

# DERMATOSES AU RETOUR DE VOYAGES

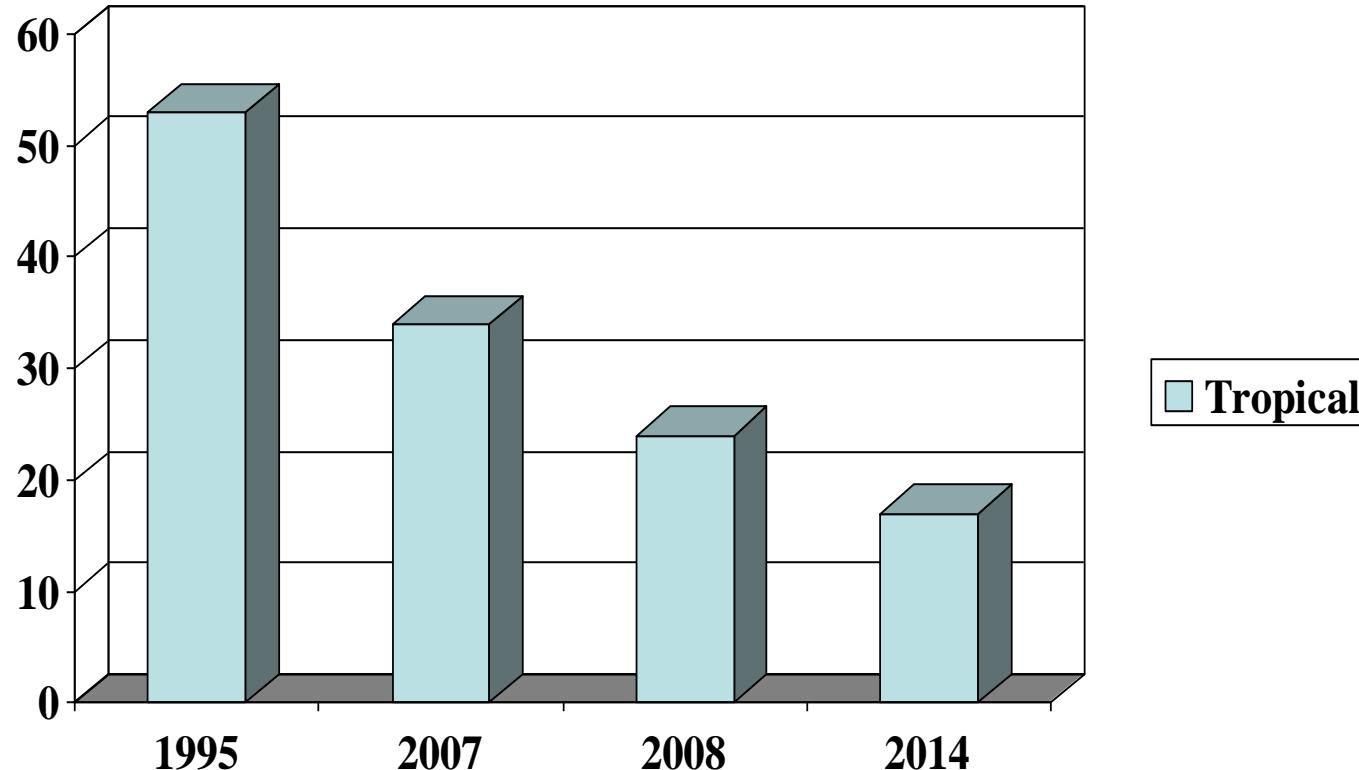
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DESC, 9/2020

# What is the part occupied by tropical diseases amongst skin diseases diagnosed in returning travelers ?

- > 50%
- 35-50%
- 20-35%
- 5-20%
- < 5%

# Tropical skin diseases in returning travelers: less and less common



1995- Caumes E. Clin Inf Dis 1995; 20:542-548

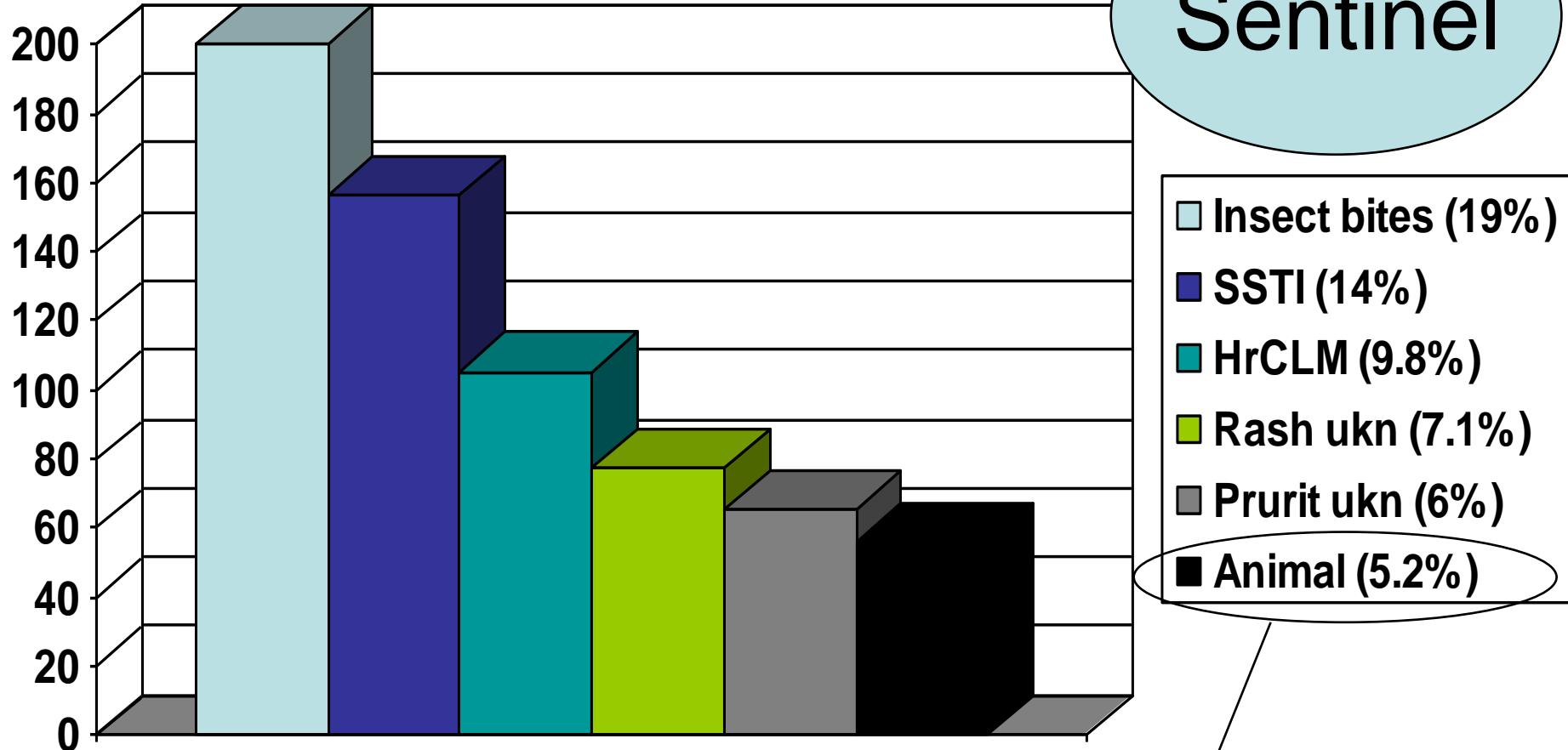
2007- Ansart S. Am J Trop Med Hyg 2007; 76:184-186

2008- GeoSentinel. Int J Inf Dis 2008 i:10.1016/j.ijid.2007.12.008

2014- CanTravNet. CAMJ 2014

# Skin problems in 1076 travellers

## Canada



Stevens MJ et al.  
CMAJ open 2015

monkey (25), dog (18), other (10: bat  
6, cat 3, tiger, stingray & leech 1)













# SSTI in 60 travelers, 01/2006-08/2007

| Forms        | N (%)    | % culture + | MS Sa | GAS | Both |
|--------------|----------|-------------|-------|-----|------|
| Impetigo     | 21 (35%) | 76%         | 31%   | 38% | 31%  |
| Abscess      | 14 (23%) | 57%         | 100%  | 0   | 0    |
| Ecthyma      | 11 (19%) | 91%         | 10%   | 60% | 30%  |
| Cellulitis   | 11 (19%) | 0           | NA    | NA  | NA   |
| Folliculitis | 3 (5%)   | 33%         | 100%  | 0   | 0    |

# MRSA Imported by Swedish travelers 2000-2003 : countries at risk (ORs)

|                                |                   |
|--------------------------------|-------------------|
| • Nordic                       | 0.1 (0.01-0.6)    |
| • Western Europe               | Reference*        |
| • Southern Europe              | 2.4 (1.0-5.8)     |
| • Central and Eastern Europe   | 2.8 (1.0-8.1)     |
| • UK and Ireland               | 10.3 (4.4-24.0)   |
| • North America                | 10.6 (4.2-26.7)   |
| • Northeastern Mediterranean   | 15.8 (7.0-35.6)   |
| • South America                | 31.2 (10.0-97.6)  |
| • East Asia                    | 36.5 (16.2-82.0)  |
| • Oceania and Pacific Islands  | 43.0 (15.5-119.4) |
| • Sub-Saharan Africa           | 46.3 (17.3-123.6) |
| • North Africa and Middle East | 59.0 (25.1-138.9) |

# ***S.aureus* related SSTI in travelers**

- Transmission in the household then in the community
- Antibiotic resistance
- Récurrences
- Portage

Zhou YP, et al. J Travel Med. 2014; 21: 272-81

Zanger P (editorial). J Travel Med 2014; 21: 225-7



## **70 pts with creeping dermatitis, 2008-12**

| <b>Disease</b>   | <b>Number of cases (%)</b>                   |
|--|--|
| <b>HrCLM including<br/>Hookworm folliculitis</b>   | <b>66 (94%) including<br/>7 HF /66 (11%)</b> |
| Gnathostomiasis  | 2 (3%)                                       |
| Loiasis  | 1 (1.5%)                                     |
| Creeping (dog) hair  | 1 (1.5%)                                     |
| Migratory myiasis,<br>dirofilariasis, larva currens,<br>Pyemotes ventricosus,<br>scabies | 0  |





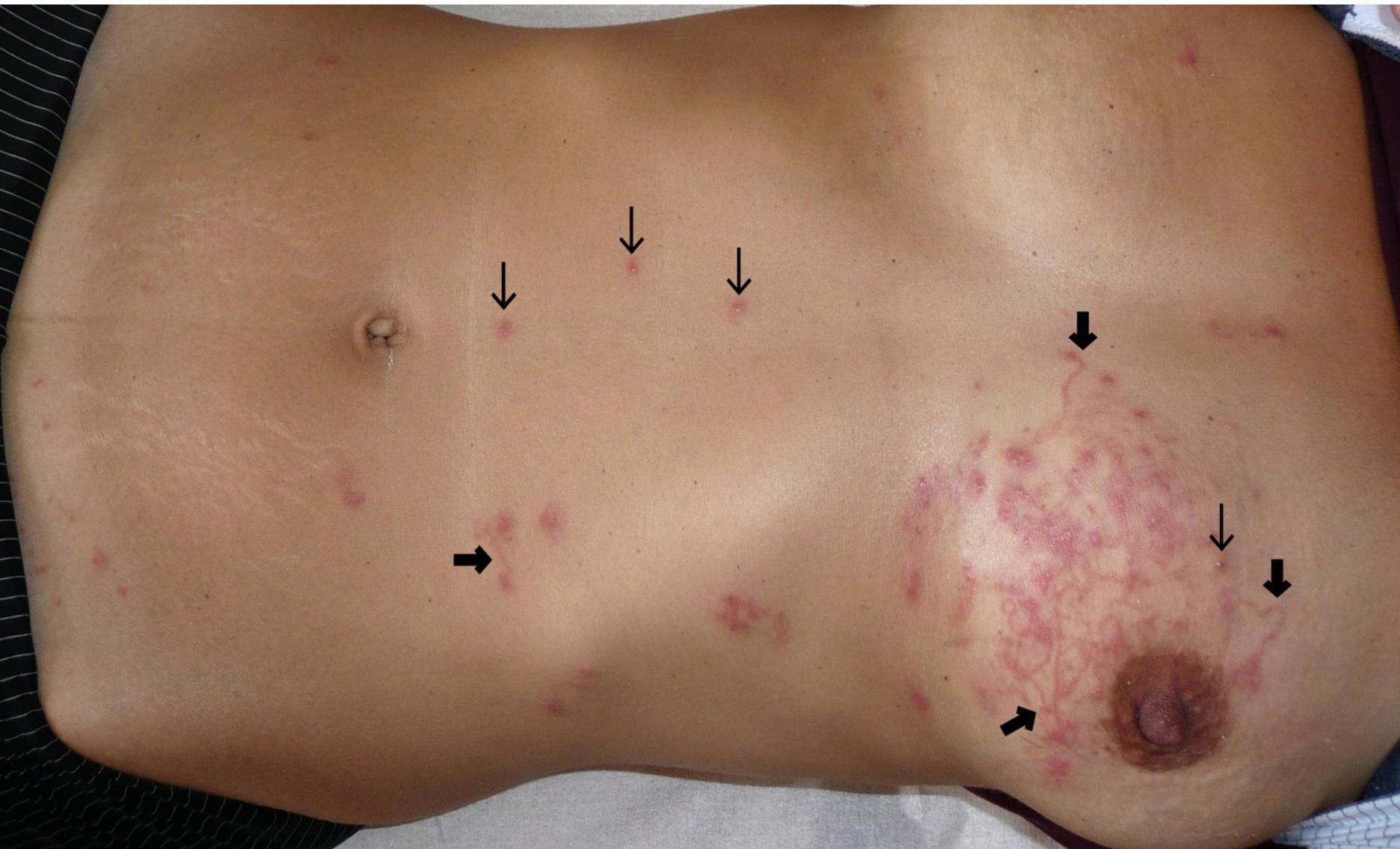


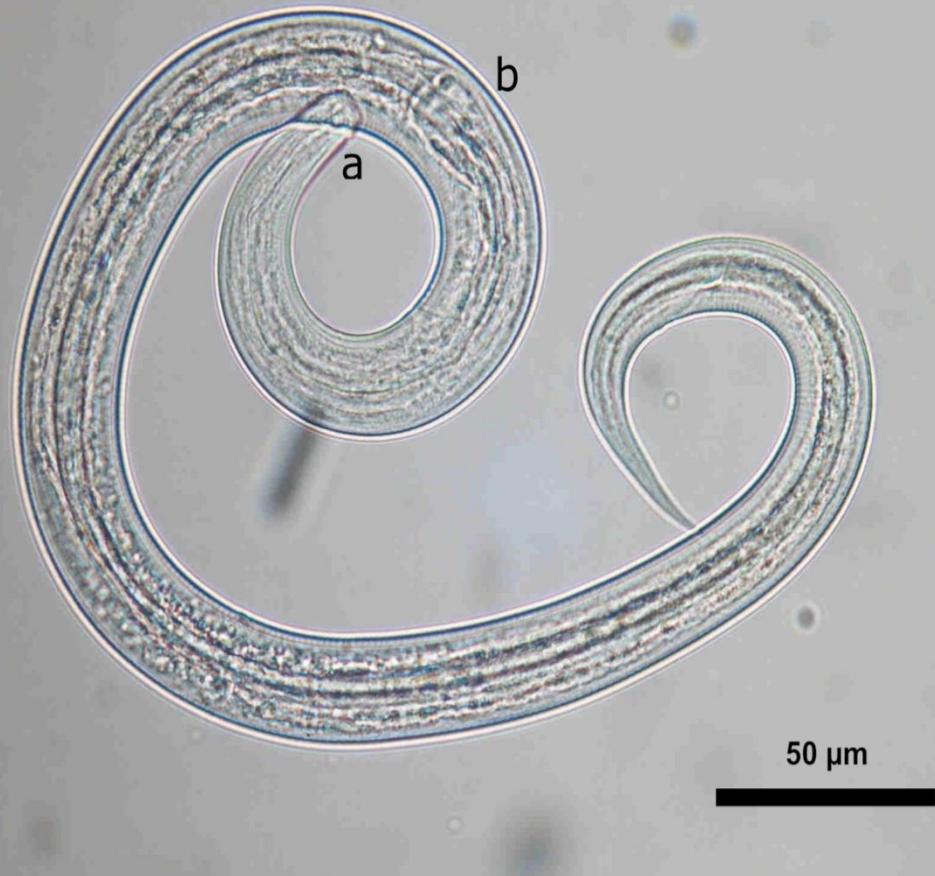
Folliculitis (HrCLM)





# **Identification of *Ancylostoma* *braziliense* in HrCLM** (Le Joncour A et al. Am J Trop Med Hyg 2012; 86:843-5)



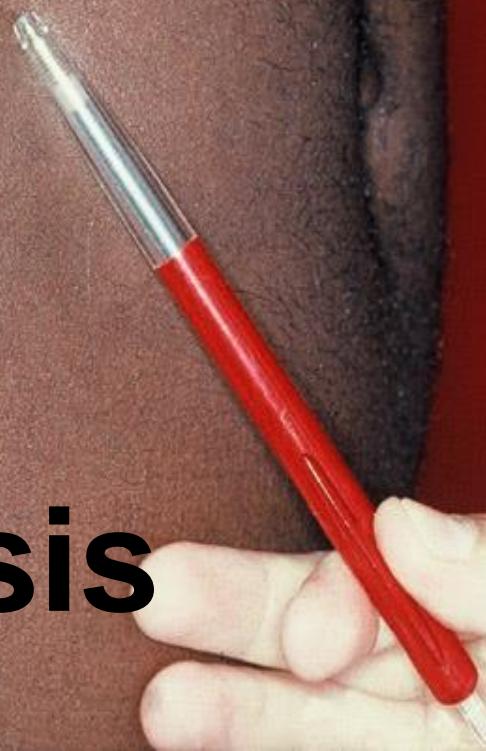


**hookworm larva  
recovered  
from a skin scraping  
of folliculitis  
lesion (optical  
micro, x40)**

**Living hookworm larva recovered  
from a skin scraping of folliculitis  
Lesion (optical micro, x10)**



# **Larva currens Strongyloidiasis**



# Creeping Dermatitis Loiasis



# HrCLM : efficacy of a single dose ivermectin varies with the clinical presentation.

- 62 travellers (35 F, 27 M, mean age 35) with HrCLM treated with 200 µg/kg dose of ivermectin, single dose.
- All pts had creeping dermatitis and 6 patients (10%) also had hookworm folliculitis (HF).
- Overall CR = 59/62 pts (95%). **CR = 98% in the 56 pts presenting with only creeping dermatitis and 66% in the 6 patients also presenting with HF**







# Febrile exanthema, 2018

- A 48-year-old previously healthy male,
- 5 weeks trip: Ecuador, Peru, Bolivia, Chile, Easter Island, French Polynesia, and Hawaii.
- In Moorea, French Polynesia, several mosquito bites (use of insect repellents containing 30% DEET).
- < 12 hours after departing French Polynesia: pruritic erythematous rash of his neck. Rash progressed + malaise, fatigue, fever ( $38.8^{\circ}\text{C}$ ), marked arthralgia, low back pain, and bilateral exudative conjunctivitis.
- By day 9, the patient's symptoms were generally resolved with the exception of progression of the rash until day 11

?







REPLAY  
DENIM

# Dengue vs Chikungunya

| Variable           | Chikungunya<br>N = 22 | Dengue<br>N = 16 | P =    |
|--------------------|-----------------------|------------------|--------|
| Arthralgies        | 100%                  | 0%               | <0.001 |
| Prurit             | 48%                   | 31%              | NS     |
| Neutropénie        | 10%                   | 81%              | <0.001 |
| Thrombopenie       | 35%                   | 88%              | 0.002  |
| Cytolyse hépatique | 65%                   | 88%              | NS     |

Hochedez P et al. Am J Trop Med Hyg 2008; 78:710-713





# « Exanthèmes » fébriles

|                |   |
|----------------|---|
| VIRUS*         | <b>Chikungunya</b> (35%), <b>dengue</b> (26%), EBV (5%), HIV (3%), CMV (2%), rougeole, rubéole et varicelle (2% chaque) |
| BACTERIE       | <b>Fièvre Africaine à tiques</b> (10%), Strep TSS (2%)  |
| PARASITE       | Toxoplasmose et schistosomose invasive (2% chaque);   |
| ADR            | Nevirapine (prophylaxie post exposition en Afrique(2%)  |
| <b>Unknown</b> | 8%  |

\*Overpresentation of chikungunya infections due to the outbreak in the south East indian ocean islands; no Zika

Hochedez P et al. Am J Trop Med Hyg 2008; 78: 710-713

# Dermatoses et voyages

- De – en – tropicales, de – en – infectieuses
- Pdt le voyage: Soleil et arthropodes
- Dermatoses au retour : 1- Infections cutanées bactériennes, 2- piqûres d'insectes (+/-surinfectées), 3- LMCa
- Infections éruptives: 1- arboviroses (dengue, chik, zika), 2- rickettsioses
- Prévention: VAT, répulsifs, moustiquaire, vêtements (imprégnés), DC, AS?, AB ?