA B VIRUS	2	0	0	0	0	0	0	2
0301 PARAINFLUENZA VIRUS TYPE 1	0	4	0	1	1	0	0	6
0302 PARAINFLUENZA VIRUS TYPE 2	0	4	0	0	0	0	0	4
0303 PARAINFLUENZA VIRUS TYPE 3	1	3	2	0	0	0	0	6
0399 PARAINFLUENZA VIRUS TYPING PEN	0	4	0	0	0	0	0	4
0400 RESPIRATORY SYNCYTIAL VIRUS (R	31	135	38	41	73	6	2	326
0500 RHINOVIRUS (ALL TYPES)	2	11	1	0	0	0	0	14
0600 MYCOPLASMA PNEUMONIAE	6	1	0	0	8	0	0	15
0816 COXSACKIEVIRUS A16	0	2	0	0	0	0	0	2
0902 COXSACKIEVIRUS B2	1	0	0	0	0	0	0	1
0903 COXSACKIEVIRUS B3	1	0	0	0	0	0	0	1
0905 COXSACKIEVIRUS B5	1	0	0	0	0	0	0	1
1000 ECHOVIRUS NOT TYPED	0	0	0	0	2	0	0	2
1001 ECHOVIRUS TYPE 1	1	0	0	0	0	0	0	1
1011 ECHOVIRUS TYPE 11	2	0	0	0	0	0	0	2
1022 ECHOVIRUS TYPE 22	0	2	0	0	0	0	0	2
1025 ECHOVIRUS TYPE 25	0	1	0	0	0	0	0	1
1028 ECHOVIRUS TYPE 28 = RHINO VIRU	6	0	0	0	0	0	0	6
1100 POLIOVIRUS NOT TYPED	5	0	0	0	0	0	0	5
1101 POLIOVIRUS TYPE 1	4	2	0	0	0	0	0	6
1102 POLIOVIRUS TYPE 2	2	1	0	0	0	0	0	3
1200 MUMPS VIRUS	0	1	0	0	0	0	0	1
1300 HERPES VIRUS GROUP - NOT TYPED	2	0	0	0	0	0	0	2
1301 HERPES SIMPLEX VIRUS - NOT TYP	22	0	2	1	0	4	0	29
1302 EPSTEIN-BARR VIRUS (EB VIRUS)	15	2	0	0	18	0	0	35
1303 VARICELLA-ZOSTER VIRUS	2	2	0	4	1	0	0	9
1306 HERPES SIMPLEX TYPE 1	11	36	33	2	21	0	0	103
1307 HERPES SIMPLEX TYPE 2	41	45	44	6	19	0	0	155
1401 COXIELLA BURNETII	4	0	0	0	0	0	0	4
1502 PICORNIA VIRUS - NOT TYPED = E	11	0	10	0	0	0	0	21
1521 MEASLES VIRUS	0	6	0	0	0	0	0	6
1522 RUBELLA VIRUS	2	3	0	0	0	0	0	5
1532 HEPATITIS B ANTIGEN	27	11	23	7	6	0	0	74
1535 HEPATITIS A ANTIBODY	0	1	0	0	5	0	0	6
1536 HEPATITIS C VIRUS	0	0	0	0	0	5	0	5
1541 CHLAMYDIA A - C. TRACHOMATIS	14	16	28	7	18	12	0	95
1555 PAPOVAVIRUS GROUP (PAPILLOMA -	0	1	0	0	0	0	0	1
1556 CMV - CYTOMEGALOVIRUS	14	34	7	7	0	1	0	63
1563 CORONAVIRUS	1	2	0	0	0	0	0	3
1564 ROTAVIRUS	20	17	0	23	17	0	0	77
1565 CALICI VIRUS	1	0	0	0	0	0	0	1
1571 ENTEROVIRUS TYPE 71 (BCR)	1	1	0	0	0	0	0	2
1599 ENTEROVIRUS TYPING PENDING	8	2	0	0	0	0	0	10
9902 POXVIRUS GROUP NOT TYPED	0	1	0	0	0	0	0	1
9992 ROSS RIVER VIRUS	5	3	0	0	0	0	0	8
9993 ASTROVIRUS	1	7	0	0	0	0	0	8
9994 SMALL VIRUS (LIKE) PARTICLE	0	1	0	0	0	0	0	1
TOTAL	292	379	192	106	197	28	2	1196

NOTE: DIRECT COMPARISON BETWEEN STATES IS NOT POSSIBLE SINCE:
 - SOME STATES HAVE MORE THAN ONE CONTRIBUTING LABORATORY; AND
 - INTERSTATE REFERRALS OCCUR REGULARLY.

AUSTRALIA - COMMUNICABLE DISEASES INTELLIGENCE

VIRAL IDENTIFICATIONS BY CLINICAL INFORMATION TABLE 1

PERIOD 2/8/90 TO 15/8/90

- 1. CODE 00, 99 - NO ILL OR DATA
- 2. CODE 01, 02, 11, 12 - RESPIRATORY
- 3. CODE E3 - ENCEPHALITIS
- 4. CODE M3 - MENINGITIS
- 5. CODE 04 - PARALYSIS
- 6. CODE 05, 13 - CNS OTHER UNSPEC
- 7. CODE 07, 49 - GASTRO INTESTINAL
- 8. CODE 17, 47 - HEPATIC
- 9. CODE 19 ... - CVS
- 10. CODE 89 ... - URINARY TRACCT
- 11. CODE 06 ... - SKIN MUCOUS

	1	2	3	4	6	7	8	9	10	11	TOTAL
0100 ADENOVIRUS NOT TYPED	1	8	0	1	0	16	0	0	0	1	27
0101 ADENOVIRUS TYPE 1	0	1	0	0	0	2	0	0	0	0	3
0103 ADENOVIRUS TYPE 3	0	0	0	0	0	2	0	0	0	0	2
0104 ADENOVIRUS TYPE 4	1	1	0	0	0	0	0	1	0	0	3
0105 ADENOVIRUS TYPE 5	0	1	0	0	0	0	0	0	0	0	1
0111 ADENOVIRUS TYPE 11	3	0	0	0	0	0	0	0	0	0	3
0142	0	0	0	0	0	1	0	0	0	0	1
0199 ADENOVIRUS TYPING PENDING	1	4	0	0	0	3	0	0	0	1	9
0201 INFLUENZA A VIRUS	1	0	0	0	0	0	0	0	0	0	1
0203 INFLUENZA B VIRUS	1	0	0	0	0	0	0	0	0	0	1
0301 PARAINFLUENZA VIRUS TYPE 1	0	6	0	0	0	0	0	0	0	0	6
0302 PARAINFLUENZA VIRUS TYPE 2	0	4	0	0	0	0	0	0	0	0	4
0303 PARAINFLUENZA VIRUS TYPE 3	1	5	0	0	0	0	0	0	0	0	6
0399 PARAINFLUENZA VIRUS TYPING PEN	0	4	0	0	0	0	0	0	0	0	4
0400 RESPIRATORY SYNCYTIAL VIRUS (R	10	302	0	0	0	0	0	0	0	0	312
0500 RHINOVIRUS (ALL TYPES)	0	10	0	0	0	0	1	0	0	0	11
0600 MYCOPLASMA PNEUMONIAE	1	13	0	0	0	0	0	0	0	1	15
0816 COXSACKIEVIRUS A16	0	0	0	0	0	0	0	0	0	2	2
0902 COXSACKIEVIRUS B2	0	0	0	1	0	0	0	0	0	0	1
0903 COXSACKIEVIRUS B3	0	0	0	0	0	0	0	1	0	0	1
0905 COXSACKIEVIRUS B5	1	0	0	0	0	0	0	0	0	0	1
1000 ECHOVIRUS NOT TYPED	0	2	0	0	0	0	0	0	0	0	2
1001 ECHOVIRUS TYPE 1	0	1	0	0	0	1	0	0	0	0	1
1022 ECHOVIRUS TYPE 22	0	1	0	0	0	0	0	0	0	0	1
1028 ECHOVIRUS TYPE 28 = RHINO VIRU	0	6	0	0	0	0	0	0	0	0	6
1100 POLIOVIRUS NOT TYPED	0	0	0	0	0	5	0	0	0	0	5
1101 POLIOVIRUS TYPE 1	0	1	0	0	0	2	0	0	0	0	3
1102 POLIOVIRUS TYPE 2	0	0	0	0	0	1	0	0	0	0	1
1200 MUMPS VIRUS	1	0	0	0	0	0	0	0	0	0	1
1300 HERPES VIRUS GROUP - NOT TYPED	1	0	0	0	0	0	0	0	1	0	2
1301 HERPES SIMPLEX VIRUS - NOT TYP	5	1	0	1	0	0	0	0	0	13	20
1302 EPSTEIN-BARR VIRUS (EB VIRUS)	5	1	0	0	1	0	0	0	0	0	7
1303 VARICELLA-ZOSTER VIRUS	2	0	0	0	0	0	0	0	0	7	9
1306 HERPES SIMPLEX TYPE 1	3	8	0	0	0	0	0	0	0	54	65
1307 HERPES SIMPLEX TYPE 2	10	1	0	0	0	0	0	0	0	37	48
1401 COXIELLA BURNETII	0	0	0	0	0	0	1	1	0	0	2
1502 PICORNIA VIRUS - NOT TYPED = E	2	8	0	0	0	9	0	0	0	1	20
1521 MEASLES VIRUS	0	1	0	0	0	0	0	0	0	5	6
1522 RUBELLA VIRUS	1	0	0	0	0	0	0	0	0	0	1
1532 HEPATITIS B ANTIGEN	30	0	0	0	0	0	39	0	0	0	69
1535 HEPATITIS A ANTIBODY	1	0	0	0	0	0	3	0	0	0	4
1536 HEPATITIS C VIRUS	0	0	0	0	0	0	5	0	0	0	5
1541 CHLAMYDIA A - C. TRACHOMATIS	10	2	0	0	0	0	0	0	0	0	12
1555 PAPOVAVIRUS GROUP (PAPILLOMA -	0	0	0	0	1	0	0	0	0	0	1
1556 CMV - CYTOMEGALOVIRUS	5	18	1	1	0	1	3	0	2	0	31
1563 CORONAVIRUS	0	2	0	0	0	1	0	0	0	0	3
1564 ROTAVIRUS	0	0	0	0	0	77	0	0	0	0	77
1565 CALICI VIRUS	0	0	0	0	0	1	0	0	0	0	1
1571 ENTEROVIRUS TYPE 71 (BCR)	1	0	0	0	0	0	0	0	0	1	2
1599 ENTEROVIRUS TYPING PENDING	0	2	0	1	0	6	0	0	0	0	9
9902 POXVIRUS GROUP NOT TYPED	0	0	0	0	0	0	0	0	0	1	1
9992 ROSS RIVER VIRUS	5	1	0	0	0	0	0	0	0	0	6
9993 ASTROVIRUS	0	0	0	0	0	8	0	0	0	0	8
9994 SMALL VIRUS (LIKE) PARTICLE	0	0	0	0	0	1	0	0	0	0	1
TOTAL	103	414	1	5	2	137	52	3	3	124	844

AUSTRALIA - COMMUNICABLE DISEASES INTELLIGENCE

VIRAL IDENTIFICATIONS BY CLINICAL INFORMATION TABLE 2

PERIOD 2/8/90 TO 15/8/90

12. CODE 10 - EYE	17. CODE 69 - CONGENITAL
13. CODE 59 - GENITAL	18. CODE P8 - PUO
14. CODE 39 - ENDOCRINE/SALIVARY GL.	19. CODE G8 - FEVER/MALAISE
15. CODE 38 - RETICULO-ENDOTHELIAL	20. CODE 09 - OTHER
16. CODE 29 - MUSCLE/JOINT	21. CODE A1 - SIDS

	12	13	14	16	17	18	19	20	21	TOTAL
0100 ADENOVIRUS NOT TYPED	0	0	0	0	0	0	1	0	0	1
0101 ADENOVIRUS TYPE 1	0	0	0	0	0	0	0	2	0	2
0104 ADENOVIRUS TYPE 4	1	0	0	0	0	0	0	0	0	1
0108 ADENOVIRUS TYPE 8	1	0	0	0	0	0	0	0	0	1
0110 ADENOVIRUS TYPE 10	0	0	0	0	0	0	0	1	0	1
0111 ADENOVIRUS TYPE 11	0	0	0	0	0	0	0	1	0	1
0144	0	0	0	0	0	0	0	1	0	1
0199 ADENOVIRUS TYPING PENDING	0	0	0	0	0	0	2	0	0	2
0201 INFLUENZA A VIRUS	0	0	0	0	0	0	0	1	0	1
0203 INFLUENZA B VIRUS	0	0	0	0	0	0	0	1	0	1
0400 RESPIRATORY SYNCYTIAL VIRUS (R	0	0	0	0	0	1	5	8	0	14
0500 RHINOVIRUS (ALL TYPES)	0	0	0	0	0	0	3	0	0	3
1011 ECHOVIRUS TYPE 11	0	0	0	0	0	0	2	0	0	2
1022 ECHOVIRUS TYPE 22	0	0	0	0	0	0	0	0	1	1
1025 ECHOVIRUS TYPE 25	0	0	0	0	0	0	1	0	0	1
1101 POLIOVIRUS TYPE 1	0	0	0	0	0	0	0	0	3	3
1102 POLIOVIRUS TYPE 2	0	0	0	0	0	0	0	0	2	2
1301 HERPES SIMPLEX VIRUS - NOT TYP	1	8	0	0	0	0	0	0	0	9
1302 EPSTEIN-BARR VIRUS (EB VIRUS)	0	0	20	0	0	2	4	2	0	28
1306 HERPES SIMPLEX TYPE 1	5	28	0	0	0	1	2	2	0	38
1307 HERPES SIMPLEX TYPE 2	0	107	0	0	0	0	0	0	0	107
1401 COXIELLA BURNETII	0	0	0	0	0	0	2	0	0	2
1502 PICORNIA VIRUS - NOT TYPED = E	0	0	0	0	0	0	1	0	0	1
1522 RUBELLA VIRUS	0	0	1	0	1	0	0	2	0	4
1532 HEPATITIS B ANTIGEN	0	0	0	0	0	0	0	5	0	5
1535 HEPATITIS A ANTIBODY	0	0	0	0	0	0	0	2	0	2
1541 CHLAMYDIA A - C. TRACHOMATIS	3	80	0	0	0	0	0	0	0	83
1556 CMV - CYTOMEGALOVIRUS	0	1	0	0	1	0	1	29	0	32
1599 ENTEROVIRUS TYPING PENDING	0	0	0	0	0	0	1	0	0	1
9992 ROSS RIVER VIRUS	0	0	0	1	0	0	0	1	0	2
TOTAL	11	224	21	1	2	4	25	58	6	352