

ATLAS OF DISEASES - Plate 1
Distribution of Poliomye-
litis. 1900 - 1950



WORLD DISTRIBUTION OF POLIOMYELITIS

1900 - 1950

Discussion of the Sources

THIS MAP is based on a number of sources that differ in reliability and precision. We distinguish: facts and figures issued by international or national agencies; facts and/or figures originating in the books, published papers, and recorded statements of individual authors.

International and national agencies publish figures which we have accepted as the most reliable available at the present time. They are seldom, if ever, qualified by explanatory statements. They do not, and cannot, pretend to represent the whole truth as it exists in nature, but are limited to facts as they have been reported. The reader must use his own judgment as to their reliability, bearing in mind the medical facilities for survey, diagnosis, and notification that may be presumed to exist in various countries.

Individual authors publish both figures and qualifying statements, or sometimes statements without figures. In the first case the facts reported usually apply to a limited area and enough information is given to help interpret the figures accurately. In the second case the statements may be accepted as they stand if their author is well known and accredited.

Example: "Infantile paralysis exists in endemic form in all of the 21 states of Brazil." Or, "Minor epidemics were reported in Piauhy in 1943." (Dr. O. P. Campos, Official Delegate from Brazil at the First International Poliomyelitis Conference.) No figures are given. We assume that the author of the statement has taken into consideration the demography of the region before using the word "epidemic."

No information has been available from Russia since 1927; no answer to our questionnaire has been received.

With these qualifications in mind the reader may use the map and refer to the sources listed below for an explanation of any statement made on the map.

The principal populated areas of the world have been shown by a generalized outline.

Abbreviations

DH	Department of Health
DHW	Department of Health and Welfare
DMS	Director of Medical Services
DPH	Department of Public Health
MH	Ministry of Health
MSP	Ministerio de Salud Pública y Asistencia Social
Q	Questionnaire sent by the American Geographical Society
AER	<i>Annual Epidemiological Report</i> , League of Nations Health Organization for the Year 1932, 1936, 1938.
EVSR	<i>Epidemiological and Vital Statistics Report</i> , United Nations.
ICTMM	<i>Proceedings of the Fourth International Congresses on Tropical Medicine and Malaria</i> , (1948), Dept. of State, Wash., D. C., 1.
MER	<i>Monthly Epidemiological Report and Weekly Epidemiological Record</i> , United Nations and League of Nations.
PASB	Pan American Sanitary Bureau, <i>Monthly Epidemiological Reports</i> .
PB	<i>International Poliomyelitis Congress, Poliomyelitis, Papers and Discussions</i> , (1949), J. B. Lippincott Co., Phila.
PHR	United States Health Service, <i>Public Health Reports</i> .

- PSC *Proceedings of the Sixth Pacific Science Congress of the Pacific Science Association*, (1942), U. of California Press, Berkeley, 5.

TB MED *War Department Technical Bulletin*, War Department, Wash., D. C.

VDM Van Rooyen, C. E., and Rhodes, A. J. (1948), *Virus Diseases of Man*, Thomas Nelson and Sons, New York.

Basic Sources

- Schaeffer, M., and Muckenfuss, R. S. (1940), Experimental Polio-myelitis. National Foundation for Infantile Paralysis.
- Simmons, J. S., et al. (1944). Global Epidemiology: A Geography of Disease and Sanitation. J. B. Lippincott Co., Philadelphia.
- United Nations, World Health Organization,
- _____, (Nov. 1947), *Epidemiological and Vital Statistics Report*, 1, no. 6
- _____, (Sept. 1948), *Epidemiological and Vital Statistics Report*, 1, no. 16
- _____, (Jan. 1950), *Epidemiological and Vital Statistics Report*, 3, no. 1
- _____, (1946) *Epidemiological Record*, 21, 379
- _____, (1949), Demographic Yearbook 1948.
- _____, (1949), *Population and Vital Statistics Reports — Statistical Papers . . . Series A, No. 1*.
- Zappert, J. (1937), *Wien. klin. Wchnschr.*, 50, 463.

Sources by Countries

ADEN

AER

ALASKA

Q Alaska DH, Juneau

AER

Hayes, M., *PSC*, 470

Paul, J. R. (1949), *Preliminary Report of Expedition to Point Barrow, Alaska*, (unpublished)

ALGERIA

EVSR

ANGOLA

Q Direcção dos Serviços de Saúde e Higiene, Luanda

EVSR

ARGENTINA

EVSR

PASB

TB MED 235, 32

Bol. Ofic. san. panam., (1943), 22, 770

Bustamente, G. B. (1944), *Bol. Ofic. san. panam.*, 23, 586

Candioti, C. V., *PB*, 327

Dauer, C. C. (1947), *PHR*, 62, 901

Maggi, R. (1945), *Rev. Assoc. méd. argent.*, 59, 302

AUSTRALIA

Q Commonwealth Bureau of Census and Statistics, Canberra

DPH, Perth

AER

- EVSR
MER LN (1934), no. 1 - 2, 16
PHR
Burnet, F. M. (1940), *M. J. Australia*, 1, 325
Circular on Infantile Paralysis (1937), Public Health Notes, Adelaide, Oct. 1937, 57. (Cited by *Bull. Hyg.*, Lond., 1938, 108)
Drew, J.G. (1933), *M. J. Australia*, 1, 26
Gill, J.M. (1927), *M. Standard*, 50, 11
Hamilton, D.G. (1940), *M. J. Australia*, 1, 148
Helms, K. (1941), *M. J. Australia*, 1, 467
Henson, J., and Port, L. (1945), *South African M. J.*, 19, 422
Litchfield, W. F. (1904), *Australasian Med. Gaz.*, 23, 346
M. J. Australia, (1938), 1, 402
Report of the Commissioner of Public Health for the Year 1948, (1949), Govt. Printer, Perth
Scholes, F. V., *PSC*, 157
Stephens, H. D. (1908), *Intercolonial M. J. Australasia*, 13, 573
Wade, R. B. (1904), *Australasian Med. Gaz.*, 23, 344
Williams, S. (1940), *M. J. Australia*, 1, 147

AUSTRIA

- Q Österreichisches Statistisches Zentralamt, Vienna
AER
MER LN (1932), No. 1, 5
PHR
TB MED 59
Langer, J. (1913), *Arch. f. Kinderb.*, 60, 436
Leiner, C., and von Wiesner, R. (1909), *Berl. klin. Wchnschr.*, 46, 2331
Mayer, C. (1934), *Wien. klin. Wchnschr.*, 47, 1441
Puschnig, R. (1911), *Oesterr. San. Wes.*, 23, 113
Siegl, J. (1937), *Wien. klin. Wchnschr.*, 50, 1357
Stiefler, G. (1915), *Wien. klin. Wchnschr.*, 28, 1079
Zappert, J. (1936), *Wien. med. Wchnschr.*, 86, 821
_____, (1937), *Wien. klin. Wchnschr.*, 50, 463

BARBADOS

AER

MER LN (1934), no. 1-2, 16

BASUTOLAND

Q DMS, Maseru

BECHUANALAND

Q DMS, Mafeking

BELGIAN CONGO

EVSR

MER LN (1935), no. 10-12, 223

Annual Report for 1933 of the Medical Assistance to the Natives
of the Belgian Congo

Rapport sur l'Hygiène Publique au Congo Belge, 1947

Vilen, A. F. (1942), *Ann. Soc. belge de med. trop.*, 22, 309

BELGIUM

Q Institut National de Statistique, Brussels

EVSR

Comby, J. (1930), *Arch. de méd. d. enf.*, 33, 683

Lancet (1945), 2, 440

Timbal, (1930), *Pathologie Infantile*, 27, 16

BERMUDA

AER

BILLITON ISLAND

PHR, (1948), 63, 1532

BOLIVIA

EVSR

PASB

BRAZIL

Q Departamento Nacional de Saúde, Rio de Janeiro

EVSR

PASB

Campos, O. E., *PB*, 40, 328

Ferreira, C. (1912), *Arch. Latino-Am. de pediat.*, 6, 44

_____, (1911), *Bull. Soc. pédiat. de Paris*, 13, 370

Parreiras, D. (1940), *Bull. Hyg.*, 15, 294

BRITISH GUIANA

EVSR

PASB

BRITISH HONDURAS

PASB

BRITISH SOMALILAND

AER

BULGARIA

EVSR

TB MED 58

Lancet (1945), 2, 440

BURMA

Q Director of Medical and Public Health Services, Rangoon

TB MED 77

Min Sein, *PB*, 329

CANADA

Q DHW, Charlottetown

DHW, Victoria

Dominion Bureau of Statistics, Ottawa

DPH, Halifax

- DPH, Regina
MH, Quebec
- AER
EVSR
PASB
PHR
Adamson, J. D., and Dubo, S. (1942), *Canad. J. Pub. Health*, 33, 259
Adamson, J. D., et al. (1949), *Canad. M. A. J.*, 61, 339
Couture, E., *PB*, 329
Donovan, C. R. (1937), *Canad. J. Pub. Health*, 28, 368
Donovan, C. R., and Bowman, M. (1942), *Canad. M. A. J.*, 46, 525
_____, (1942), *Canad. J. Pub. Health*, 33, 246
McCormick, W. J. (1942), *Medical Record*, 155, 89
McGugan, A. C. (1939), *Canad. J. Pub. Health*, 30, 495
_____, (1941), *Canad. J. Pub. Health*, 32, 559
Paul, J. R. (1949), *Preliminary Report Expedition to Point Barrow*, (unpublished)
Quebec (1948). Statistical Year Book. Department of Trade and Commerce
The Canada Year Book 1943-1944. Dominion Bureau of Statistics, Ottawa
- CANARY ISLANDS
TB MED 192
- CARRIACOU IS.
Caribbean M. J. (1942), 4, 62
- CELEBES
AER
- CEYLON
Q Registrar General's Office, Colombo
PHR
- CHILE
EVSR
PASB
PHR
Romero, H., *PB*, 331
- CHINA
TB MED 171, 220
New, W. S. (1934), *Chinese M. J.*, 48, 142
Scott, A. V. (1938), *Chinese M. J.*, 54, 442
Yen, C. H., and Hsü, Y. K. (1941), *Chinese M. J.*, 60, 199
- CHOISEUL ISLAND — See Pacific Islands
- COLOMBIA
Q Ministerio de higiene, Bogotá

- PASB
González, O. G. (1941), *Bol. clin., Univ. de Antioquia*, 7, 373
Ruiz-Mora, J., *PB*, 332
- COSTA RICA
EVSR
PASB
PHR
Montes de Oca, J. (1941), *Bol. Ofic. san. panam.*, 20, 1124
Núñez, S. (1945), *Bol. Ofic. san. panam.*, 24, 681
- CUBA
Q Ministerio de Salubridad y Asistencia Social, Havana
AER
EVSR
PASB
PHR
Corria, F. R., *ICTMM*, 548
International Committee (1932). Poliomyelitis: A Survey Organized by Jeremiah Milbank. Williams & Wilkins, Baltimore.
Joaunneau, L. (1936), *Bol. Soc. cubana de pediat.*, 8, 687
Paul, J. R., Corria, F. R., and Horstmann, D. M. (1949), *Am. J. Trop. Med.*, 29, 543
Recio, A., et al. (1944), *Rev. de med. y cir. Habana*, 49, 1
_____, (1942), *Bol. Ofic. san. panam.*, 21, 1222
Rodriguez Perez, J., and Ramirez Corria, F. (1935), *Rev. de med. y cir. de Habana*, 40, 1067
- CURAÇÃO
EVSR
PASB
Van Creveld, S., *PB*, 43
- CYPRUS
Q Director of Medical and Health Department, Nicosia
EVSR
- CZECHOSLOVAKIA
EVSR
TB MED 107
- DAHOMEY
EVSR
- DENMARK
Q Sundhedsstyrelsen, Copenhagen
EVSR
Henningsen, E. J., and Rasch, G. (1940), *J. Hyg.*, 40, 84
Jensen, C. (1935), *Proc. Roy. Soc. Med.*, 28, 1007
Nissen, N. I. (1935), *Ugesk. f. laeger.*, 97, 371, 1003
_____, (1935), *Acta paediat.*, 18, 1
_____, (1936), *Acta med. Scandinav.*, 88, 72

Sabin, A. B., *PB*, 3
DOMINICA

AER

DOMINICAN REPUBLIC

EVSR

ECUADOR

EVSR

PASB

EGYPT

Q Statistical Department, Cairo

TB MED 214

Paul, J. R., Havens, W. P., jr., and Van Rooyen, C. R. (1944),
Brit. M. J., 1, 841

ENGLAND AND WALES

EVSR

PHR (1948), 63, 397

Batten, F. E. (1911), *Pub. Health*, 25, 51

Bradley, W. H., *PB*, 335

Carruthers, D. A. (1912), *School Hyg.*, 3, 94

Daley, A., and Benjamin, B. (1948), *Medical Officer*, 80, 171

Gilloran, J. L. (1949), *Medical Officer*, 81, 255

Gregor, A., and Hopper, L. B. (1911), *Proc. Roy. Soc. Med.*, 5, 28

Henderson, W. E. (1915), *J. State Med.*, 23, 243

Jubb, G. (1913), *Lancet*, 2, 1380

_____, (1915), *Lancet*, 1, 67

Macewen, H. A. (1918), Great Britain, Local Govt. Board,
Repts. on public health and medical subjects, n.s. 120, London,
H. M. Stationery Office

Moir, J. H. (1911), *Brit. M. J.*, 2, 1693

Parker, G. (1911), *Brit. M. J.*, 1, 609

Payne, D. D. (1941), *Pub. Health*, 54, 209

Soltau, A. B. (1911), *Brit. M. J.*, 2, 1151

Tomkys, L. S. (1912), *Brit. M. J.*, 1, 182

ESTONIA

AER

ETHIOPIA

EVSR

FAROE ISLANDS

AER

FIJI ISLANDS

AER

FINLAND

Q Central Office of Statistics of Finland, Helsinki

AER

TB MED 27

EVSR

TB MED 66

Kaprio, L. A., PB, 336

FORMOSA

Sakai, K., Muto, S., and So, Z. (1940), *Taiwan Igakkai Zassi*, 39, 91

FRANCE

Q l'Institut National d'Hygiène, Paris

EVSR

PHR

Bull. Inst. Nat. Hyg., 1944-1950

Chalier, J., et al. (1942), *J. de méd. de Lyon*, 23, 471

Jeannin, (1931), *Lyon méd.*, 148, 84

J. A. M. A. (1947), 134, 1116

Levaditi, C., and Lépine, P. (1931), *Compt. rend. Soc. de biol.*, 106, 34

_____, and Willemin, L. (1931), *Ann. Inst. Pasteur*, 46, 233

Meyer, R. (1938), *Rev. franç. de pédiat.*, 14, 135

Payan, L., and Massot, M. (1926), *Arch. de méd. d. enf.*, 29, 690

Recueil des Travaux, Institut National d'Hygiène, 1944-1950

Souvestre, (1937), *Bull. Acad. de méd., Paris*, 118, 116

FRENCH CAMEROONS

Q Directeur de la Santé Publique, Yaoundé

AER

EVSR

FRENCH EQUATORIAL AFRICA

AER

EVSR

Ceccaldi, J. (1943), Rapport . . . de l'Institut Pasteur de Brazza-ville

FRENCH WEST AFRICA

AER

EVSR

Findlay, G. M., Anderson, J. R., and Haggie, M. H. K. (1946), *J. Roy. Army M. Corps*, 86, 20

LePine, P. R., PB, 337

Olitsky, P. K., and Findlay, G. M. (1946), *J. Bact.*, 52, 255

GERMANY

Q Chief of Preventive Medicine Branch of the Medical Division, U. S. Zone

AER

EVSR

MER LN

- Bauke, E. E. (1939), *Deutsche med. Wchnschr.*, 65, 205
Birk, W. (1922), *Med. Cor.-Bl. f. Württemb.*, 92, 133
Brit. M. J., (1935), 2, 311
Brüning, H. (1934), *Med. Klin.*, 30, 1187
Guttman, L. (1933), *Med. Klin.*, 29, 939
Huber, H. G. (1938), *München. med. Wchnschr.*, 85, 638
Kochmann, R. (1928), *Deutsche med. Wchnschr.*, 54, 1412
Krause, P. (1909), *Deutsche med. Wchnschr.*, 35, 1822
Lindstadt, R. (1929), *Ztschr. f. Kinderh.*, 47, 372
Meyer, M. (1911), *Arch. f. Kinderh.*, 56, 46
Möllers, B. (1936), *Öff. Gesundh Dienst.*, 2, 253
Müller, H. (1938), *München. med. Wchnschr.*, 85, 638
Petermann, Geographische Mitteilungen, (1944), 90 Jahr., 7/8
Heft, Juli/August
Pohlen, K. (1934), *Gesundh. u. Erzieh.*, 47, 305
Sabin, A. B., *PB*, 3
Sievers, M. (1940), *Klin. Wchnschr.*, 19, 766
Walcha, (1928), *Med. Klin.*, 24, 1584

GIBRALTAR

AER

GILBERT AND ELLICE ISLANDS

TB MED 189

Ann. Med. and San. Rep., Gilbert and Ellice Islands Colony,
1924-1929, Govt. Printer, Suva

Blue Books, July 1, 1932 — March 31, 1935, Govt. Printer, Suva

GOLD COAST

Q DMS, Accra

Findlay, G. M., et al. (1946), *J. Roy. Army M. Corps*, 86, 20

GREECE

AER

EVSR

PHR

TB MED 26

GREENLAND

Hoygaard, A. (1939), *Lancet*, 1, 245

Hrolv, K. (1935), *Canad. J. Pub. Health*, 26, 575

Meddelser om Grönland, (1935), 117, 4, 151

grenada

AER

GUAM

TB MED 41

International Committee (1932). Poliomyelitis: A Survey Organized by Jeremiah Milbank. Williams & Wilkins, Baltimore.

GUATEMALA

EVSR

- PASB
 HAINAN
 TB MED 118
- HAITI
 AER
- HAWAII
 Q DH, Honolulu
 Doolittle, S. E. (1943), *Hawaii M. J.*, 3, 29
 Enright, J. R., *PB*, 49
 Lee, R. K. E. (1941), *PHR*, 56, 1556
 Morales, E. G. (1930), *J. Infect. Dis.*, 46, 31
 Paul, J. R. (1947 a), *Am. J. Hyg.*, 45, 206
- HONDURAS
 EVSR
 PASB
- HUNGARY
 Q Hungarian Central Statistical Office, Budapest
 EVSR
MER LN (1931), 11, 7
 PHR
 TB MED 140
Acta path. et microbiol. Scandinav., Suppl., 68
 Bokay, J. (1912), *Jahrb. f. Kinderh.*, 12, 603
 Fritz, S. (1912), *Gyermekorvos*, Budapest
Lancet (1945), 2, 440
 Petrilla, A. (1936), *Orvosi hetil.*, 13, 288
- ICELAND
 Q Landlaeknir, Reykjavik
 AER
 EVSR
MER LN (1930), 2, 69
 PHR
- INDIA
 Q Director, Public Health, Poona
 correspondence, Dr. Nephi K. Kezerian, Children's Hospital
 School, Baltimore, Md. May 26, 1950
 McAlpine, D. (1945), *Lancet*, 2, 130
 ———, (1946), *Proc. Roy. Soc. Med.*, 39, 169
 Paul, J. R., Havens, W. P., and Van Rooyen, C. E. (1944), *Brit. M. J.*, 1, 841
- INDOCHINA
 Q Le Conseiller a la Santé Publique,
 AER
 EVSR
 Canet, J. (1936), *Bull. Soc. med.-chirug. Indo-Chine*, 14, 206

IRAQ

EVSR

Witry, H. A., *PB*, 339

IRELAND

Q DH, Dublin

EVSR

PHR

TB MED 215

Deeny, J., and MacCormack, J. D. (1946), *Lancet*, 2, 8

Musgrave, J. A. (1942), *Medical Officer*, 68, 141

ISRAEL

EVSR

Hebrew M. J., (1938), 2, 258

Paul, J. R., Havens, W. P., and Van Rooyen, C. E. (1944), *Brit. M. J.*, 1, 841

ITALY

Q Istituto Centrale di Statistica, Rome

EVSR

PHR

TB MED 178

Cannarsa, F. (1924), *Pediatria*, 32, 215

Castellana, A. (1937), *Folia med.*, 23, 986

Gioseffi, M. (1911), *Riv. clin. pediat.*, 9, 640

Gottardi, G. (1931), Rilievi statistici clinici ed epidemiologici sulla malattia di Heine-Medin in provincia de Padova, Padua, A. Milani.

Magliano, G. (1930), *Riv. clin. pediat.*, 28, 966

Mayanz, F. (1911), *Riv. clin. pediat.*, 9, 710

Minciotti, G. (1931), *Pediat. med. prat.*, 6, 19

Nucci, E. (1936), *Riv. clin. pediat.*, 34, 412

Petragnani, G. (1937), *Bull. Office internat. d'hyg. pub.*, 29, 2129

Saggese, V. (1933), *Riforma med.*, 49, 1850

Simoni, R. (1922), *Clin pediat.*, 4, 11

IVORY COAST

AER

JAMAICA

Q DMS, Kingston

EVSR

PASB

PHR

JAPAN

EVSR

PHR, (1917), 32, 1104

TB MED 160

Paul, J. R. (1947), *Am. J. Hyg.*, 45, 206
VDM, 949

JAVA

TB MED 102

KASHMIR AND JAMMU

AER

KENYA

Q DMS, Nairobi

EVSR

KOREA

Paul, J. R. (1949), *Am. J. Hyg.*, 50, 57

LATIVA

AER

MER LN, (1932), no. 1, 10

(1935), no. 10-12, 208

LIBERIA

Internat. Bull. Econ. M. Res. Pub. Hyg., A 40, (1939), Infantile Paralysis

LITHUANIA

AER

MER LN, (1935), no. 10-12, 208

LUXEMBOURG

Q Office de la Statistique Générale, Luxembourg

EVSR

PHR

MADAGASCAR

Q Directeur du Service de Santé, Tananarive

EVSR

PHR

Fontoynont and Raharijaona (1930), *Bull. Soc. path. exot.*, 23, 554

_____, (1933), *Bull. Soc. path. exot.*, 26, 1118

MALAYA

EVSR

PHR

Kauntze, W. H. (1946), *Bull. Office internat. d'hyg. pub.*, 38, 281

MALTA

Q Office of Statistics, Valletta

EVSR

PHR

Agius, T., et al. (1945), *Brit. M. J.*, 1, 759

Bernard, A. V. (1945), *Brit. M. J.*, 2, 26

Bernstein, H. G. G., et al. (1945), *Brit. M. J.*, 1, 763

Debono, J. E. (1945), *Brit. M. J.*, 2, 61

- Kauntze, W. B. (1946), *Bull. Office internat. d'hyg. pub.*, 38, 281
- Morana, J. (1945), *J. Roy. Inst. Pub. Health & Hyg.*, 8, 181
- Seddon, H. J., et al. (1945), *Quart. J. Med.*, 14, 1
- MANCHURIA
TB MED 216, 47
- MARTINIQUE
AER
- MAURITIUS
Q DMS, Port Louis
EVSR
PHR
Kauntze, W. H. (1946), *Bull. Office internat. d'hyg. pub.*, 38, 281
- McFarlan, A. M. (1946), *Proc. Roy. Soc. Med.*, 39, 323
- _____, Dick, G. W. A., and Seddon, H. J. (1946), *Quart. J. Med.*, 15, 183
- Sabin, A. B., PB, 14
- Seddon, H. J., Hawes, E. I. B., and Raffray, J. R. (1946), *Lancet*, 2, 170
- VDM, 950
- MEXICO
EVSR
PASB
PHR
Dauer, C. C. (1947), *PHR*, 62, 901
- Farill, J., PB, 340
- Stuck, W. G., and Loiselle, A. O. (1943), *J. A. M. A.*, 122, 853
- MOLUCCAS
AER
- MOROCCO
AER
- MOZAMBIQUE
Q Direcção dos Serviços de Saúde, Lourenço Marques
EVSR
- NAURU IS.
International Committee (1932). Poliomyelitis: A Survey Organized by Jeremiah Milbank. Williams & Wilkins, Baltimore.
- Müller, A. (1910), *Archiv. f. Schiffs. u. Tropen Hyg.*, 14, 535
- NETHERLANDS
EVSR
PASB
Bolt, N.A. (1939), *Nederl. tijdschr. v. geneesk.*, 83, 5141
- Scheltema, G. (1907), *Nederl. tijdschr. v. geneesk.*, 1, 1673
- Schuurmans Stekhoven, W. (1930), *Geneesk. gids.*, 8, 222

Siegenbeek van Heukelom, J. (1918), *Nederl. tijdschr. v. geneesk.*, 54, 1339

Stekhoven, W. S. (1931), *Geneesk. gids.*, 9, 317

Van Creveld, S., *PB*, 41, 43, 341

Van der Hagen, (1909), *Tijdschr. v. sociale byg.*, 11, 317

Van Emden, J. E. G., and Gorter, E. (1909), *Tijdschr. v. sociale byg.*, 11, 349

NETHERLANDS INDIES

(Java, Sumatra, Billiton Islands)

EVSR

PHR

Van Creveld, S., *PB*, 43

NEW GUINEA, MANUS, NEW BRITAIN, NEW IRELAND

TB Med 18, 13

Am. J. Trop. Med., (1944), Suppl., 24, no. 3

International Committee (1932). Poliomyelitis: A Survey Organized by Jeremiah Milbank. Williams & Wilkins, Baltimore.

NEW ZEALAND

Q Census and Statistics Department, Wellington

AER

EVSR

PHR

Cook, D., *PB*, 342

James, S. P. (1937), *Bull. Office internat. d'hyg. pub.*, 29, 2133

Report of the Commissioner of Public Health for the Year 1948, (1949), Government Printer, Perth

Watt, M. H. (1938), *Report of the Director-General of Health, N.Z. Year ended 31st March*, Appendix B, 72.

NEWFOUNDLAND

Q DH, St. John's

PASB

PHR

NICARAGUA

EVSR

PASB

Dauer, C. C. (1947), *PHR*, 62, 901

Taylor, C. E. (1944), *Medical Record, N. Y.*, 230, 790

NICOBAR ISLANDS

correspondence, Dr. Nephi K. Kezerian, Children's Hospital School, Baltimore, Md.

Pandit, G. G., *ICTMM*, 546

NIGERIA

Q DMS, Lagos

NORTHERN IRELAND

Q General Register Office, Belfast