“Consulta do Viajante: Princípios, Experiências e Particularidades”

José Poças
Director do Serviço de Doenças Infecciosas
CHS – HSB *EPE* Setúbal

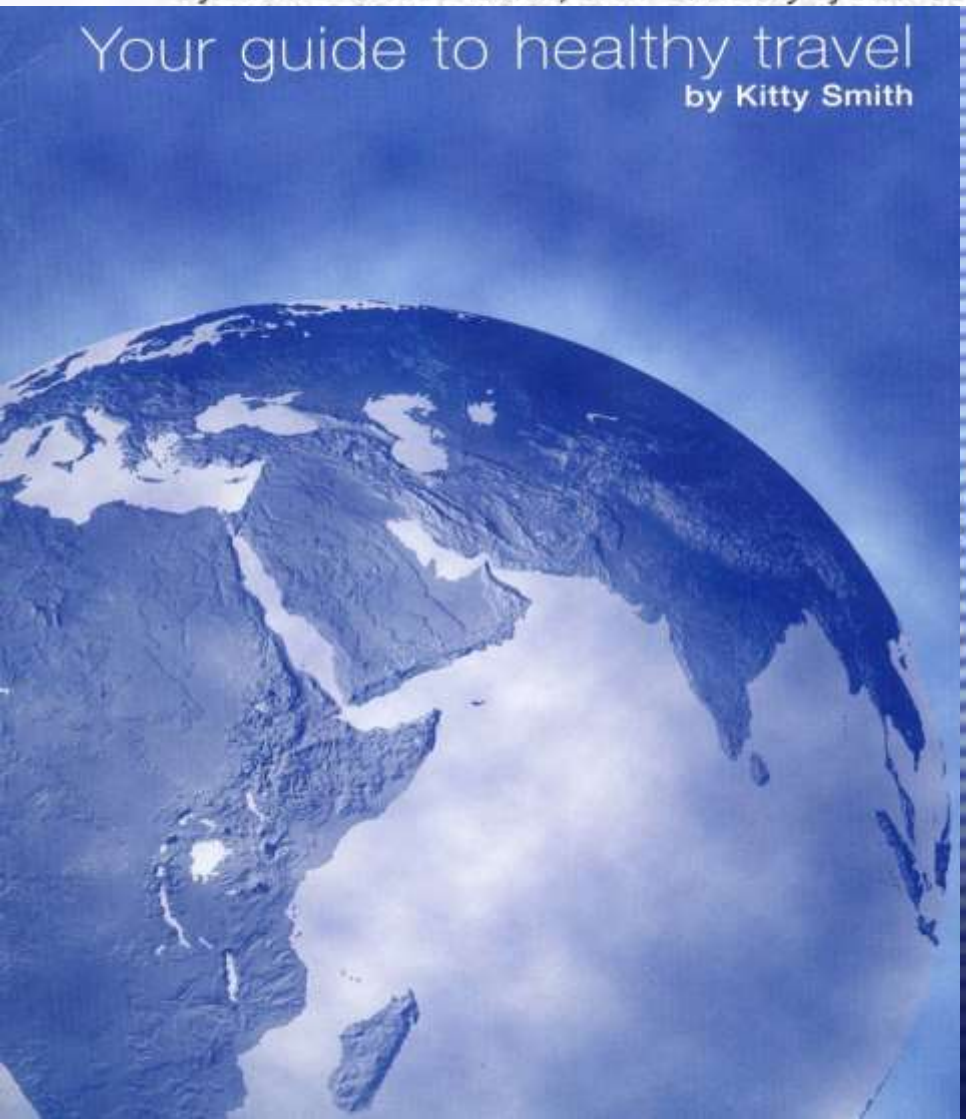
CLINICAL MICROBIOLOGY REVIEWS, Oct. 1997, p. 650–673
0893-8512/97/$04.00+0

Vol. 10, No. 4

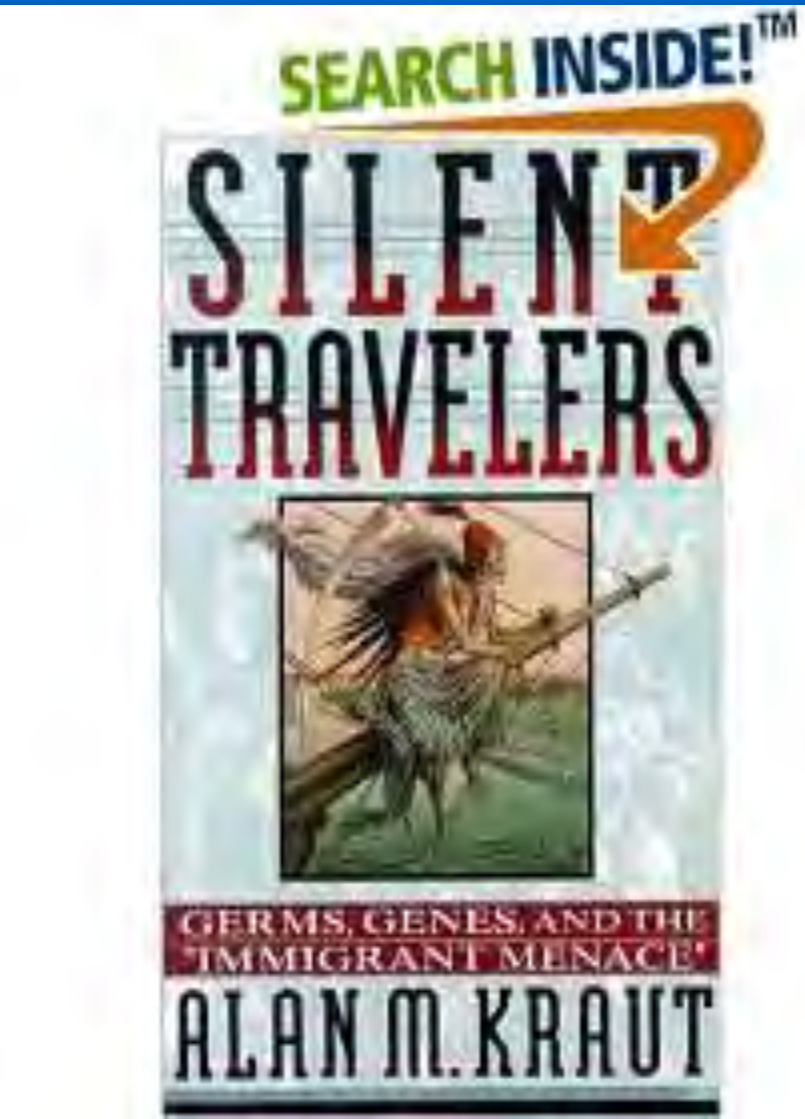
A Week in the Life of a Travel Clinic

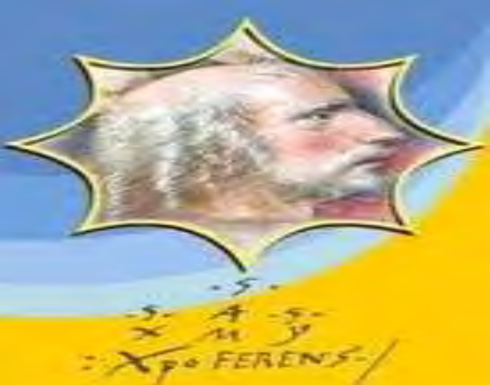
DONALD C. BLAIR*

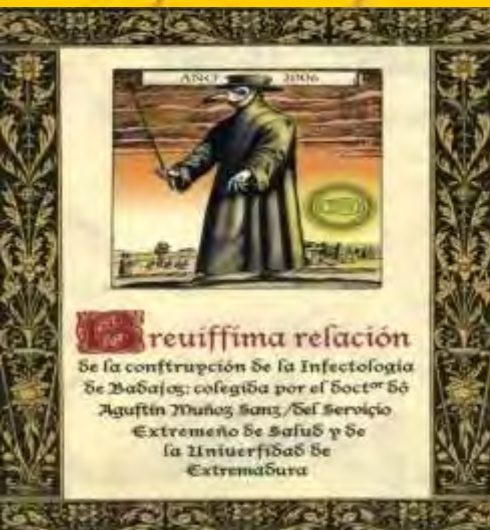
Infectious Disease Division, State University of New York—Health Science Center, Syracuse, New York 13210

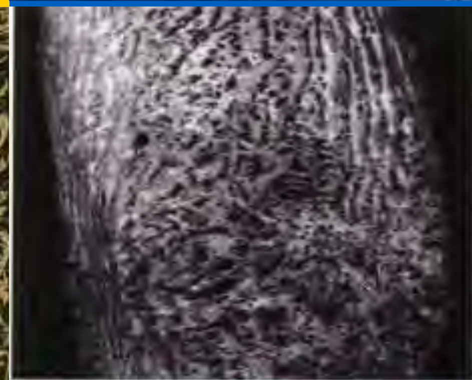


Os Agentes Transmissíveis NÃO conhecem Fronteiras …

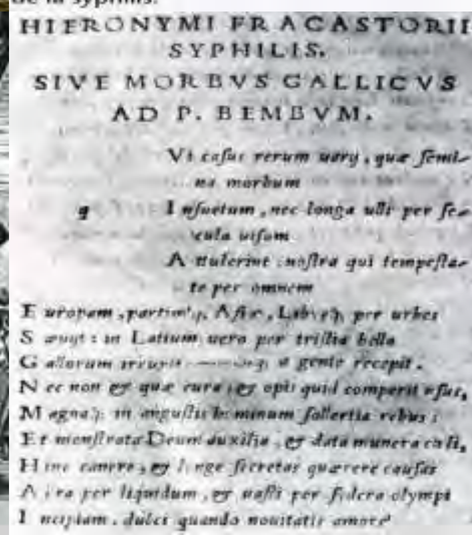




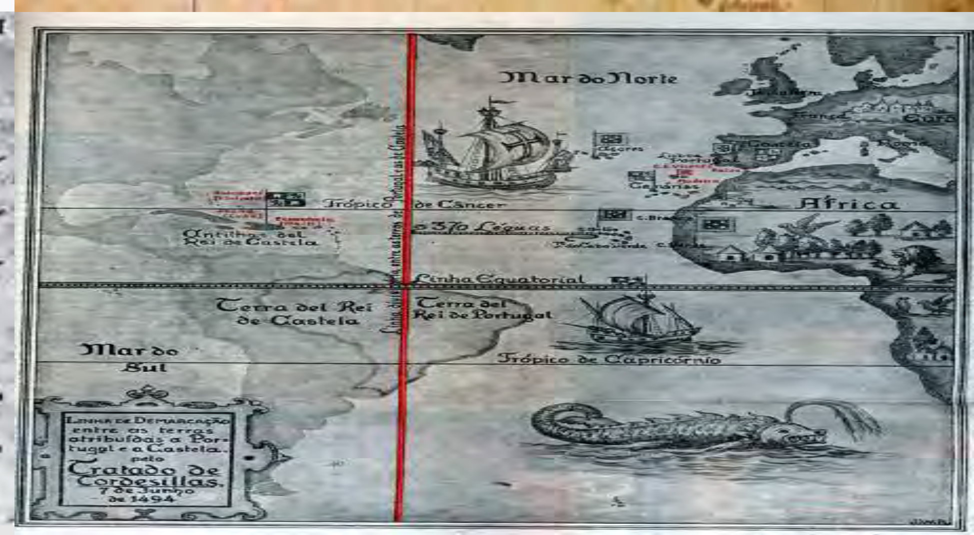




8. Tibia droit d'une jeune femme (Gloucester, XIII^{e}-XIV^{e} siècles) présentant une lésion liée à une tréponématose. Antérieur à 1493, ce cas, avec d'autres observations réalisées en Grande-Bretagne, conforte la thèse d'une origine européenne de la syphilis.



HIERONYMI FRACASTORII SYPHILIS.
SIVE MORBVS GALLICVS
AD P. BEMBVM.

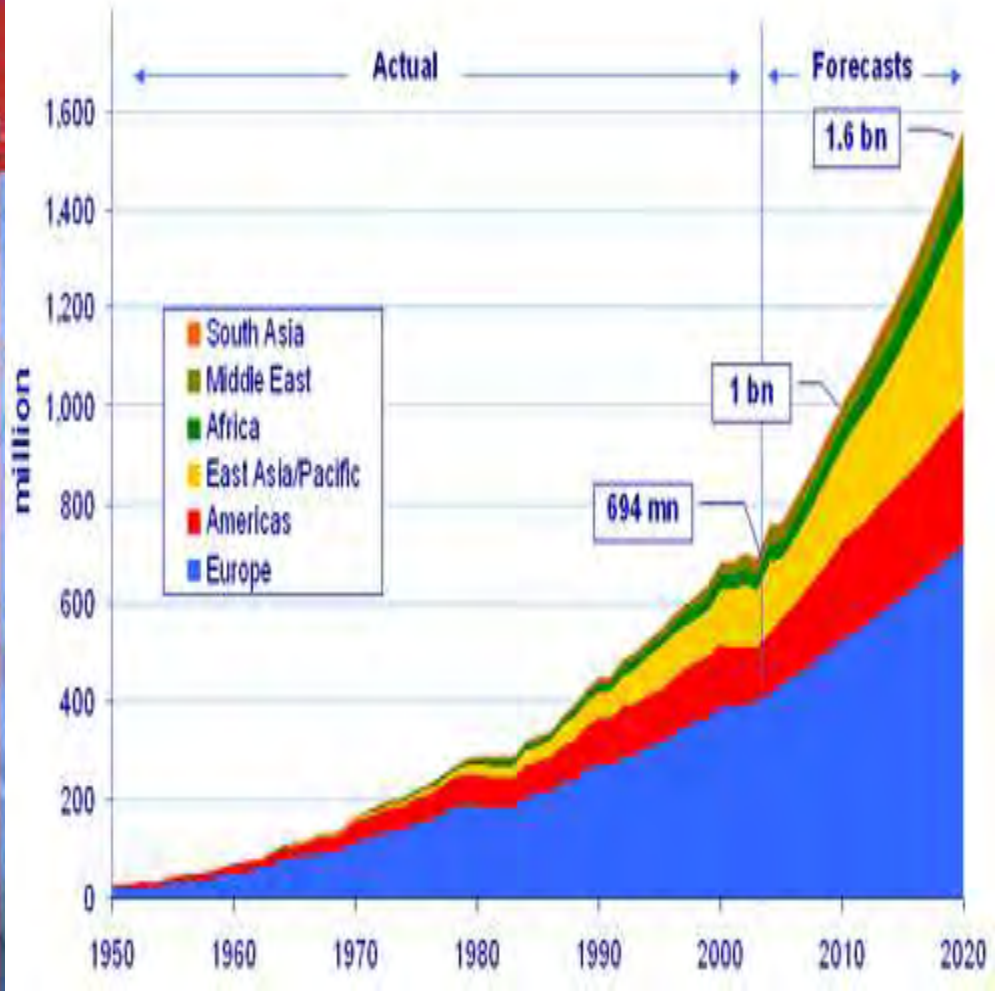


Estimativas Anuais

- Viajantes
  - 1 bilião de pessoas atravessam as fronteiras (aumento > a 7% / ano nos últimos 40 anos)
  - 50 a 170 milhões para países em vias de desenvolvimento
    - menos de 1/3 dos doentes procuram aconselhamento médico especializado
    - 13 a 75 % dos doentes apresentam um qualquer problema de saúde
      - 3 a 11 % sofrem de uma doença febril
      - 1 a 19 % solicitam una consulta médica
      - 0,5 a 2 % têm de ser internados em estabelecimento hospitalar
      - 0,01 a 0,1 % são evacuados para tratamento médico mais diferenciado
      - Mortalidade: 1/100.000 (2 % por doença infecciosa)
- Agências de Viagem
  - > de 50% dão informações erradas / incompletas

Frequent Travelers and Rate of Spread of Epidemics

T. Déirdre Hollingsworth,* Neil M. Ferguson,* and Roy M. Anderson*



Emerging Infectious Diseases, along with more than 200 other science journals, is dedicating its October 2007 issue to the theme Global Poverty and Human Development. Emerging infections linked to global poverty are examined in the following articles:

Global Public Health Security; Preparedness for Highly Pathogenic Avian Influenza Pandemic in Africa; Plague Reappearance in Algeria after 50 Years, 2003; HIV and Tuberculosis in Ho Chi Minh City, Vietnam, 1997–2002; Epidemiology of Schistosomiasis in the People's Republic of China, 2004; Dengue Fever Seroprevalence and Risk Factors, Texas–Mexico Border, 2004; Cost-effectiveness of Algorithms for Confirmation Test of Human African Trypanosomiasis; Public Transportation and Pulmonary Tuberculosis, Lima, Peru; Prevalence of *Plasmodium falciparum* Infection in Rainy Season, Artibonite Valley, Haiti, 2006; Evaluating Tuberculosis Case Detection in Eritrea; West Nile Virus Infection among the Homeless, Houston, Texas, USA; *Schistosoma haematobium* and *S. mansoni* among Children, Southern Sudan; Influenza A and B Infection in Children in Urban Slum, Bangladesh; Identification of Rickettsiae, Uganda and Djibouti; and Skin and Soft Tissue Infections and Vascular Disease in Drug Users, England.

Global Public Health Security

Guénaël Rodier,* Allison L. Greenspan,† James M. Hughes,† and David L. Heymann*

"When the world is collectively at risk, defense becomes a shared responsibility of all nations."
——Dr. Margaret Chan, Director General, World Health Organization; World Health Day 2007

Tourism Trends

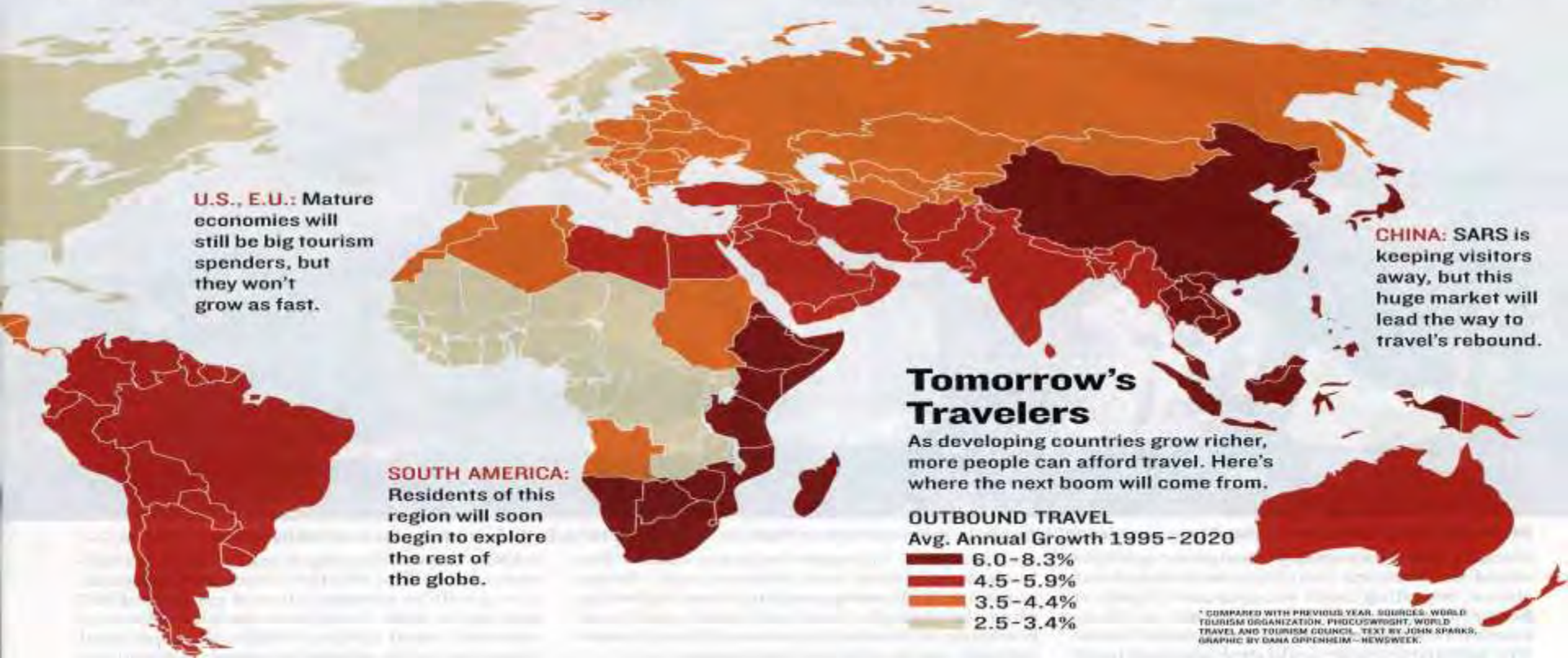
Online booking is booming, but a world of troubles has cut the number of travelers.

PROJECTED GROWTH OF ONLINE BOOKING (US$ billions)

GROWTH STOPS, BUT ...

... BUSINESS IS STILL BIG

200 million jobs in an industry that generates **$3.5 trillion,** or 10 percent of global gross domestic product



* COMPARED WITH PREVIOUS YEAR. SOURCES: WORLD TOURISM ORGANIZATION, PHOCUSWRIGHT, WORLD TRAVEL AND TOURISM COUNCIL. TEXT BY JOHN SPARKS, GRAPHIC BY DANA OPPENHEIM—NEWSWEEK.

The Role of the Traveler in Emerging Infections and Magnitude of Travel

Lin H. Chen, MD, FACP[a,*], Mary Elizabeth Wilson, MD, FACP, FIDSA[b]

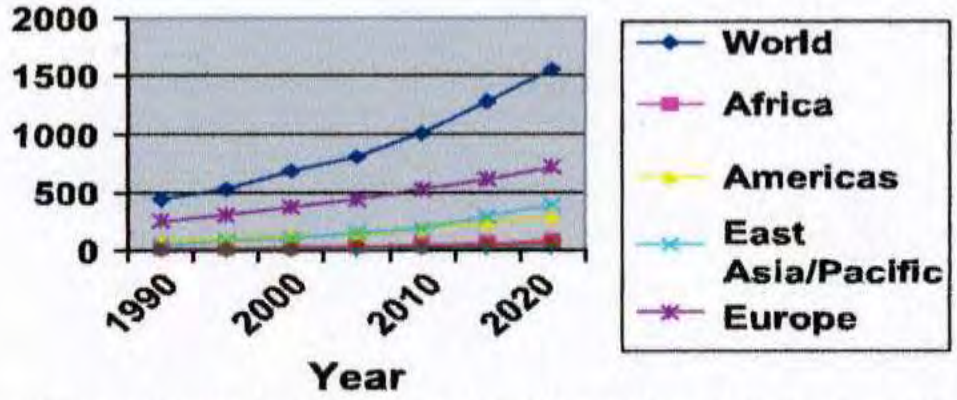


Fig. 1. International tourist arrivals by region (millions) with forecast. (*Data from* WTO Tourism Highlights 2007 and World Tourism Barometer 2008;6(1). Available at http://www.world-tourism.org/facts/menu.html.)

Table 1
Growth in world population and international tourist arrivals

Year	World Population (Millions)	International Tourist Arrivals (Millions)
1950	2557	25.3
1985	4852	329
1995	5694	550
2007	6600	898
Change from 1950 to 2007	2.6×	35×

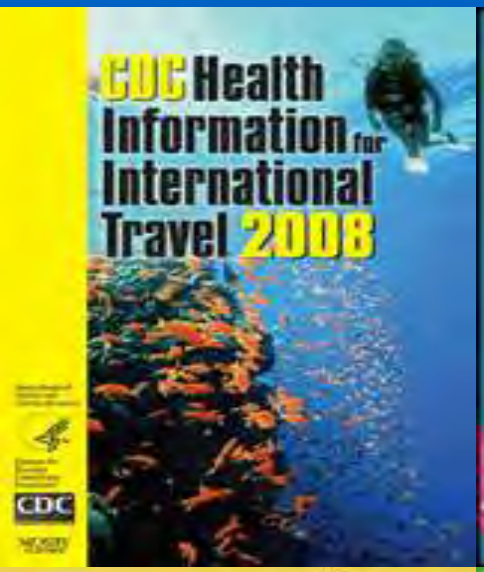
Data from US Census Bureau and World Tourism Organization. Available at: http://www.census.gov/ipc/www/idb and http://www.world-tourism.org/facts/menu.html, respectively.

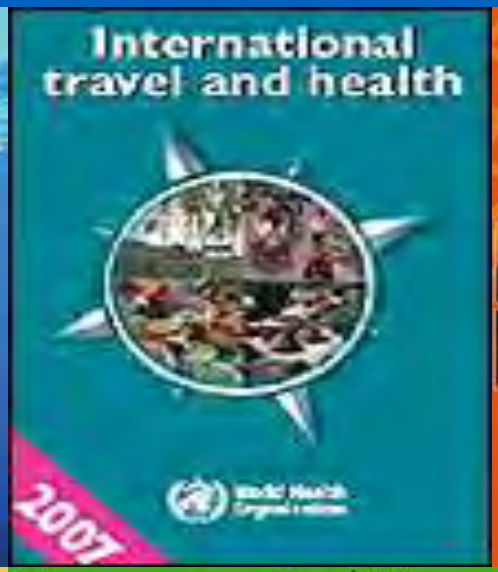
Table 2
Comparison of arrivals by purpose of visit, 1990 and 2006

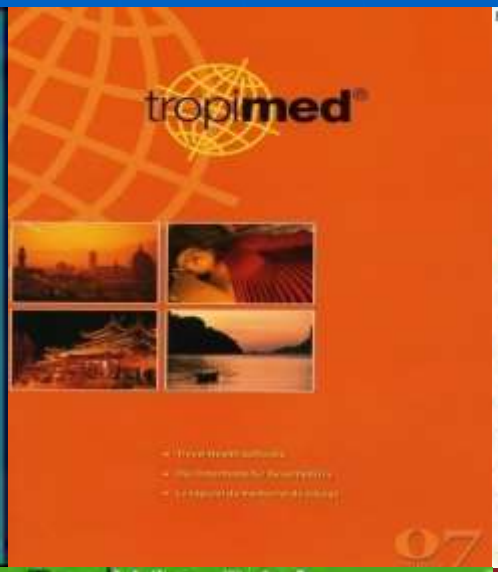
Reason for Travel	Total International Arrivals (%)	
	1990 (International Tourist Arrivals = 438 Million)	2006 (International Tourist Arrivals = 846 Million)
Leisure, holiday	55.6	51
Business, professional	13.8	16
Visit friends and relatives, health, religion	19.6	27
Not specified	11.0	6

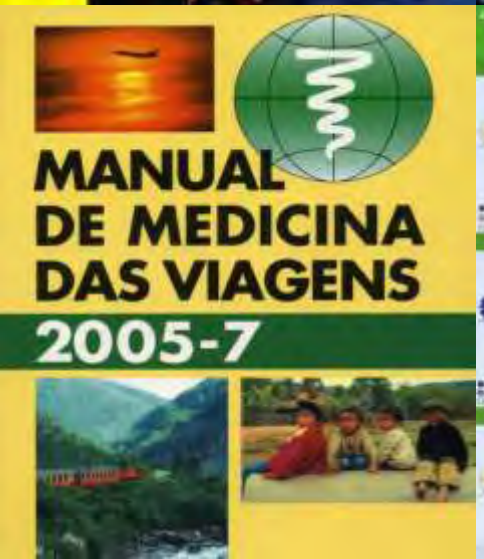
Data from World Tourism Organization. Available at: http://www.unwto.org.

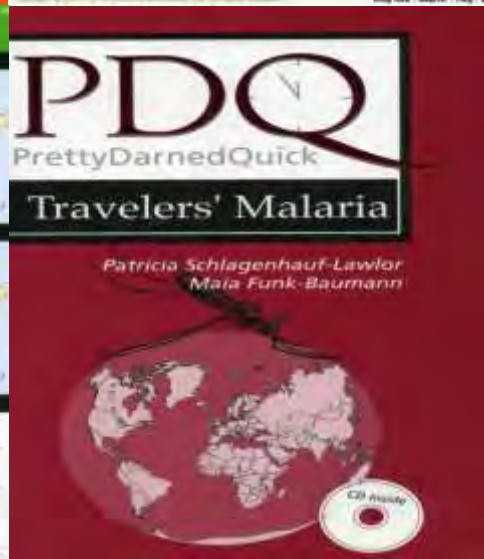
A IMPORTÂNCIA de uma Informação CREDÍVEL e ACTUALIZADA …







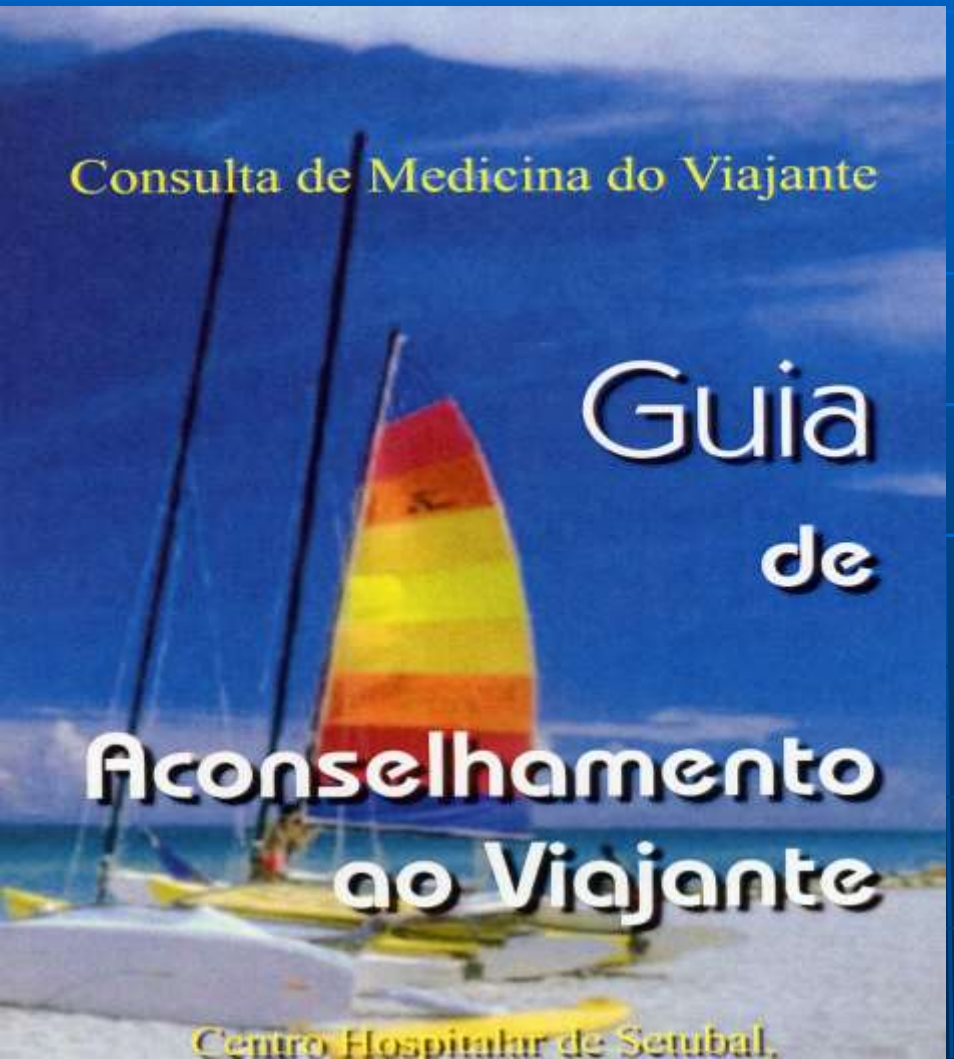




A IMPORTÂNCIA de uns Registos Clínicos CORRECTOS e EXPLÍCITOS …

A IMPORTÂNCIA do Cumprimento das Regras Básicas de Aconselhamento Geral …

Casuística: Consulta do Viajante do CHS – HSB *EPE* Setúbal



- Consultas Externas (2003/06 – 2007/10)
  - Total: 3161 (M: 9 – 10 /S.)
    - Adultos: 3062 (96,9%)
    - Crianças: 99 (3,1%)
- Consultas Externas (2003/06 – 2005/05)
  - Total: 718
    - Pós-Viagem: 10 (1,4%)
      - Malária: 3
      - Diarreia do Viajante: 3
      - Schistosomose: 1
      - Escabiose: 1
      - Outros Diagnósticos: 2

Conflict and Emerging Infectious Diseases

Michelle Gayer,* Dominique Legros,* Pierre Formenty,* and Maire A. Connolly*

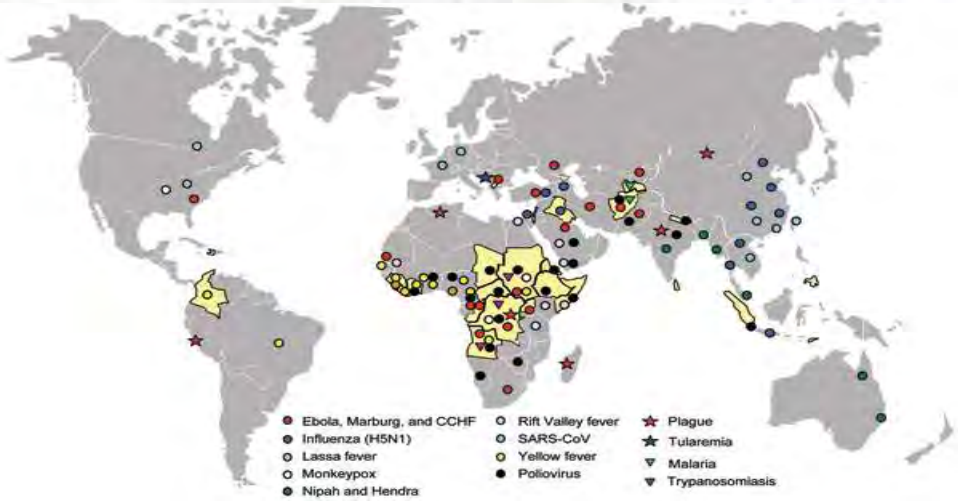
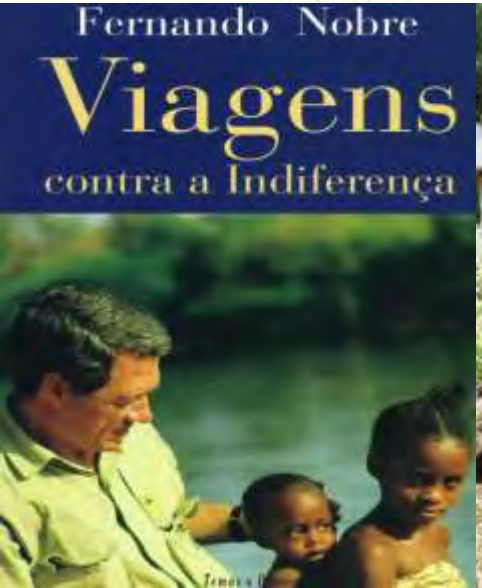
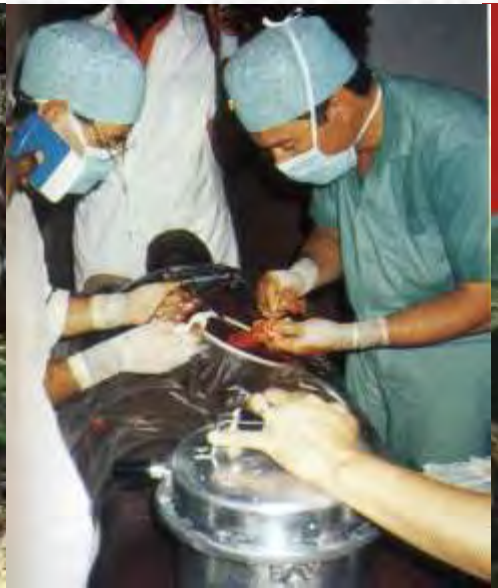
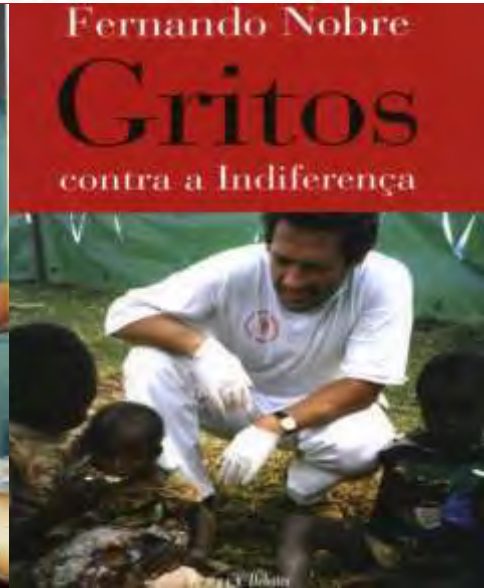


Figure. Geographic distribution of recent emerging or reemerging infectious disease outbreaks and countries affected by conflict, 1990–2006. Countries in yellow were affected by conflict during this period (source: Office for the Coordination of Humanitarian Affairs, World Health Organization, www.reliefweb.int/ocha_ol/onlinehp.html). Symbols indicate outbreaks of emerging or reemerging infectious diseases during this period (source: Epidemic and Pandemic Alert and Response, World Health Organization, www.who.int/csr/en). Circles indicate diseases of viral origin, stars indicate diseases of bacterial origin, and triangles indicate diseases of parasitic origin. CCHF, Crimean-Congo hemorrhagic fever; SARS-CoV, severe acute respiratory syndrome coronavirus.







TRAVELERS, IMMIGRANTS, AND REFUGEES

PREVENTING EMERGING INFECTIOUS DISEASES

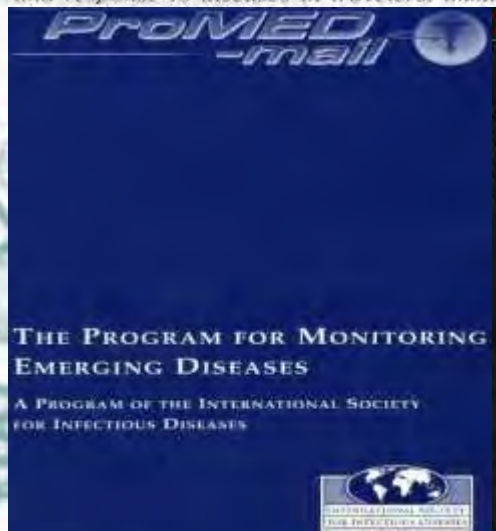
Addressing the Problem of Diseases of Travelers, Immigrants, and Refugees

A Strategy for the 21st Century

CDC

CENTERS FOR DISEASE CONTROL AND PREVENTION

Figure 1: Examples of CDC collaborative projects to enhance global surveillance and response to diseases in travelers, immigrants, and refugees.

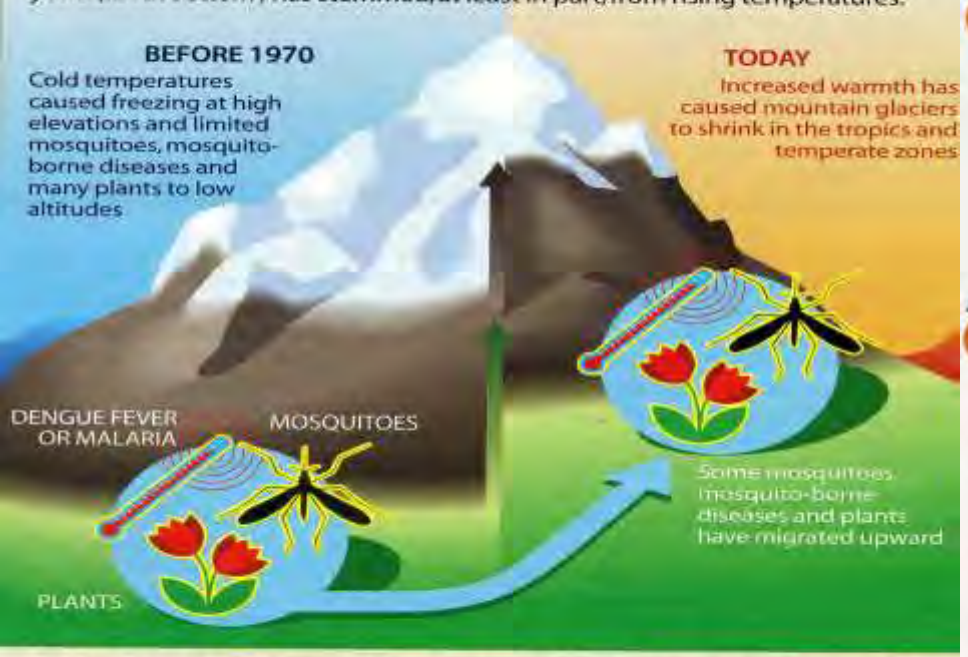


MALARIA... WEST NILE VIRUS... HANTAVIRUS... DENGUE... CHOLERA...

Global Warming: The Hidden Health Risk

Changes Are Already Under Way

Computer models have predicted that global warming would produce several changes in the highlands: summit glaciers (like North Polar sea ice) would begin to melt, and plants, mosquitoes and mosquito-borne diseases would migrate upward into regions formerly too cold for them (*diagram*). All these predictions are coming true. This convergence strongly suggests that the upward expansion of mosquitoes and mosquito-borne diseases documented in the past 15 years (*list at bottom*) has stemmed, at least in part, from rising temperatures.



WHERE DISEASES OR THEIR CARRIERS HAVE REACHED HIGHER ELEVATIONS

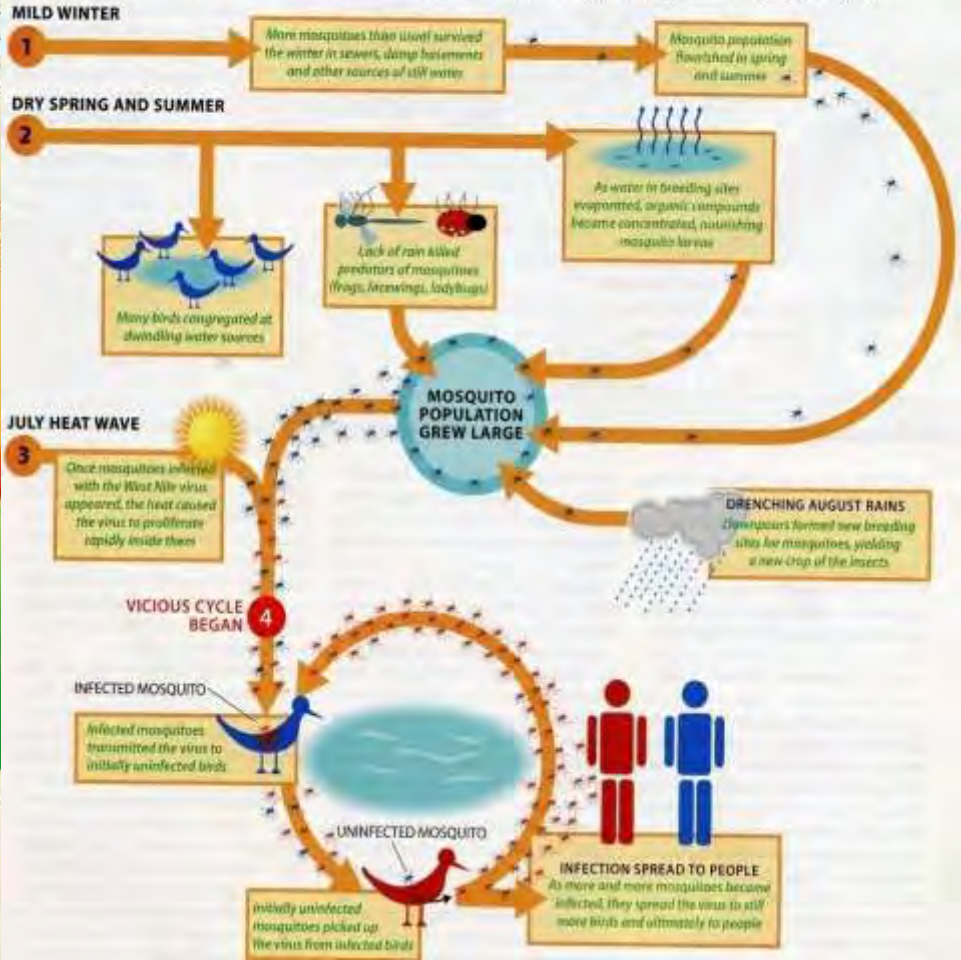
Malaria
Highlands of Ethiopia, Rwanda, Uganda and Zimbabwe
Usamabara Mountains, Tanzania
Highlands of Papua New Guinea and West Papua (Irian Jaya)

Dengue fever
San Jose, Costa Rica
Taxco, Mexico

***Aedes aegypti* mosquitoes**
(can spread dengue fever and yellow fever)
Eastern Andes Mountains, Colombia
Northern highlands of India

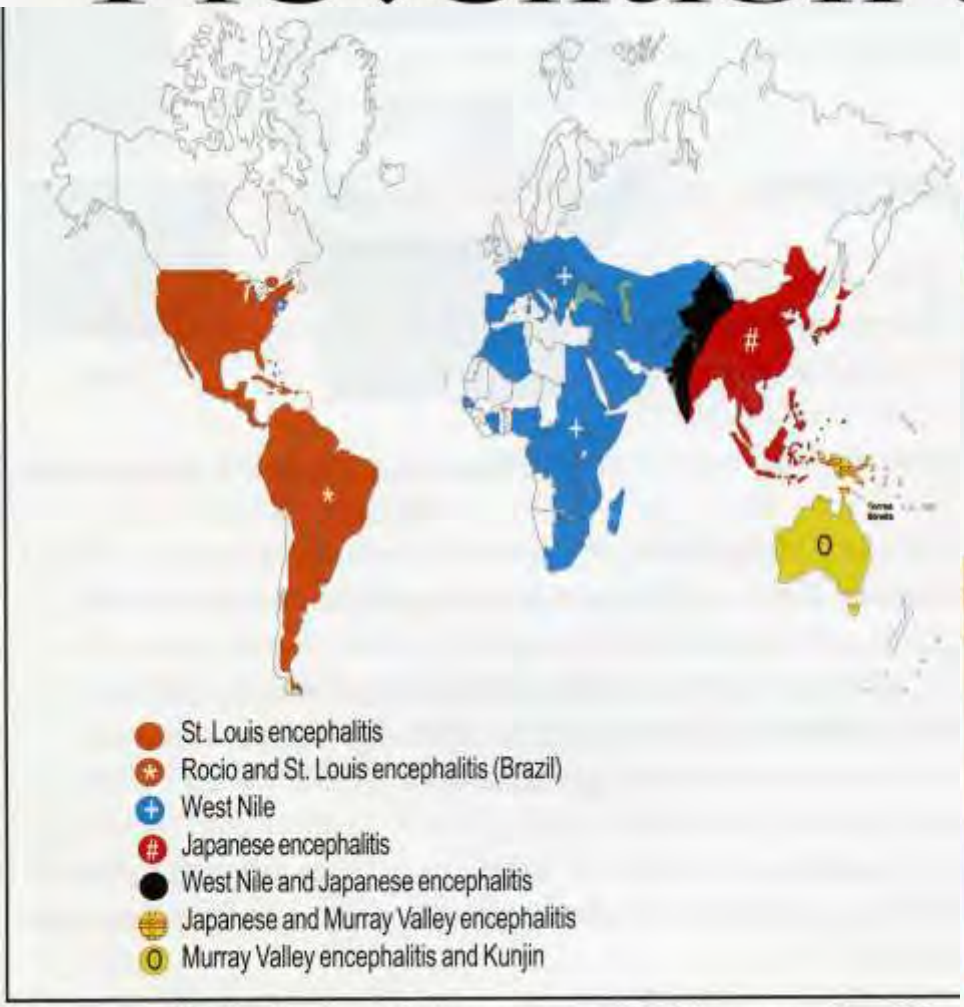
Weather and the West Nile Virus

This diagram offers a possible explanation for how a warming trend and sequential weather extremes helped the West Nile virus to establish itself in the New York City area in 1999. Whether the virus entered the U.S. via mosquitoes, birds or people is unknown. But once it arrived, interactions between mosquitoes and birds amplified its proliferation.

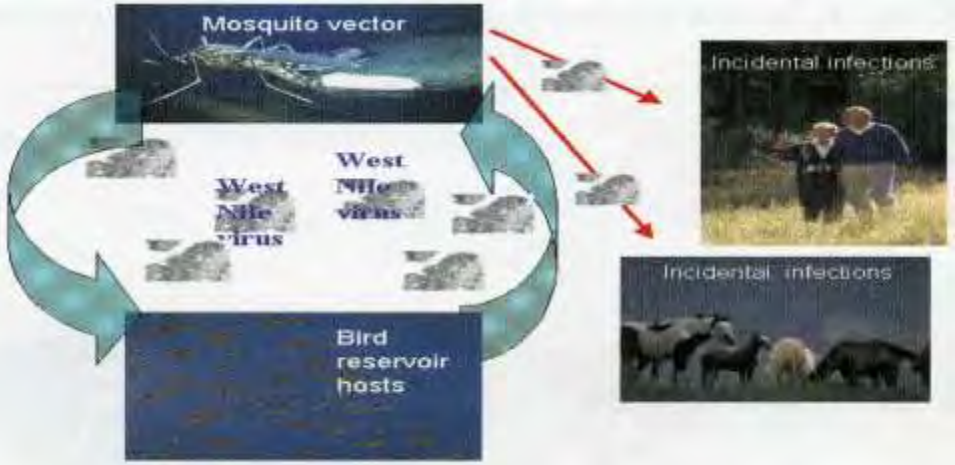


West Nile Virus Infection

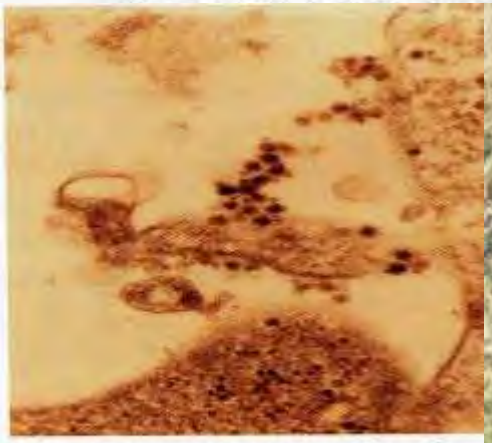
Prevention and Control



The geographic distribution of the Japanese encephalitis serocomplex of the family Flaviviridae, viruses that are related to West Nile virus



West Nile virus transmission cycle in nature



Electron micrograph of West Nile virus particles (cluster of dark spheres)

Storm sewer catch basins can be mosquito breeding sites.

Pathogenic flaviviruses

E M Gould, T Solomon

Lancet 2008; 371: 500–09
Cell Biology, Maryfield Road, Oxford, UK (E M Gould PhD); and Viral Encephalitis Group, Department of Neurological Science, Walton Centre for Neurology and Neurosurgery, University of Liverpool, Liverpool, UK (Prof T Solomon FRCP)

Haemorrhagic disease, encephalitis, biphasic fever, flaccid paralysis, and jaundice are typical manifestations of diseases in human beings after infections by mosquito-borne or tick-borne flaviviruses such as yellow fever, dengue, West Nile, St Louis encephalitis, Japanese encephalitis, tick-borne encephalitis, Kyasanur Forest disease, and Omsk haemorrhagic fever. Although the characteristics of these viruses are well defined, they are still unpredictable with increases in disease severity, unusual clinical manifestations, unexpected methods of transmission, long-term persistence, and the discovery of new species. This Seminar will compare the epidemiological and clinical features of the medically important flaviviruses, consider the effect of human activity on their evolution and dispersal, and draw attention to new findings and some of the unanswered questions, unresolved issues, and controversies that remain.

	Year of first isolation	Location of isolation	Source of isolation	Geographic distribution	Principal vector species	Principal host species	Human disease
Alkhurma	1995	Saudi Arabia	Human beings	Arabian Peninsula?	*Ornithodorus savignyi* ?	Human beings, sheep, camels	Haemorrhagic fever
Apoi	1954	Japan	Pooled rodents	Japan	Unknown	Rodents?	Encephalitis
Bagaza	1966	Central African Republic	*Culex* spp	Africa	*Culex* spp	Unknown	Fever
Banzi	1956	South Africa	Human beings	Africa	*Culex* spp	Unknown	Fever
Bussuquara	1956	Brazil	*Alouatta belzebul*	Brazil	*Culex* spp	Unknown	Fever
Dakar bat	1962	Senegal	Pooled bats	Africa	Unknown	Bats?	Fever
Dengue 1	1944	Hawaii	Human beings	Tropics, subtropics	*Aedes aegypti*	Human beings	Fever, rash, vasculopathy
Dengue 2	1944	New Guinea	Human beings	Tropics, subtropics	*Aedes aegypti*	Human beings	Fever, rash, vasculopathy
Dengue 3	1957	Philippines	Human beings	Tropics, subtropics	*Aedes aegypti*	Human beings	Fever, rash, vasculopathy
Dengue 4	1957	Philippines	Human beings	Tropics, subtropics	*Aedes aegypti*	Human beings	Fever, rash, vasculopathy
Ilheus	1944	Brazil	Pooled *Aedes* and *Psorophora*	South and Central America	*Culex* spp?	Birds	Fever
Japanese encephalitis	1935	Japan	Human beings	Asia	*Culex tritaeniorhynchus*	Birds	Encephalitis
Koutango	1969	Senegal	*Tatera kempi*	Senegal	Unknown	Rodents?	Fever, rash
Kyasanur Forest disease	1957	India	*Presbytis entellus*	India	*Haemaphysalis spinigera*	Monkeys	Haemorrhagic fever
Langat	1956	Malaysia	*Ixodes Granulatus*	Malaysia, Thailand, Siberia	*Ixodes granulatus*	Unknown	Encephalitis
Louping ill	1929	Scotland	*Ovis aries*	UK, Ireland	*Ixodes* spp	Sheep, grouse, hares	Encephalitis
Modoc	1958	USA	*Peromyscus*	USA	Unknown	*Peromyscus manicolatus*	Encephalitis
Murray Valley encephalitis	1951	Australia	Human beings	Australia, New Guinea	*Culex annulirostris*	Birds	Encephalitis
Ntaya	1943	Uganda	Mosquitoes	Africa	Mosquitoes	Unknown	Fever
Omsk haemorrhagic fever	1947	Russia	Human beings	Western Siberia	*Dermacentor pictus*	Muskrats, rodents?	Haemorrhagic fever
Powassan	1958	Russia, USA, Canada	*Ixodes* spp/*Dermacentor* spp/ *Haemaphysalis* spp	Russia, USA, Canada	*Ixodes* spp	Small mammals	Encephalitis
Rio Bravo	1954	USA	*Tadarida braziliensis mexicana*	USA, Mexico	Unknown	*Tadarida braziliensis mexicana*	Fever
Rocio	1975	Brazil	Human beings	Brazil	*Culex* spp?	Birds	Encephalitis
St Louis encephalitis	1933	USA	Human beings	South and Central America	*Culex* spp	Birds	Encephalitis
Sepik	1966	New Guinea	*Mansonia septempunctata*	New Guinea	Mosquitoes	Unknown	Fever
Spondweni	1955	South Africa	*Mansonia uniformis*	Africa	*Aedes circumluteolus*	Unknown	Fever
Tick-borne encephalitis	1937	Russia	Human beings	Europe, Asia	*Ixodes* spp	Rodents?	Encephalitis
Usutu	1959	South Africa	*Culex neavei*	Africa	Mosquitoes	Birds	Fever, rash
Wesselsbron	1955	South Africa	*Ovis* spp	Africa, Asia	*Aedes* spp	Unknown	Unknown
West Nile	1937	Uganda	Human beings	Worldwide	Mosquitoes, ticks	Birds	Encephalitis
Yellow fever	1927	Ghana	Human beings	Sub-Saharan Africa, South America	*Aedes* spp/ *Haemagogus* spp	Monkeys	Pantropic
Zika	1947	Uganda	*Macacca mulatta*	Africa, Asia	*Aedes* spp	Monkeys?	Fever, rash

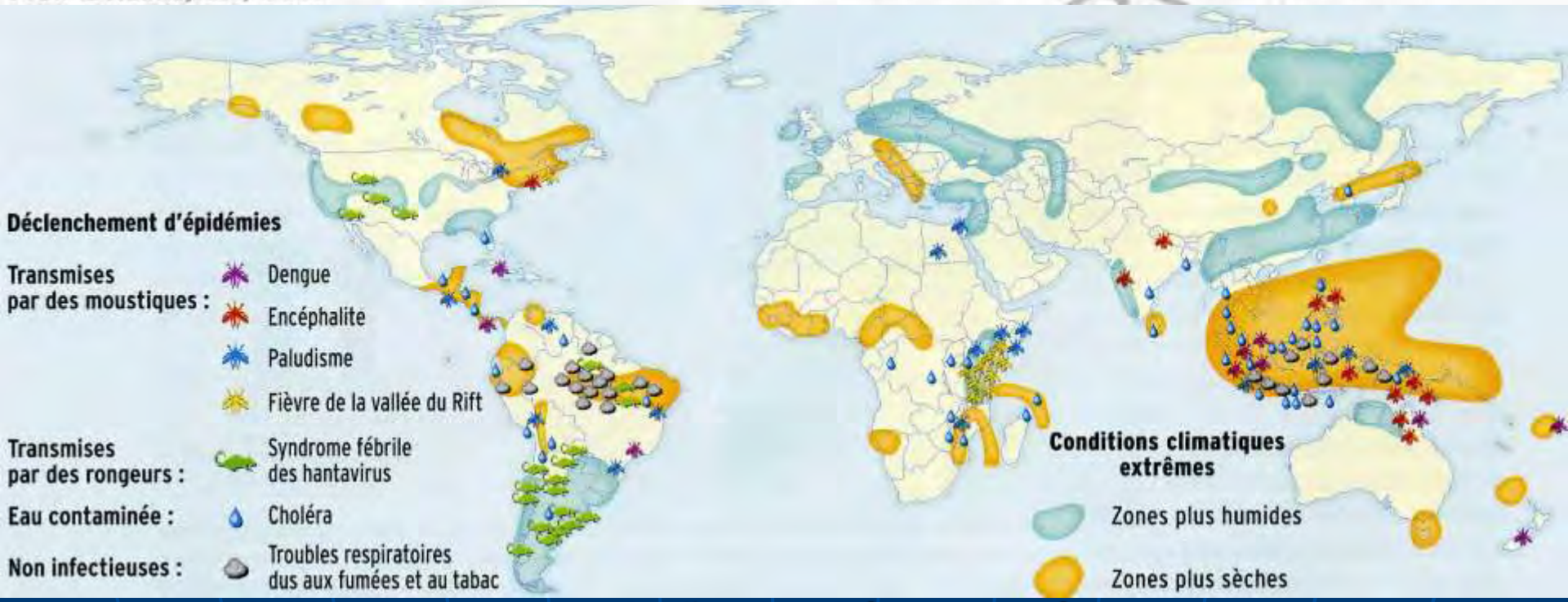
Adapted from reference 1. Question marks indicate that the principal host identified is probably correct.

***Table*: Flaviviruses that are pathogenic for human beings by designation, year of first isolation, location and source of isolation, geographic distribution, principal vector species, principal host species, and disease associations**

REVIEW

Global Climate Changes, Natural Disasters, and Travel Health Risks

James H. Diaz, MD, DrPH
Schools of Public Health and Medicine, Louisiana State University Health Sciences Center in New Orleans, New Orleans, LA, USA



- Possibilidade de transmissão simultânea de vários agentes microbianos
  - Chicungunya / Febre Amarela
  - Chicungunya / Dengue
  - Chicungunya / Dengue / Malária

[TRAVEL HISTORY] [GEOGRAPHIC RISK] [ACTIVITY-BASED RISKS] [INCUBATION PERIODS] [ALGORITHM FOR...] [PARASITES] [REFERENCES] [TABLES]

Wilderness and Environmental Medicine Vol. 11, No. 1, pp. 34–43.

Fever in the Returning Traveler, Part One: A Methodological Approach to Initial Evaluation

Michael David Schwartz, MD

From the Department of Emergency Medicine, University of Cincinnati, Cincinnati, OH

Disease	Family	Vector	Geography
Venezuelan equine encephalitis	Togavirus	*Haemagogus* mosquitoes	South America
Mayaro	Togavirus	*Haemagogus* mosquitoes	Amazon basin, northern South America
Chikungunya	Togavirus	*Aedes* mosquitoes	South Asia, Philippines
Yellow fever	Flavivirus	*Aedes aegypti*	15 degrees North and South latitude of equator
Dengue	Flavivirus	*A. aegypti* and *Aedes albopictus*	Caribbean, Central and South America, South and Southeast Asia
Japanese B encephalitis	Flavivirus	*Culex* mosquitoes	Southeast Asia, South Asia, China, Australia (1995)
Murray Valley encephalitis	Flavivirus	*Culex* mosquitoes	Australia
West Nile virus	Flavivirus	Mosquito—*Culex* and *Anopheline* spp in Europe	Africa, Middle East, South France, and Eastern Europe, New York and other states (1999)
Central European tick-borne encephalitis	Flavivirus	*Dermacentor, Ixodes,* and *Haemaphysalis* spp	Eastern Europe, southern Europe, western Russia
Hantavirus	Bunyavirus	Rodent urine and feces	Manchuria, Korea, Japan, United States
Rift Valley hemorrhagic fever	Bunyavirus	Mosquito	Africa
Crimean-Congo hemorrhagic fever	Bunyavirus	*Dermacentor* and *Hyalomma* spp	Crimea, Africa, Europe, Asia
Lassa hemorrhagic fever	Arenavirus	Rodent	West Africa
Argentine (Junin) hemorrhagic fever	Arenavirus	Rodent	Argentina
Bolivian (Machupo) hemorrhagic fever	Arenavirus	Rodent	Northeast Bolivia
Marburg	Filovirus	Human contact	Sub-Saharan Africa
Ebola	Filovirus	Human contact	Africa

Disease	*Distribution*	*Vector*	*Incubation period*
Malaria—*Plasmodium vivax, Plasmodium falciparum, Plasmodium ovale*	Worldwide	Mosquito, blood transfusion, IVDA	8–15 d
Malaria—*Plasmodium malariae*	Worldwide	Mosquito, blood transfusion, IVDA	15–30 d
African trypanosomiasis	Sub-Saharan Africa	Tsetse fly	10–21 d after chancre appears
Schistosomiasis	Africa, South and Southeast Asia, China	Freshwater exposure	4–8 wk
Leishmaniasis	South and Southeast Asia, Africa, Middle East, Central and South America	Sandflies	(Visceral disease) 3–10 mo
Dengue	Worldwide	*Aedes* mosquitoes	4–7 d
Yellow fever	15 degrees North or South of the equator	*Aedes* mosquitoes	3–8 d; remits for 1–2 d and then severe illness
Primary HIV disease	Worldwide	Sexual contact, IVDA, transfusions	3–21 d
Hepatitis A	Worldwide	Fecal-Oral	15–45 d
Rabies	Worldwide	Animal bite	30–120 d
Arboviral fevers	Variable	Mosquitoes, ticks	3–6 d for some, 7–10 d for others
Lassa fever	West-Central Africa	Rodent	7–14 d
Ebola/Marburg	Africa	Human contact	7–21 d
African tick bite fever	Sub-Saharan Africa, South Africa	Tick	4–7 d
Mediterranean spotted fever	Sub-Saharan Africa	Tick	4–7 d
Scrub typhus	Southeast Asia, South Asia, Africa	Mites, chiggers	8–12 d
Epidemic typhus	Southeast Asia, South Asia, Africa, South and Central America	Lice	8–12 d
Murine typhus	Worldwide	Fleas	8–14 d
Q fever	Worldwide	Parturient ungulates; ticks	10–14 d
Leptospirosis	Worldwide	Freshwater exposure: mammals (urine, tissue)	Primary phase: 10–21 d; remits for 2–3 d; secondary phase: up to 4 wk
Bubonic plague	Worldwide	Rat flea	3–5 d
Brucellosis	Worldwide	Unpasteurized dairy products, undercooked meat	2–3 wk
Tuberculosis	Worldwide	Respiratory	Months

ELSEVIER SAUNDERS

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EMERGENCY MEDICINE CLINICS OF NORTH AMERICA

Travel-Related Infections

Hans R. House, MD, FACEP[a,b,*],
Jesmin P. Ehlers, MD[c]

[a]*Department of Emergency Medicine, University of Iowa Hospitals and Clinics, C43 GH, 200 Hawkins Drive, Iowa City, IA 52242, USA*
[b]*Emergency Medicine Residency Program, University of Iowa Hospitals and Clinics, C43 GH, 200 Hawkins Drive, Iowa City, IA 52242, USA*
[c]*University of Iowa Carver College of Medicine, MERF, Iowa City, IA 52242, USA*

Ingestion:
- **Consumption of untreated water—hepatitis A and E, amoebiasis, cholera**
- **Consumption of unpasteurized dairy products—brucellosis, *Salmonella*, Q fever**
- **Undercooked meat—cestodes, trichinosis, *Salmonella*, *Escherichia coli***

Animal contact:
- **Animal (mammal) contact—rabies, Q fever, typhus, tularemia, brucellosis, leptospirosis, echinococcosis, anthrax**
- **Mosquitoes—dengue, malaria, yellow fever, arboviruses**
- **Tsetse flies—African trypanosomiasis**
- **Sand flies—filariasis, leishmaniasis**
- **Hard ticks—Mediterranean spotted fever, African tick typhus, North Asian tick typhus, Queensland tick typhus, arboviruses**
- **Fleas—murine typhus, plague**
- **Lice—epidemic (louseborne) typhus, relapsing fever**
- **Mites—scrub typhus**

Recreation:
- **Freshwater exposure—leptospirosis, schistosomiasis**
- **Barefoot exposure—strongyloides, cutaneous larval migrans**
- **Sexual contact—HIV, hepatitis B and C, syphilis, gonorrhea, herpes simplex**
- **Sick contacts—TB, meningitis, viral hemorrhagic fevers**
- **IVDA/Transfusions—HIV, hepatitis B and C, malaria, toxoplasmosis, babesiosis**

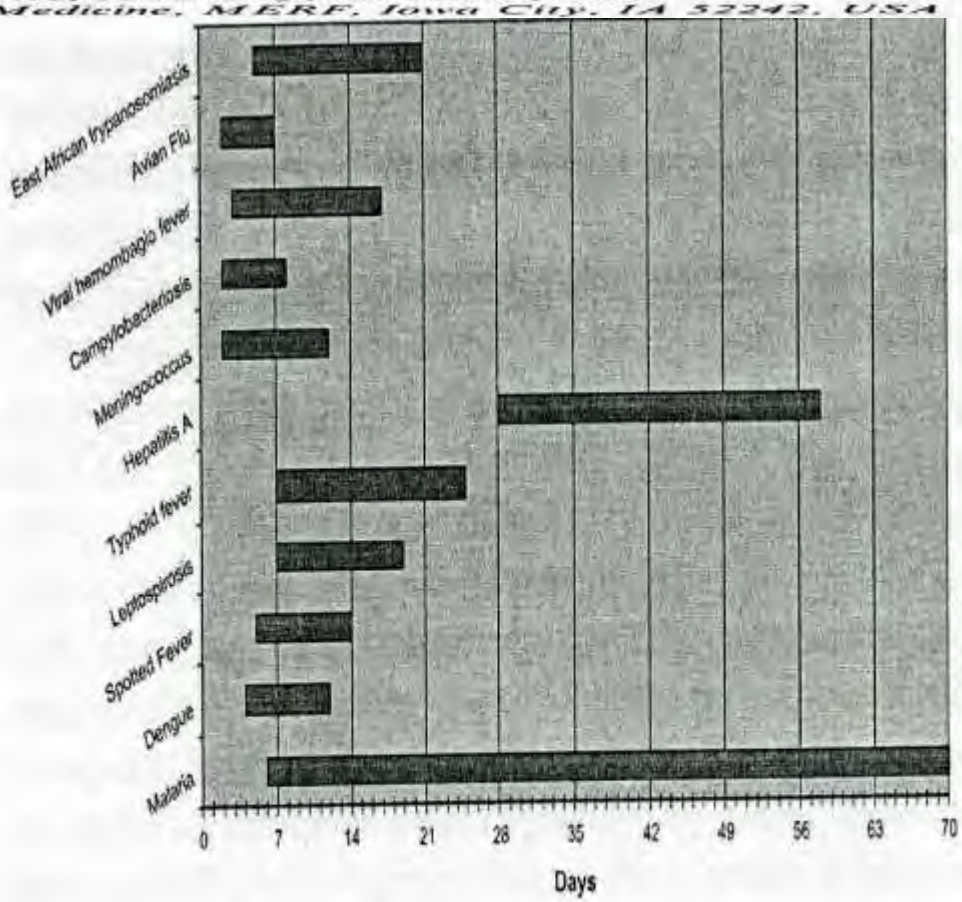


Fig. 2. Incubation period for selected travel-related infections that may present with fever. Dark bars indicate the typical incubation period. Bars that run to the end of the graph indicate possible incubation periods of prolonged timeframes. (*Data from* Ryan ET, Wilson ME, Kain KC, et al. Illness after international travel. N Engl J Med 2002;347:505–16.)

Risk and Spectrum of Diseases in Travelers to Popular Tourist Destinations

Julia Rack; Ole Wichmann; Bai Kamara; Matthias Günther; Jakob Cramer; Christian Schönfeld; Tatjana Henning; Ute Schwarz; Marion Mühlen; Thomas Weitzel; Barbara Friedrich-Jänicke; Behruz Foroutan; Tomas Jelinek

J Travel Med. 2005;23(5):248-253. ©2005 International Society of Travel Medicine
Posted 11/16/2005

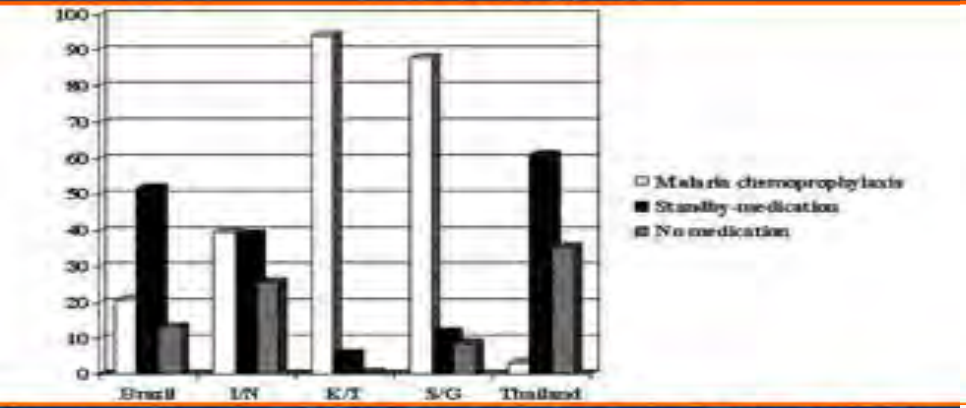


Table 2. Risk Behaviors*

Behavior	n (%)
Swimming/contact in/with freshwater	161 (24.5)
Food risk	519 (78.9)
Tap water	77 (11.7)
Raw vegetables/salad	500 (75.9)
Raw milk	42 (6.4)
Raw meat/fish	64 (30.3)
Animal contact (except mosquito bites)	36 (5.5)
Unsafe sex	10 (1.5)

*n = 658.

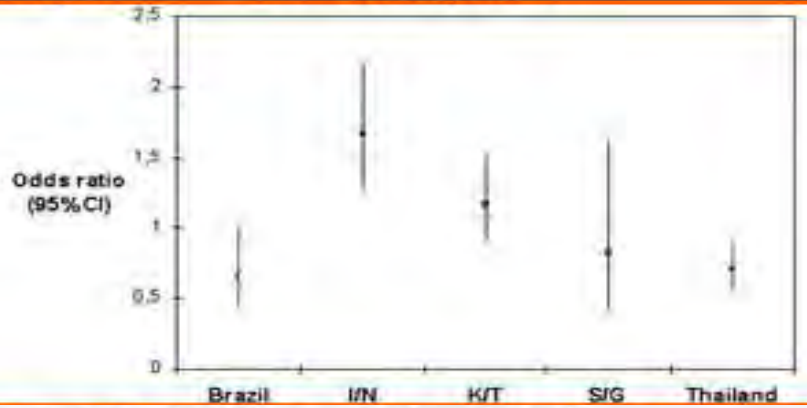


Table 3. Reported Illness during Travel*

Symptoms	n (%†)
Gastrointestinal	228 (80.9/34.6)
Respiratory	90 (31.9/13.7)
Fever	41 (14.5/6.2)
Dermatologic	27 (9.6/4.1)

*n = 658.
†Percent of travelers who reported illness/percent of all travelers.

Epidemiology of Travel-Related Hospitalization

Shmuel Stienlauf, Gad Segal, Yechezkel Sidi, and Eli Schwartz

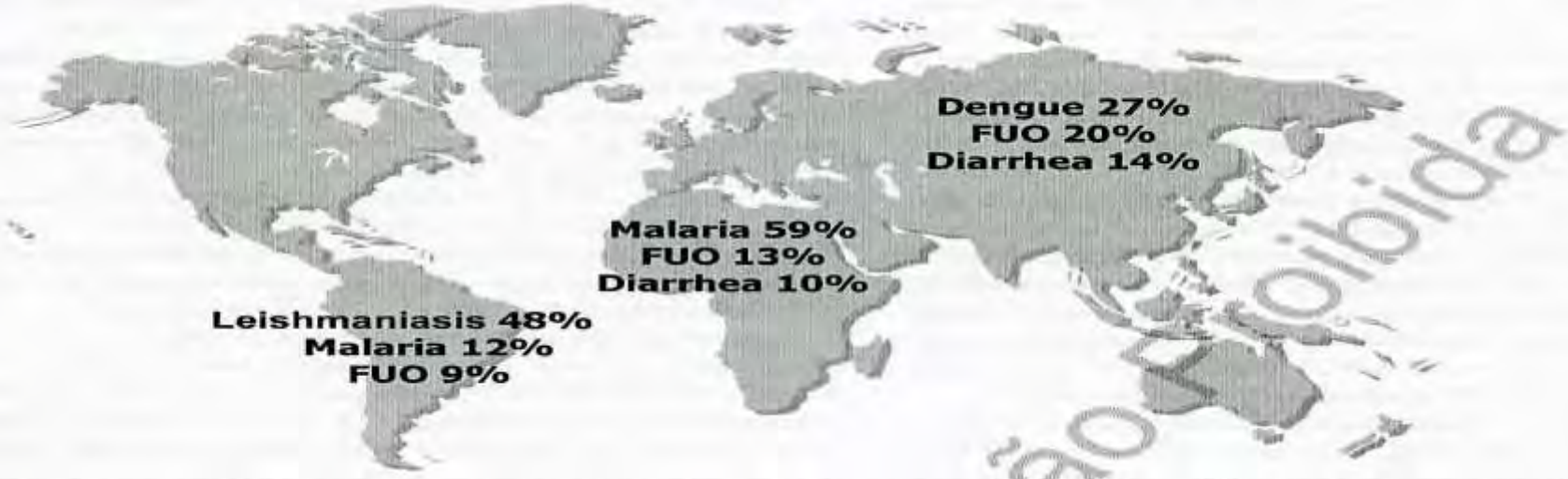


Figure 1 Diseases and destinations: the three most common diagnoses in each continent visited. FUO = fever of unknown origin.

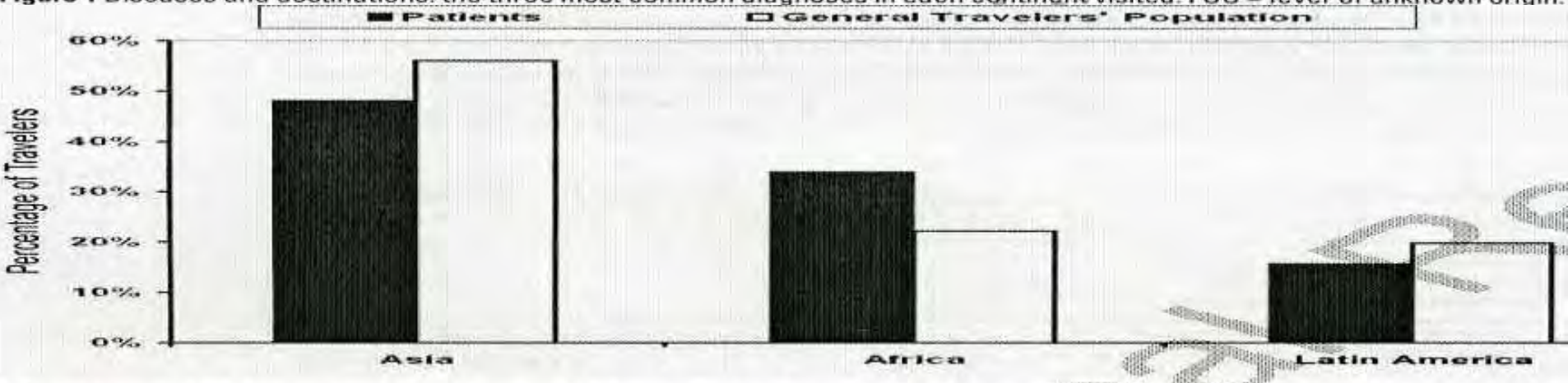


Figure 2 Comparison of travel destination of general travelers' population and hospitalized travelers.

Fever in Returned Travelers: Results from the GeoSentinel Surveillance Network

Mary E. Wilson,[1,2] Leisa H. Weld,[3] Andrea Boggild,[4,5] Jay S. Keystone,[4,5] Kevin C. Kain,[4,5] Frank von Sonnenburg,[6] and Eli Schwartz,[7,8] for the GeoSentinel Surveillance Network[a]

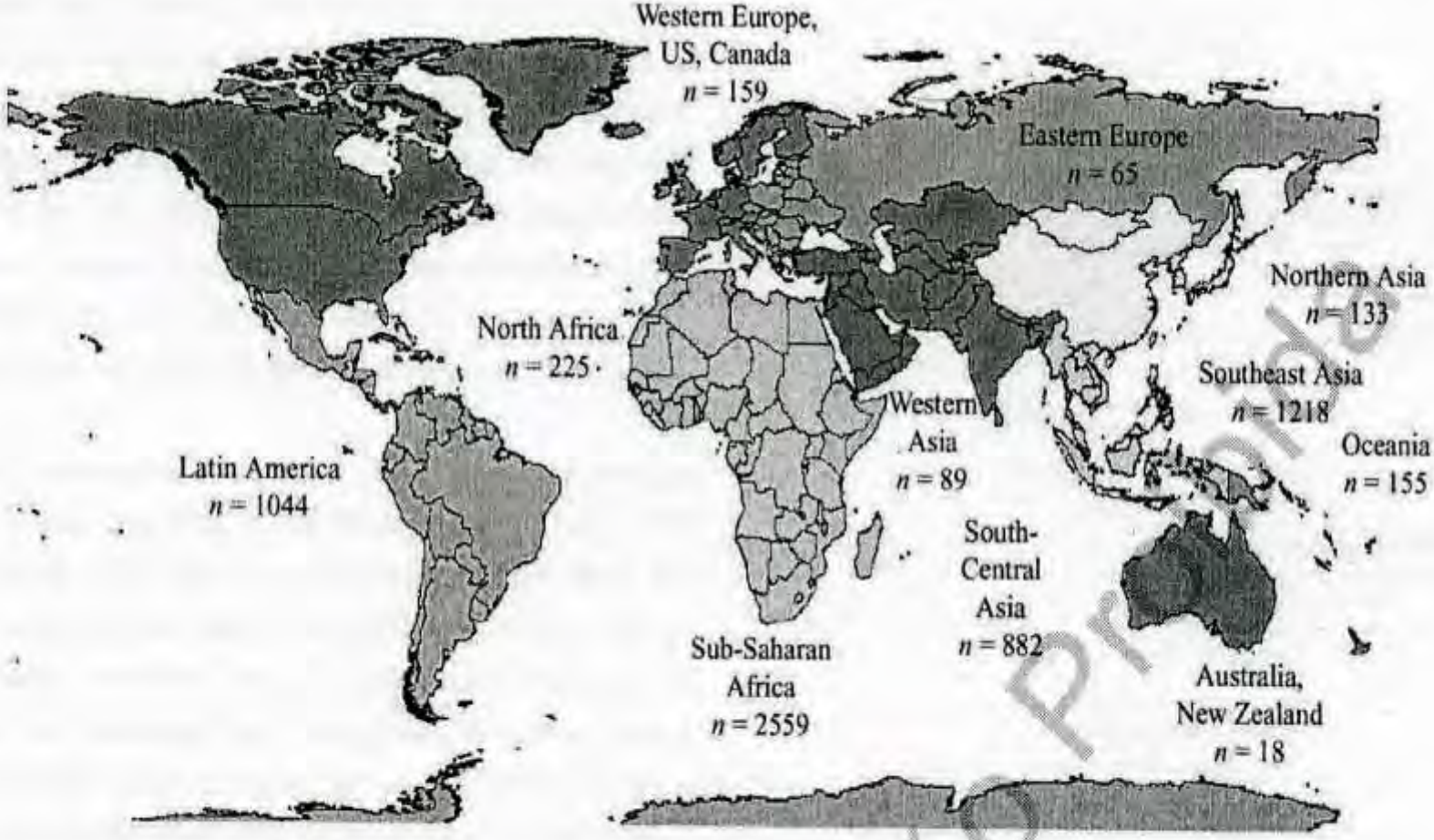


Figure 1. Distribution of regions of the world visited by ill travelers. A total of 6957 patients experienced fever; information regarding region of travel was missing or travel was to multiple regions for 403 travelers.

Problemas de ordem clínica emergentes nos refugiados

William M. Stauffer[a,b] e Michelle Weinberg[b]

Current Opinion in Infectious Diseases

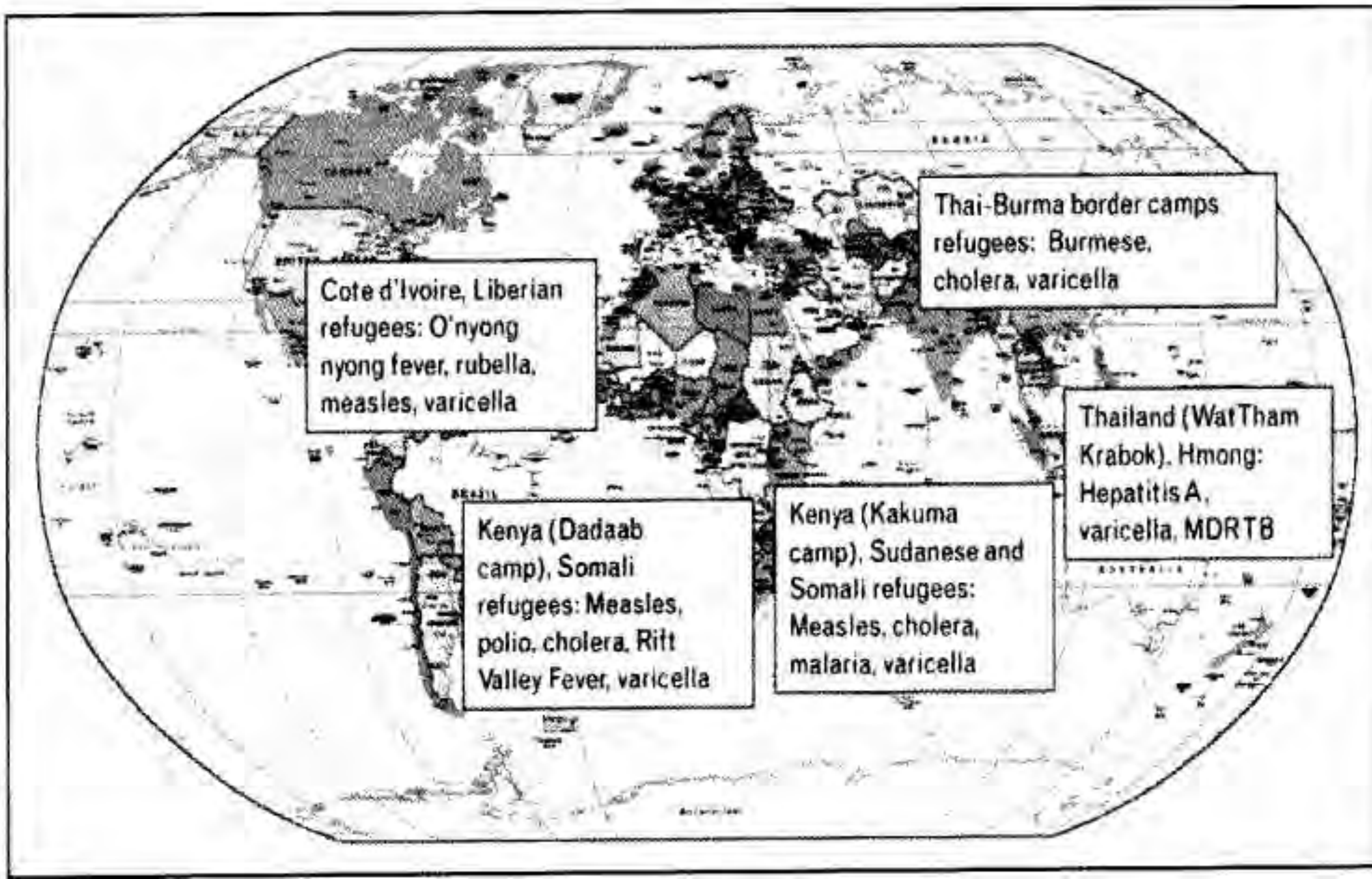
Objectivo da revisão
A população mundial movimenta-se cada vez mais. Cada população que se mobiliza (por exemplo, imigrantes, refugiados e viajantes) tem características particulares, que determinam o risco para a saúde pública e o impacto nas doenças infecciosas. Os refugiados constituem-se como desafios únicos para os profissionais de saúde pública e para especialistas de doença infecciosa.

Achados recentes
A imigração de refugiados para os Estados Unidos representa o movimento de população mais controlado, numa perspectiva de saúde. O rastreio médico e os programas que envolvem tratamento empírico para as doenças infecciosas altamente prevalentes, tanto antes como após a migração alteram a epidemiologia das doenças infecciosas nestas populações.

Resumo
Os especialistas de doença infecciosa devem reconhecer que as diferentes características das diferentes populações em mobilidade irão alterar o impacto das doenças infecciosas. Este artigo realça, especificamente, como as intervenções recentes em saúde pública podem alterar a epidemiologia e a apresentação clínica da malária, dos parasitas intestinais e da tuberculose, em populações de refugiados.

Palavras-chave
infection, intestinal parasite, malaria, mobile population, refugees

Figure 2 Pre-departure Outbreak Responses by Centers for Disease Control and Prevention, Division of Global Migration Quarantine, 2003–2007



Etiology of travel-related fever

Mary E. Wilson[a] and David O. Freedman[b]

Table 1 Regional distribution of ill travelers with fever and major diagnosis groups, by region of likely exposure, for ill returned patients with fever (6957 patients with fever among 24 920 ill returned travelers)

Region of travel	Number of travelers who had fever	Fever[a]	Percentage of travelers, by condition						
			Systemic febrile illness	Malaria	Dengue	Undiagnosed febrile illness	Respiratory illness	Diarrheal illness	Vaccine-preventable illness
Oceania/Pacific islands	155[b]	51	69	59	6	12	10	4	1.9
Sub-Saharan Africa	2559	41	49	42	1	19	10	10	1.0
Southeast Asia	1218	33	34	7	18	22	17	17	2.1
South-central Asia	882	27	32	7	9	20	14	22	9.9
Northern Asia	133	24	8	1	0	26	39	11	7.5
Eastern Europe	65	23	14	1	0	14	29	25	10.8
Northern Africa	225	22	12	5	1	13	13	38	4.4
Caribbean and Central and South America	1044	18	25	8	9	26	13	15	2.2
Western Asia	89	18	12	1	0	31	16	16	2.3
United States, Canada, Western Europe, Australia, and New Zealand	177	15	14	0	0	29	25	9	5.7
Missing travel data	45	24	17	13	0	29	12	10	4.4
Multiple travel exposures	358	19	12	4	1	28	17	15	3.9
Total	6957	28	35	21	6	22	14	15	3.4

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[a] Percentage of travelers to the area who had fever.

[b] Destination: Papua New Guinea, 61%; Vanuatu, 11%; and Solomon Islands, 10%. Origin of travelers: Australia, 40%; United States, 10%; Germany, 10%; New Zealand, 7%; and Israel, 7%.

Illnesses in Travelers Returning from the Tropics: A Prospective Study of 622 Patients

Séverine Ansart, Lucia Perez, Olivier Vergely, Martin Danis, François Bricaire, and Eric Caumes

Table 1 Diseases Diagnosed in 622 Travelers Returning from the Tropics

Diseases	*Immigrants (n = 210)*	*Expatriates (n = 88)*	*Business (n = 42)*	*Tourists (n = 282)*	*Total (N = 622)*
Skin diseases	51 (8%)	23 (3.6%)	9 (1.4%)	66 (10.4%)	149 (23.4%)
GI diseases*	16 (2.5%)	24 (3.8%)	14 (2.2%)	68 (10.7%)	122 (19.1%)
Respiratory diseases†	18 (2.8%)	0 (0%)	4 (0.6%)	51 (8.0%)	73 (11.5%)
Malaria	22 (3.5%)	16 (2.5%)	6 (0.9%)	12 (1.9%)	56 (8.8%)
Plasmodium falciparum	16	4	4	12	36
Plasmodium ovale	2	2	0	0	4
Plasmodium vivax	4	8	2	0	14
Subacute	0	2	0	0	2
Schistosomiasis	35 (5.5%)	4 (0.6%)	1 (0.2%)	6 (0.9%)	46 (7.2%)
Intestinal*	17	2	1	1	21
Urinary	18	2	0	0	20
Invasive	0	0	0	4	4
Late cutaneous	0	0	0	1	1
Viral hepatitis	19 (3.0%)	3 (0.5%)	0 (0%)	4 (0.6%)	26 (4.1%)
Urinary tract infections	4 (0.6%)	2 (0.3%)	2 (0.3%)	14 (2.2%)	22 (3.5%)
STDs	12 (1.9%)	2 (0.3%)	1 (0.2%)	7 (1.1%)	22 (3.4%)
Tuberculosis	15 (2.4%)	0 (0%)	0 (0%)	2 (0.3%)	17 (2.7%)
Dengue fever	0 (0%)	4 (0.6%)	4 (0.6%)	8 (1.3%)	16 (2.5%)
Others‡	30 (4.7%)	10 (1.6%)	2 (0.3%)	46 (7.2%)	88 (13.8%)
Total	222	88	43	284	637

GI = gastrointestinal; STDs = sexually transmitted diseases.

*See Table 2.

†See Table 3.

‡Other diseases include rheumatism ($n = 13$), viral disease ($n = 11$) including 3 herpes zoster and 3 herpes, psychiatric disorders ($n = 9$), human immunodeficiency virus infection ($n = 8$), thrombosis ($n = 5$), adverse drug reactions ($n = 5$), ciguatera ($n = 5$), gnathostomiasis ($n = 3$), kidney or urinary lithiasis ($n = 2$), and miscellaneous ($n = 27$).

Etiology and Outcome of Fever After a Stay in the Tropics

Emmanuel Bottieau, MD; Jan Clerinx, MD; Ward Schrooten, MD, PhD; Erwin Van den Enden, MD; Raymond Wouters, MD; Marjan Van Esbroeck, MD; Tony Vervoort, MD; Hendrik Demey, MD; Robert Colebunders, MD, PhD; Alfons Van Gompel, MD; Jef Van den Ende, MD, PhD

Table 3. Prevalence of the Main Diagnoses According to Category of Travelers*

Main Diagnosis	Western Travelers (n = 1098)	Expatriates (n = 266)	VFR Travelers (n = 249)	Foreign Visitors or Migrants (n = 229)
Plasmodium falciparum malaria	159 (14)	100 (38)	90 (36)	59 (26)
Nonfalciparum malaria	59 (5)	19 (7)	7 (3)	18 (8)
Rickettsial infection	57 (5)	3 (1)	0	0
Dengue	48 (4)	5 (2)	3 (1)	0
Acute schistosomiasis	30 (3)	2 (1)	1 (0.4)	0
Enteric fever	11 (1)	1 (0.4)	2 (1)	1 (0.4)
Invasive amebiasis	5 (0.5)	3 (1)	0	2 (1)
Respiratory tract infection	104 (9)	22 (8)	27 (11)	41 (18)
Bacterial enteritis	87 (8)	14 (5)	7 (3)	7 (3)
Tuberculosis	2 (0.2)	0	7 (3)	21 (9)
Unknown cause	302 (28)	50 (19)	66 (27)	31 (14)
HIV infection, No./No. tested (%)	22/372 (6)	8/136 (6)	32/131 (24)	54/134 (40)

Abbreviations: HIV, human immunodeficiency virus; VFR, visiting friends or relatives.
*Data are given as number (percentage) of cases (N = 1842).

Fever After a Stay in the Tropics

Diagnostic Predictors of the Leading Tropical Conditions

Emmanuel Bottieau, MD, Jan Clerinx, MD, Erwin Van den Enden, MD, Marjan Van Esbroeck, MD, Robert Colebunders, MD, PhD, Alfons Van Gompel, MD, and Jef Van den Ende, MD, PhD

TABLE 1. Prevalence of the Tropical Infections According to the Delay Between Date of Return and Onset of Fever (n = 2071)

	Before or Within 1 Month After Return (1619 cases)	During 2nd and 3rd Month (228 cases)	From 4th to 12th Month (224 cases)	Total Within 12 Months (2071 cases)
	No. (%)	No. (%)	No. (%)	No. (%)
P. falciparum malaria	401 (24.8)	29 (12.7)	10 (4.5)	440 (21.2)
Non-falciparum malaria*	34 (2.1)	41 (18)	38 (17)	113 (5.5)
Rickettsial infection†	70 (4.3)	–	–	70 (3.4)
Dengue	64 (4)	–	–	64 (3.1)
Acute schistosomiasis	28 (1.7)	9 (3.9)	1 (0.4)	38 (1.8)
Enteric fever‡	15 (0.9)	1 (0.4)		16 (0.8)
Protozoan enteritis§	12 (0.7)	–	2 (0.9)	14 (0.7)
Amebic liver abscess	8 (0.5)	1 (0.4)	1 (0.4)	10 (0.5)
Histoplasmosis	6 (0.4)	–	–	6 (0.3)
Helminthic enteritis	3 (0.2)	2 (0.9)	1 (0.4)	6 (0.3)
Hepatitis E	4 (0.2)	1 (0.4)	–	5 (0.2)
Löffler syndrome	3 (0.2)	1 (0.4)	–	4 (0.2)
Other tropical diseases‖	11 (0.6)	–	–	11 (0.6)
Total tropical diseases	659 (40.7)	85 (36.8)	53 (23.7)	797 (38.4)

*Including *P. vivax* (n = 53), *P. ovale* (n = 43), and *P. malariae* (n = 17) malaria.

†Including *R. africae* (n = 58), *R. conorii* (n = 5), *R. typhi* (n = 4), and *O. tsutsugamushi* (n = 3) infection.

‡Including *S. typhi* (n = 9) and *S. paratyphi* A (n = 7).

§Including *Cyclospora* species (n = 7), *Cryptosporidium* species (n = 4), *E. histolytica* (n = 2), and *Isospora belli* (n = 1).

‖Including human African trypanosomiasis (n = 3), sarcocystosis (n = 3), enteritis *Shigella dysenteriae* (n = 3), relapsing fever (n = 1), and angiostrongyloidiasis (n = 1).

Infectious Disease Risks Associated With Occupational Exposure

A Systematic Review of the Literature

Occupational and Environmental Medicine

Juanita A Haagsma; Luqman Tariq; Dick J Heederik; Arie H Havelaar

Posted: 01/22/2012; Occup Environ Med. 2012;69(2):140-146.

Table 1. Work-related pathogens by specific job title or broader occupational groups

Occupation	ISCO code	Pathogen
Abattoir workers	751	(Methicillin resistant) *Staphylococcus aureus*, (swine) influenza virus, *Brucella* spp., *Campylobacter* spp., *Coxiella burnetii*, *Escherichia coli*, hepatitis B virus, hepatitis E virus, *Leptospira hardjo*, *Leptospira pomona*, *Streptococcus pyogenes*, *Toxocara canis*
Airline personnel	511	Hepatitis E virus
Animal carers	516	*Bartonella hensalae*, *Borrelia burgdorferi*, *Capillaria hepatica*, *Chlamydophila psittaci*, hantavirus, influenza virus, *Leptospira* spp., simian foamy virus, simian parvovirus, simian type D retrovirus, *Toxocara canis*, *Toxoplasma gondii*
Archaeologists	211	*Coccidioides immites*
Armed forces	01	*Leishmania* spp
Childcare providers	531	*Cryptosporidium parvum*, Cytomegalovirus, *Giardia lamblia*, hepatitis A virus, parvovirus, varicella zoster virus
Cleaners	515	Hepatitis A virus, hepatitis B virus, *Mycobacterium tuberculosis*
Dental care workers (dentist 266, dentist assistant 325)	226, 325	Hepatitis B virus, hepatitis C virus, HIV, etc
Divers	754	*Campylobacter jejuni*, enteroviruses, *Pseudomonas aeruginosa*
Farm labourers (animal handlers)	921	(Methicillin resistant) *Staphylococcus aureus*, (swine and avian) influenza virus, *Borrelia burgdorferi*, *Brucella* spp., *Campylobacter* spp., *Chlamydophilia psittaci*, *Clostridium tetani*, *Coxiella burnetii*, *Escherichia coli*, *Helicobacter pylori*, hepatitis E virus, *Leptospira icterohaemorrhagiae*, *Mycobacterium bovis*, *Strongyloides stercoralis*, *Toxocara canis*, *Toxoplasma gondii*, West Nile virus
Farm workers, animals	612	(Methicillin resistant) *Staphylococcus aureus*, (swine and avian) influenza virus, *Borrelia bergdorferi*, *Brucella* spp., *Campylobacter* spp., *Chlamydophilia psittaci*, *Clostridium tetani*, *Coxiella burnetii*, *Helicobacter pylori*, hepatitis E virus, *Leptospira icterohaemorrhagiae*, *Mycobacterium bovis*, *Streptococcus suis*, *Strongyloides stercoralis*, *Toxocara canis*, *Toxoplasma gondii*, West Nile virus
Farm workers, crops	611	*Borrelia bergdorferi*, *Clostridium tetani*, *Coxiella burnetii*, *Escherichia coli*, *Leishmania* spp., *Strongyloides stercoralis*, *Toxocara canis*
Fishermen	622	*Anasakis simplex*
Fishmonger	751	*Anasakis simplex*
Forestry workers	621	*Anaplasma phagocytophilum*, *Borrelia burgdorferi*, *Coxiella burnetii*, hantavirus, *Rickettsia conorii*, *Rickettsia helvetica*, tick-borne encephalitis virus, *Toxoplasma gondii*
Funeral service workers	516	*Mycobacterium tuberculosis*
Gardeners	611	*Francisella tularensis*
Healthcare assistants	532	*Helicobacter pylori*
Healthcare workers (nurses and midwives 222, nurse or midwife assistant 322)	222, 322	(Methicillin resistant) *Staphylococcus aureus*, *Bordetella pertussis*, cytomegalovirus, *Helicobacter pylori*, hepatitis A virus, hepatitis B virus, hepatitis C virus, hepatitis E virus, human herpes virus, HIV, human parvovirus, influenza virus, measles virus, monkey pox virus, mumps virus, *Mycobacterium bovis*, *Mycobacterium tuberculosis*, rubella virus, *Salmonella* spp., SARS coronavirus, *Streptococcus pyogenes*, vancomycin-resistant enterococci, varicella zoster virus
Hospital dietary workers	941	*Coxiella burnetii*, hepatitis A virus
Hunter, trapper	622	*Borrelia burgdorferi*, *Brucella* spp., *Echinococcus granulosis*, *Echinococcus multilocularis*, *Ehrlichia chaffeensis*, *Francisella tularensis*, hantavirus, *Leptospira icterohaemorrhagia*, *Leptospira interrogans*, *Toxocara canis*
Laboratory workers	321	(Methicillin resistant) *Staphylococcus aureus*, *Bartonella hanselae*, *Brucella* spp., *Clostridium difficile*, *Coxiella burnetii*, *Giardia lamblia*, HIV, influenza virus, *Mycobacterium tuberculosis*, *Neisseria meningitidis*, *Pasteurella multocida*, rhinovirus, *Salmonella* spp., *Shigella* spp., simian foamy virus
Medical doctors	221	Hepatitis B virus, hepatitis C virus, HIV, *Mycobacterium tuberculosis*, SARS coronavirus
Microbiologists	213	*Neisseria meningitidis*
Plant and machine operators and assemblers	81	*Histoplasma capsulatum*, *Legionella pneumophila*, *Mycobacterium chelonae*
Prison guards	541	*Mycobacterium tuberculosis*
Sex workers (also adult movie actors)	516	*Chlamydia trachomatis*, hepatitis B virus, hepatitis C virus, herpes virus, HIV, human papilloma virus, human T-lymphotrophic virus, *Neisseria gonorrhoeae*, *Treponema pallidum*, *Trichomonas vaginalis*
Teachers, primary	234	Cytomegalovirus, *Neisseria*
Veterinarian assistants	324	(Methicillin resistant) *Staphylococcus aureus*, (swine) influenza virus, *Brucella* spp., *Bartonella hanselae*, *Campylobacter* spp., *Chlamyodphila psitacci*, *Clostridium tetani*, *Coxiella burnetii*, *Pasteurella multocida*, *Salmonella* spp., *Toxoplasma gondii*
Veterinarians	225	(Methicillin resistant) *Staphylococcus aureus*, (swine) influenza virus, *Bartonella hanselae*, *Brucella* spp., *Campylobacter* spp., *Chlamyodphila psittaci*, *Clostridium tetani*, *Coxiella burnetii*, hepatitis E virus, monkey pox virus, *Pasteurella multocida*, *Salmonella* spp., *Toxocara canis*, *Toxoplasma gondii*
Waste collectors	961	*Brucella* spp., *Helicobacter pylori*, hepatitis A virus, hepatitis B virus, hepatitis C virus, *Toxoplasma gondii*

ISCO: International Standard Classification of Occupation

Infectious Disease Risks Associated With Occupational Exposure

A Systematic Review of the Literature

Occupational and Environmental Medicine

Juanita A Haagsma; Luqman Tariq; Dick J Heederik; Arie H Havelaar

Posted: 01/22/2012; Occup Environ Med. 2012;69(2):140-146.

Table 2. Work-related pathogens by proximate sources of exposure and site of entry in the human body

Site of entry	Proximate sources of exposure		
	Human*	Animal*	Environment†
Skin and mucous membranes‡	Needle-stick injuries Hepatitis B virus Hepatitis C virus HIV Human herpes virus 8 Cutaneous infections (Methicillin-resistant) *Staphylococcus aureus* *Streptococcus pyogenes* *Streptococcus suis* Cytomegalovirus	Mammals (bites or direct contact) *Brucella* spp. Hantavirus Rabies virus *Leptospira hardjo* *Francisella tularensis* *Bartonella henselae* *Pasteurella multocida* (Methicillin-resistant) *Staphylococcus aureus* Simian foamy virus Simian type D retrovirus Monkey pox virus Mosquito bites *Leishmania* spp. West Nile virus Tick bites *Anaplasma phagocytophilum* *Borrelia burgdorferi* *Ehrlichia chaffeensis* Tick-borne encephalitis virus *Rickettsia* spp.	Human reservoirs *Strongyloides stercoralis* Animal reservoirs *Clostridium tetani* *Leptospira icterohaemorrhagia* Inanimate reservoirs *Pseudomonas aeruginosa*
Uro-genital tract	Human papilloma virus *Neisseria gonorrhoeae* *Chlamydia trachomatis* HIV Human T-lymphotrophic virus *Treponema pallidum* Hepatitis B virus *Trichomonas vaginalis* Herpes virus		
Respiratory tract	*Bordetella pertussis* *Streptococcus pyogenes* *Neisseria meningitides* Varicella zoster virus Influenza virus SARS coronavirus Rubella virus Mumps virus Measles virus *Mycobacterium tuberculosis* Parvovirus Rhinovirus Monkey pox virus	Avian influenza virus Simian parvovirus Influenza virus *Mycobacterium tuberculosis*	Animal reservoirs *Coxiella burnetii* *Francisella tularensis* *Histoplasma capsulatum* Hantaviruses *Chlamydophilia psittaci* Inanimate reservoirs *Coccidioides immites* *Enterobacteriaceae* (eg. *Klebsiella* spp., *Enterobacter* spp.) *Legionella pneumophila* *Mycobacterium cheloniae*
Gastro-intestinal tract	*Helicobacter pylori* *Giardia lamblia* *Cryptosporidium parvum*	*Cryptosporidium* spp. *Salmonella* spp. *Campylobacter* spp. *Escherichia coli*	Human reservoirs Hepatitis A virus Hepatitis E virus *Clostridium difficile* Animal reservoirs Shiga-toxin producing *Escherichia coli* *Brucella* spp. Hepatitis E virus *Salmonella* spp. (non-typhoidal) *Campylobacter* spp. *Toxocara canis*/*Toxocara cati* *Shigella* spp. *Cryptosporidium parvum* *Echinococcosis multilocularis* *Echinococcus granulosis* *Anisakis simplex* *Toxoplasma gondii* *Capillaria hepatica* *Mycobacterium bovis*

* Including indoor environment.
†Food, water, soil and air.
‡Including eyes and ears.

The NEW ENGLAND JOURNAL of MEDICINE

ESTABLISHED IN 1812 JANUARY 12, 2006 VOL. 354 NO. 2

Spectrum of Disease and Relation to Place of Exposure among Ill Returned Travelers

David O. Freedman, M.D., Leisa H. Weld, Ph.D., Phyllis E. Kozarsky, M.D., Tamara Fisk, M.D.,* Rachel Robins, M.D., Frank von Sonnenburg, M.D., Jay S. Keystone, M.D., Prativa Pandey, M.D., and Martin S. Cetron, M.D., for the GeoSentinel Surveillance Network†

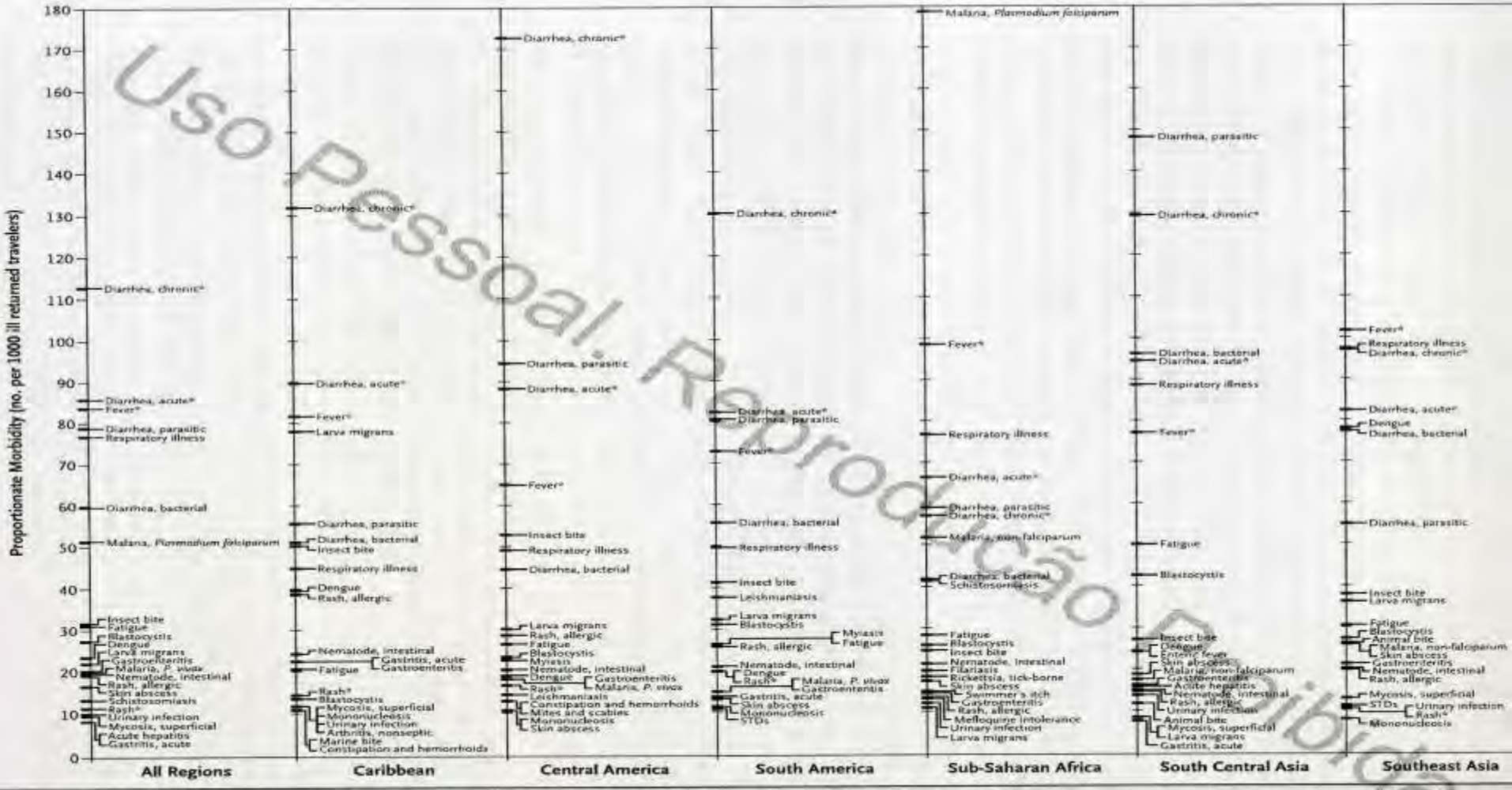


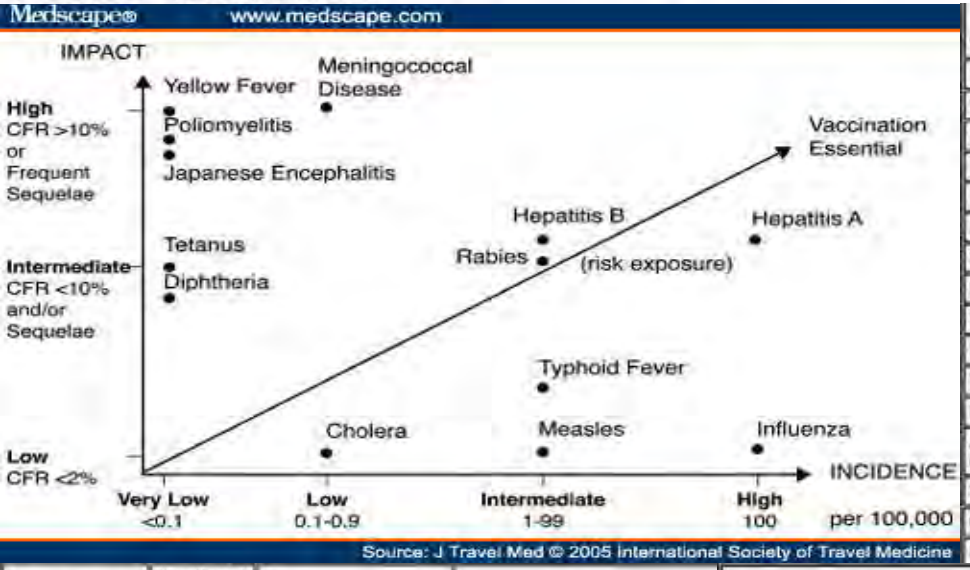
Figure 2. Proportionate Morbidity among Ill Travelers Returning from the Developing World, According to Region of Travel.

The proportions are shown, not incidence rates, of each of the top 22 specific diagnoses for all ill returned travelers within each of the regions. STD denotes sexually transmi disease. Asterisks indicate syndromic diagnoses for which specific etiologic diagnoses could not be assigned.

Vaccines in Travel Health: From Risk Assessment to Priorities

Robert Steffen, MD; Bradley A. Conno

J Travel Med. 2005;12(1):26-35. ©2005 International Society of Travel Medicine
Posted 02/09/2005



Vaccine	Expert Group/Country				
	WHO/World	CATMAT/Canada	CDC/US	CDSC/UK	NHMRC/Australia
Required vaccines					
Yellow fever	**	**	**	**	**
Routine vaccines					
Diphtheria/tetanus	***	***	***	***	***
Polio	**	**	**	**	**
Measles	***	***	***	***	***
Hepatitis B	*	*	*	*	*
Recommended vaccines					
Hepatitis A	***	***	***	***	***/*
Rabies	*	*	*	*	*
Typhoid fever	*	*	*	*	*
Meningococcal	*	*	*	***	*
Japanese encephalitis	*	*	*	*	*
Tuberculosis	*	–/*	–	*	*
Cholera	c	–	–	–	–
Influenza	*	*	*	*	NA

Vaccine	Duration of Trip†	Environmental Factor	Host Factor
Influenza	–	Many long flights, cruises	> 50/65 yr, preexisting disease, small children (?)
Typhoid	> few weeks	South Asia, north and west Africa	Gastric anacidity substandard eating places, or off-tourist itinerary
	> 1 mo	All to developing countries	
Rabies	> 1 mo	High endemicity	High exposure: eg, cyclists; work with animals; children
	> 3 mo	High endemicity	Any exposure
Meningococcal disease	> 1 d	Epidemics, meningitis belt	Asplenic
	> 1 wk	Dry season, meningitis belt	
Japanese encephalitis	> 2-4 wk	Rural areas (rice fields), during season	–
Tuberculosis	> 1 mo‡	Close contact with local population	Infants and children
Cholera	–	Work in refugee camp	Gastric anacidity

*This table refers to recommended vaccines. Vaccination against hepatitis A is recommended by most expert groups for all visits to developing countries.
†Assuming comparatively good hygienic conditions at destination.
‡Only for infants.

Infection	Without Vaccine†	With Vaccine
Hepatitis A	300	< 1
Hepatitis B (symptomatic)	20-60	2-5
Influenza	500	250
Yellow fever	4‡	0
Typhoid fever	3 (-30)	1-10
Rabies	Unknown, > 1	0
Japanese encephalitis	1	0
Poliomyelitis	< 1	0
Meningococcal disease	< 1	0
Cholera	< 1	0+
Tetanus	NA	0
Measles	NA	0+

Cause of Death	CFR (%)	No Preventive Measures†	Type of Measure	With Intervention	Benefit
Accident	NA	0 (-100)	Advice	(-80)	(-20)
HIV/AIDS	NA	0	Advice	< 1	~ 10
Malaria	1	00	PPM + ChePro	< 2	~ 300
Hepatitis A	0-4	20	Vaccine	0	20
Hepatitis B	2	10	Vaccine	0	10
Yellow fever	50	2‡	Vaccine	0	10
Typhoid fever	1	< 1 (India, 3)	Vaccine	0-< 1	1-3
Japanese encephalitis	30	< 1	Vaccine	0	< 1

AIDS = acquired immunodeficiency syndrome; CFR = case-fatality rate; CheProPro = chemoprophylaxis; HIV = human immunodeficiency virus; NA = not available; PPM = personal protection measures against mosquito bites.
*1-month stay in developing countries; for malaria in tropical Africa.
†Rough estimates based on published data.
‡Rare infections in travelers as most are protected by vaccine that, in many countries, is a requirement for entry.

Chikungunya, an epidemic arbovirosis

Gilles Pialoux, Bernard-Alex Gaüzère, Stéphane Jauréguiberry, Michel Strobel

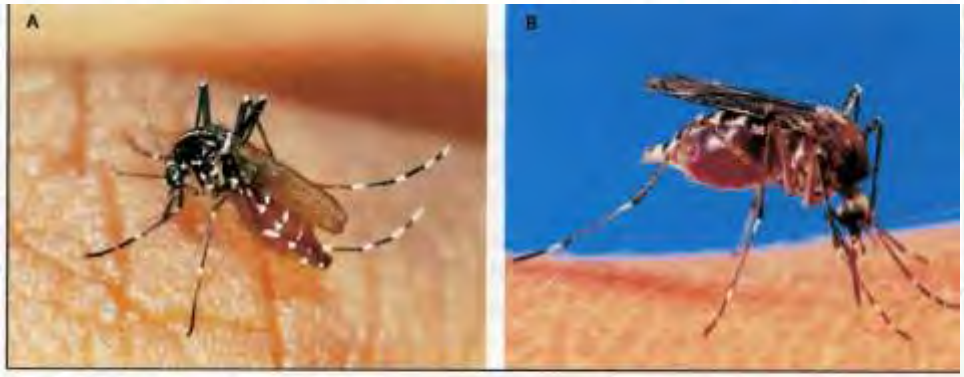
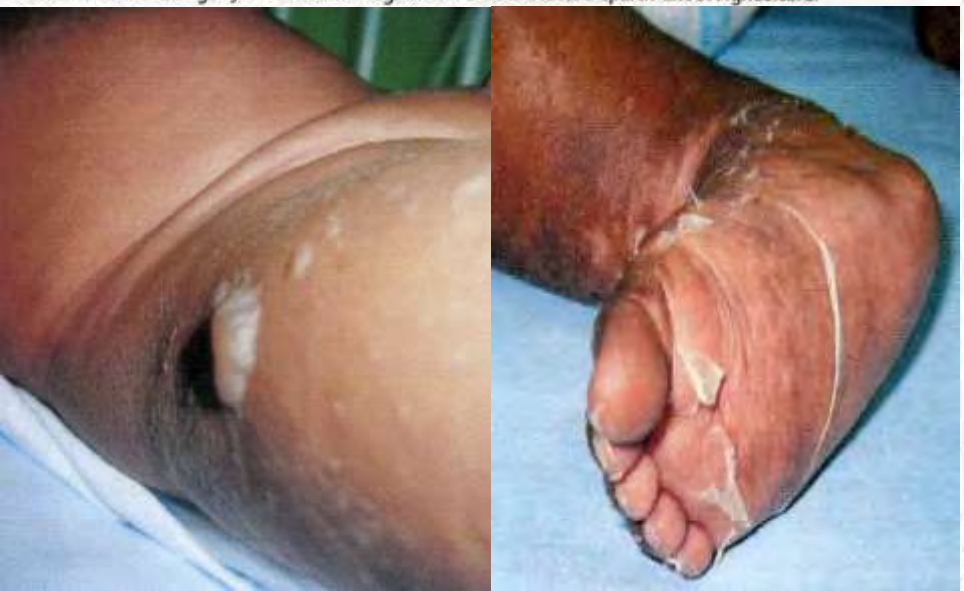


Figure 1: **Mosquito vectors of chikungunya virus**
(A) Blood-gorged *A albopictus* female feeding on a human host. *A albopictus* is the primary chikungunya virus vector in the current Indian Ocean outbreak. (B) *A aegypti* mosquito. *A aegypti* is the primary chikungunya virus vector in Asian chikungunya outbreaks. Images from United States Department of Agriculture.



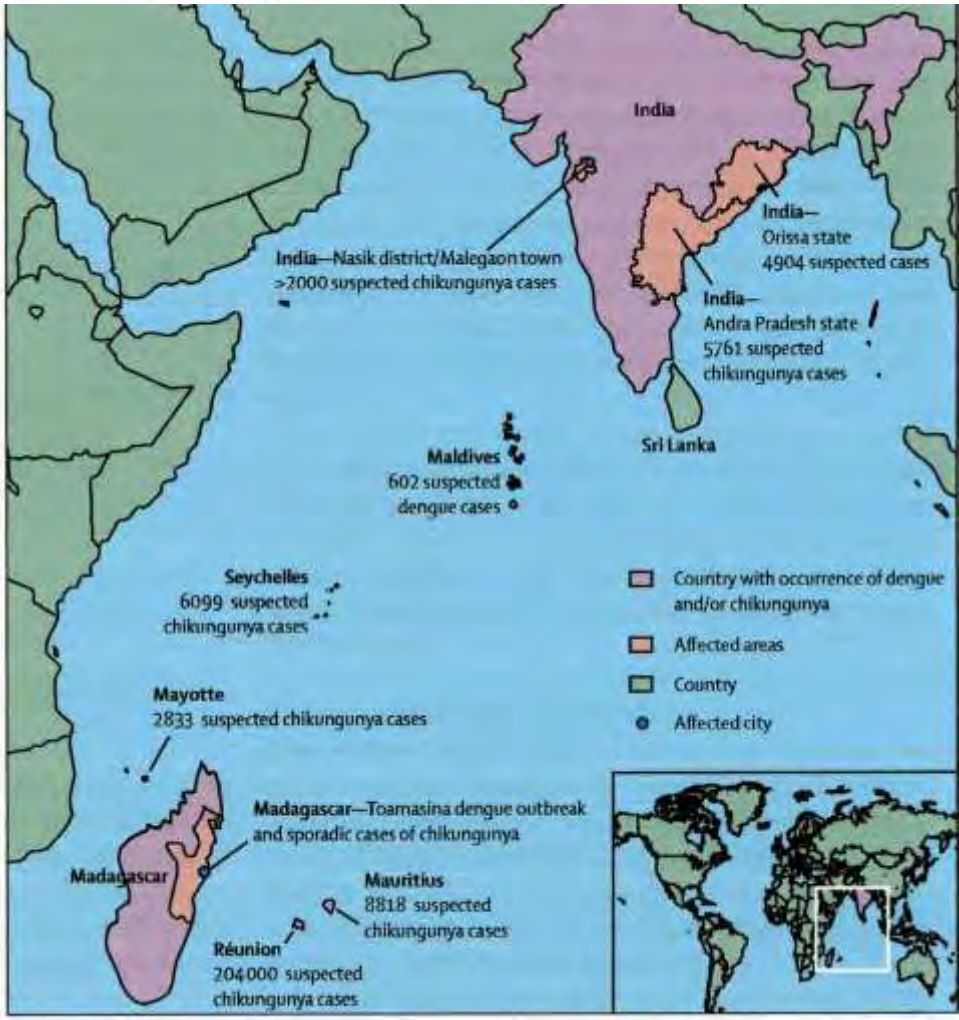
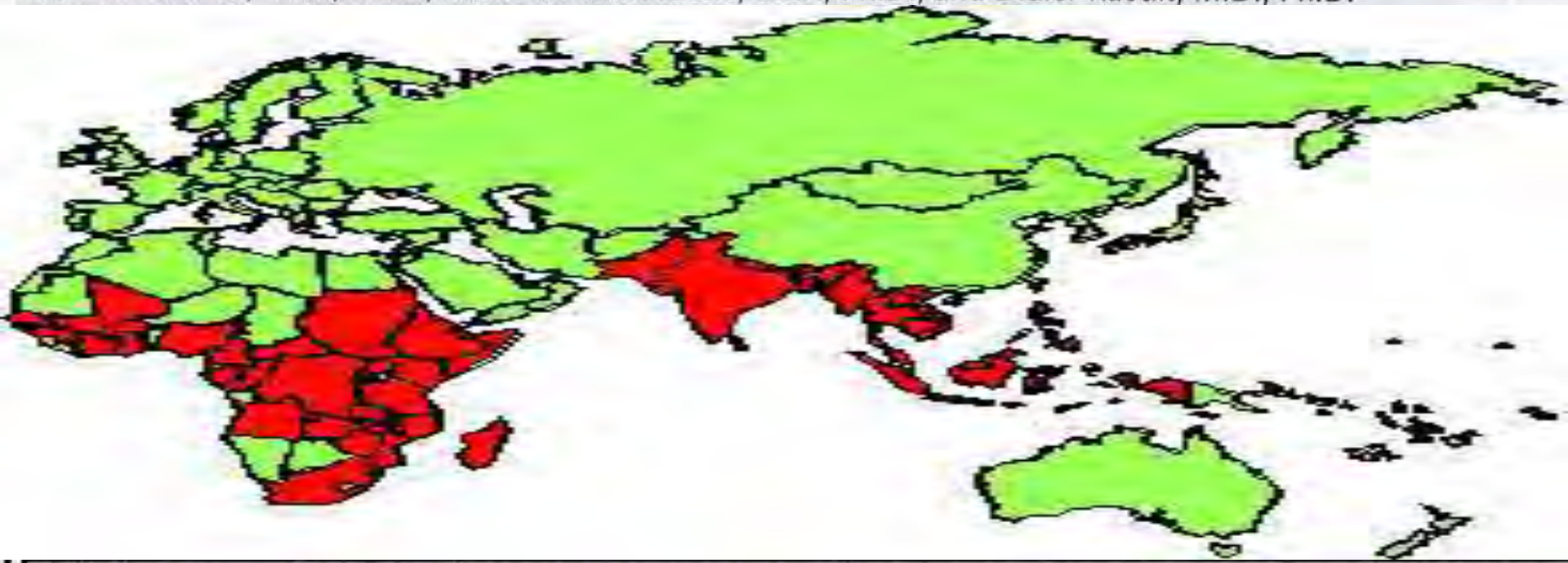


Figure 2: **Chikungunya and dengue incidence in India and Indian Ocean islands (WHO)**
Status as of March 17, 2006. Data from WHO, http://www.who.int.

Chikungunya Outbreaks — The Globalization of Vectorborne Diseases

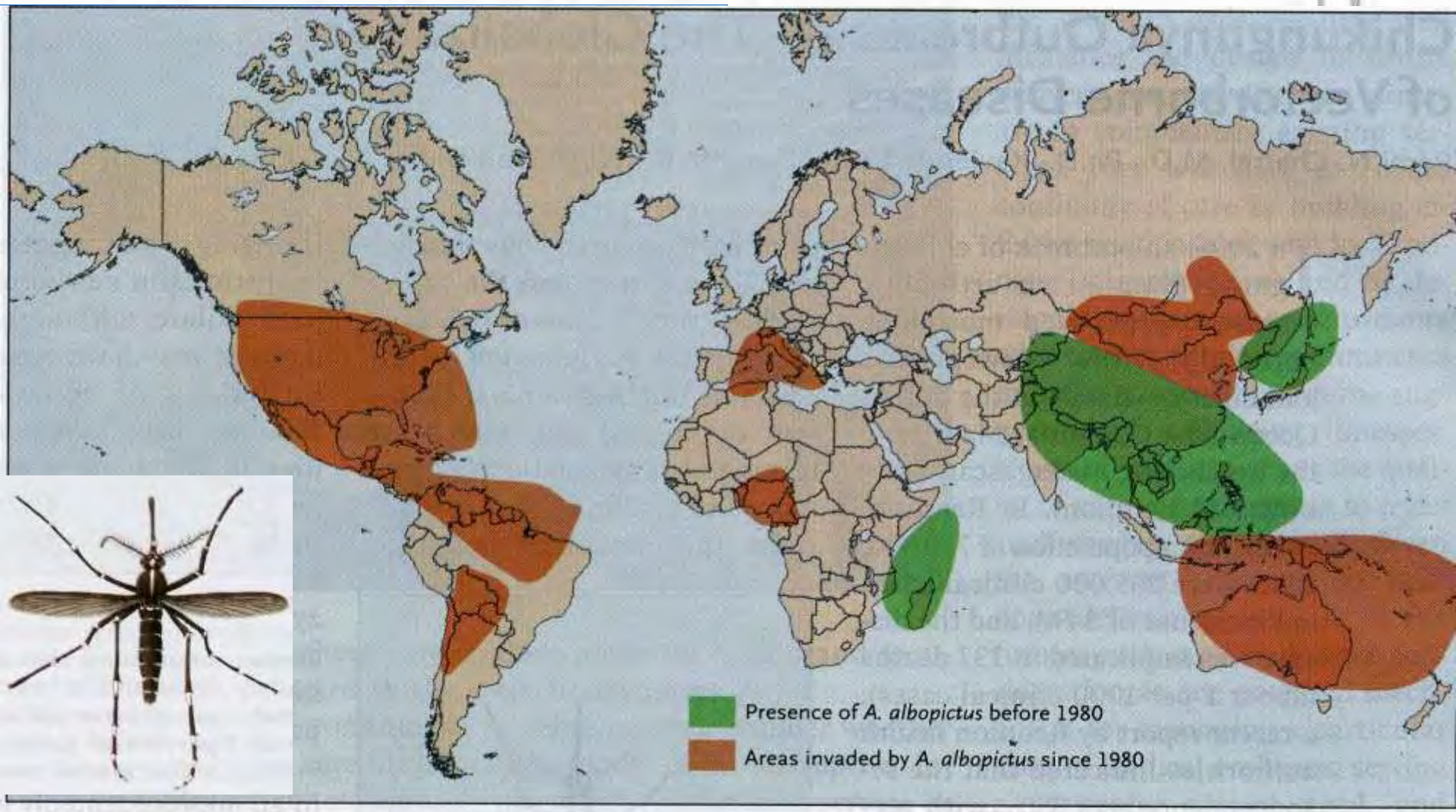
Rémi N. Charrel, M.D., Ph.D., Xavier de Lamballerie, M.D., Ph.D., and Didier Raoult, M.D., Ph.D.



Cases of chikungunya fever (between 1952–2006) have been reported in the countries depicted in red on this map.
In Africa, these include Burundi; Central African Republic; Comoros; Democratic Republic of Congo; Guinea; Kenya; Nigeria; Madagascar; Malawi; Mauritius; Mayotte; Reunion; Senegal; Seychelles, South Africa; Tanzania; Uganda; Zimbabwe.

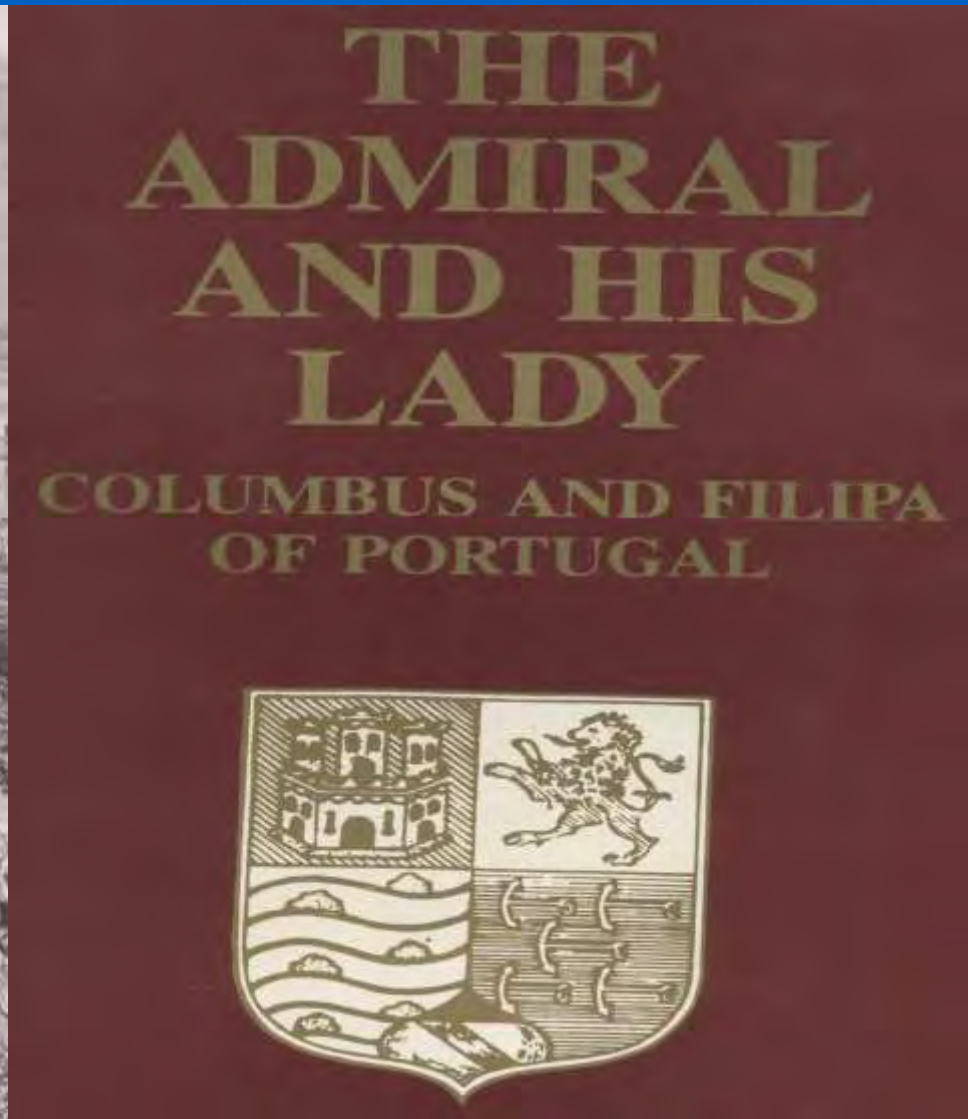
Chikungunya in Europe: what's next?

Infection with chikungunya virus in Italy: an outbreak in a temperate region

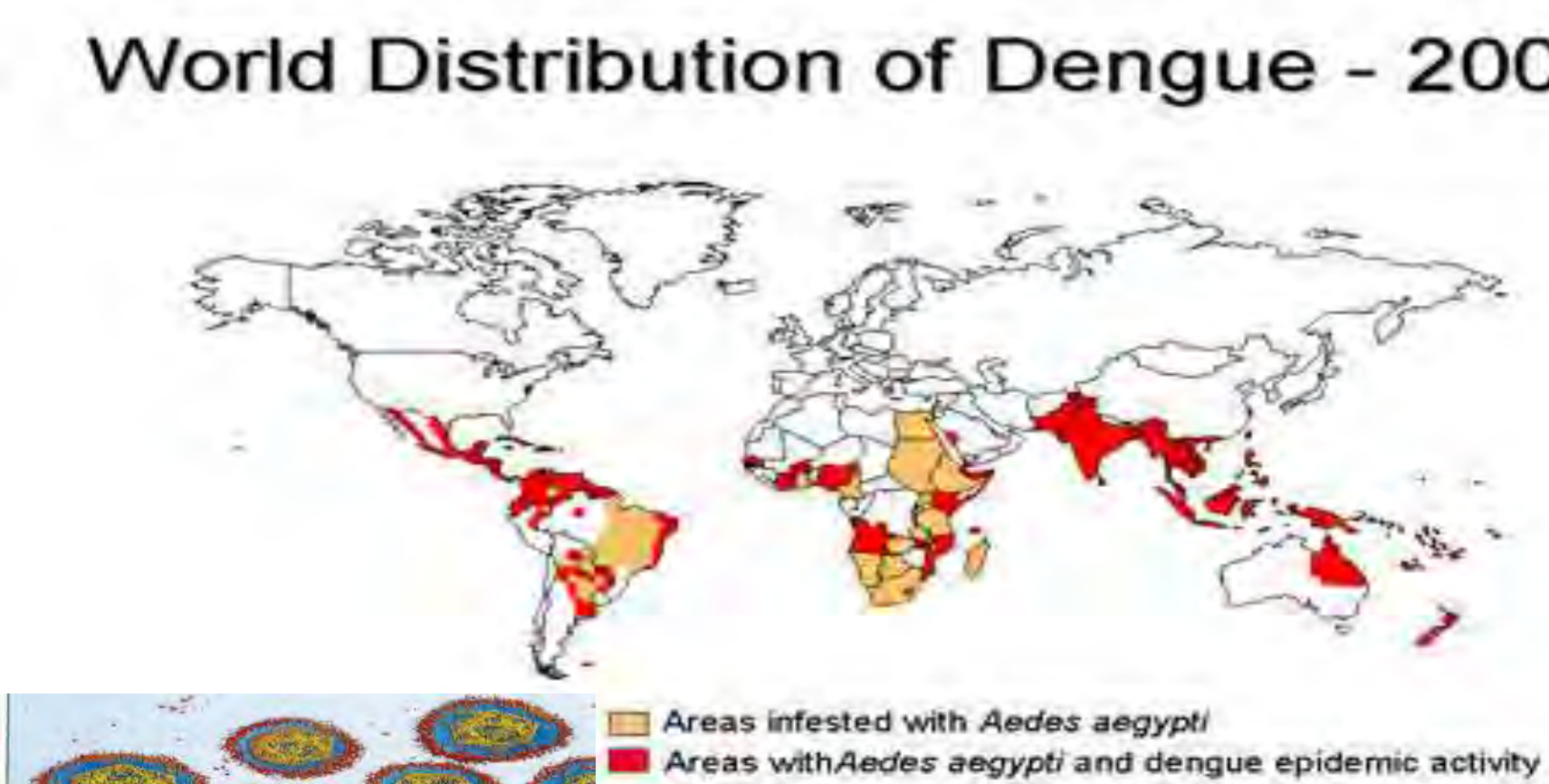


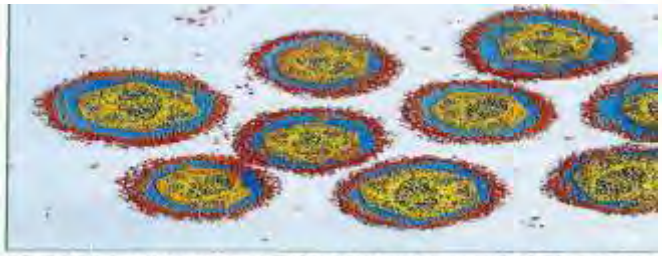
World Distribution of the *Aedes albopictus* Mosquito.

… e o Vector já chegou ao arquipélago da Madeira!

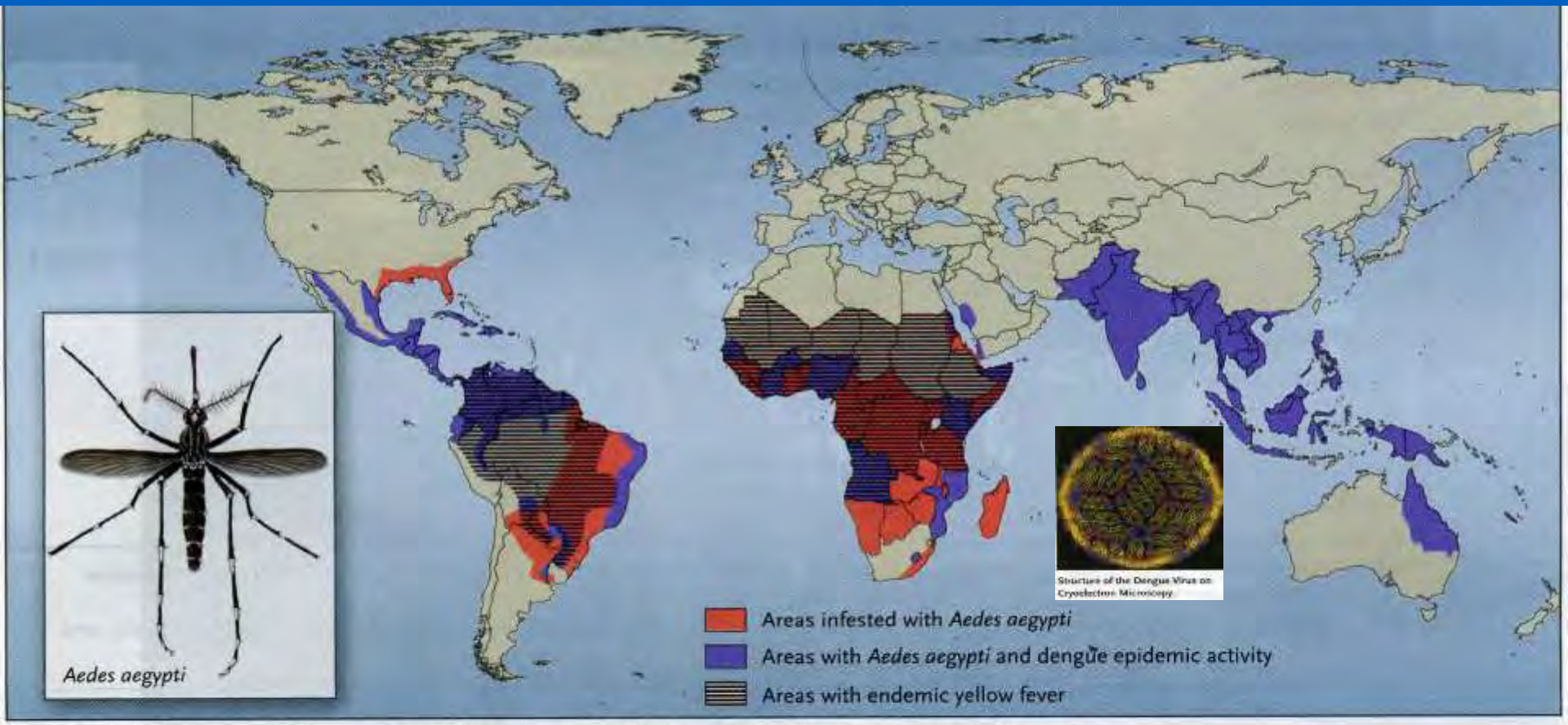


Distribuição Geográfica Mundial do Dengue





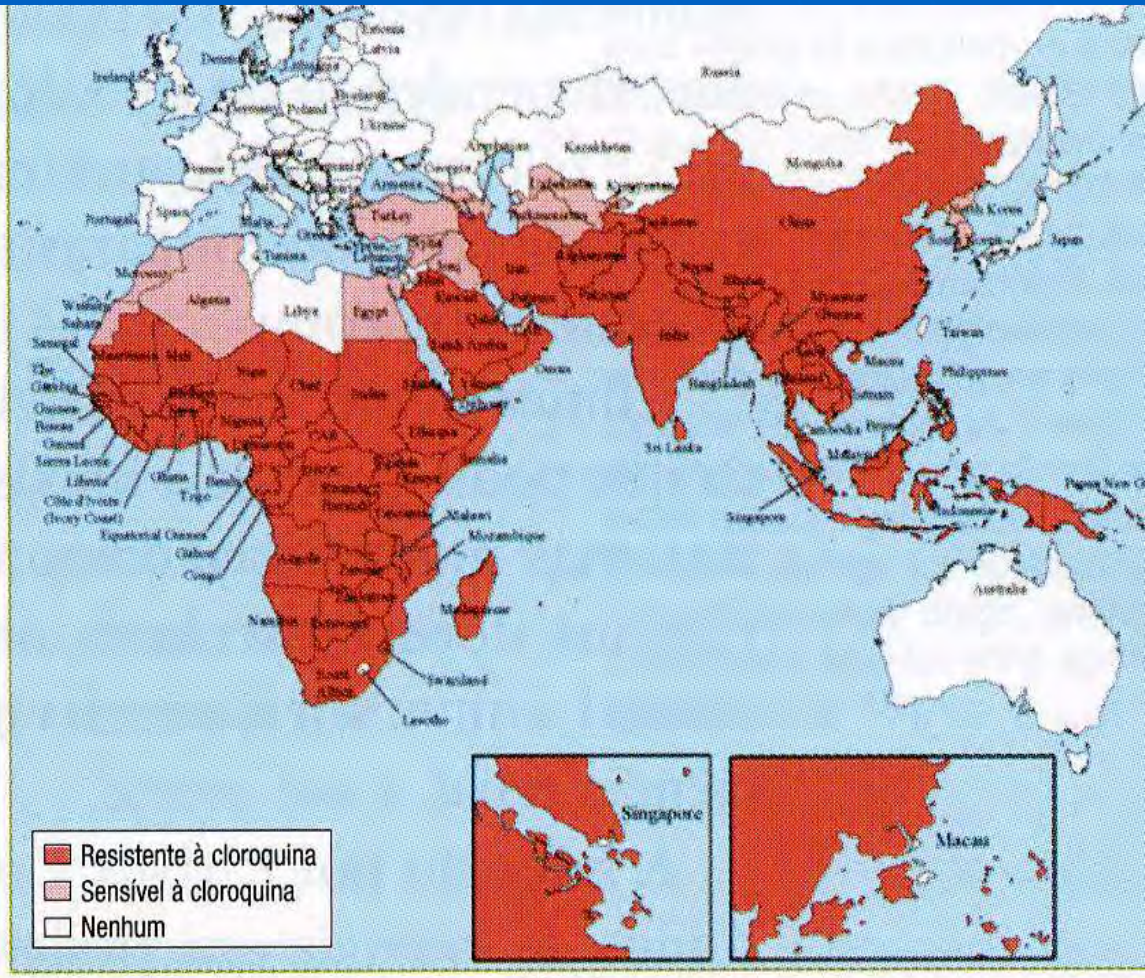
O mesmo vector, várias doenças …



Distribution of Dengue, Yellow Fever, and Their Principal Vector, the *Aedes aegypti* Mosquito.

Areas infested with *A. aegypti* are receptive to the introduction (by air travelers with viremia) and epidemic transmission of the dengue and yellow fever viruses. Yellow fever has never occurred in Asia — possibly because immunity to dengue provides a barrier to interhuman transmission by mosquitoes and because Asian strains of *A. aegypti* are less efficient vectors than strains from Africa and Latin America — but spread to Asia is an important future threat.

Distribuição Geográfica Mundial da Malária



Países endémicos de malária. (Fonte: www.cdc.gov).

Fever of Unknown Origin Due to Zoonoses

Dennis J. Cleri, MD[a,b,*], Anthony J. Ricketti, MD[a,b]
John R. Vernaleo, MD[c]

[a]Department of Medicine, St. Francis Medical Center, Room B-158, 601 Hamilton Avenue, Trenton, NJ 08629-1986, USA
[b]Seton Hall University, School of Graduate Medical Education, South Orange, NJ 07079, USA
[c]Division of Infectious Diseases, Wyckoff Heights Medical Center, 374 Stockholm Street, Brooklyn, NY 11237, USA

Fever of Unknown Origin in the Returning Traveler

Cristian Speil, MD, Adnan Mushtaq, MD, Alys Adamski, BS, Nancy Khardori, MD, PhD*

Division of Infectious Diseases, Department of Internal Medicine and Medical Microbiology/Immunology, Southern Illinois School of Medicine, 701 North First Street, PO Box 19636, Springfield, IL 62794-9636, USA

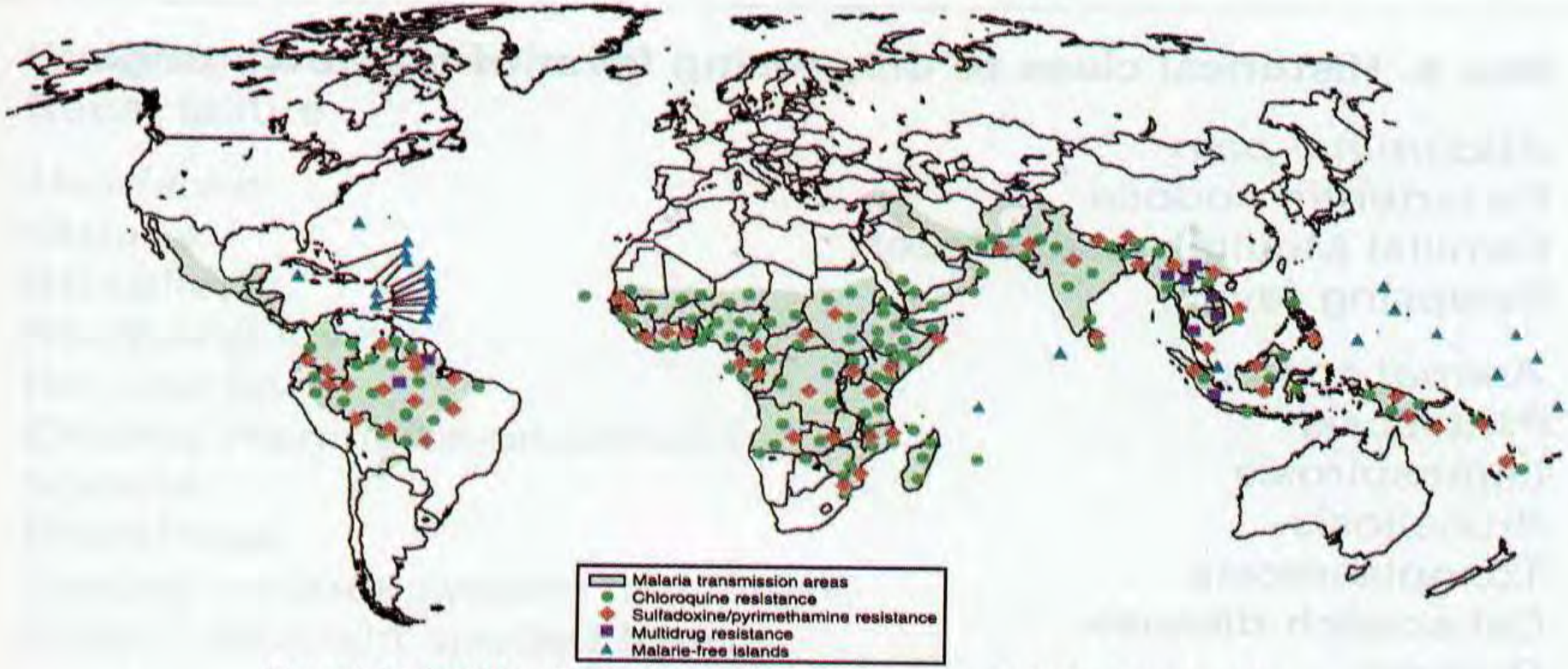
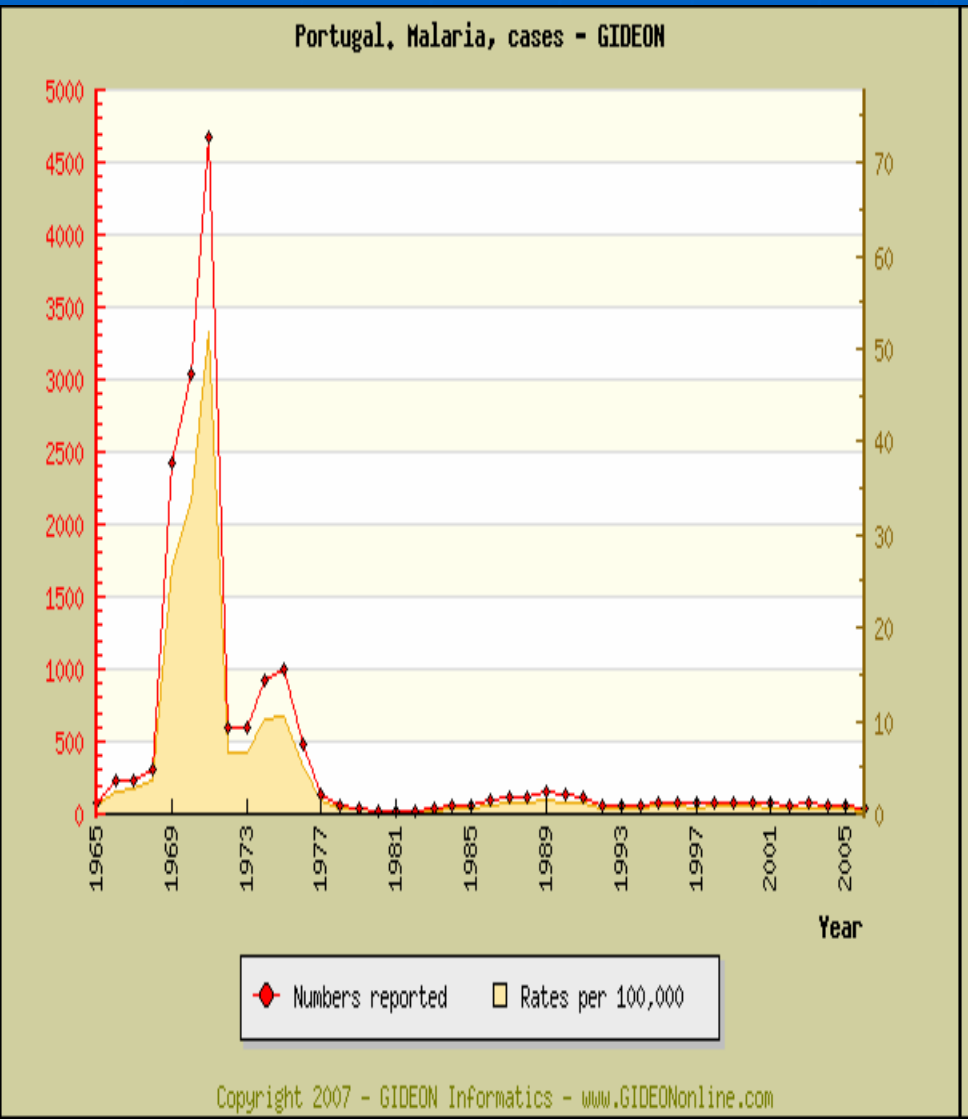
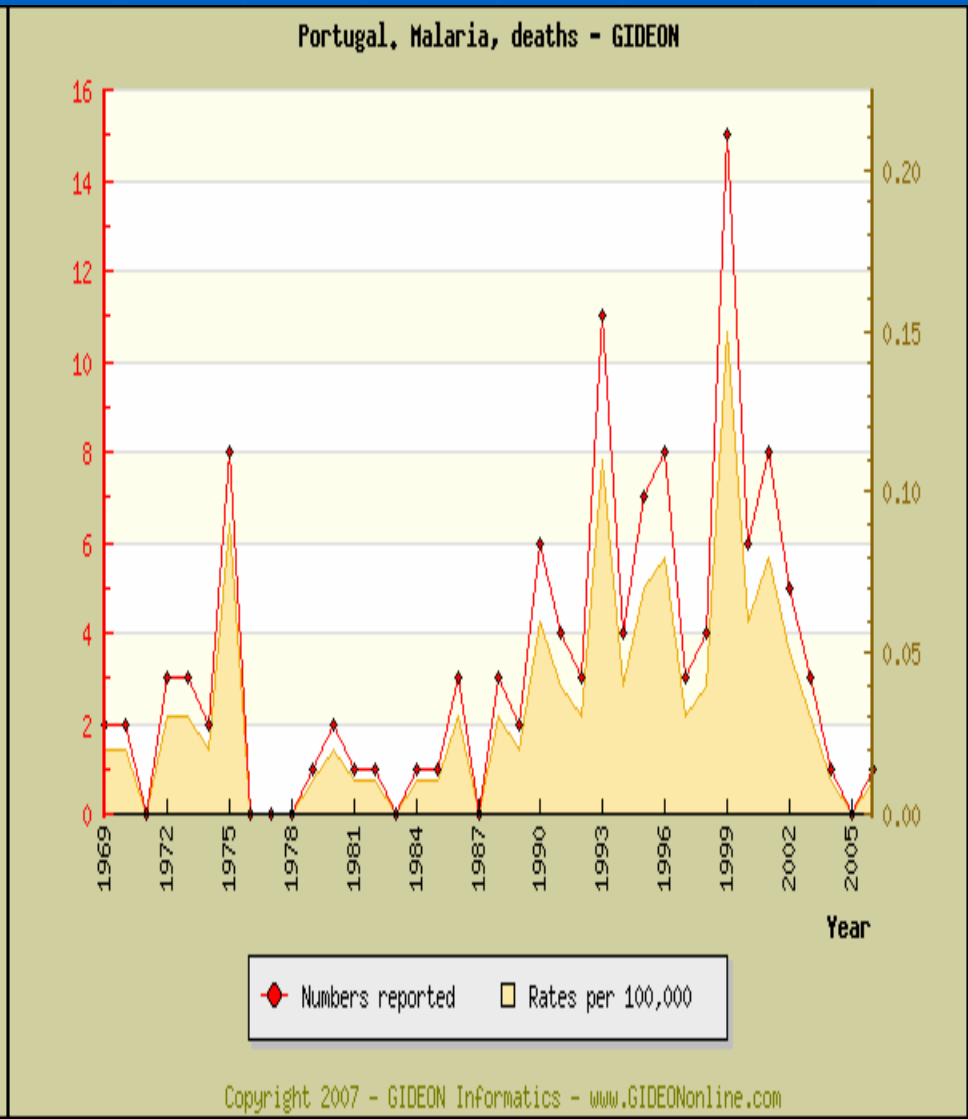


Fig. 2. Distribution of drug-resistant malaria. (*From* Mackowiak P, Durack D. Fever of unknown origin. In: Mandell, Douglas and Bennett's principles and practice of infectious diseases. 6th edition. Elsevier; 2005. p. 718–29; with permission.)

A Malária em Portugal (1969-2005)

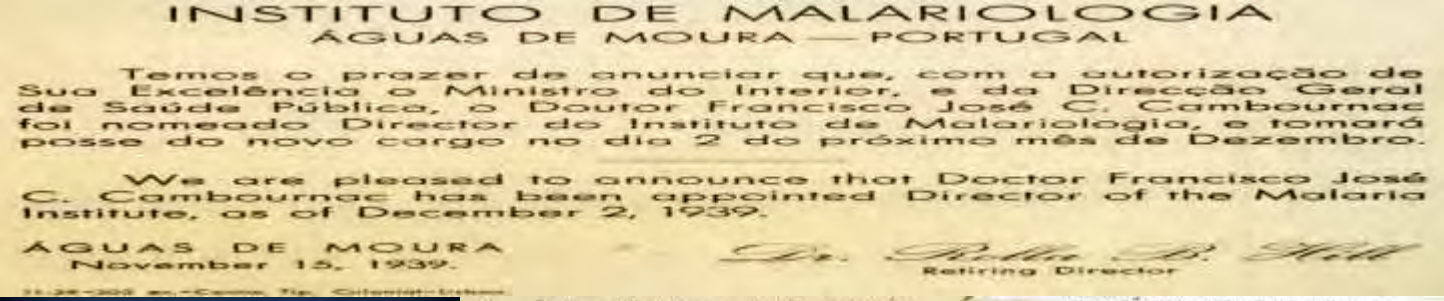




Malária: Experiência do CHS-HSB *EPE* Setúbal

- 1990 – 2007
  - Casos em Internamento
    - Total 74 D. (4-5 casos /Ano)
      - Adultos: 62 (83,8%)
      - Grávidas: 2 (2,7%)
      - Crianças: 10 (13,5%)
    - Países (49 D.)
      - Angola: 17 (34,7%)
      - Moçambique: 14 (28,6%)
      - Guiné Bissau: 4 (8,2%)
      - S. Tomé Príncipe: 4 (8,2%)
      - Outros África: 9 (18,4%)
      - América Latina: 1 (1,9%)
      - Ásia: 0 (0,0%)

- 1990 – 2007
  - Clínica (49 / 74 D.)
    - Malária Aguda: 46 (93,9%)
      - UCI: 9 (12,2%)
        - Pós-transfusional: 1
      - Mortalidade: 0 (0,0%)
    - Malária Crónica: 3 (6,1%)
      - 1 caso autóctone
  - Quimiorofilaxia Primária
    - C/: 13 (26,5%)
    - S/: 36 (73,5%)
  - Plasmódio
    - *Falciparum*: 39 (79,7%)
    - *Vivax*: 2 (4,0%)
    - *Malariae*: 1 (2,0%)
    - *P. spp*: 7 (14,3%)



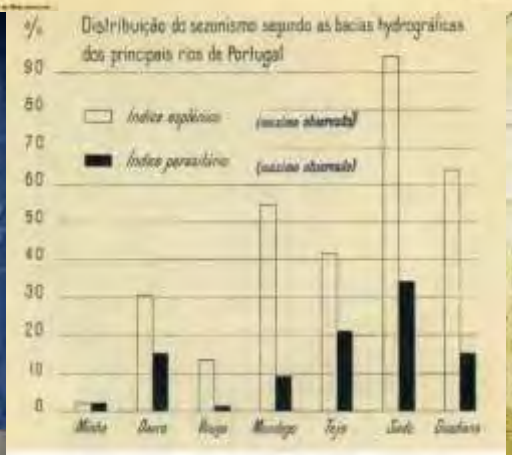
INSTITUTO DE MALARIOLOGIA
ÁGUAS DE MOURA — PORTUGAL

Temos o prazer de anunciar que, com a autorização de Sua Excelência o Ministro do Interior, e da Direcção Geral de Saúde Pública, o Doutor Francisco José C. Cambournac foi nomeado Director do Instituto de Malariologia, e tomará posse do novo cargo no dia 2 do próximo mês de Dezembro.

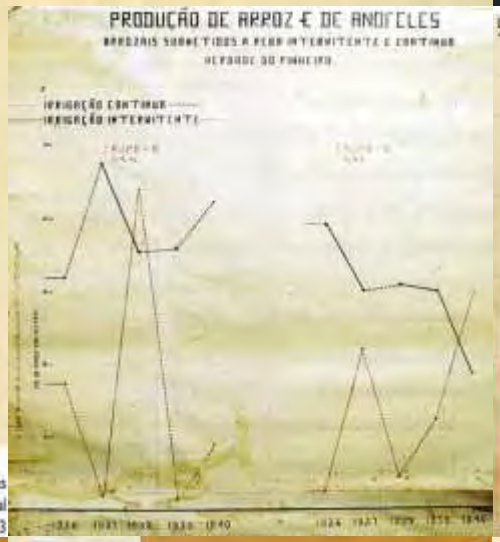
We are pleased to announce that Doctor Francisco José C. Cambournac has been appointed Director of the Malaria Institute, as of December 2, 1939.

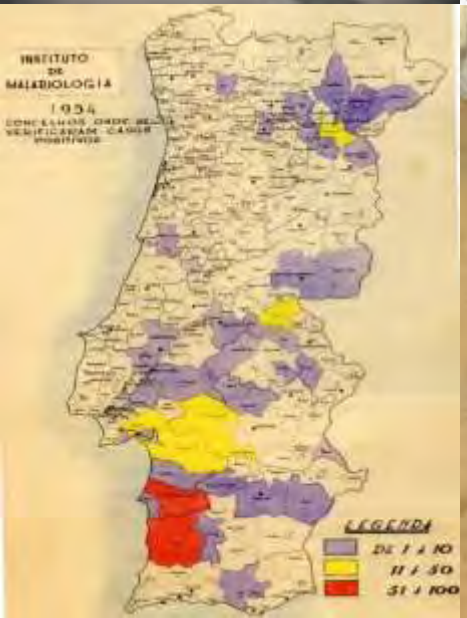
ÁGUAS DE MOURA
November 15, 1939.

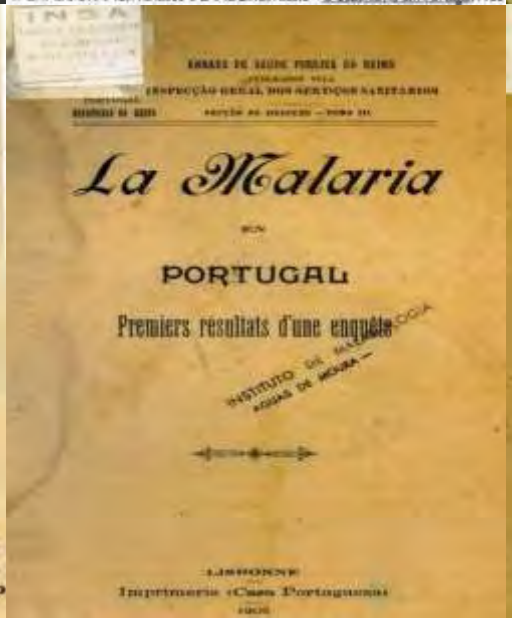
Retiring Director



Distribuição do Sezonismo segundo as bacias hidrográficas dos principais rios de Portugal
in CAMBOURNAC, Francisco e LANDEIRO, Fausto - O Sezonismo em Portugal. 1933



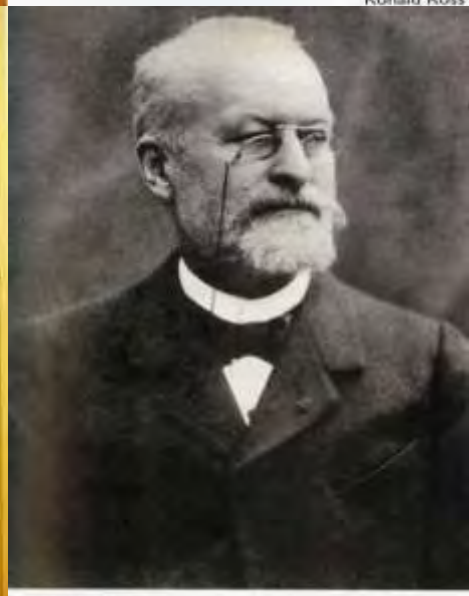




Inauguração do Anexo ao Instituto de Malariologia de Águas de Moura
Fotografia de Américo Ribeiro - Arquivo Municipal de Moura

Ronald Ross

Curso Internacional de Malariologia para Médicos, 1952
António Levy Mendes (Portugal), Claude Vermeil (França), Guy Hosel (Argélia), J. Fernandez Manuto (Espanha), Branimir Richter (Jugoslávia), Luis Carrenera Poza (Espanha), Prof. F. Cambournac, Anastassiou Marinos (Grécia), L. Saadar (Irlanda), George Famellaris (Grécia), Etienne Noel (França), L. Andreotti (Argélia), Vermona Sinan (Portugal), Jean Denizot (França), Hector Meyus (Bélgica), Luis Meira (Portugal)



Charles Laveran

INSA /CEVDI

- Zoonoses Transmitidas p/ Vectores (2005 – 2007)
  - Hantavírus
    - 2007
      - Análises: 45
        - Positivos: 3
        - Casos de Importação: 1 (América Latina)
  - Toscana
    - 2005
      - Positivo: 1 caso de Coimbra
    - 2006
      - Positivos: 4 em 17 Análises
  - Dengue
    - 2006
      - Análises: 23
        - Positivos 12 (Brasil: 6; Timor Lorosae: 1; Tailândia: 1; 5 de outros (?) países
    - 2007 (1ºs 6 meses)
      - Análises: 13
        - Positivos: 10 (Brasil: 1; América Latina: 3)

Vacinação e aconselhamento: Não se aplicam só quando a Lei o exige …

Zonas endémicas de febre-amarela, em 2005. (Fonte: www.cdc.gov).

You can't play the percentages with rabies...

Details of this map can change – always check for the latest information at: www.who.int/ith/chapter05_m10_rabies.html

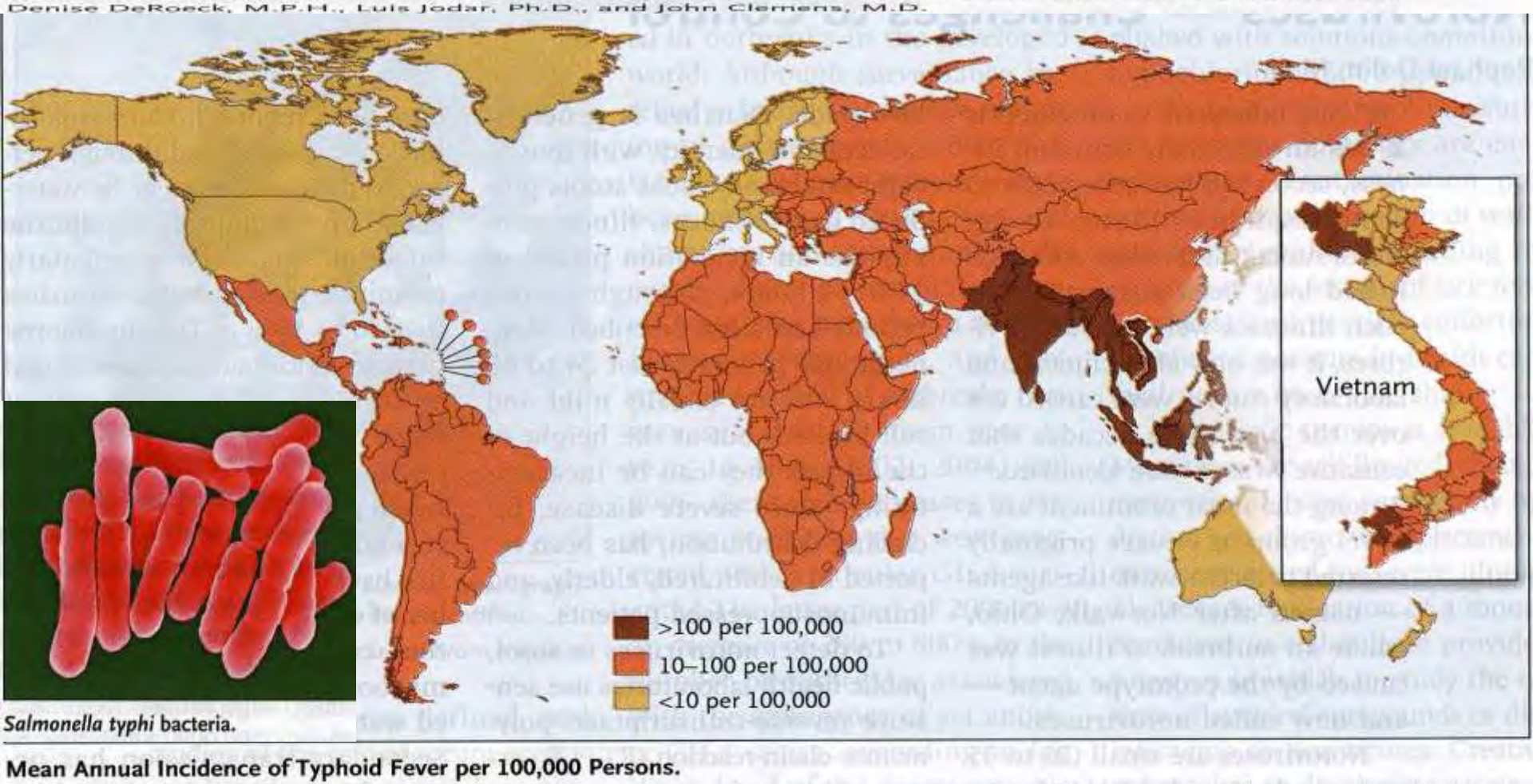
The NEW ENGLAND JOURNAL of MEDICINE

Perspective

SEPTEMBER 13, 2007

Putting Typhoid Vaccination on the Global Health Agenda

Denise DeRoeck, M.P.H., Luis Jodar, Ph.D., and John Clemens, M.D.



Salmonella typhi bacteria.

Mean Annual Incidence of Typhoid Fever per 100,000 Persons.

Country-specific incidence rates, some of which are estimates, are for 2000. Province-specific incidence rates for Vietnam are for children 5 to 14 years of age, between 1999 and 2003 (inset). Country data are from Crump et al.[2] Provincial data for Vietnam are from a meta-analysis conducted by the DOMI Program.

CURRENT CONCEPTS

Enteropathogens and Chronic Illness in Returning Travelers

Allen G.P. Ross, M.D., Ph.D., G. Richard Olds, M.D., Allan W. Cripps, Ph.D., Jeremy J. Farrar, M.D., Ph.D., and Donald P. McManus, Ph.D., D.Sc.

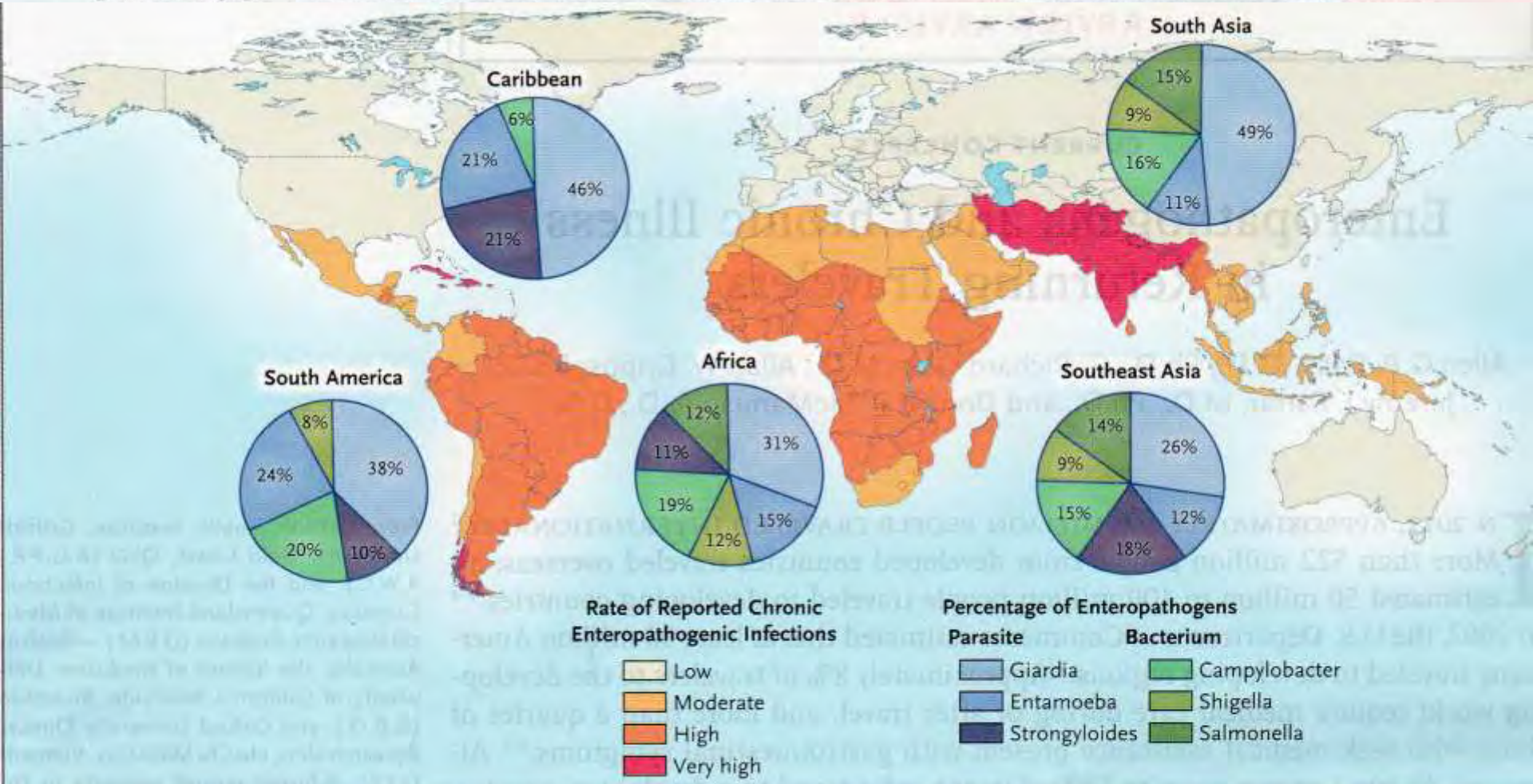


Figure 1. Relative Risk of Chronic Enteropathogenic Infections Acquired during Travel Abroad.

Data are from Swaminathan et al.[9]

The new global map of human brucellosis

Georgios Pappas, Photini Papadimitriou, Nikolaos Akritidis, Leonidas Christou, Epameinondas V Tsianos

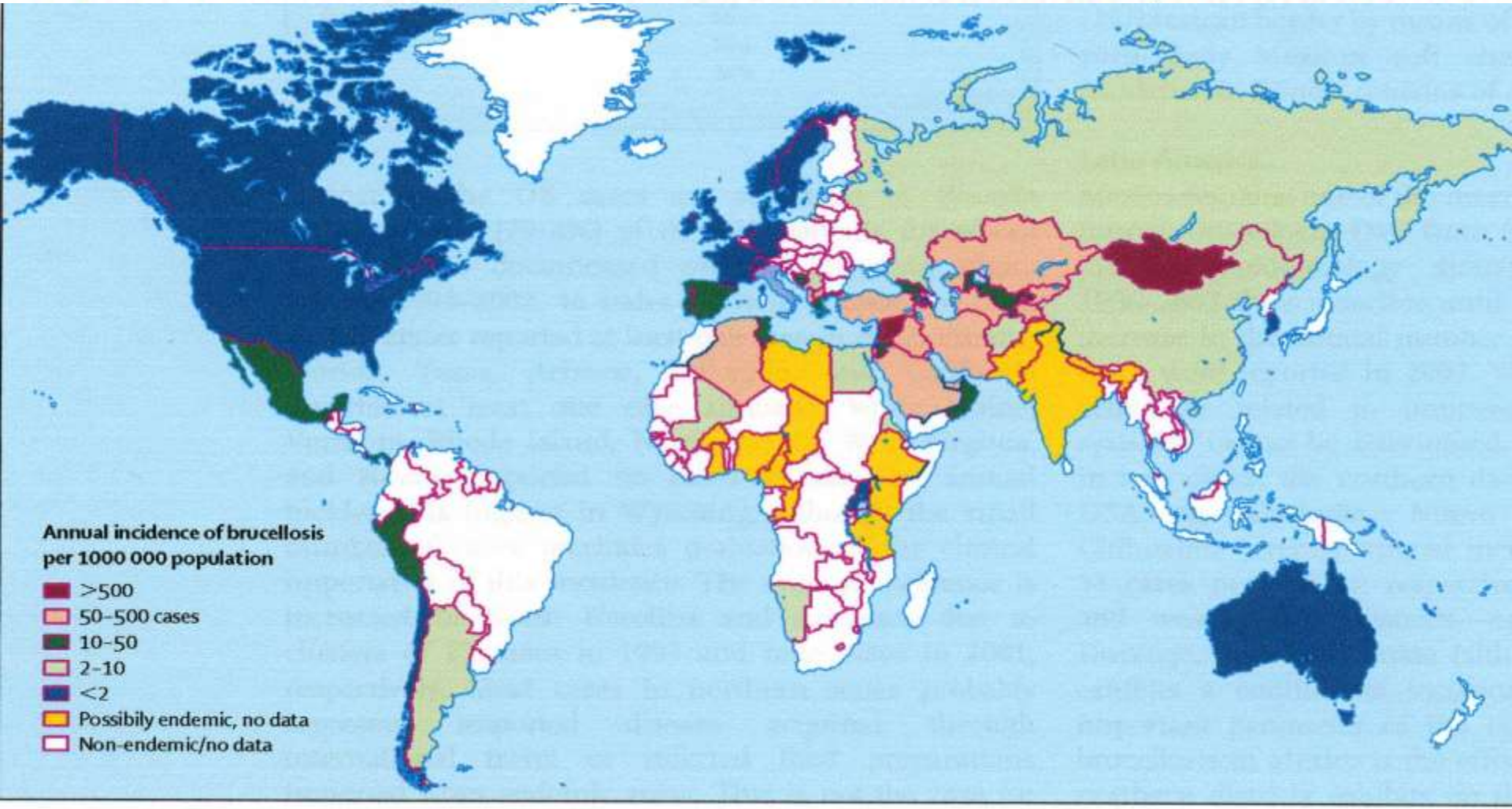
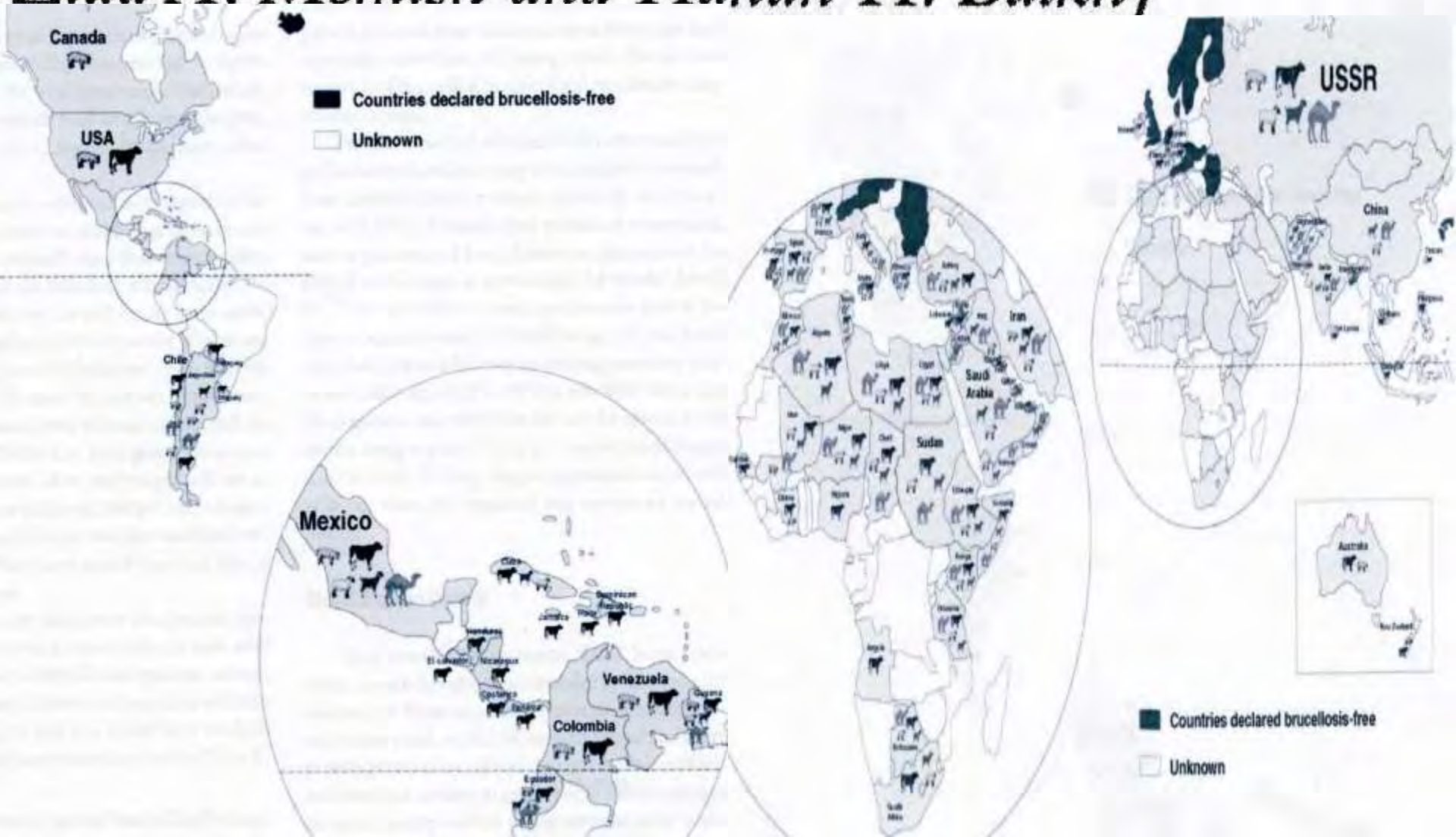


Figure 1: **Worldwide incidence of human brucellosis**

Brucellosis and International Travel

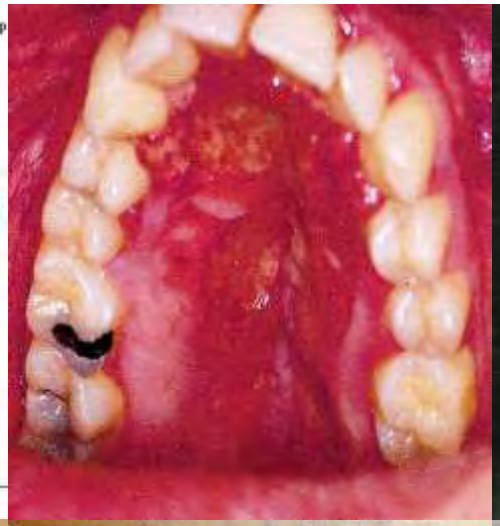
Ziad A. Memish and Hanan H. Balkhy

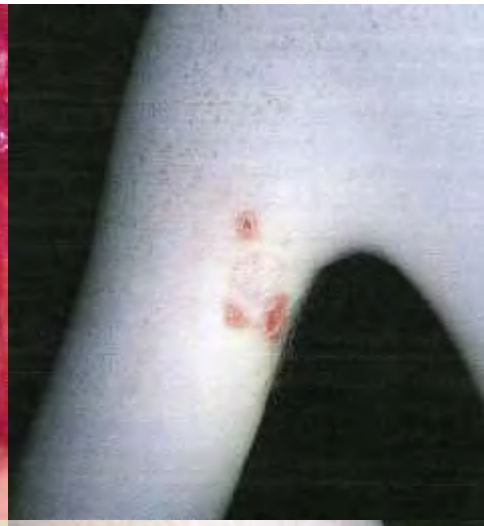


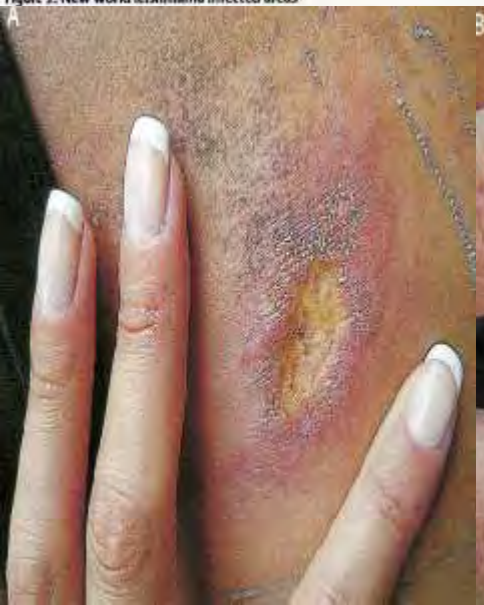
New world cutaneous leishmaniasis in travellers

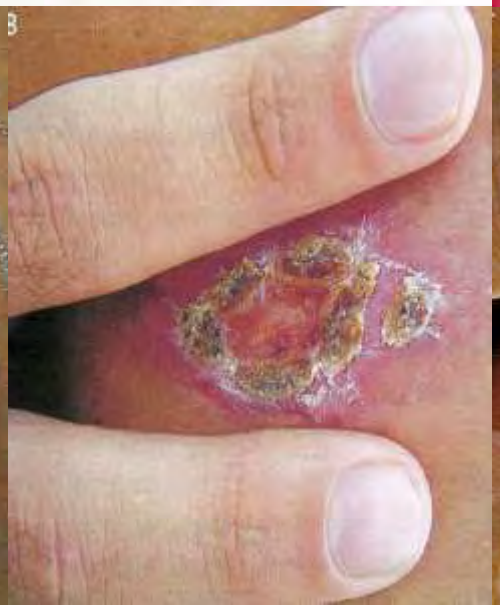
Eli Schwartz, Cristoph Hatz, Johannes Blum

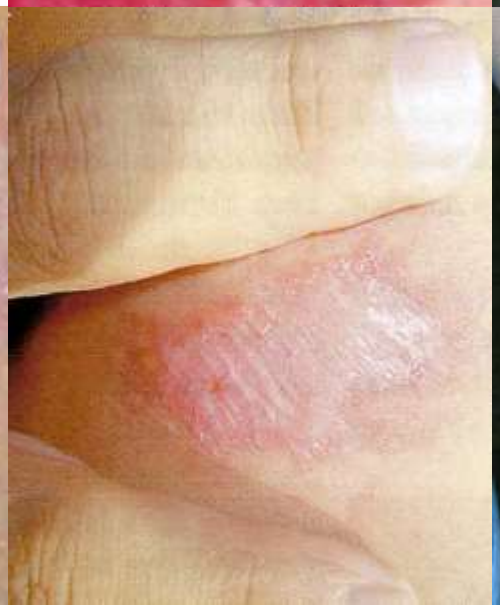
Figure 1: New world leishmania infected areas

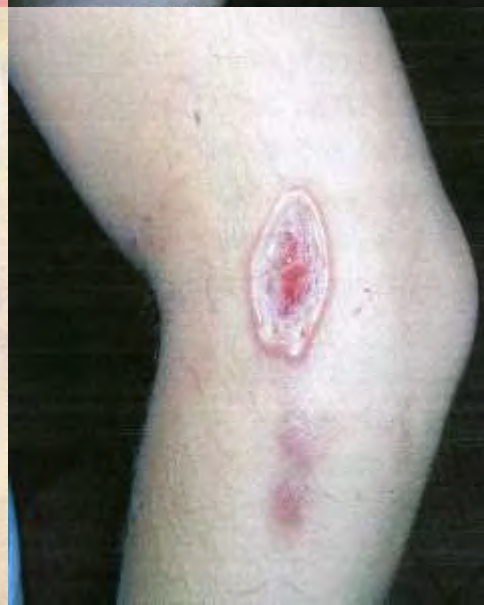












REVIEW ARTICLE

CURRENT CONCEPTS

Control of Neglected Tropical Diseases

Peter J. Hotez, M.D., Ph.D., David H. Molyneux, Ph.D., D.Sc., Alan Fenwick, Ph.D., Jacob Kumaresan, M.B., B.S., Dr.P.H., Sonia Ehrlich Sachs, M.D., Jeffrey D. Sachs, Ph.D., and Lorenzo Savioli, M.D.

Table 1. The Major Neglected Tropical Diseases Ranked by Prevalence.*

Disease	Global Prevalence (millions)	Population at Risk	Regions of Highest Prevalence	Source
Ascariasis	807	4.2 billion	East Asia and Pacific Islands, sub-Saharan Africa, India, South Asia, China, Latin America and Caribbean	Bethony et al.[3] de Silva et al.[7]
Trichuriasis	604	3.3 billion	Sub-Saharan Africa, East Asia and Pacific Islands, Latin America and Caribbean, India, South Asia	Bethony et al.[3] de Silva et al.[7]
Hookworm infection	576	3.2 billion	Sub-Saharan Africa, East Asia and Pacific Islands, India, South Asia, Latin America and Caribbean	Bethony et al.[3] de Silva et al.[7]
Schistosomiasis	207	779 million	Sub-Saharan Africa, Latin America and Caribbean	Steinmann et al.[4]
Lymphatic filariasis	120	1.1 billion	India, South Asia, East Asia and Pacific Islands, sub-Saharan Africa	Ottesen,[5] WHO[6]
Trachoma	84	190 million	Sub-Saharan Africa, Middle East and North Africa	International Trachoma Initiative,[11] Médecins sans Frontières[12]
Onchocerciasis	37	90 million	Sub-Saharan Africa, Latin America and Caribbean	Basáñez et al.[13]
Leishmaniasis	12	350 million	India, South Asia, sub-Saharan Africa, Latin America and Caribbean	Desjeux[14]
Chagas' disease	8–9	25 million	Latin America and Caribbean	WHO[15]
Leprosy	0.4	ND	India, sub-Saharan Africa, Latin America and Caribbean	International Federation of Anti-Leprosy Associations[16]
Human African trypanosomiasis	0.3	60 million	Sub-Saharan Africa	Fèvre et al.[17]
Dracunculiasis	0.01	ND	Sub-Saharan Africa	Carter Center[18]
Buruli ulcer	ND	ND	Sub-Saharan Africa	Global Buruli Ulcer Initiative[19]

* ND denotes not determined.

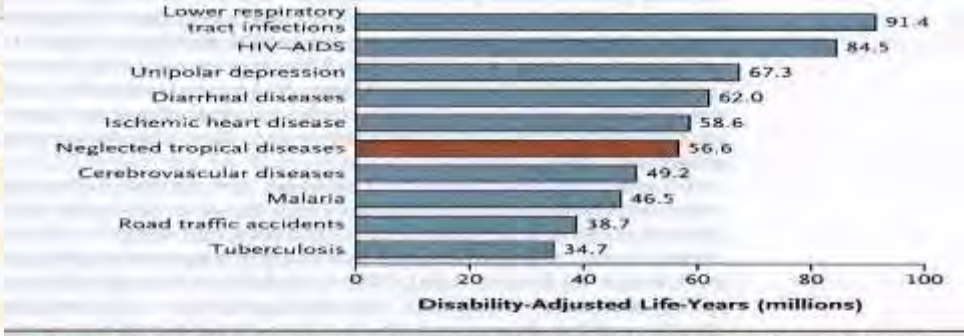


Figure 1. The 10 Leading Causes of Life-Years Lost to Disability and Premature Death.

The number of years lost to disability and premature death (disability-adjusted life-years) for the 13 major neglected tropical diseases were calculated according to a method we described previously.[4] The disability-adjusted life-years for the other conditions are based on data from the World Health Organization.[23] The ranking of disease burdens is based on data in Hotez.[5]

Figure 2. Nations with Five, Six, or Seven Neglected Tropical Diseases to Be Targeted for Integrated Preventive Chemotherapy.

Of the 56 nations to be targeted with a rapid-impact package, shown in yellow, 37 are located in the World Health Organization (WHO) African region, 5 in the WHO Region of the Americas, 5 in the WHO Eastern Mediterranean region, 3 in the WHO South-East Asia region, and 6 in the WHO Western Pacific region. Data regarding the occurrence of lymphatic filariasis, onchocerciasis, schistosomiasis, and the three soil-transmitted helminth infections are derived from the WHO.[4,6] Data regarding the occurrence of trachoma are derived from the WHO.[4,5] The five nations shown in orange — Burkina Faso, Ghana, Mali, Niger, and Uganda — will be targeted for integrated control in national programs through the support of the U.S. Agency for International Development Neglected Tropical Disease Control Program beginning this year. The two nations shown in red — Rwanda and Burundi — will be targeted for integrated control in national programs through the support of Geneva Global beginning this year.

Prospective Analysis of Parasitic Infections in Canadian Travelers and Immigrants

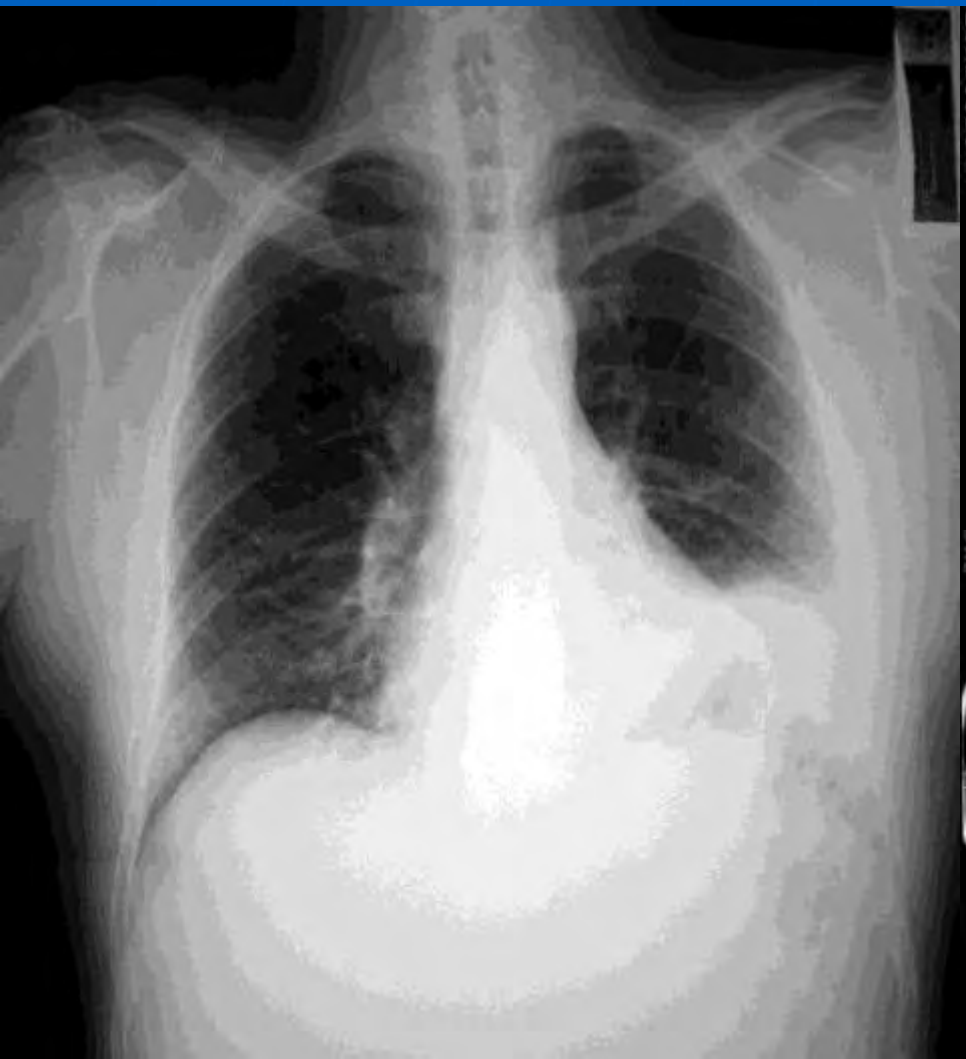
Andrea K. Boggild, MSc, MD,* Seychelle Yohanna, BSc,† Jay S. Keystone, MD, FRCP and Kevin C. Kain, MD, FRCPC*†‡§

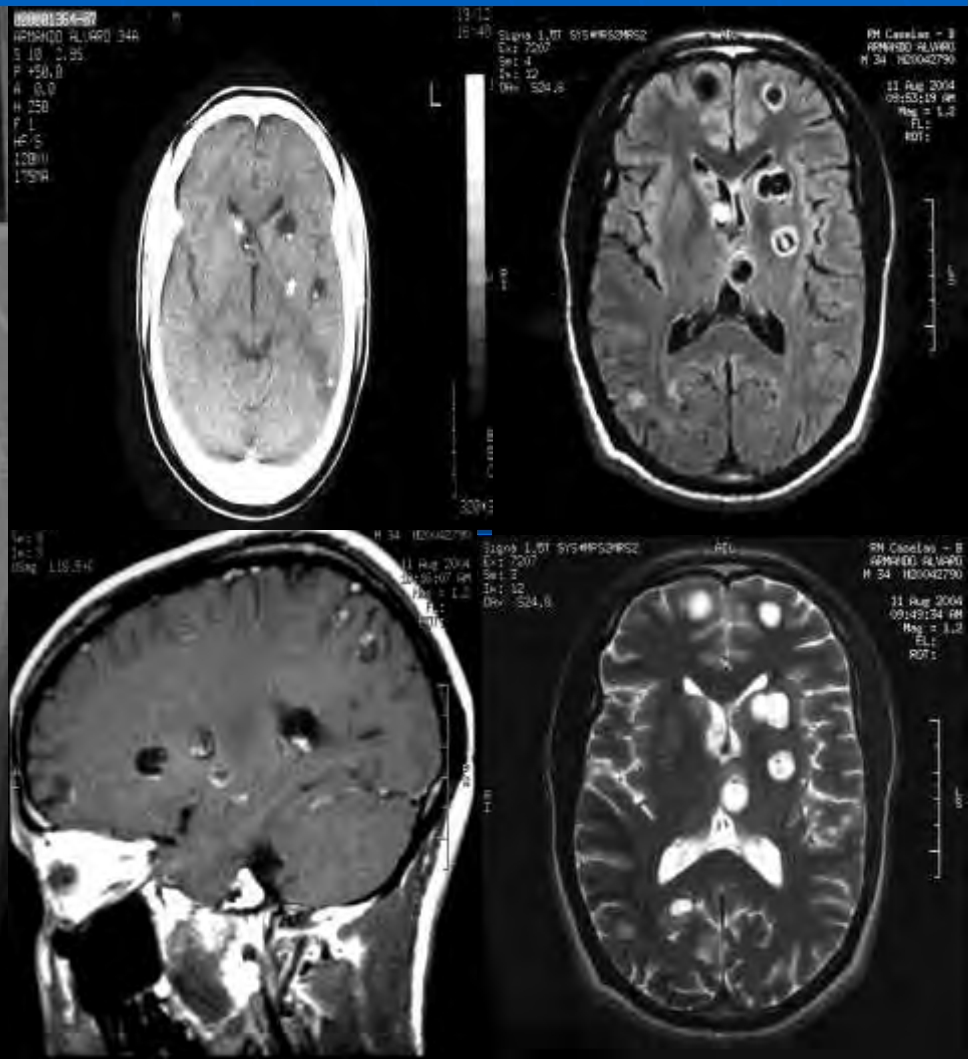
Table 1 Parasitic and Vector-Borne Diseases in Returned Canadian Travelers

Diagnosis	Frequency (*N*)	% of parasitic (*N* = 1,010) infections	Purpose of travel (*N*)				
			Immigration *N* = 390	VFR *N* = 476	Tourism *N* = 1,896	Business *N* = 344	Other *N* = 403
NHA*	209	20.7	62	34	72	21	20
Malaria	143	14.2	22	37	49	19	15
Plasmodium vivax	66	6.5	10	17	28	4	6
P. falciparum	51	5.0	7	15	13	11	5
P. ovale	8	0.8	3	2	2	—	1
P. malariae	1	0.1	—	1	—	—	—
Unknown	12	1.2	1	1	4	2	3
CLM†	105	10.4	1	3	97	2	—
Dientamebiasis	84	8.3	19	7	45	4	9
Giardiasis	74	7.3	14	10	32	7	10
Schistosomiasis	48	4.8	14	9	17	4	4
Schistosoma hematobium	25	2.5	7	4	12	1	1
S. mansoni	17	1.7	7	5	2	1	2
S. japonicum	2	0.2	—	—	2	—	—
Unknown	4	0.4	—	—	1	2	1
Strongyloidiasis	43	4.3	9	16	13	—	5
Amebiasis	41	4.1	10	8	14	1	8
Echinococcosis	38	3.8	12	16	9	—	—
Tapeworms, Other‡	30	3.0	15	6	6	1	2
Filariasis	28	2.8	10	8	9	—	1
Wuchereria bancrofti	18	1.8	7	5	5	—	—
Onchocerciasis	2	0.2	1	—	1	—	—
Loaiasis	3	0.3	—	1	2	—	—
Unknown	5	0.5	2	1	2	—	—
Clonorchiasis	24	2.4	10	5	7	2	—
Ascariasis	22	2.2	5	4	10	2	—
Myiasis	17	1.7	—	1	12	1	3
Enterobiasis	15	1.5	3	2	9	—	1
Neurocysticercosis	13	1.3	6	4	2	1	—
Cutaneous Leishmaniasis	12	1.2	4	3	3	—	—
Whipworm	12	1.2	5	2	2	—	2
Hookworm	11	1.1	3	3	2	—	3
Toxoplasmosis	10	1.0	2	1	7	—	—
Chagas' Disease	4	0.4	1	1	1	—	—

*Nonhistolytica amebiasis; includes *Entamoeba coli, E.dispar, E.hartmani, Endolimax nana.*
†Cutaneous larva migrans.
‡Includes Taenia saginata, Hymenolepis nana, Taenia solium, and unidentified tapeworms.

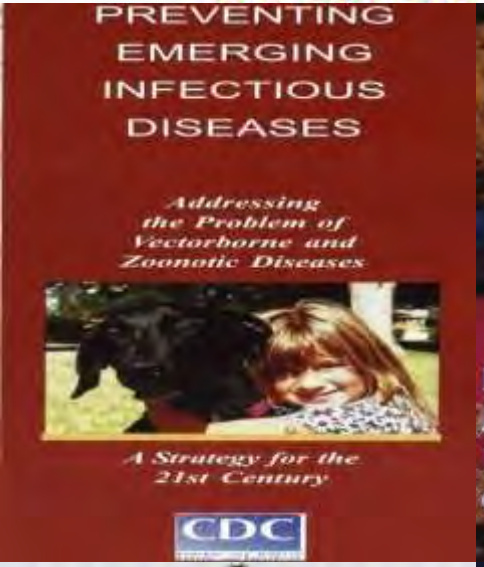
O Exemplo de 2 Casos Clínicos

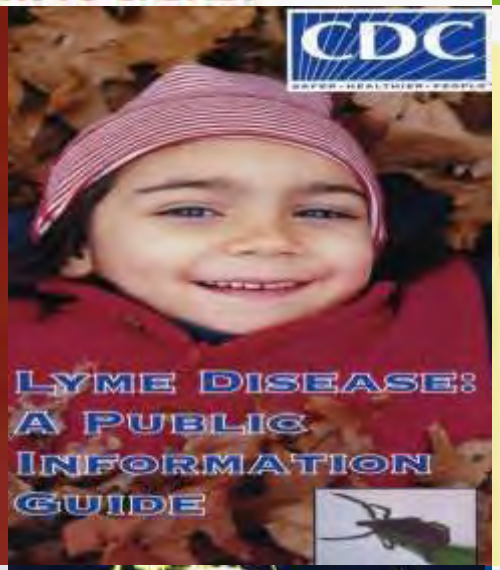


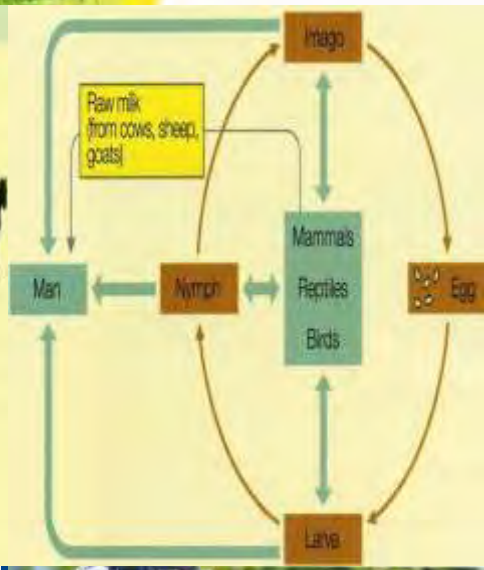


The Great Outdoors.

Be careful: It ticks.







information series for hiv-positive people

hiv & sex

Welcome to
Tanzania's Immigration Department

The Truth about HIV/AIDS

How to protect yourself from HIV/AIDS in Tanzania and beyond.....

Protect yourself against transmission of HIV

HIV is transmitted through the exchange of bodily fluids which are primarily blood, semen and vaginal excretions.

By following these steps you can effectively protect yourself from HIV.

Abstinence: the most effective method of protection is by abstaining from penetrative sex.

Safe sex: Use a new male or female condom every time you have vaginal, anal or oral sex.

Don't share **needles** or **syringes.**

Keep all **open wounds** and **sores** covered.

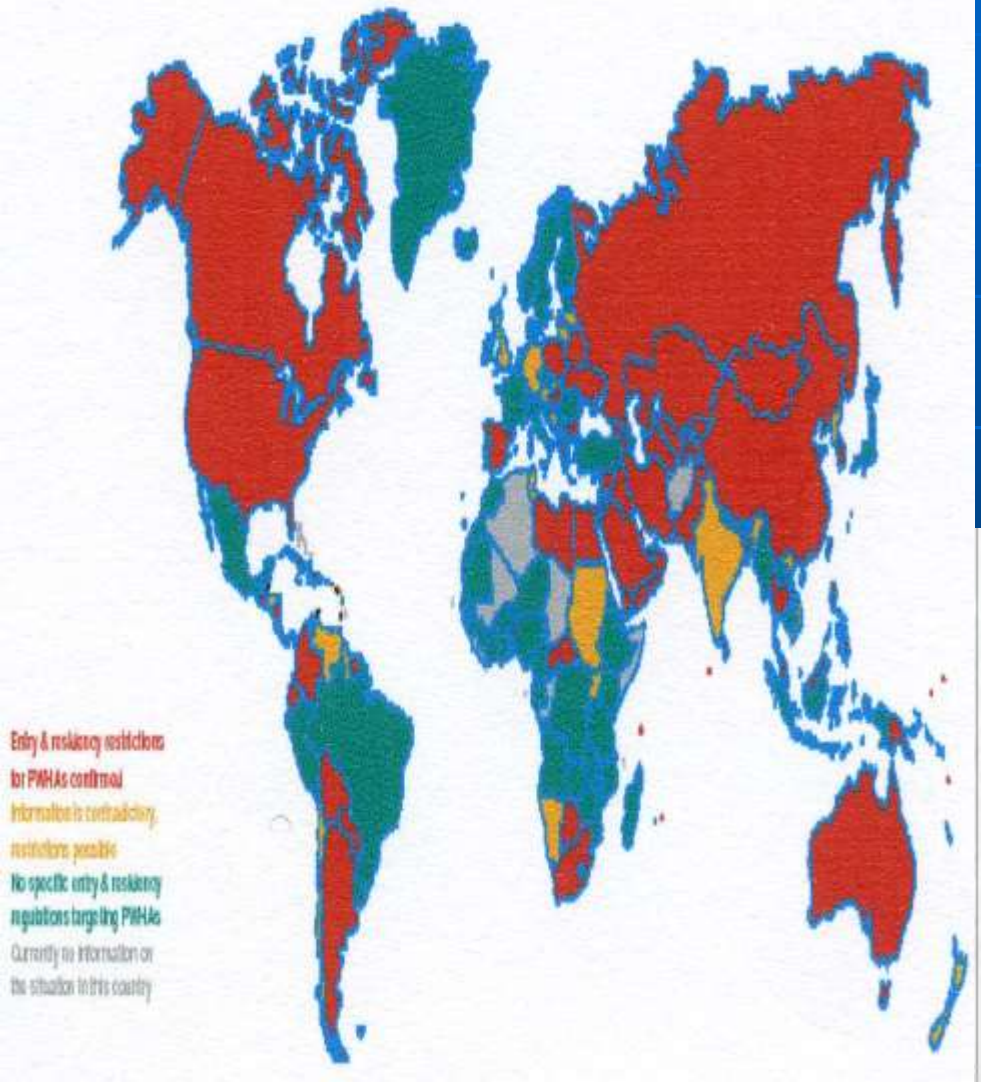
Follow medical advice if HIV positive and **pregnant.**

Seek treatment for **Sexually Transmitted Diseases (STDs)** as these increase the risk of transmission of HIV.

Quick Reference

Travel and residence regulations for people with HIV and AIDS

Material for counsellors in AIDS service organisations



- Alguns países exigem um teste serológico p/ estadias > 3 meses
- Vários países proíbem explicitamente a entrada a viajantes seropositivos
- Nem todos os países aceitam o atestado de isenção da Vacina contra a Febre Amarela

Medical certificate for carrying of medication and utensils

Patient's name:

Date of birth:

This is to certify that the above named person carries the following medications and utensils, which are for personal use in the treatment of the medical conditions mentioned.

Medical condition(s): Medication(s) (generic names) and utensils:

Syringes: Needles:
Other utensils:

Date: Official stamp

Physician's signature:

Medical certificate for exemption from yellow fever vaccination

Patient's name:

Date of birth:

This is to certify that the above named person has not been vaccinated against YELLOW FEVER because of

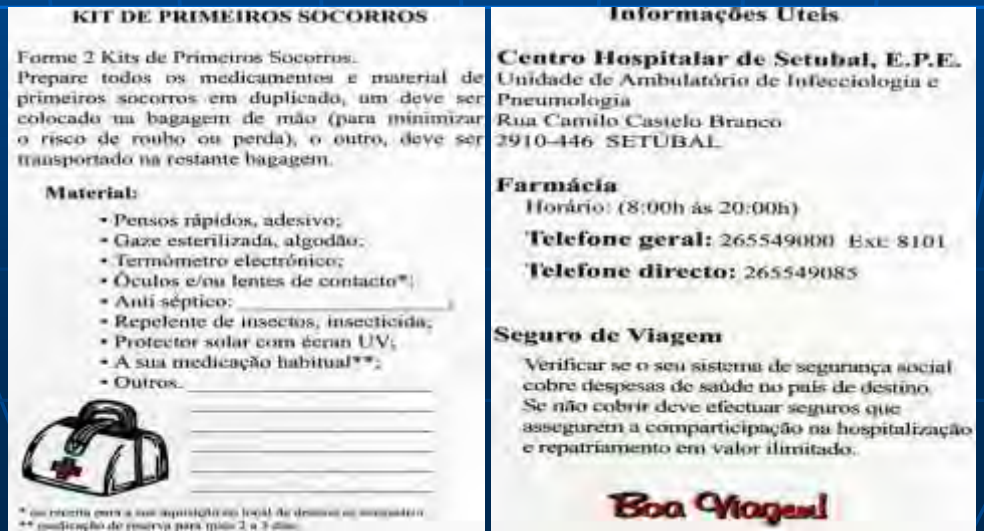
- pregnancy
- less than 9 months of age
- other

Date: Official stamp

Physician's signature:

Farmácia de Emergência p/ Auto Tratamento

- Fluconazol
- (Val)Aciclovir
- Contracepção de emergência
- TARV *(PPE (SI)*
- ABs. (Ciprofloxacina; Azitromicina; Rifaximina)
- Auto–Tratamento da Malária
- Preservativos ***(lubrificante hídrico …)***
- **(etc …)**



KIT DE PRIMEIROS SOCORROS

Forme 2 Kits de Primeiros Socorros.
Prepare todos os medicamentos e material de primeiros socorros em duplicado, um deve ser colocado na bagagem de mão (para minimizar o risco de roubo ou perda), o outro, deve ser transportado na restante bagagem.

Material:

- Pensos rápidos, adesivo;
- Gaze esterilizada, algodão;
- Termómetro electrónico;
- Óculos e/ou lentes de contacto*;
- Anti séptico: _____;
- Repelente de insectos, insecticida;
- Protector solar com écran UV;
- A sua medicação habitual**;
- Outros. _____

Informações Úteis

Centro Hospitalar de Setubal, E.P.E.
Unidade de Ambulatório de Infecciologia e Pneumologia
Rua Camilo Castelo Branco
2910-446 SETÚBAL

Farmácia
Horário: (8:00h às 20:00h)
Telefone geral: 265549000 Ext 8101
Telefone directo: 265549085

Seguro de Viagem

Verificar se o seu sistema de segurança social cobre despesas de saúde no país de destino.
Se não cobrir deve efectuar seguros que assegurem a comparticipação na hospitalização e repatriamento em valor ilimitado.

Boa Viagem!


MALARIA IS BIG PROBLEM IN AFRICA
HOSPITAL ZANZIBAR TANZANIA E AFRICA
RECEPTION

MACIA
FARMACIA
DE
DESCUENTO

CONSULTORIO
MEDICO
URGENCIAS
24 HORAS
Dr. José Guirao López

BEWARE OF MALARIA IT KILLS
BEWARE OF HIVAIDS IT KILLS

Tooth brush Tree.
salvadora persica
(swahili-mswaki).
The twigs are used as a toothbrush. roots and leaves used for treatment of malaria.

FEVER TREE
Acacia xanthophlea (olerai-Masai)
The tree grows in groups in a Low Lying Swampy areas Which is favourable breeding ground for Malarial Mosquitoes. Early Pioneers Were convinced that the tree caused Malaria Which is not true. Roots used for treatment of Stomach-ache.



DISCOUNT
FARMACY
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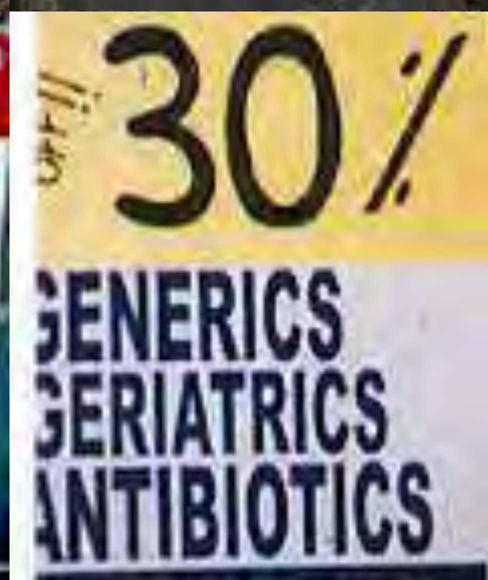
• GERIATRICS
• ANTIBIOTICS

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ANTIBIOTICS

DOCTOR TRADICIONAL
FEBRE AMARELA - MALUCU
PALUDISMO - MAKULU
TROMBOSE - AMSIMA
ASMA - DIABETA

ZANZIBAR

O QUE VOCÊ DEVE SABER SOBRE A DENGUE

DROGARIA FREI OSVALDO

ALMEIDA PRADO

SÃO JOSÉ DO RIO PRETO E A HOMEOPATIA CONTRA A DENGUE

Auxiliar no tratamento dos sintomas da Dengue.

(cansaço, desânimo, indisposição, dor de cabeça, dor muscular, náuseas, inapetência, febres e calafrios, dor abdominal e dor retro-ocular)

MS 1.0266.0168.001-3

Contra-indicações: Ainda não são totalmente conhecidas a intensidade e freqüência das reações adversas do uso dos medicamentos homeopáticos. Hipersensibilidade aos componentes da fórmula.
É UM MEDICAMENTO. SEU USO PODE TRAZER RISCOS.
PROCURE O MÉDICO E O FARMACÊUTICO. LEIA A BULA.

TELEVENDAS: 0800.7076311 SAC 0800.116311

Homeopatia Almeida Prado

LABORATÓRIO CENTRAL E VENDAS
Praça Benedito Calixto, 129/133 - Pinheiros - São Paulo - SP
Consulte nossa homepage
www.homeopatiaalmeidaprado.com.br
Farmacêutica Responsável: Dra. Zuleika Carvalho CRF-SP 4142

DISTRIBUIÇÃO INTERNA - Impresso FEV/2009

Travel patterns and risk behaviour of HIV-positive people travelling internationally

Irving E. Salit, Marie Sano, Andrea K. Boggild, Kevin C. Kain

Table 3: Preparations made before travel by HIV-positive international travellers

Preparation	No. (%) of travellers
Seeking of health advice	*n = 58*
Source	
Physician at HIV clinic	27 (46.6)
Travel clinic	17 (29.3)
Internet	5 (8.6)
Travel agent	2 (3.4)
Type of information	
Travel-related diseases	23 (39.7)
Vaccinations	25 (43.1)
Malaria prevention	13 (22.4)
Border and visa requirements	14 (24.1)
Safer sex	3 (5.2)
Physician's letter about anti-HIV medications	16 (27.6)
HIV physician at destination	5 (8.6)
Preventive measures	*n = 133*
Antidiarrheal drugs (e.g., loperamide)	59 (44.4)
Insect repellents and mosquito nets	21 (15.8)
Malaria chemoprophylaxis	9 (6.8)
Pretravel vaccinations	23 (17.3)
Yellow fever	2 (1.5)
Typhoid	3 (2.3)
Diphtheria–tetanus	10 (7.5)
Hepatitis A	17 (12.8)
Hepatitis B	20 (15.0)

Table 4: Risk exposure and medical help sought during international travel

Variable	No. (%) of international travellers
Risk exposure	
Adherence to antiretroviral therapy during travel	*n = 119*
Complete	53 (44.5)
Partial (missed 1–3 doses)	31 (26.1)
Poor or none	35 (29.4)
Casual sexual intercourse	*n = 31*
With another traveller	11 (35.5)
With local resident	27 (87.1)
With commercial sex worker	1 (3.2)
Exposure to sharps	*n = 21*
Tattoo	1 (4.8)
Injection drug use (medical)	6 (28.6)
Injection drug use (illicit)	1 (4.8)
Body piercing	6 (28.6)
Shared razor	7 (33.3)
Medical help*	*n = 24*
Given diagnosis	11 (45.8)
Infectious diagnosis†	7 (29.2)
Seen by local physician	12 (50.0)
Seen at hospital or clinic	9 (37.5)
Seen immediately upon return	3 (12.5)

*The details of all illnesses are not available.
†Diagnoses included acute otitis media, bronchitis, influenza, pneumonia, upper respirat tract infection, parasitic infection.

Fever After a Stay in the Tropics: Clinical Spectrum and Outcome in HIV-Infected Travelers and Migrants

Emmanuel Bottieau, MD, PhD; Eric Florence, MD, PhD; Jan Clerinx, MD; Erika Vlieghe, MD; Marc Vekemans, MD; Filip Moerman, MD; Lut Lynen, MD; Robert Colebunders, MD, PhD; Alfons Van Gompel, MD; Jef Van den Ende, MD, PhD

J Acquir Immune Defic Syndr. 2008;48(5):547-552.
Posted 01/28/2009

Table 1. Prevalence of HIV Infection in the Study Participants (n = 1850) per Category of Traveler (at First Inclusion)

	Western Travelers and Expatriates (n = 1458), n (%)	VFR Travelers (n = 239), n (%)	Foreign Visitors/Migrants (n = 153), n (%)	Total (n = 1850), n (%)
Cases tested for HIV infection	782 (54)*	180 (75)	120 (78)	1082 (58)
Prevalence of HIV infection	31 (2)†	26 (11)	36 (24)	93 (5)
Cases previously known with HIV infection	18 (1)	17 (7)	10 (7)	45 (2.5)
Cases diagnosed during the fever workup	13 (1)	9 (4)	26 (17)	48 (2.5)

*HIV testing was performed in 611/1195 (51%) western travelers and 171/263 (65%) expatriates.
†Prevalence of HIV infection was 2% (22/1195) in western travelers and 3.5% (9/263) in expatriates.

Table 2. Clinical Features, Disease Pattern, and Outcome According to HIV Status

	Fever Episodes in HIV-Positive Patients (n = 104)	Fever Episodes in HIV-Negative Patients (n = 1035)	P
Clinical features			
Any respiratory symptom, n (%)*	63 (61)	332 (32)	<0.001
Any digestive symptom, n (%)†	61 (59)	508 (49)	0.08
Fever as isolated symptom	4 (4)	259 (25)	<0.001
Fever ≥39°C, n (%)	48 (47)	494 (48)	0.8
Enlarged lymph node, n (%)	26 (25)	112 (11)	<0.001
Abnormal lung auscultation, n (%)	21 (20)	44 (4)	<0.001
Skin rash/skin lesions, n (%)	14 (14)	147 (14)	0.9
Splenomegaly (assessed clinically)	18 (17)	118 (11)	0.07
Disease pattern			
Tropical conditions	13 (13)‡	460 (44)	<0.001
Malaria	10 (10)	339 (31)	<0.001
Cosmopolitan infections	70 (67)	327 (32)	<0.001
Respiratory tract infection	21 (20)§	94 (9)	<0.001
Tuberculosis	13 (13)‖	8 (1)	<0.001
OIs (other than tuberculosis)	10 (10)¶	0	<0.001
STI	9 (9)#	18 (2)**	<0.001
Bacterial enteritis	5 (5)	54 (5)	0.8
Mononucleosis-like syndromes	6 (6)††	53 (5)	0.9
Bacteremia	3 (3)‡‡	10 (1)	0.08
Noninfectious disease	7 (7)§§	23 (2)	0.006
Unknown etiology	13 (13)	220 (21)	0.04
Outcome			
Hospitalization	57 (55)	439 (42)	0.01
Median duration of hospital stay, d (IQR)	8 (4–17)	4 (2–6)	<0.001
Median total duration of fever, d (IQR)	10 (5–20)	7 (4–11)	0.001
Death	1 (1)	7 (0.5)	0.5

All results are expressed in n (%), except otherwise mentioned.
*Including cough and/or dyspnea and/or thoracal pain.
†Including vomiting and/or diarrhea and/or abdominal pain.
‡Including African tick bite fever (n = 1), dengue (n = 1), and amebic colitis (n = 1), besides malaria.
§Including upper (n = 5) and lower (n = 16) respiratory tract infections.
‖Including pulmonary (n = 5) and extrapulmonary tuberculosis (n = 8).
¶Including *Pneumocystis jirovecii* pneumonia (n = 3), *Cryptococcus* sp. meningitis (n = 3), cerebral toxoplasmosis (n = 2), disseminated histoplasmosis (n = 1), and isosporiasis (n = 1).
#Including secondary syphilis (n = 4), lymphogranulomatosis venereum (n = 2), infection with Herpes simplex virus-2 (n = 2), and acute hepatitis B (n = 1).
**Including primary HIV infection (n = 5) and primary *Cytomegalovirus* infection (n = 1).
††Including bacteremia due to nontyphi/paratyphi *Salmonella* (n = 2) and to *Streptococcus pneumoniae* (n = 1).
‡‡Including drug fever (n = 3), immune reconstitution inflammatory syndrome (n = 2), and malignancy (n = 2).
IQR, interquartile range.

Travel and Sexually Transmitted Infections

Brian J. Ward, MDCM, * and Pierre Plourde, MD†

*McGill University Tropical Diseases Centre, Montreal General Hospital, Montreal, Quebec, Canada; †Population and Public Health Program, Winnipeg Regional Health Authority, Winnipeg, Manitoba, Canada

ESTILOS DE VIDA

BAREBACK

Dá-me a tua SIDA

Com o aparecimento da Síndroma de Insuficiência Imunitária (HIV/SIDA), a forma de encarar a sexualidade sofreu uma mudança profunda e despertou novas preocupações e apreensões na mentalidade humana. Com o aumento dos inúmeros casos de seropositivos na década de 80/90, e o alarmante número de mortes registadas devido ao HIV, os ofertórios traduziram-se em extensas campanhas de prevenção de forma a consciencializar a sociedade para a necessidade de comportamentos sexuais seguros e para a urgência de pôr um freio na proliferação da doença.

No entanto, as décadas de luta e sofrimento e a perda de inúmeras vidas humanas, vítimas de um dos mais terríveis flagelos conhecidos pelo Homem, está a sofrer um revés nas suas pretensões de insidiar (ou pelo menos diminuir) novos casos de Síndroma de Insuficiência Imunitária a nível global.. E esse revés tem nome.. Barebacki

ESTILOS DE VIDA

- **Barebacking Party's**
  Festas de sexo em grupo sem uso de preservativo
- **The Gift**
  (o presente)
  O HIV
- **Gift Givers**
  (doadores de presentes)
  Individuo HIV positivo que contamina HIV negativo
- **Bug Chasers**
  (caçadores de vírus)
  HIV- procurando receber o vírus da SIDA
- **Conversion Party's**
  (festas de conversão)
  Festas onde os bug chasers são convertidos em Gift Givers
- **Fuck of Death**
  (foda da morte)
  Sexo quando é transmitido o HIV
- **Bug Brothers**
  (irmãos de problemas)
  Grupo de individuos HIV+
- **Charged Cum/Poz Cum**
  (ejaculação carregada)
  Sémen com HIV

ÁFRICA QUE MORRE

As cores do VIH

Cem dólares pagam o tratamento, durante um ano. Mas não as estradas, os hospitais ou os enfermeiros necessários para tratar os 4 milhões e 600 mil seropositivos que vivem em África...

REVIEW

Sexually transmitted infections and HIV among travellers: A review

John Richens[a,b,*]

[a]Department of Genito-Urinary Medicine, Mortimer Market Centre, Camden Primary Care Trust, London, UK
[b]Centre for Sexual Health and HIV Research, UCL, London, UK

Sexual Risk Behavior of Travelers who Consulted a Pretravel Clinic

Mieke Croughs, MD,*† Alfons Van Gompel, MD,† Elly de Boer, MSc,* and Jef Van Den Ende, MD, PhD‡

*Department of General Health Care, STI Clinic and Travel Clinic, GGD Hart voor Brabant, 's-Hertogenbosch, The Netherlands; †Department of Clinical Services, Travel Clinic, Institute of Tropical Medicine, Antwerp, Belgium; ‡Tropical Medicine Hospitalization Unit, University Hospital, Antwerp, Belgium

- Comportamentos Sexuais
  - Cont. sex. esporádicos
    - 6,5 – 70%
      - c/ outro viajante
        - 36%
      - c/ residente local
        - 87,1%
  - Cont. sex. s/ preservativo
    - 24 – 74%
  - Cont. sex. c/ prostituição
    - 3,2 - 10%
- (Holanda)
  - Adquirem HBV (p/via sex.)
    - H/B M.: 27%
    - Het. M.: 30%
    - F.: 19%
- (Sífilis)
  - 3 x > nos últimos 3 a.

Infectious Mononucleosis–Like Syndromes in Febrile Travelers Returning From the Tropics

Emmanuel Bottieau, MD,* Jan Clerinx, MD,* Erwin Van den Enden, MD,* Marjan Van Esbroeck, MD,* Robert Colebunders, MD, PhD,*† Alfons Van Gompel, MD,* and Jef Van den Ende, MD, PhD*†

Table 1 Epidemiology, evolution, and outcome of patients with IM-like syndromes ($n = 72$)

	All IM-like syndromes ($n = 72$)	Primary CMV infections ($n = 36$)	Primary *Toxoplasma gondii* infections ($n = 16$)	Primary EBV infections ($n = 15$)	Primary HIV infections ($n = 5$)
Mean age ± SD (years)	38 ± 14.5	38 ± 14.5	44 ± 15	32.5 ± 13.5	33 ± 8
Males (%)	65	67	56	67	80
Short-term travelers (%)	78	78	75	73	100
Travel-related (%)	86	83	88	94	80
Continent of exposure (%)					
Africa	52	48	50	60	50
Asia	32	34	29	33	25
America	10	14	7	7	0
>1 continent	6	3	14	0	25
Mean delay from fever onset to consultation ± SD (days)	14.5 ± 11.5	15 ± 10.5	14 ± 11.5	16.5 ± 15	7 ± 3.5
Previous contact with another practitioner (%)	58	67	44	53	60
Previous antimalarial and/or antibiotic treatment (%)	45	42	44	53	40
Empiric antibiotic treatment at first contact (%)	26	26	12.5	31	60
Hospitalization rate (%)	25	29	25	12.5	40
Complication rate (%)	8	3	25	17	40
Mean duration of fever ± SD (days)	21.5 ± 14	21.5 ± 12	22 ± 13	24.5 ± 20	9 ± 1
Protracted asthenia >3 months (%)	60	57	75	44	80

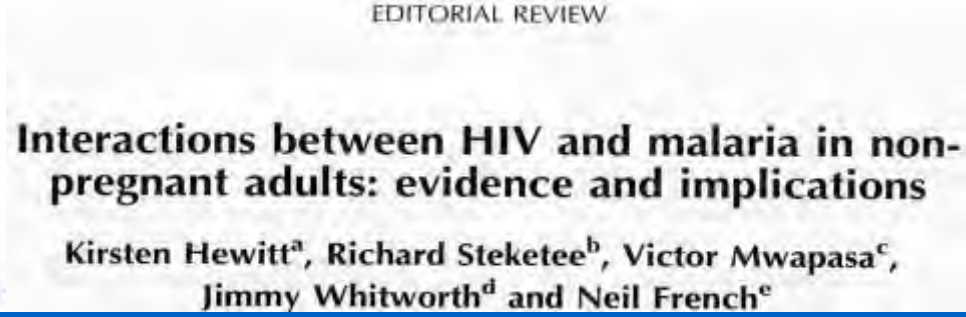
CMV = cytomegalovirus; EBV = Epstein–Barr virus; HIV = human immunodeficiency virus; IM = infectious mononucleosis.

Epidemiologia

- Aspectos Gerais
  - Viajantes Seropositivos
    - 3 – 29 % vão à Consulta do Viajante
- Complicações Infecciosas: 1/3
  - Diarreia do Viajante
    - 32%
  - Infecções Cutâneas
    - 28%
  - Infecções Respiratórias (não oportunistas)
    - 19%

"*Diarreia do Viajante*"

- > Susceptibilidade / > Gravidade Clínica
  - Salmoneloses (*ñ Typhi*)
    - Bacteriémias
    - Sépsis
  - Campilobacter
  - Shigelose
  - Isosporidiose
  - Ciclosporidiose
  - (...)
  - F. Tifóide
    - 100 x > freq.
  - Listeriose
- Risco Aumentado
  - Terap. > ph Gástrico
    - Anti-ácidos
    - Inib. H2
    - Inib. da B. de Protões



- Paludismo
  - > Gravidade da Infecção aguda
  - > Parasitémia (= HIV2)
  - > Falência da Terapêutica (3 x >)
  - > Risco reinfecção p/ plasmódio (6x >)
  - < Imunidade adquirida
  - > Probabilidade da ausência de Febre (< Acuidade Diagnóstica) (CD4)
  - < Prognóstico nos d. ñ semi-imunes
    - Zonas de transmissão intermitente
  - Co-Infecção é responsável na África Sub-Shariana p/
    - 4,9 % do total das mortes p/ Malária
      - > da mortalidade anual: 65.000
    - > nº de casos/ano: 3.000.000

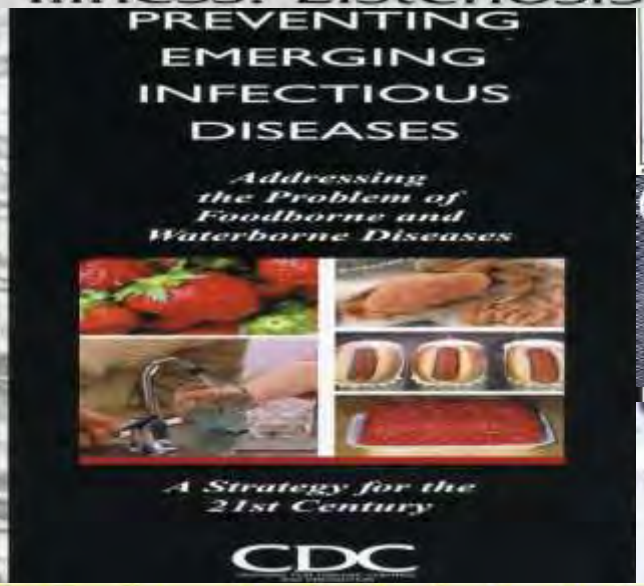
- HIV
  - > Replicação (> TNF alfa)
  - > CV HIV
    - 2,5 a 7 x valor basal
  - < CD4
  - Co-Infecção é responsável na África Sub-Sahariana p/
    - 3% das mortes p/ SIDA

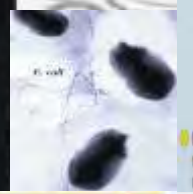
CDC/NCID

CENTERS FOR DISEASE CONTROL AND PREVENTION — NATIONAL CENTER FOR INFECTIOUS DISEASES

Division of Bacterial and Mycotic Diseases

Preventing Foodborne Illness: Listeriosis





CDC/NCID

CENTERS FOR DISEASE CONTROL AND PREVENTION — NATIONAL CENTER FOR INFECTIOUS DISEASES

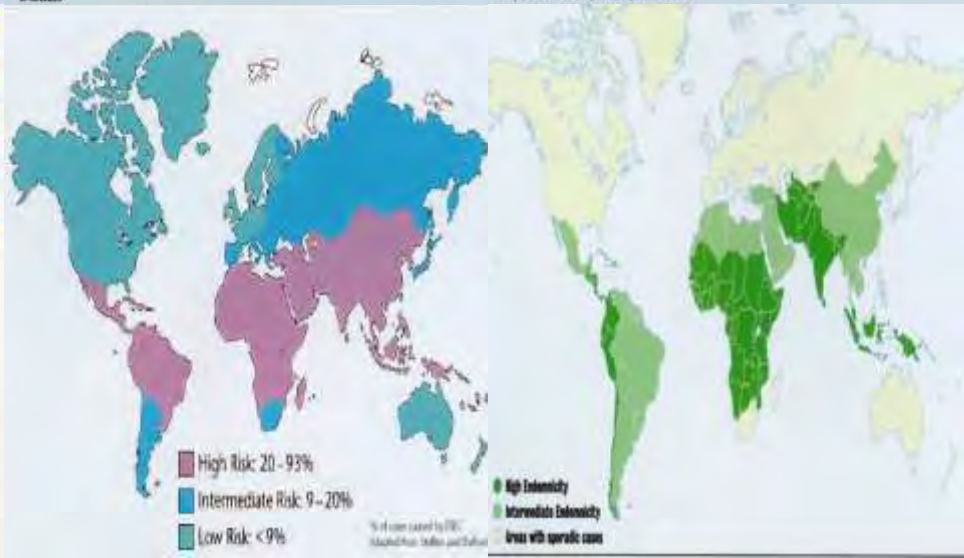
Division of Bacterial and Mycotic Diseases

Preventing Typhoid Fever: A Guide for Travelers

V I T O R D A U P H I N E T

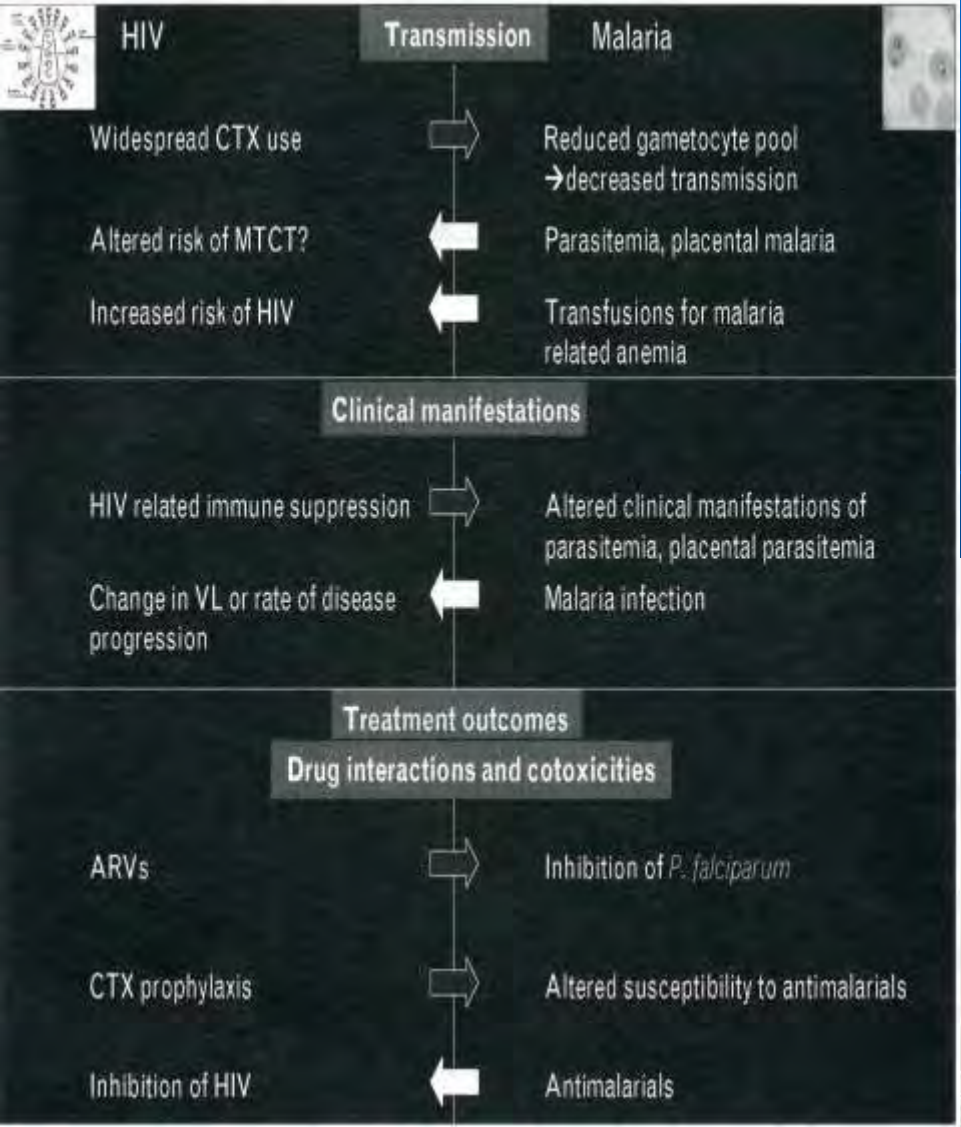
HÁBITOS ALIMENTARES E INFECÇÃO VIH/SIDA

BOLETIM DE PROMOÇÃO DOS HÁBITOS ALIMENTARES E CONTROLO DAS COMPLICAÇÕES METABÓLICAS ASSOCIADAS À INFECÇÃO PELO VIH/SIDA



HIV and Malaria

Maria Dolores Herrero, Pablo Rivas, Norma I. Rallón, Germán Ramírez-Olivencia and Sabino Puente
Department of Infectious Diseases, Hospital Carlos III, Madrid, Spain



HIV and malaria: interactions and implications

Laurence Slutsker[a] and Barbara J. Marston[b]

- Grávida co-infectada
  - Atraso no desenvolvimento fetal
  - > probabilidade de parto pré termo
  - < peso do RN
  - > transmis. trans-placentar do HIV
  - > CV HIV no sangue placentar
    - 2 – 2,4 x valor basal

The potential for interactions between antimalarial and antiretroviral drugs

Saye Khoo, David Back and Peter Winstanley

Table 2. Anticipated drug interactions between antimalarial and antiretroviral drugs.

	Quinine	CLQ	SP	Pro	Dap	MFQ	ADQ	Art	LUM	HF	ATQ	PQ
Protease inhibitors												
Saquinavir	▽[1]	√	√	√[2]	√[3]	√	ND	ND[6]	●[7]	●[7]	√	ND
Ritonavir	▽[1]	▽	▽	▽[2]	√[3]	√[4]	ND	ND[6]	●[7]	●[7]	▽	ND
Indinavir	▽[1]	√	√	√[2]	√[3]	√[5]	ND	ND[6]	●[7]	●[7]	√[8]	ND
Nelfinavir	▽[1]	√	√	√[2]	√[3]	√[5]	ND	ND[6]	●[7]	●[7]	√	ND
Amprenavir	▽[1]	√	√	√[2]	√[3]	√	ND	ND[6]	●[7]	●[7]	√	ND
Lopinavir	▽[1]	√	√	√[2]	√[3]	√	ND	ND[6]	●[7]	●[7]	▽[9]	ND
Atazanavir	▽[1]	√	√	√[2]	√[3]	√	ND	ND[6]	●[7]	●[7]	√	ND
NNRTI												
Nevirapine	▽[1]	√	√	√	√	√	ND	ND[6]	▽[7]	▽[7]	√	ND
Efavirenz	▽[1]	√	√	√	√	√	ND	ND[6]	▽[7]	▽[7]	√	ND
Delavirdine	▽[1]	√	√	√	√	√	ND	ND[6]	●[7]	●[7]	√	ND
NRTI												
Zidovudine	√	√	√	√	√	√	√	√	√	√	√[10]	√
Lamivudine	√	√	√	√	√	√	√	√	√	√	√	√
Didanosine	√	√	√	√	√[11]	√	√	√	√	√	√	√
Stavudine	√	√	√	√	√	√	√	√	√	√	√	√
Abacavir	√	√	√	√	√	√	√	√	√	√	√	√
Zalcitabine	√	√	√	√	√	√	√	√	√	√	√	√
Emtricitabine	√	√	√	√	√	√	√	√	√	√	√	√
Tenofovir	√	√	√	√	√	√	√	√	√	√	√	√
Fusion inhibitors												
Enfuvirtide	√	√	√	√	√	√	√	√	√	√	√	√

Interactions are assessed as: ND, no clear data, actual or theoretical, to indicate whether an interaction will occur; √, no clinically significant interaction, or interaction unlikely based on knowledge of drug metabolism; ▽, potential interaction that may require close monitoring, alteration of drug dosage or timing of administration; ●, interaction likely, do not use or use with caution.

NRTI, nucleoside reverse transcriptase inhibitor; NNRTI, non-nucleoside reverse transcriptase inhibitor; PI, protease inhibitor; CLQ, chloroquine; SP, sulfadoxine–pyrimethamine; Pro, proguanil; Dap, dapsone; MFQ, mefloquine; ADQ, amodiaquine; Art, artenusate; LUM, lumefantrine; HF, halofantrine; ATQ, atovaquone; PQ, promaquine. Evaluation of interactions between antiretroviral and antimalarial drugs here refer to specific points in a numbered list above. Adapted with permission from www.hiv-drug-interactions.org. As new data emerges, updates to this table will be posted on this website.

Pharmacotherapy, vaccines and malaria advice for HIV-infected travellers

Matthias L Cavassini, Valérie D'Acremont, Hansjakob Furrer, Blaise Gen
Philip E Tarr†
†*Infectious Diseases Service, University Hospital, Lausanne, Switzerland*

Table 5. Suggested malaria prophylaxis and standby treatment in HIV-infected travellers based on drug interaction considerations.

Antiretroviral drug used by the traveller	Drug interaction considerations: antimalarial agents				Order of preference for malaria prophylaxis*	Order of preference standby treatment*
	Doxy	Mef (Lariam®, Mephaquine®)	AP (Malarone®)	AL (Riamet®, Coartem®)		
NRTIs						
AZT, 3TC, d4T, ddI, abacavir, tenofovir	No theoretical interaction	No theoretical interaction	No theoretical interaction	No theoretical interaction	As in HIV-uninfected travellers	As in HIV-un travellers
NNRTIs						
Efavirenz	No theoretical interaction	Theoretical risk of reduced level of mefloquine	Unknown	Theoretical risk of reduced level of AL	Doxy > Mef > AP	AP > Mef = AL
Nevirapine	No theoretical interaction	Theoretical risk of reduced level of mefloquine	Unknown	Theoretical risk of reduced level of AL	Doxy > Mef > AP	AP > Mef = AL
PIs						
Amprenavir	No theoretical interaction	Unknown	Unknown	Unknown	Doxy > Mef > AP	Mef > AP > AL
Atazanavir	No theoretical interaction	Theoretical risk of reduced level of atazanavir	Theoretical risk of reduced level of atovaquone	Theoretical risk of increased level of AL	Doxy > AP	Mef > AP
Indinavir	No theoretical interaction	No interaction in one subject	Risk of reduced level of indinavir	Unknown	Doxy > Mef	Mef > AP > AL
Lopinavir/ ritonavir	No theoretical interaction	Theoretical risk of reduced level of lopinavir	Risk of reduced level of atovaquone	Theoretical risk of increased level of AL	Doxy > AP	Mef > AP
Nelfinavir	No theoretical interaction	Theoretical risk of reduced level of nelfinavir	Unknown	Theoretical risk of increased level of AL	Doxy > AP	Mef > AP
Ritonavir	No theoretical interaction	Risk of reduced level of ritonavir	Risk of reduced level of atovaquone	Theoretical risk of increased level of AL	Doxy > AP	Mef > AP
Saquinavir	No theoretical interaction	Unknown	Unknown	Unknown	Doxy > Mef > AP	Mef > AP > AL

*Three criteria were used to determine the order of preference for antimalarial drugs: i) the cumulative practical safety experience (which is most extensive for mefloquine); ii) the potential for reduced levels of AR potential for reduced levels of the antimalarial drug.

3TC: Lamivudine; AL: Artemether/lumefantrine; AP: Atovaquone/proguanil; AZT: Zidovudine; d4T: Stavudine; ddI: Didanosine; Doxy:Doxycycline; Mef: Mefloquine, NNRTI: Non-nucleoside reverse transcriptase inh Nucleoside reverse transcriptase inhibitor; PI: Protease inhibitor.

ELSEVIER

International Journal of Antimicrobial Agents

Review

Recycling of chloroquine and its hydroxyl analogue to face bacterial, fungal and viral infections in the 21st century

Jean-Marc Rolain *, Philippe Colson, Didier Raoult

Unité des Rickettsies, CNRS UMR 6020, Université de la Méditerranée, Faculté de Médecine et de Pharmacie, 27 Boulevard Jean Moulin, 13385 Marseille Cedex 5, France

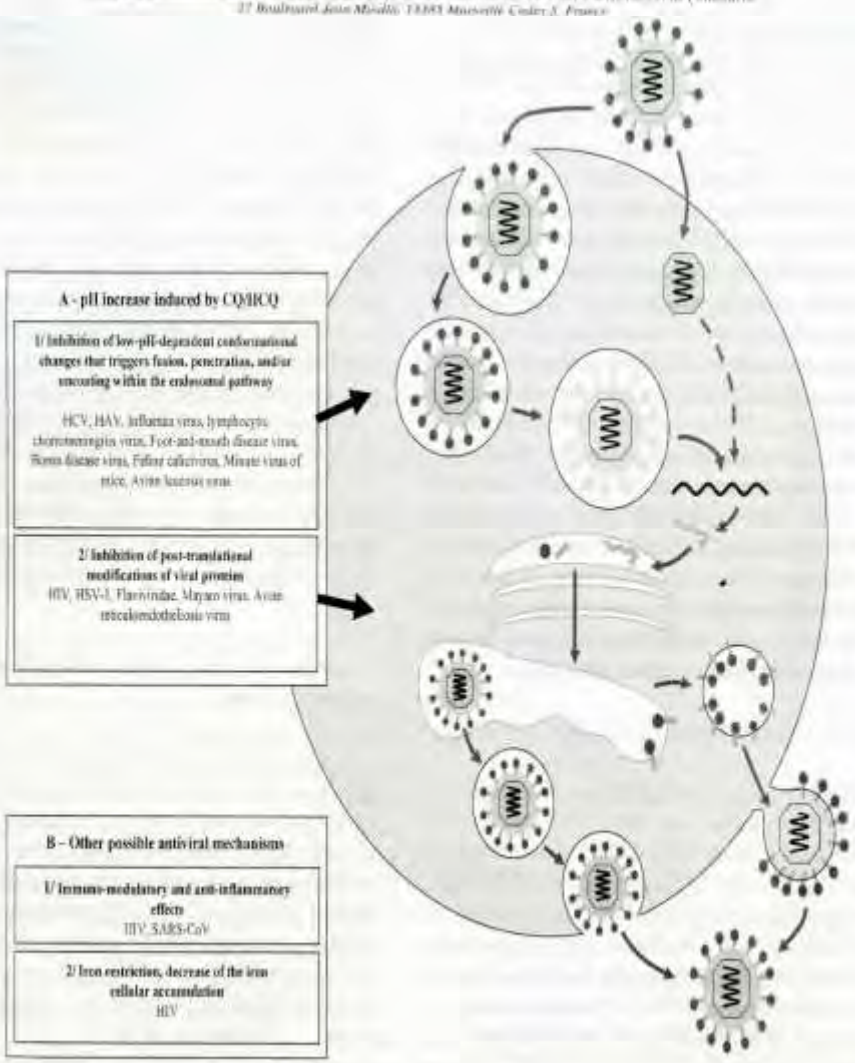
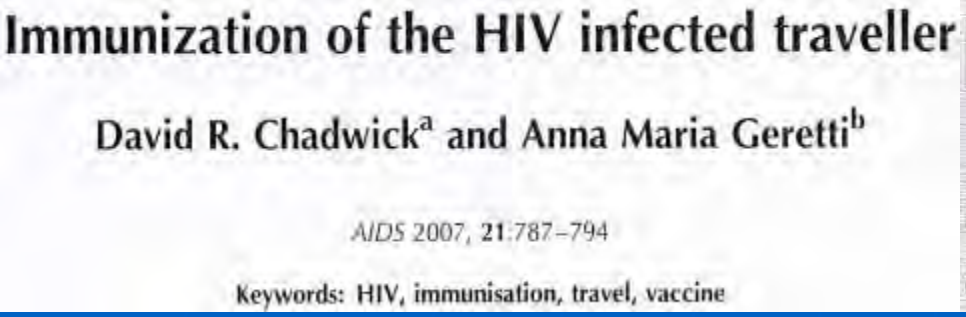


Fig. 4. Viruses inhibited by chloroquine (CQ) and/or hydroxychloroquine (HCQ). HCV, hepatitis C virus; HAV, hepatitis A virus; HIV, human immunodeficiency virus; HSV-1, herpes simplex virus type-1; SARS-CoV, severe acute respiratory syndrome-associated coronavirus.

Effects of chloroquine on viral infections: an old drug against today's diseases?

Andrea Savarino, Johan R Boelaert, Antonio Cassone, Giancarlo Majori, and Roberto Cauda.

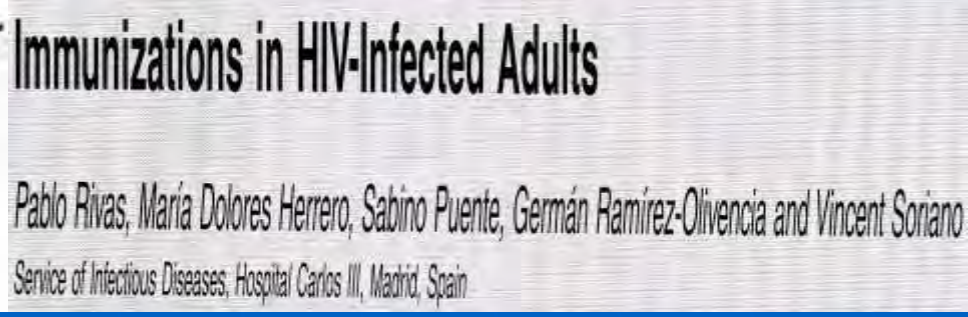
- Particularidades dos Fármacos
  - Cloroquina e HIV
    - < replicação (inibe a gp120)
  - PI e Plasmódio
    - < replicação
      - Receptor celular
        - (CD36)
      - Mol. de adesão intra celular
        - Tipo I
  - Co-Tx e Plasmódio
    - < 38 – 70% dos casos
    - > probabilidade de falência da terapêutica c/ Pirimetamina + Sulfadoxina


Immunization of the HIV infected traveller

David R. Chadwick[a] and Anna Maria Geretti[b]

AIDS 2007, 21:787–794

Keywords: HIV, immunisation, travel, vaccine


Immunizations in HIV-Infected Adults

Pablo Rivas, María Dolores Herrero, Sabino Puente, Germán Ramírez-Olivencia and Vincent Soriano

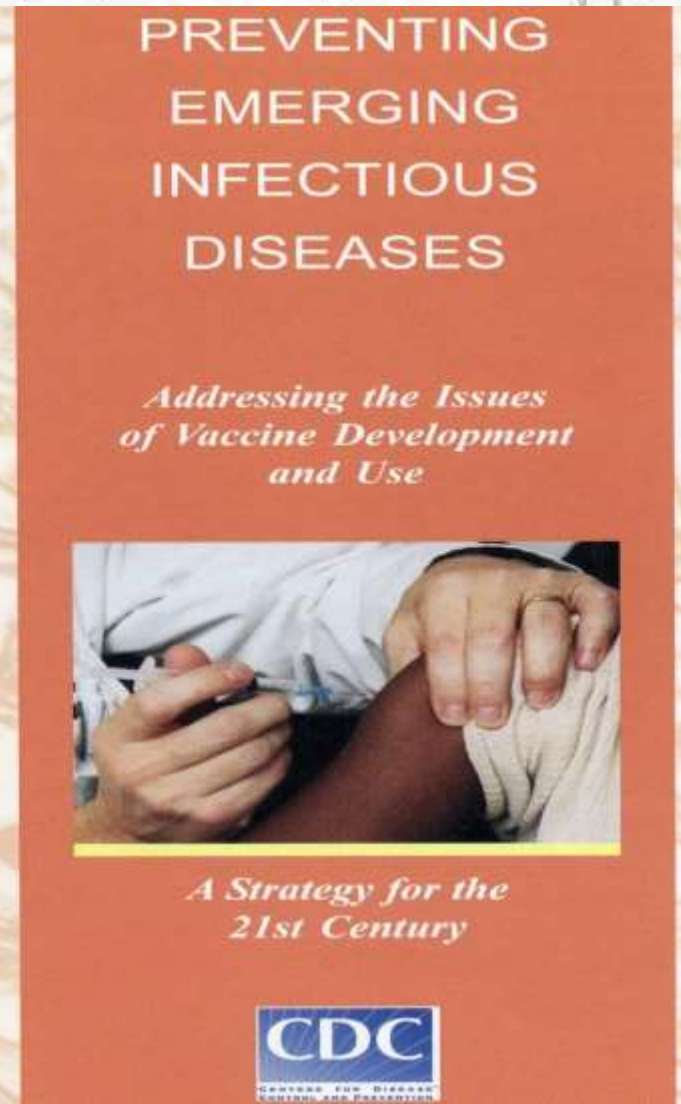
Service of Infectious Diseases, Hospital Carlos III, Madrid, Spain

- Início da Vacinação
  - 6 a 12 M. após TARV
- Papel dos Esquemas Curtos
  - HAV/HBV
  - TBE
  - JE
- Se CD4 < 100
  - Não há vantagem em vacinar
- Se CD4 > 100 < 200
  - Ponderar revacinação após reconstituição imunológica
- Se CD4 < 200
  - CI p/ Vacinas Vivas
- Falso Mito
  - Vacinação = > Replicação Viral = Risco de Progressão Clínica

The HIV-Positive Traveler

Nahid Bhadelia, MD, MALD, Mary Klotman, MD, Daniel Caplivski, MD

Samuel Bronfman Department of Internal Medicine, Division of Infectious Diseases, Mount Sinai School of Medicine, New York, NY.



REVIEW

HIV and travel

M.A. Schuhwerk[a,*], J. Richens[a,b], Jane N. Zuckerman[c]

TABLE 9-1. Vaccination of Immunocompromised Adults

	Asymptom HIV	Symptomat HIV Infection/ AIDS	Severely Immuno-Compromis (Non-HIV Related)	Post-Solid Organ Transplant Chronic Immunosup Therapy	Asplenia	Renal Failure	Chronic Hepatic Disease, Cirrhosis, Diabetes
Live Vaccines							
Bacille Calmette Guérin	X	X	X	X	U	U	U
Influenza (LAIV)	X	X	X	X	U	X	X
MMR (MR/M/R)[1]	R	W	X	X	U	U	U
Typhoid, Ty21a	X	X	X	X	U	U	U
Varicella (Adults)[2]	U	X	X	X	U	U	U
Yellow Fever[3]	W	X	X	X	U	U	U
Killed (Inactivated) Vaccines							
Haemophilu Influenzae (Hib)	C[4]	C[4]	R	R	R	U	U
Hepatitis A	U[5]	U[5]	U	U	U[5]	U[5]	U[5]
Hepatitis B	U[5]	U[5]	U	U	U	R[6]	U
Influenza (inactivated)	R	R	R	R	R	R	R
Japanese encephalitis	U	U	U	U	U	U	U
Meningococ polysacchar or conjugate	C	C	U	U	R	U	U
Pneumococ polysacchar	R	R	R	R	R	R	R
Polio (IPV)	U	U	U	U	U	U	U
Rabies	U	U	U	U	U	U	U
Td or Tdap	R	R	R	R	R	R	R
Typhoid, Vi	U	U	U	U	U	U	U

R = Recommended for all in this patient category
U = Use as indicated for normal hosts
C = Consider
W = Warning
X = Contraindicated

ELSEVIER SAUNDERS

Infect Dis Clin N Am 19 (2005) 121–135

INFECTIOUS DISEASE CLINICS OF NORTH AMERICA

The Impact of HIV Infection on Tropical Diseases

Gundel Harms, MD, MPH, PhD[a,*], Hermann Feldmeier, MD, PhD[b]

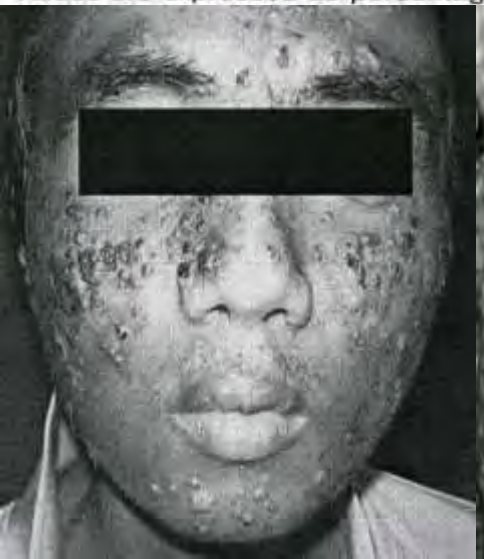
[a]Institute of Tropical Medicine, Charité-University Medicine Berlin, Spandauer Damm 130, 14050 Berlin, Germany

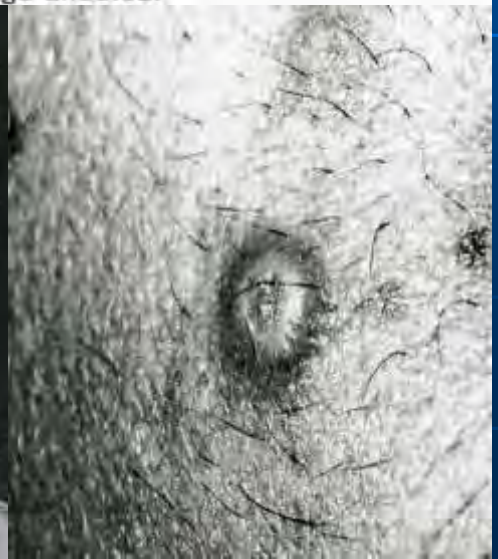
[b]Institute of Infection Medicine, Department of Microbiology, Charité-University Medicine Berlin, Hindenburgdamm 27, 12203 Berlin, Germany

Table 1 Clinical features of *Penicillium marneffei* infection in HIV patients

Clinical characteristics	Case series	
	Duong [23]	Supparatpinyo *et al.* [11]
Fever	98	93
Anaemia	74.8	78
Weight loss	71.6	76
Skin lesions	69.7	71
Lymphadenopathy	52.3	58
Cough	49.7	–
Hepatomegaly	43.9	51
Diarrhoea	23.2	31
Splenomegaly	13.5	16
Pericarditis	4.5	–
Osteolytic lesions	3.9	–
Arthritis	3.9	–
Ulcer	–	6
Jaundice	–	8
Positive blood culture	54.2	76

Values are expressed as percentage affected.





- Schistosomose
  - > compromisso genital / prostático
    - > transmissibilidade sexual do HIV
  - < eliminação p/ fezes e urina
    - Atraso no diagnóstico e tratamento
  - > CV HIV (mastócitos intestinais)
  - < CD4
- Leishmaniose
  - > replicação do HIV
  - > susceptibilidade à leishmania
  - Clínica
    - < hepatoesplenomegalia
    - > citopénias
    - > envolvimento GI / Pulmonar
  - TARV
    - < incidência do Kalazar
      - Espanha: 4,8–0,8 casos/100.000H.
- Tripanosomose
  - D. de Chagas
    - > parasitémia (fase crónica)
    - > envolvimento do SNC
  - D. do Sono
    - < recorrência após tratamento (DFMO)
    - > mortalidade

ELSEVIER SAUNDERS

Infect Dis Clin N Am 19 (2005) 15–47

INFECTIOUS DISEASE CLINICS OF NORTH AMERICA

Challenging Scenarios in a Travel Clinic: Advising the Complex Traveler

Kathryn N. Suh, MD, FRCPC[a,b,*], Maria D. Mileno, MD[c,d]

[a]Division of Infectious Diseases, Children's Hospital of Eastern Ontario, 401 Smyth Road, Ottawa, ON K1H 8L1, Canada
[b]Department of Paediatrics, University of Ottawa, Ottawa, ON, Canada
[c]The Miriam Hospital, 164 Summit Avenue, Providence, RI 02906, USA
[d]Department of Medicine, Brown Medical School, Providence, RI, USA

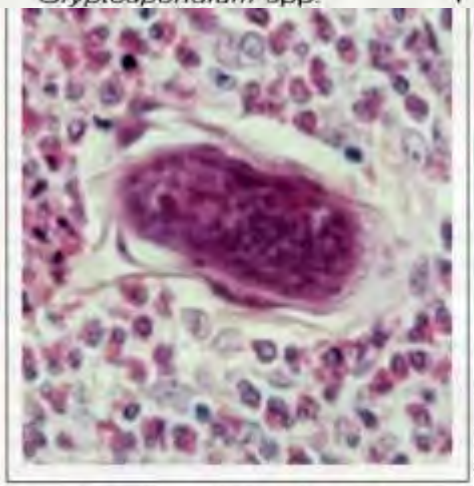
- Outras Infecções de Importação
  - > da susceptibilidade / gravidade
    - Meningite Meningococica
    - Melioidose
    - Infecções Fúngicas Sistémicas Endémicas
    - **TSP/HAM (provável…)**
    - HAV (adulto)
      - Forma Fulminante (até 2%)

Immune reconstitution disease associated with parasitic infections following initiation of antiretroviral therapy

Stephen D. Lawn[a,b]

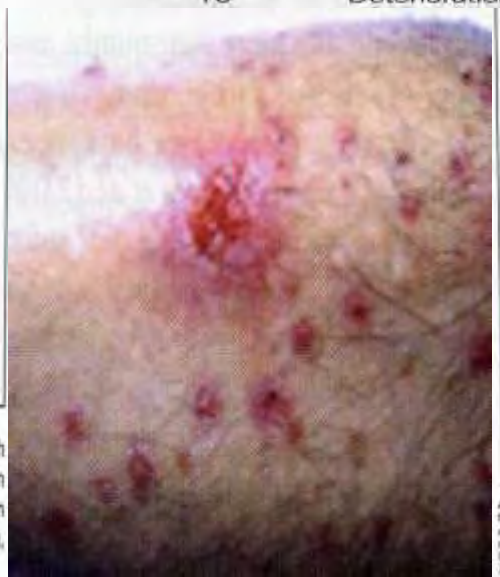
Table 1 Cases reported as immune reconstitution disease associated with parasitic infections

Organism	Number of cases	Clinical manifestation	Baseline CD4 cell count/μl	Presentation or deterioration	Reference
Helminths					
Schistosoma mansoni	1	Eosinophilia	170	Presentation	Fernando, 2002 [13]
	1	Eosinophilic enteritis	170	Presentation	de Silva, 2006 [14•]
	1	Colitis with polyposis	Not stated	Presentation	Javid, 2007 [15•]
Strongyloides stercoralis	1	Fever, eosinophilia and hepatitis	32	Presentation	Kim, 2004 [16]
	1	Disseminated strongyloidiasis	135	Presentation	Lanzafame, 2005 [17]
	1	Disseminated strongyloidiasis	30	Deterioration	Brown, 2006 [18•]
	1	Strongyloides enteritis	96	Presentation	Taylor, 2007 [19•]
Protozoa					
Leishmania spp. (unspecified)	1	Visceral leishmaniasis		Presentation	Albrecht, 1998 [20]
	3	Visceral leishmanisis	94, 39, 30	Presentation	Jimenez-Exposito, 1999 [21]
Leishmania infantum	2	Visceral leishmaniasis	186, 15	Presentation	Berry, 2004 [22]
Leishmania braziliensis	1	Cutaneous + mucosal leishmaniasis	38	Presentation	Posada-Vergara, 2005 [23]
	1	Cutaneous + mucosal leishmaniasis	23	Deterioration	Posada-Vergara, 2005 [23]
Leishmania major	1	Cutaneous leishmaniasis	150	Deterioration	Kerob, 2006 [24•]
Leishmania major	1	Uveitis	4	Presentation	Blanche, 2002 [25]
Leishmania infantum	1	Post kala-azar dermal leishmaniasis	35	Presentation	Ridolfo, 2000 [26]
Leishmania donovani (presumed)	1	Post kala-azar dermal leishmaniasis	150	Presentation	Gilad, 2001 [27]
Toxoplasma gondii	1	Cerebral toxoplasmosis	Not given	Not given	Jevtovic, 2001 [28]
	1	Cerebral toxoplasmosis	83	Presentation	Tsambiras, 2005 [29]
	2	Cerebral toxoplasmosis	Not given	Presentation	Subsai, 2006 [30]
Cryptosporidium spp.	1	Terminal ileitis	10	Deterioration	Plasencia, 2006 [31•]



Schistosomiasis has been associated with reports of immune reconstitution disease following initiation of antiretroviral therapy (see Table 1). Image from the Parasite Image Library, Division of Parasitic Diseases, Centers for Disease Control and Prevention, Atlanta, USA.

Four possible cases of immune reconstitution disease associated with strongyloidiasis following initiation of antiretroviral therapy have been described (see Table 1). Image from the Parasite Image Library, Division of Parasitic Diseases, Centers for Disease Control and Prevention, Atlanta, USA.



As described by Gilad *et al.* [27]. This Ethiopian patient had been treated for visceral leishmaniasis some years earlier. Two weeks after starting antiretroviral therapy, this rash typical of post-kala-azar dermal leishmaniasis (PKDL) developed on his face and torso. Image kindly supplied by Dr Jacob Gilad and reproduced with permission of the Israel Medical Association Journal [27].

CONCLUSÕES

- O âmbito da Medicina do Viajante é cada vez mais complexo e vasto
- É possível admitir que as zonas tradicionalmente endémicas para algumas zoonoses se possam estender, em termos geográficos, da região inter-tropical para as de clima temperado
- As respostas que dermos aos problemas desencadeados pelas alterações ecológicas e climáticas que se prevêem para um futuro próximo, bem como as do domínio das políticas de emigração e da sustentabilidade do padrão de desenvolvimento económico que implementarmos, irão certamente condicionar o seu padrão epidemiológico
- É fundamental a existência de uma maior colaboração entre Epidemiologistas, Microbiologistas, Biólogos, Infecciologistas e Veterinários, para um combate mais eficaz a estas doenças e aos seus vectores e reservatórios

- A casuística do CHS – HSB *EPE*, se bem que ainda limitada, tem vindo, no entanto, a sofrer um aumento significativo ao longo dos últimos meses, em especial dos viajantes para Angola, sobretudo por motivos profissionais
- Uma parte significativa das agências de viagem e dos especialistas de Medicina Ocupacional das diversas empresas não fornecem aconselhamento adequado
- Uma parte importante dos viajantes negligencia os conselhos dados na consulta
- É determinante para o êxito deste tipo de consultas, não só a sua descentralização territorial, mas também a possibilidade de se efectuar a vacinação na sua sequência e no mesmo local desta
- É necessário dar mais formação aos Médicos de Família ao nível dos Cuidados Primários de Saúde, bem como aos colegas das outras especialidades hospitalares, e uma maior colaboração com os especialistas de Saúde Pública

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