

Infectious diseases in French Polynesia in 2001

The infectious disease situation in French Polynesia has been developing satisfactorily, owing to improved living conditions and to better access to quality health care and prevention programmes – e.g., vaccination, screening, preventive treatment and behaviour modification exercises.

Development highlights have been as follows:

- The Territory is holding out fairly well against the HIV infection pandemic for the time being, but caution needs to be exercised.
- Vector-borne infections are difficult to control in tropical environments, and leptospirosis and dengue epidemics have not been effectively managed. Although the filariasis pandemic is on the wane, prevention campaigns cannot yet be discontinued.
- By providing very high vaccination coverage of French Polynesian children, most of the targeted diseases have virtually disappeared. High-risk groups should now be vaccinated against influenza.
- The tuberculosis rate has fallen dramatically, by 50 per cent in three years, but remains high.
- Rheumatic fever has dropped by half in 10 years, but an incidence of 2 cases in 1000 children is still too high.
- Among children, respiratory and skin infections and diarrhoea are the major reasons for medical consultations. Although the means of controlling such infections are limited, prevention of the attendant complications needs to be strengthened.
- Increased bacterial resistance to antibiotics is a concern and requires rationalising antibiotic use as a precaution for the future.

Specific programmes, such as tuberculosis, HIV, filariasis, and rheumatic fever, require support so as to maintain their still fragile achievements. But work should also be done on medical practice (particularly antibiotic prescription and case management for diarrhoea and skin infections) and environmental quality (access to drinking water, waste disposal, and vector-borne disease control).

Leptospirosis

A retrospective study (BISES, Health and Epidemiological Information Bulletin, 1/1996) estimated that between 1985 and 1990, the annual incidence of leptospirosis varied from 18 to 90 cases per 100,000 inhabitants.

In 1998, the incidence of hospitalised cases was particularly high (60 per 100,000 inhabitants), especially in the Leeward Islands (41 cases or 150/100,000) and Marquesas Islands (23 cases or 287/100,000). At the same time, the 'Institut Malardé' recorded a strong increase in requests for blood tests in 1998, twice as many as the average for previous years. The number of confirmed cases increased six-fold in 1998. The unusual weather conditions (El Niño) were most likely responsible for this increase.

The main leptospirosis traits are as follows:

- Half of the cases are infected by *L. icterohaemorrhagiae*.
- This infection is seasonal in nature and is high during the rainy season, at the beginning of the year, with a peak in May.



- Hospitalised cases are predominantly male (three times as many men as women).
- Some 77 per cent of the hospitalised patients are over the age of 15.
- On average, four deaths are recorded each year.

Leptospirosis: evolution of declared cases, cases hospitalised in the Territorial Hospital (CHT) or other public hospitals, deaths from leptospirosis, and anti-leptospirosis IgM research ('Institut Malardé'), 1994-2000

	1994	1995	1996	1997	1998	1999	2000
Number of BMT (Bulletin des Maladies Transmissibles or Notifiable Diseases Bulletin) declared cases	-	-	48	35	66	17	9
Number of cases hospitalised outside CHT	15	23	30	14	75	36	22
Number of cases hospitalised in CHT	16	19	17	25	54	29	31
Total hospitalisations*	31	42	47	39	129	65	53
Number of deaths	4	4	5	2	5	2	3
Number of IgM requests	234	250	305	192	557	306	275
Number of positive tests	43	17	34	12	160	57	37

*Some cases may have been recorded twice, i.e., at the CHT and at other facilities.
 Sources: 'Institut Louis Malardé', Epistat Office, CHT Medical Information Service.

Prevention is a difficult task in tropical settings that have a very significant pool of rodents. Following a case in a child at a summer camp in February 2001, blood tests were performed on 34 people aged 10 to 29 who had taken part in the camp. A total of 9 of them (26 per cent) had anti-leptospirosis IgM, indicating a recent infection. No precise risk factor was identified, e.g., fresh-water bathing, eating fruit, contact with pigs or rodents.

Vaccination, which is recommended for professions at risk, only covers the icterohaemorrhagiae serotype (50 per cent of cases). It is also very costly and requires booster shots every two years. For those reasons, it is of very limited interest.

On the other hand, the availability of an early diagnosis test (PCR) would improve initial treatment of patients.

Finally, higher quality surveillance is needed to better identify the precise location and circumstances in which infections are acquired.

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This is an abstract of the full report on infectious diseases in French Polynesia that was released by the Department of Health in December 2001. It is based on statistics provided by the health department's Epistat office and GITE (field action and epidemiology group), the 'Institut Malardé', the CHT (territorial hospital) medical and laboratory information service, the French Polynesian statistics office and all doctors involved in surveillance.

