

PACIFIC ISLANDS

BRITISH NORTH BORNEO

Population: 270,223

Area: 29,500

A League of Nations Report (1937) states that leprosy does not form a serious problem among the native population of rural districts. A settlement is provided on the island of Berhala, about three miles from Saudakan, and segregation is compulsory. Of 70 patients under treatment at the settlement on December 31, 1935, 20, or 28.6 per cent, were natives of North Borneo, and the majority of these came from the districts of Penampang and Kota Belud, where Chinese have intermarried with the native population.

LEAGUE OF NATIONS PUBLICATION.

1937. Health organization—Intergovernmental conference of Far-Eastern countries on rural hygiene. Report by the preparatory committee. Ser. L.o.N.P., III, 3.

CAROLINE ISLANDS

Population: 26,332

Area: 380

Cole (1944) reports that leprosy is relatively rare in the eastern Carolines. Since 1900 patients have been taken to asylums in Jaluit (in the Marshalls) and in the Palau group. In 1931 there were estimated to be 40 cases in the district of Yap Island, and in 1931 the South Seas Government established an asylum there.

COLE, H. I.

1944. Personal communication to Perry Burgess.

COOK ISLANDS

Population: 16,203

Area: 280

Simmons *et al* (1944) state that except in the northern Cook Islands and especially on Penrhyn, leprosy is not common. When new patients are detected they are sent as soon as practicable to a clearing station on Penrhyn Island to await transportation to the Central Leper Hospital at Makogai, Fiji.

Austin (1939) states that in 1938, 43 patients collected from all over the Cook Islands were removed from Penrhyn to Makogai hospital.

AUSTIN, C. J.

1939. Correspondence to the Editor. *Internat. J. Leprosy*, 7, 414.

SIMMONS, J. S. *et al*.

1944. *Global Epidemiology*. J. B. Lippincott Co., Philadelphia, ed. 1, p. 227.

DUTCH EAST INDIES

Population: 11,726

AMBOINA, MOLUCCA GROUP

Area: 75,820

Simons (1933) states that leprosy is common here. Data are given on 302 known cases. He mentions a peculiar geographical distribution, with a high prevalence in Leitimor, and a low prevalence in Hitoe. These two parts of the island are joined by a narrow peninsula; Leitimor is inhabited mainly by Christians, and Hitoe by Mohammedans.

SIMONS, L. H.

1933. De Lepra on het eiland Ambon. Mededeel. v.d. dienst d. volksgezondh. in Nederl.—Indië, 22, 197-208. Abstract in *Internat. J. Leprosy*, 1936, 4, 137.

DUTCH EAST INDIES

Population: 1,802,683

BALI and LOMBOK

Area: 3,973

Sitanala (1938) states that in BALI there were 2,178 known cases in a population of 1,091,654, a rate of 2 per 1,000. There are six leprosaria with 394 patients.

Smalt (1938) states that there were 310 registered cases of leprosy in LOMBOK.

SITANALA, J. B.

1938. Personal communication to Perry Burgess.

SMALT, D. F. H.

1938. Personal communication to Perry Burgess.

Population: 4,600,000

CELEBES

Area: 72,886

Buitelaar (1935) reports discovery of 204 cases in 19 districts among a total of 163,288 native Toradjas. He estimates there to be at least three times this number, or about 3.5 per 1,000.

BUITELAAR, L.

1935. Leprosy among the Sâdan-Toradjas. *Geneesk. tijdschr. v. Nederl.—Indië*, **75**, 1211-1222. Abstract in *Trop. Dis. Bull.*, 1935, **32**, 857.

Population: 46,000,000

JAVA and MADURA

Area: 51,032

Burgess (1938) states that mid-JAVA is the most highly infected section of the island. Home segregation is commonly practiced. There were 5,774 patients in institutions in 1935.

Darwis (1936) reports that in Lamongan, mid-JAVA, there were 654 known cases among 650,000 inhabitants, a rate of 1 per 1,000. According to information given to Burgess (1938) by Sitanala, this number had increased to 887 in 1938.

DeNooy (1938) reports 200 patients in the Semaroeng Leprosarium at Soerabaya, mid-JAVA, with 50 coming in for treatment each week.

A Public Health Service Report (1937) states that from the opening of the leprosy polyclinic at Samarang, mid-JAVA, in 1932 until January 1937 a total of 167 patients were registered. In 1937 only 47 were under treatment.

Boenjamin (1940) states that from January 1936 to June 1939, 465 cases were registered in the Queen Wilhelmina Institute for Leprosy Research at Batavia, in western JAVA. Of these, 415 were residents of Batavia. The number of actual cases in the city is considered to be at least 1,000, or 20 per 1,000.

Sitanala (1938) reports that since 1932, 121 cases have been found in Bangli, west JAVA, among 1,600 children examined. In 1938 there were 129 patients in the leprosarium there. He reports 440 cases in the district of Blora, west JAVA, in a population of about 450,000.

Malaihollo (1940) states that surveys in the village of Wates, west JAVA, revealed a prevalence rate of 30 per 1,000 in 1937 and 38 per 1,000 in 1939.

DUTCH EAST INDIES

Burgess (1938) cites Muller, Health Officer of MADURA, as stating that there were 775 registered cases of leprosy, a rate of 1.6 per 1,000.

BOENJAMIN, R.

1940. Enkele gegevens over het voorkomen van lepra in de Gemeente Batavia. *Geneesk. tijdschr. v. Nederl.—Indië*, **80**, 322-333. Abstract in *Internat. J. Leprosy*, 1941, **9**, 375-376.

BURGESS, P.

1938. Notes from a personal visit, January 25, 1938.

DARWIS, A.

1936. Het lepra—onderzoek in Lamongan. *Geneesk. tijdschr. v. Nederl.—Indië*, **76**, 2123-2128. Abstract in *Internat. J. Leprosy*, 1937, **5**, 534.

DENOY,

1938. Personal communication to Perry Burgess.

MALAIHOLLO, J. F.

1940. Lepra in de Desa Wates (Res. Batavia) en het resultaat van een bloed-groeponderzoek onder leprozen en gezonden in Wates en Blora. *Geneesk. tijdschr. v. Nederl.—Indië*, **80**, 2296-2312. Abstract in *Internat. J. Leprosy*, 1941, **9**, 376.

PUBLIC HEALTH SERVICE.

1937. Polyclinical treatment of lepers at Samarang during 1937. Gov't. Pub. Health Serv. Rep.

SITANALA, J. B.

1938. Personal communication to Perry Burgess.

Population: 9,000,000

Area: 163,048

SUMATRA

Hayashi (1935) states that in 1933-1934 the three leprosaria in SUMATRA had a total of 1,320 patients. These were distributed as follows: Hoeta Salem, 500; Lae Si Momo, 400; Belawan Deli, 420.

Burgess (1938) reports that the three leprosaria had a total of from 1,400 to 1,500 patients at the time of his visit.

BURGESS P.

1938. Notes from a personal visit, February 5, 1938.

HAYASHI, F.

1935. Report of a leprosy study tour. *Internat. J. Leprosy*, **3**, 165-180.

FIJI ISLANDS

Population: 220,787

Area: 7,083

McKinley (1935) cites Pearce's estimate that there were from 2,500 to 3,500 leprosy cases. The distribution is mainly among Pacific Islanders and Indians.

Austin (1938) states that the number of patients in the Central Leper Hospital on the Island of Makogai increased from 577 to 619 in 1938. The Cook and Gilbert Islands supplied 81 of 135 new admissions. Indians form the largest numbers and show more lepromatous cases. During the year, 53 patients were discharged after being negative for two years; of this number 11 had been L1 and

L2 cases. The same author (1936) states that from 1911 to the end of 1933 there were more than 1,600 admissions to the Central Leper Hospital. In analysis made of 1,365 cases, 54.7 per cent were neural and 45.3 per cent were cutaneous.

AUSTIN, C. J.

1936. A study of leprosy in Fiji. *Internat. J. Leprosy*, **4**, 55-70.

1938. Report on Central Leper Hospital, Makogai. *Fiji Ann. Med. & Health Report* for year 1938, 32-37. Abstract in *Trop. Dis. Bull.*, 1940, **37**, 626.

McKINLEY, E. B.

1935. *A Geography of Disease*. George Washington University Press, Washington, D. C., ed. 1, p. 182-183.

FRENCH OCEANIA

Population: 39,920

SOCIETY, TUAMOTU, GAMBIER, LEEWARD, MARQUESAS,
TUBUAI, and RAPA ISLANDS

Area: 1,520

Simmons *et al* (1944) state: "Leprosy is of common occurrence in all the islands of French Oceania, but the incidence is highest in the MARQUESAS. Between 80 and 100 new cases are reported each year, and it is estimated that about one per cent of the native population suffers from the disease."

Sorel (1938) gives the total number of cases existing on January 1, 1937 as 330. Non-contagious patients are permitted to remain in their homes; the others are isolated in two establishments, 116 at a village in the valley of Orofara, near Papeete, on Tahiti in the SOCIETY Group, and 87 at the agricultural colony of Réao, in the TUAMOTU ARCHIPELAGO.

According to Delinotte (1939) there are heavily infected endemic areas. For example in 1935 on the small island of Réao, 56 cases were found among 340 inhabitants examined (165 per 1,000); and on Puka-Ruda, also in the TUAMOTUS, 23 among 180 persons examined (128 per 1,000).

DELINOTTE, H.

1939. The fight against leprosy in the French overseas territories. *Internat. J. Leprosy*, **7**, 517-547.

SIMMONS, J. S. *et al*.

1944. *Global Epidemiology*. J. B. Lippincott Co., Philadelphia, ed. 1, p. 253.

SOREL, F. P. J.

1938. Prophylaxie de la lèpre dans les colonies Françaises. *Bull. Office internat. d'hyg. pub.*, (suppl. to no. 6), pt. 1, **30**, 1-21.

GILBERT AND ELLICE ISLANDS

Population: 32,838

Area: 180

McKinley (1935) cites a government report for 1932 which enumerated 32 cases in these islands, with a generalized distribution.

A News Item in the JOURNAL (1936) reports that a government steamer brought 48 leprosy patients from Tarawa in the Gilberts, to Makogai in the Fijis.

McKINLEY, E. B.

1935. *A Geography of Disease*. George Washington University Press, Washington, D. C., ed. 1, p. 192.

NEWS ITEM.

1936. Transporting patients to Makogai. *Internat. J. Leprosy*, **4**, 531.

GUAM

Population: 22,290

Area: 206

Wade (1937) made a brief sampling survey and came to the conclusion that today leprosy is not a serious problem on Guam. There were 85 leprosy individuals at Tumon, a rate of 7.8 per 1,000, but the author considered many of these diagnoses questionable.

Cole (1944) reports that leprosy was at one time common in Guam but has been controlled by the American authorities; only 3 cases were reported on this island in the five years preceding 1936.

COLE, H. I.

1944. Personal communication to Perry Burgess.

WADE, H. W.

1937. Memorandum—Report to the Governor of Guam on the leprosy inquiry in Guam made in October 1937.

HAWAII

Population: 423,330

Area: 6,454

Binford (1936) reports 557 leprosy patients in segregation and 150 on parole as arrested. The prevalence rate has dropped from 4 or 5 per 1,000 in the period from 1880 to 1890, to approximately 1.5 per 1,000 in recent years. From 1865 to 1936 between 7,000 and 8,000 patients were segregated and maintained. "The Kalihi Receiving Station, or Hospital, maintains a census which fluctuates between 100 and 125 as new patients are brought in and more advanced cases are sent to Kalaupapa." This latter settlement is on the island of Molokai, occupying a small peninsula separated from the remainder of the island by mountainous cliffs. There is a 50 bed hospital for the patients needing hospital care.

BINFORD, C. H.

1936. The history and study of leprosy in Hawaii. *Pub. Health Rep.*, 51, 415-423.

LOYALTY ISLANDS

Population: 11,126

Area: 800

Vigne and Tivollier (1937) state that the prevalence rate of leprosy cases was 34 per 1,000. Cases are uniformly distributed, although there are a few more important centers on the coast. On Lifou Island, the most important focus of all, the following types were observed in 1936 and 1937: Nodular, 47; mutilatory neural, 32; anesthetic neural, 31; mixed, 75; macular, 4; and tuberculoid, 11; total, 200.

Kervingant (1939) gives the following figures for leprosy among the natives on the three islands of the Loyalty Group in 1936: Lifou, 209 cases, (35 per 1,000); Maré, 132 cases, (41 per 1,000); Ouvéa, 75 cases, (37 per 1,000). For the group, the prevalence rate is 32 per 1,000.

Sorel (1938) reports that there are four agricultural leprosy colonies in these islands: at Chila, on Lifou; at Bone and Betsédo, on Maré; and at Oné, on Ouvéa.

KERVINGANT, M.

1939. La lèpre en Nouvelle-Calédonie en 1936. *Internat. J. Leprosy*, 7, 175-200.

SOREL, F. P. J.

1938. Prophylaxie de la lèpre dans les colonies Françaises. *Bull. Office internat. d'hyg. pub.*, (suppl. to no. 6), pt. 1, 30, 1-21.

VIGNE, P. and TIVOLIER, M.

1938. La lèpre et sa prophylaxie aux Isles Loyalty. Read at Cairo Conference, 1938. *Internat. J. Leprosy*, 6, 439.

MARIANAS ISLANDS

Population: 44,205*Area:* 245

Cole (1944 a) states that according to the 1935-1937 reports to the League of Nations, a large number of leprosy cases appear to have been scattered all over the Japanese Mandated Islands from early times. Cases have been isolated by the Japanese since 1924. In 1926 4 cases were reported from the Marianas. The same author (1944 b) states that patients in these islands are treated at the asylum on Saipan, which has accommodations for 377.

COLE, H. I.

1944 a. Information obtained from the Surgeon General of the U. S. Army.

1944 b. Personal communication to Perry Burgess.

MARSHALL ISLANDS

Population: 10,439*Area:* 160

Cole (1944) states that the total number of leprosy cases is not known. In 1926, 10 cases were reported, in 1929, 5, and in 1930, 6. In 1927 the government established an asylum at Seepict on Jaluit.

COLE, H. I.

1944. Information obtained from the Surgeon General of the U. S. Army.

NAURU

Population: 3,460*Area:* 8

Bray (1930) states that leprosy was unknown before 1911. In June 1920 only 4 cases were under observation. In 1921 an influenza epidemic affecting the entire population swept the island and only one of the leprosy patients survived. In four years time, 30 per cent of the natives showed clinical manifestations of infection. In 1925 the number of cases reached a maximum of 365, of whom 189 were in segregation and 176 under observation.

Grant (1934) states that the total number of patients attending the clinics in 1929 was 115 and in 1933, 155.

Clouston (1937) states that there were 159 patients actually receiving treatment for leprosy, or approximately 10 per cent of the native population. Although this figure is high, in 1924, 30 per cent of the population were leprosy and at the end of 1933, 14 per cent.

Cumpston (1943) states that the last available report for the Island (1939) records 45 cases in the Leper Station, with 6 admissions during the year. Another 118 cases released under surveillance report regularly for treatment.

BRAY, G. W.

1930. The story of leprosy at Nauru. *Proceedings of the Royal Society of Medicine, Section of Tropical Diseases and Parasitology*, 23, 1370. Abstract in *Internat. J. Leprosy*, 1934, 2, 319-323.

CLOUSTON, T. M.

1937. Age groups of leper patients at Nauru. *Leprosy Rev.*, 8, 23-29.

CUMPSTON, J. H. L.

1943. Personal communication to the Acting Editor.

GRANT, A. M. B.

1934. Leprosy at Nauru since 1928. *Internat. J. Leprosy*, 2, 305-310.

NEW CALEDONIA

Population: 53,245

Area: 8,548

Sorel (1939) states that 1,394 cases were counted in 1938. He estimates that there are probably at least 1,500 cases in existence.

Delinotte (1939) states that in 1936 the total number of known cases, including 117 Europeans, was 1,369. In the first part of 1937, 17,412 natives were examined. A total of 130 new cases was found that year.

Sorel (1938) reports that in a census taken about 1936 or 1937, 1,185 cases of leprosy were discovered. There are three leprosaria: Maïna and Kananou, agricultural colonies on the east coast; and the Sanatorium de Ducos, seven kilometers from Nouméa. A fourth is under construction on the west coast. There are four agricultural colonies in the Loyalty Islands to which patients also go: At Chila, on Lifou; at Bone and Betsédo, on Maré; and at Oné, on Ouvéa.

DELINOTTE, H.

1939. The fight against leprosy in the French overseas territories. *Internat. J. Leprosy*, **7**, 517-547.

SOREL, F. P. J.

1938. Prophylaxie de la lèpre dans les colonies Françaises. *Bull. Office internat. d'hyg. pub. (suppl. to no. 6)*, pt. 1, **30**, 1-21.

1939. Die Leprabekämpfung in den französischen Kolonien, Besitzungen und Mandaten. *Deutsche med. Wchnschr.*, **65**, 676-678.

NEW HEBRIDES ISLANDS

Population: 60,000

Area: 5,700

Delinotte (1939) states that leprosy was considered rare in these islands until about 1934 at which time numerous cases were found on the islands in the south and north. In 1934 a leprosarium was established at Tauna in the south. Another was planned for 1935 on Giré in the north. In 1937 11 patients were hospitalized at Port-Villa. The distribution of the disease is very irregular and the western coast of Santo and the northwestern coast of Mallicoli seem to be the most affected. In one year 75 cases were diagnosed at the hospital of Santo, while at Epi only 2 cases were recognized in four years. "Nothing is known with certainty about the disease among the savage tribes of the interior."

Sorel (1939) states that according to a report of the Colonial Administration, 88 cases of leprosy were counted in 1937.

DELINOTTE, H.

1939. The fight against leprosy in the French overseas territories. *Internat. J. Leprosy*, **7**, 517-547.

SOREL, F. P. J.

1939. Die Leprabekämpfung in den französischen Kolonien, Besitzungen und Mandaten. *Deutsche med. Wchnschr.*, **65**, 676-678.

PALAU ISLANDS

Population: 6,361

Area: 175

Cole (1944 a) citing again the 1935-1937 report to the League of Nations states that from 1926 to 1930 approximately 10 cases were reported from Palau. According to a communication from the same Author (1944 b) there were an estimated 22 cases in 1931. The South Seas Government established an asylum on Palau in 1931.

COLE, H. I.

1944 a. Information obtained from the Surgeon General of the U. S. Army.

1944 b. Personal communication to Perry Burgess.

PHILIPPINE ISLANDS

Population: 16,350,000

Area: 115,600

Based upon the experience of localized surveys, and upon the number of patients in segregation, it may be estimated that the total number of leprosy persons in the Philippine Islands is not fewer than 12,000 and not more than 20,000.

The report of the Philippine Leprosy Commission (1935) states that there were almost 8,600 patients in isolation. The distribution was as follows: At Culion, 7,000; at Eversley Childs Treatment Station, Cebu, 589; at Western Visayas Treatment Station, Iloilo, 216; at Bicol Treatment Station, Legaspi, Albay, 131; at San Lazaro Hospital, Manila, 545; at Zamboanga, 24; at Jolo, Sulu, 28; at Dansalan, Lanao, 59; total, 8,592. There were also about 1,100 out-patients registered.

Two detailed epidemiological surveys have been conducted in Cebu, one of the most heavily infected provinces. At Talisay, where 143 living patients were known, Guinto and Rodriguez (1941) in a field study from May 1936 to December 1937 discovered 65 additional cases. This made a total of 208, or 19.5 per 1,000. Doull *et al* (1936) made a survey from July to November 1933 at Cordova. With 74 cases already known, 30 new cases were discovered, making a total prevalence of 17.2 per 1,000.

DOULL, J. A. *et al*.

1936. A field study of leprosy in Cebu. *Internat. J. Leprosy*, 4, 141-170.

GUINTO, R. S. and RODRIGUEZ, J. N.

1941. A field study of leprosy in Talisay, Cebu, Philippines. *Internat. J. Leprosy*, 9, 149-166.

REPORT OF THE PHILIPPINE LEPROSY COMMISSION.

1935. Presented to the Governor-General, September 1935. *Internat. J. Leprosy*, 3, 389-442.

SAMOAN ISLANDS

Population: 12,908

Area: 76

Simmons *et al* (1944) state that leprosy is endemic in Samoa, but the incidence is low. Between 10 and 15 patients transferred each year to Makogai hospital, Fiji. Paroled patients are returned to the island where they have to undergo strict periodic examinations.

SIMMONS, J. S. *et al*.

1944. *Global Epidemiology*. J. B. Lippincott Co., Philadelphia, ed. 1, p. 438.

SARAWAK

Population: 490,585

Area: 50,000

McKinley (1935) cites a Public Health Report for 1931 which states that there were approximately 27 cases at the time in this part of Borneo.

McKINLEY, E. B.

1935. *A Geography of Disease*. George Washington University Press, Washington, D. C., ed. 1, p. 141.

SOLOMON ISLANDS, BRITISH

Population: 94,105

MALAITA, NGGELA, GUADALCANAL, VESABUL,
RUSSEL IS., SAVO, AND SAN CHRISTOVAL.

Area: 11,700

Innes (1938) carried out a survey from August 1937 to March 1938: "In each island, large or small, either the whole population was attracted for survey in the various centers or good representative samples were obtained." Out of a population of 94,000, 21,615 persons were examined and 221 cases of leprosy found, a rate of 10.2 per 1,000. He estimates that there were 900 cases in existence.

INNES, J. R.

1938. Leprosy survey in the British Solomon Islands, Western Pacific. A summarized account of the work and results. *Leprosy Rev.*, 9, 122-128.

TERRITORY OF NEW GUINEA AND PAPUA

Population: 1,007,693

Area: 183,540

Holland (1936) reports that in the TERRITORY OF NEW GUINEA there were 547 patients at Anelaua on New Ireland. The prevalence of the disease in the New Ireland district as a whole was about 11 per 1,000, and in New Hanover over 59 per 1,000. In the villages of New Hanover that were infected earliest the rate was over 200 per 1,000.

Clements (1936) reports that in the TERRITORY OF PAPUA (population 338,822), no leprosy was seen among the coastal and mountain tribes, but that 7 cases were found among the subcoastal Mekeo tribe, out of 2,612 persons examined (2.7 per 1,000).

CLEMENTS, F. W.

1936. A medical survey in Papua. Report of the first expedition by the School of Public Health and Tropical Medicine, Papua. *M. J. Australia*, 1, 451-463. Abstract in *Internat. J. Leprosy*, 1937, 5, 113.

HOLLAND, E. M.

1936. Leprosy in New Guinea. *Internat. J. Leprosy*, 4, 171-176.

WALLIS AND FUTUNA

Population: 6,662

Area: 60

Delinotte (1939) states that the actual number of known leprosy cases was 21, of which 11 were isolated. In 1935 the patients were placed in a special village near Matu-Utu, around which gardens have been developed.

Sorel (1939) estimates that there were at least 40 cases on these islands.

DELINOTTE, H.

1939. The fight against leprosy in the French overseas territories. *Internat. J. Leprosy*, 7, 517-547.

SOREL, F. P. J.

1939. Die Leprabekämpfung in den französischen Kolonien, Besitzungen und Mandaten. *Deutsche med. Wchnschr.*, 65, 676-678.