

## Some Recent Data on Dengue Epidemic in The South of Vietnam

Ha Ba KHIEM, Do Quang HA, Vu Thi Que HUONG and Huynh Thi Kim LOAN

*Pasteur Institute, Ho Chi Minh City, Vietnam*

### INTRODUCTION (Epidemiological data)

The Dengue situation in the South of Vietnam in 1993 is more severe than in 1992. For the period 1 January to 30 June 1993, a record 15,421 cases have been reported to the Pasteur Institute of Ho Chi Minh city with 63 deaths (Table 1). This is a three-fold

**Table 1.** Reported cases of DHF and deaths in the South of Vietnam, by province, January-June 1993

Province	Cases	Deaths	Case-fatality rate (CFR) (percentage)
Hồ Chí Minh city	1,157	3	0.26
Tiền Giang	857	2	0.23
BR Vũng Tàu	120	4	3.33
Long An	244	2	0.82
Đồng Nai	1,684	23	1.36
Mình Hai	5,034	6	0.12
Vĩnh Long	283	0	0.00
Trà Vinh	345	1	0.29
Sông Bé	1,280	5	0.39
Đồng Tháp	669	2	0.30
Lâm Đồng	245	0	0.00
Tây Ninh	200	0	0.00
An Giang	1,382	7	0.50
Bến Tre	937	0	0.00
Cần Thơ	264	0	0.00
Sóc Trăng	292	1	0.34
Kiên Giang	428	7	1.63
Total	15,421	63	0.41

increase over the corresponding period in 1992 (6,289 cases with 50 deaths). But the case-fatality rate for DHF decreases from 0.79 per cent in 1992 to 0.41 per cent in 1993.

#### ISOLATION AND IDENTIFICATION OF VIRUSES

The Laboratory of Arbovirus (Pasteur Institute of Ho Chi Minh city) processed 73 acute blood specimens for virus isolation during this period. Sixteen dengue strains were recovered.

Blood specimens were collected by venipuncture from children within 1-4 days of the onset of illness. Anti-flavivirus IgG conjugated with FITC, serotype-specific monoclonal antibodies of Dengue 1 (1F1 and 15F3), Dengue 2 (3H5), Dengue 3 (5H4), Dengue 4 (1H10) and anti-mouse IgG conjugated with FITC were used in the identification. All biological products were supplied by Dr. D. J. Gubler, CDC, Colorado, USA.

**Table 2.** Dengue activity in the South of Vietnam in the first six months of 1993

Month	Cases	Deaths
January	1,659	1
February	984	5
March	751	2
April	1,399	6
May	1,838	11
June	8,790	38
Total	15,421	63

**Table 3.** Provinces which sent blood specimens for virus isolation

Locality	No. of specimens	Positive (percentage)
Hồ Chí Minh city	7	0
Tiền Giang	32	10 (31.25)
Bến Tre	13	3 (23.07)
Long An	5	2 (40.00)
Vĩnh Long	13	1 ( 7.69)
Đồng Nai	3	0
Total	73	16 (21.92)

**Table 4.** Results of identification of the isolates

Locality	Number and type of the isolate			
	DEN-1	DEN-2	DEN-3	DEN-4
Tiền Giang	8	2		
Bến Tre		3		
Long an		2		
Vĩnh Long	1			
Total	9	7		

*The following are the highlights of the report :*

- 1 . The number of dengue cases is still on the increase throughout the South of Vietnam.
- 2 . Dengue 1 strain is more dominant than Dengue 2 strain in 1993.
- 3 . Among 9 dengue 1 strains recognized by monoclonal antibody of Dengue 1 1F1, the monoclonal antibody of Dengue 1 15F3 only recognized 2 of them. These results were also notified in 1991 and 1992 outbreaks of DHF.