## YELLOW FEVER OUTBREAK IN MARANHAO STATE, BRAZIL, 1993

An outbreak of yellow fever (YF) is occurring in the rural area of Mirador (45°30'W, 4°23'S) and Barra do Corda (45°16'W, 5°29'S) counties, Maranhão State, Brazil. Mirador is a very small county with a population of 20,000 inhabitants. Barra do Corda is a large county with a population of 90,000 inhabitants and is located about 100 km from Mirador.

The first death occurred in the beginning of March, the last on May 24. To date, 10 fatal cases of YF have been identified. Six were laboratory confirmed; one by virus isolation, two by serology (MACELISA), two by histopathology, and one by both serology and characteristic liver histopathology. Diagnosis of the remaining four cases was based on clinical and epidemiologic information. An additional 14 patients with YF survived; diagnosis of these was by virus isolation (two) and serology (12).

Of the 24 cases, 15 were males and 9 were females. Four were < 9 years old, six were 10-19 years old, and 14 were > 20 years old.

Studies are in progress to determine whether people in other counties have been affected by the virus. Ecological investigations were begun May 18. Potential vectors have been collected and will be processed for virus. More data will be available for the next issue of the <u>Arbovirus Information Exchange</u>.

We emphasize that the last cases of YF in Maranhão State were reported 11 years ago. There is indication that the Ministry of Health conducted a vaccination campaign against YF in that area in 1985.

Reported by: Amelia P.A. TRAVASSOS DA ROSA, Sueli G. RODRIGUES, Pedro F.C. VASCONCELOS, Nicolas DEGALLIER\*, Mário A.P. MORAES\*\*, Jorge F.S. TRAVASSOS DA ROSA, and Ana C.R. da CRUZ

Instituto Evandro Chagas, Fundação Nacional de Saúde, Servico de Arbovirus, Av. Almirante Barroso, 492, 66090-000, CP1128, Belém, PA, Brasil

- \* ORSTOM/Instituto Evandro Chagas, CP75
- \*\* Servico de Patologia/Instituto Evandro Chagas

(Note: This report was sent by fax to the Editor, <u>Arbovirus Information Exchange</u>. Editor retyped the report because the copy was not clear and, in so doing, modified the text slightly but did not change the meaning.)



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