

9th National Seminar on Travel Medicine

17 November 2011



Travelling to Australia, N.Zealand and the 3 archipelagos

16.35-17.05

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Prof Y.Van Laethem Travel Clinic CHU St Pierre-Brussels

Travelling to Australia, N.Zealand and the 3 archipelagos

Y. Van Laethem

Travel Clinic

CHU St Pierre-Brussels

No problem with....

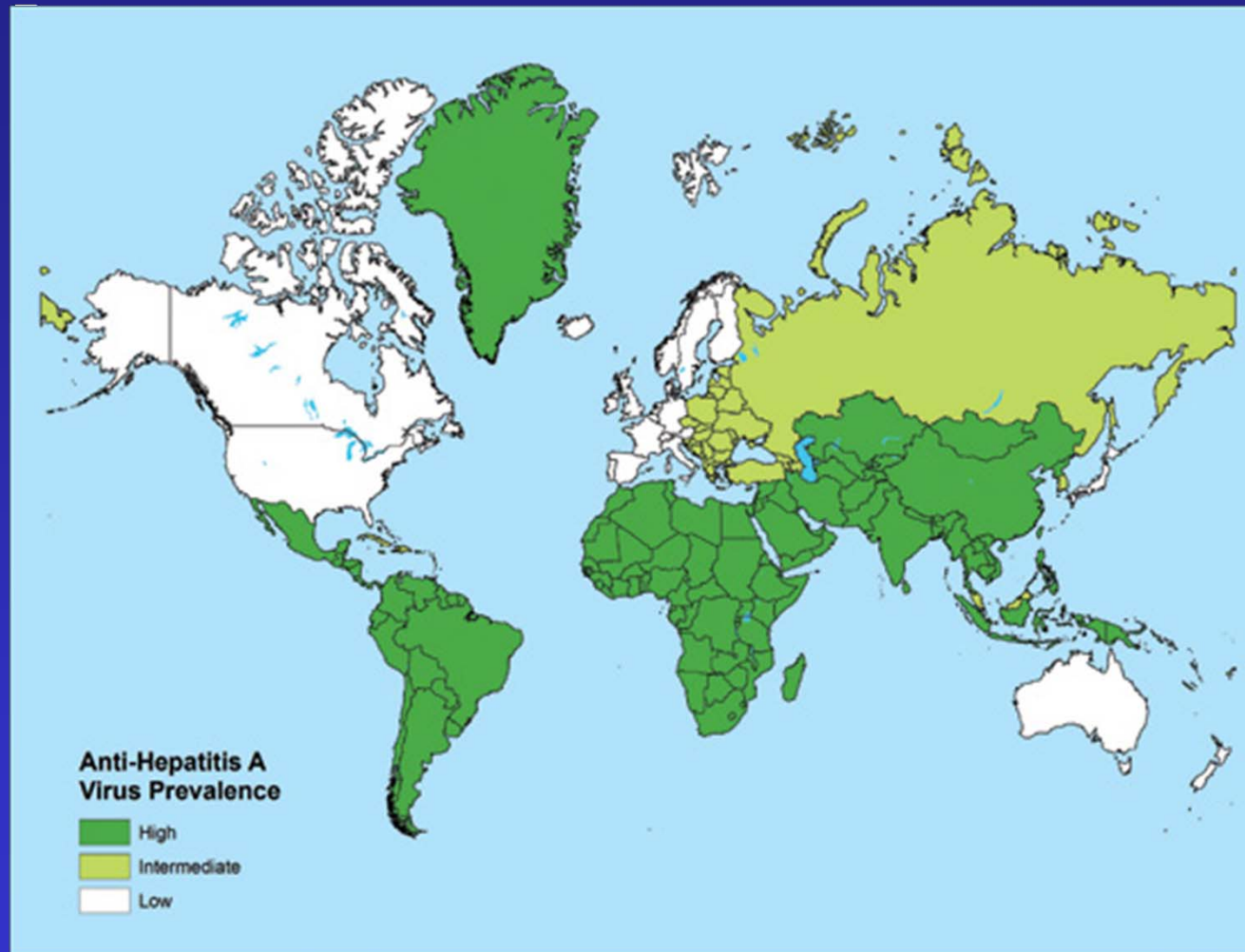
- **Yellow fever:**
except if coming from an endemic country
< **6 days** ago (**not** if airport transit only)
for all those countries/ **Not for New Zealand**
(no Aedes....)
- **Meningitis:** same risk as everywhere (as Brussels..)
No specific indication of vaccination
- **Diphtheria/Tetanos/(pertussis):** opportunity to booster!



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Prevalence of antibody to hepatitis A virus, by country, 2006.



What is similar to other SEA countries?

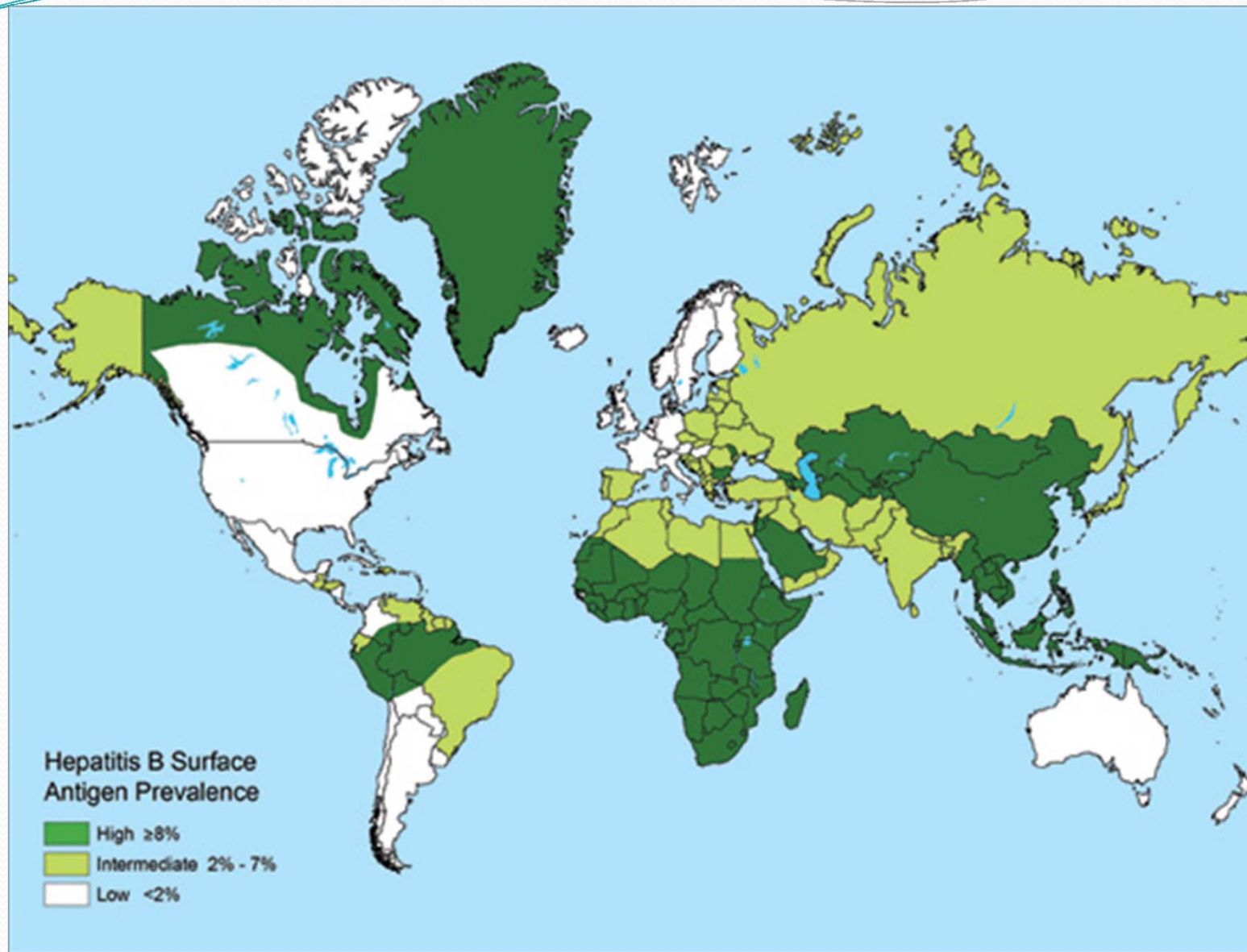
- **Hepatitis A:** all those countries

EXCEPT *Australia and New Zealand*
Singapore (Lower risk)

are at high risk of Hep A

VACCINATION !

Prevalence of chronic infection with hepatitis B virus, by country, 2006



What is similar to other SEA countries?

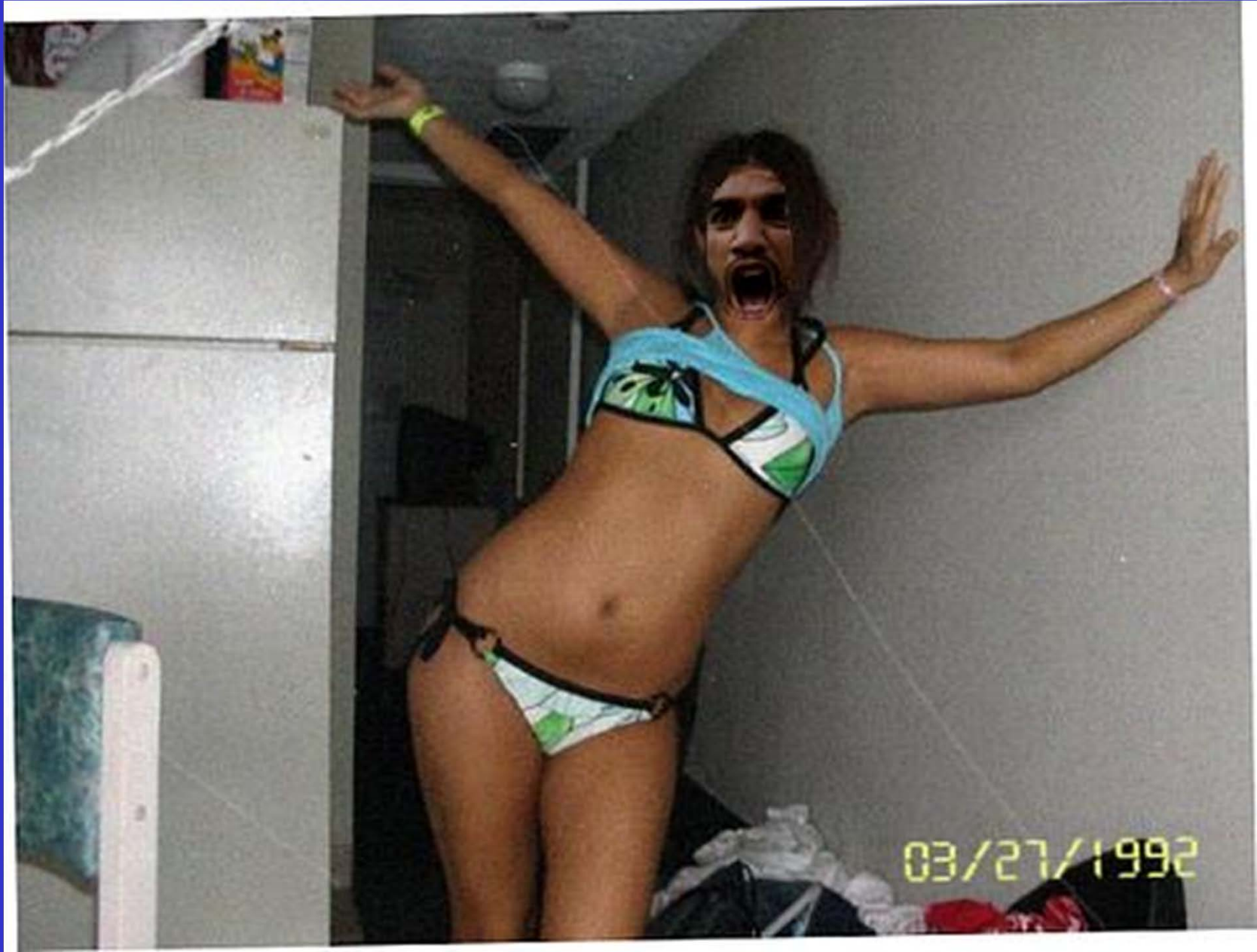
- **Hepatitis B:**

all those countries

EXCEPT **Australia ,New Zealand ,Singapore**

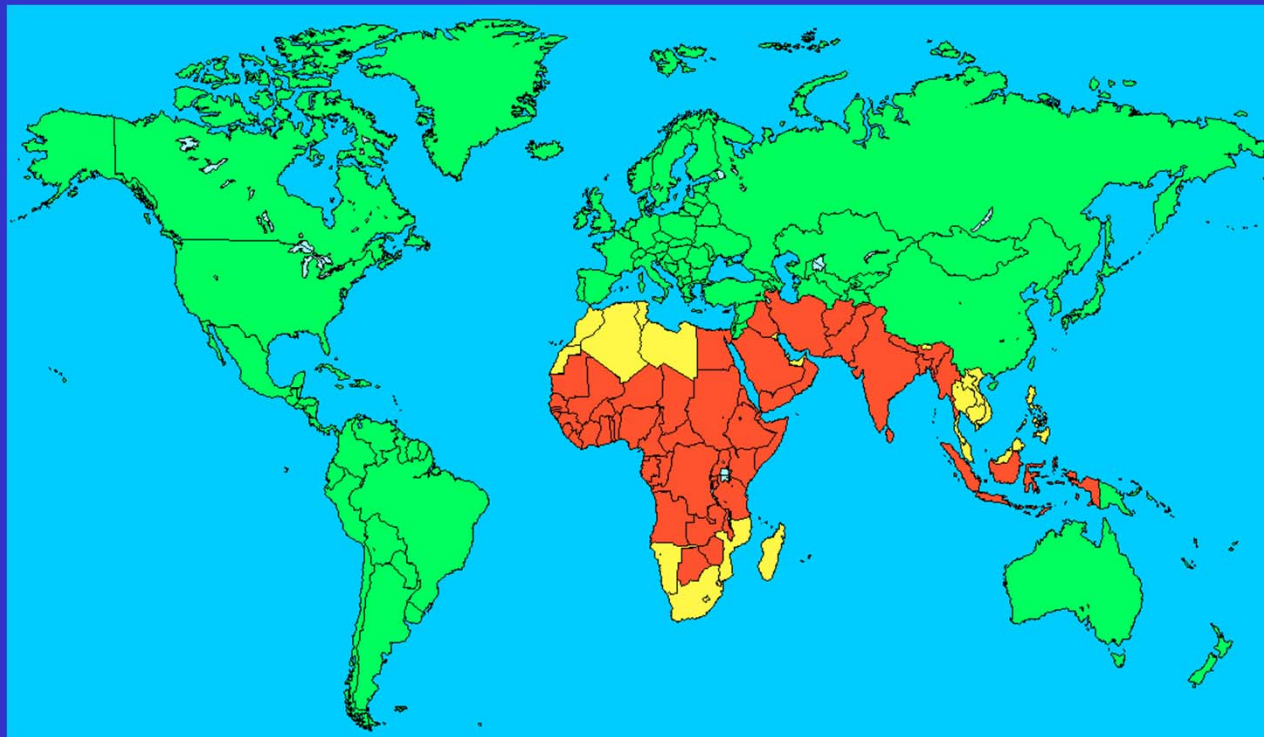
have a high prevalence level




VACCINATION if indicated (risk criteria)



Poliomyelitis vaccination (WHO 2006)

"For those who have received ≥ 3 doses of OPV, it is advisable to offer another dose of polio vaccine as a ONCE-ONLY dose to those traveling to endemic areas"



-  Certified free of polio
-  Free of polio since 2000 or earlier
-  Poliomyelitis not yet eradicated (incl. imports)

Polio vaccine

- Disease eradicated in those countries

EXCEPT Indonesia

- Several cases in children in 2005
(last one before in '95) ,
from pilgrims coming back from Mecca
- No cases since that time,
after mass immunization campaign

ONE DOSE ONCE AT ADULTHOOD !

Typhoid infection: high risk countries / regions (importation records, Switzerland 1993-2002)

per 100,000	Countries, areas
10 - 100	Pakistan (56) > Nepal (20) > India (12) (limited data: Bangla Desh)
5 - 10	Peru (9) > Sri Lanka (8) > Indonesia , Cameroun, Madagascar (5)
1 - 5	Tanzania (3) > Egypt (2) > Brazil, Morocco, Mexico (1)
<1	China, Kenya, Malaysia, Philippines , Thailand, Tunisia, Turkey; S-Europe

Typhoid fever vaccine

- For **Indonesia**, Malaysia and the Philippines :

< adventurous travelers/long trip

NOT <10 days in Bali in a 5+ stars hotel !

- **NOT** for Singapour or Australia/New Zealand

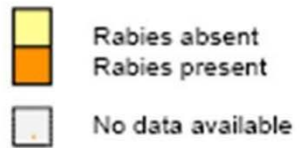
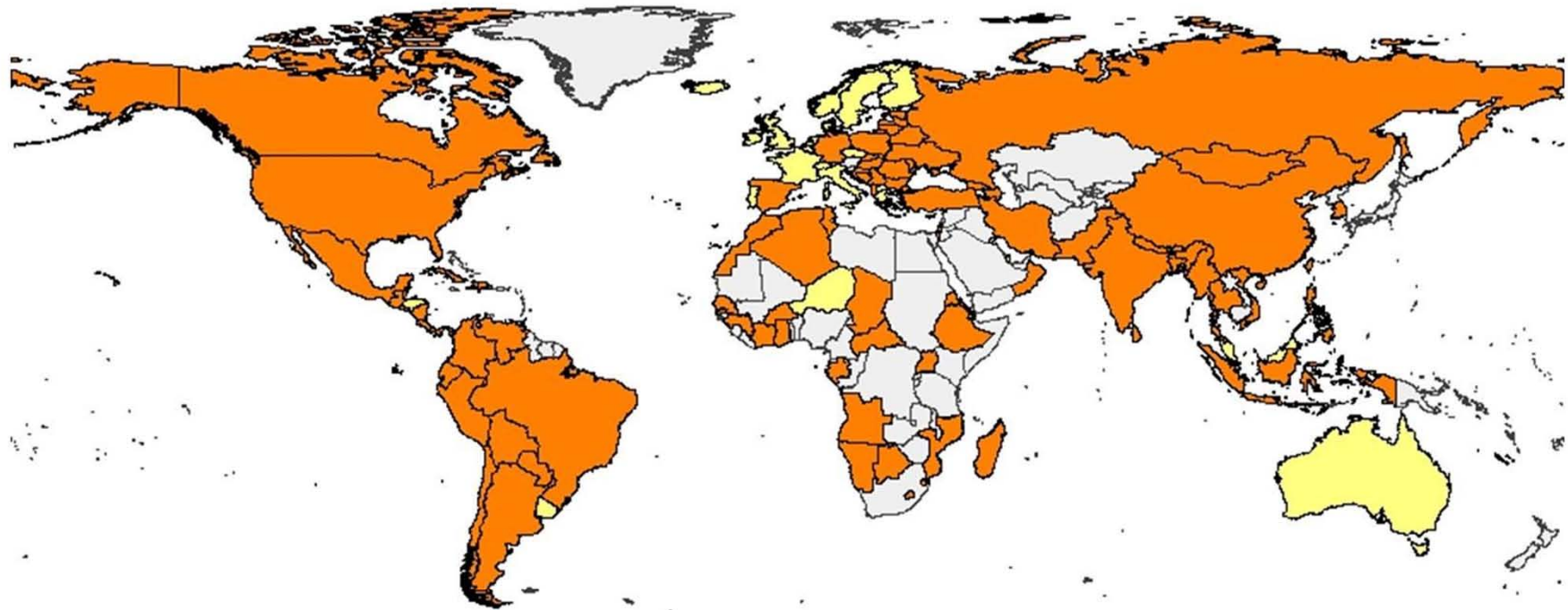


FIGURE 2—Rabid dog exhibiting aggressive behavior.

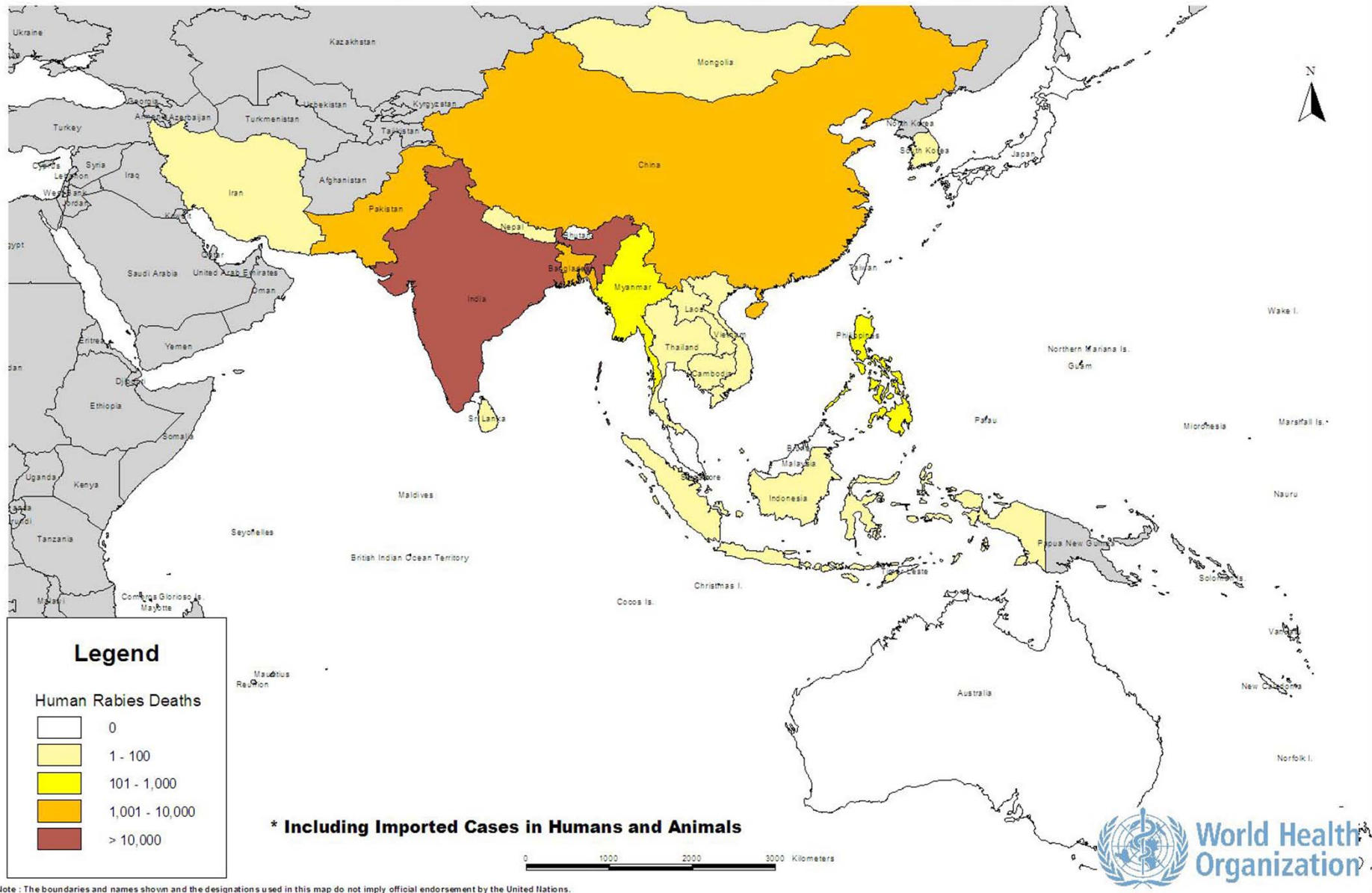




Presence/ Absence of Rabies worldwide - 2006



Human Rabies Deaths - 2004



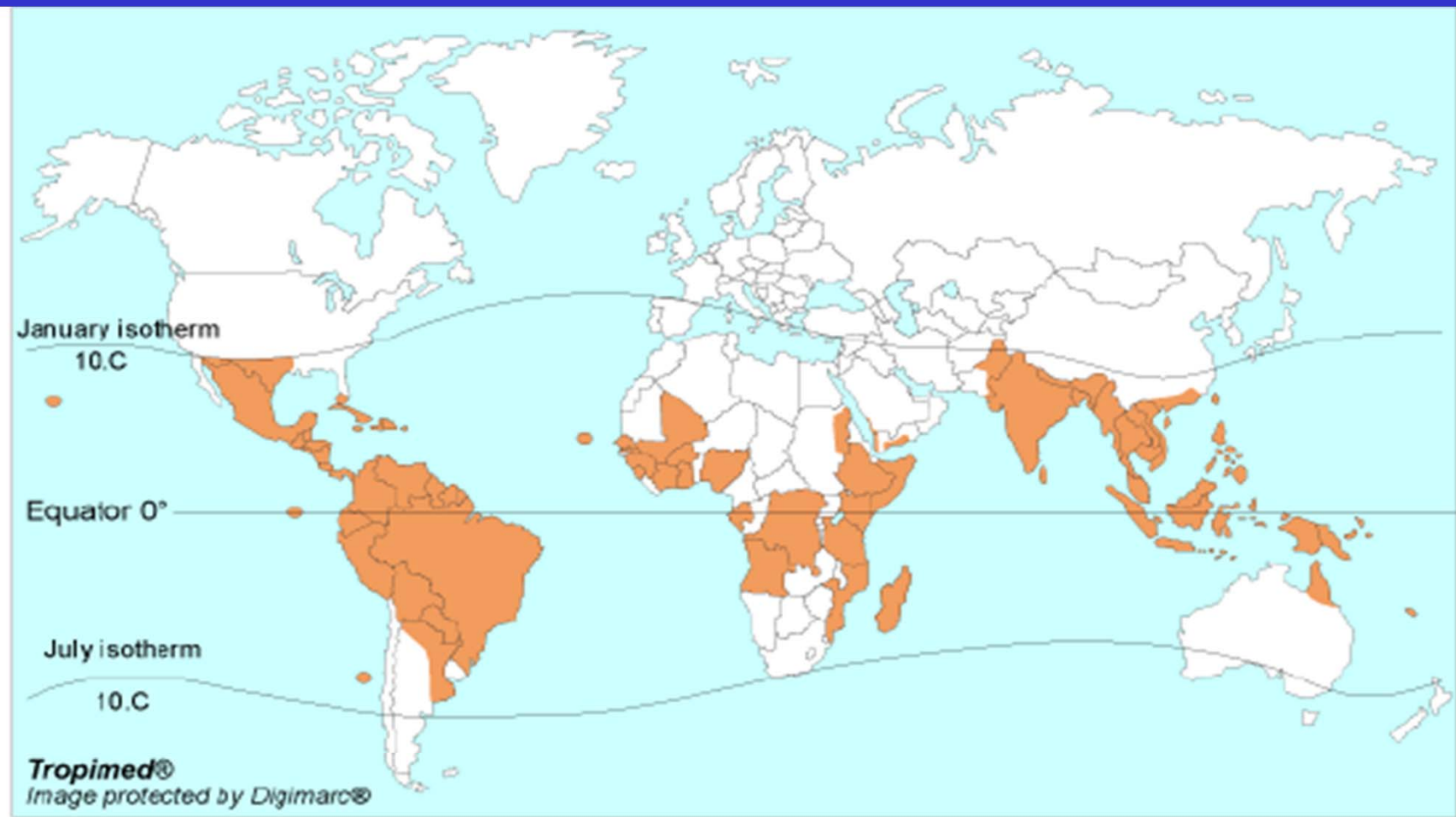
What is similar to other SEA countries?

- **Rabies**
 - **NO** rabies New Zealand
Singapore
W.Borneo, Iryan Jaya, Timor
 - **Only bat rabies** in Australia: 2 human cases
risk \approx 0 for tourists
 - **Low risk** in peninsular Malaysia
 - **Real risk** everywhere else
including Bali, Flores,...
(150 local death in Bali since the end of 2008)
- In SEAsia, Philippines have the highest number of cases









Dengue, 2010

Selon OMS 2010 (ITH 2011)

- Pays ou territoires ayant signalé des cas de dengue
- Les lignes correspondant aux isothermes de janvier et de juillet indiquent les zones à risque, définies par les limites géographiques dans les hémisphères nord et sud, où *Aedes aegypti*, principal moustique vecteur du virus de la dengue, survit toute l'année.

Epidemiology of dengue fever

- 2,5 to 3,5 billion people are at risk
- 50 to 100 million cases/y:
leading to +/- 20.000 death/y
- More frequent cause of :
 - fever in travellers (3X malaria)
 - hospit for fever when coming back from Asia



What about Dengue?

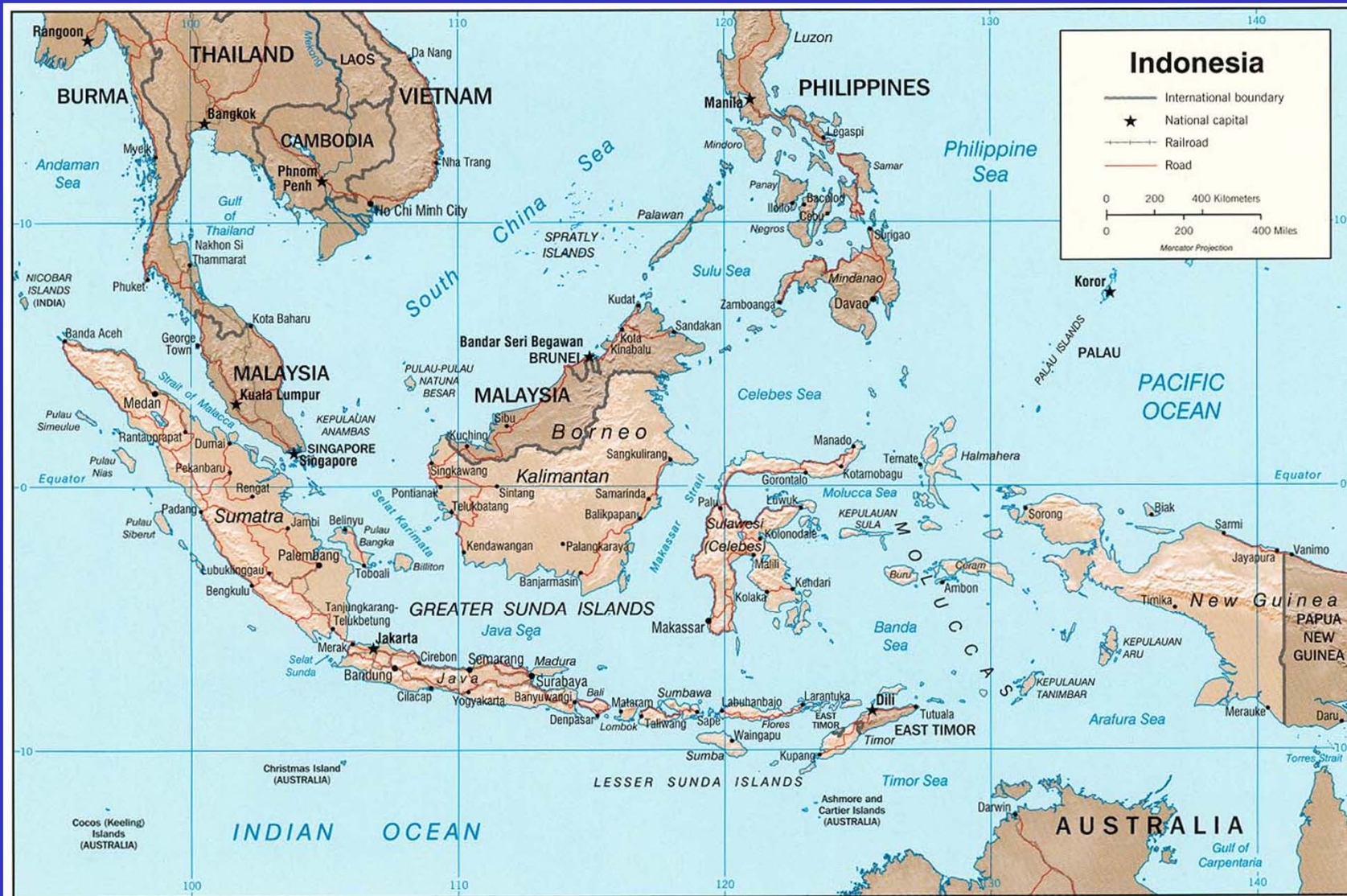
- **Repellent during daytime**
especially soon in the morning
late in the afternoon

EXCEPT in New Zealand (no Aedes)

Australia

AUSTRALIA: epidemic local cases of dengue
during the **summer**
in the North Queensland: Cairns,..
due to imported cases < Papua





And JE.....?

Obviously, nobody want to
come back from...

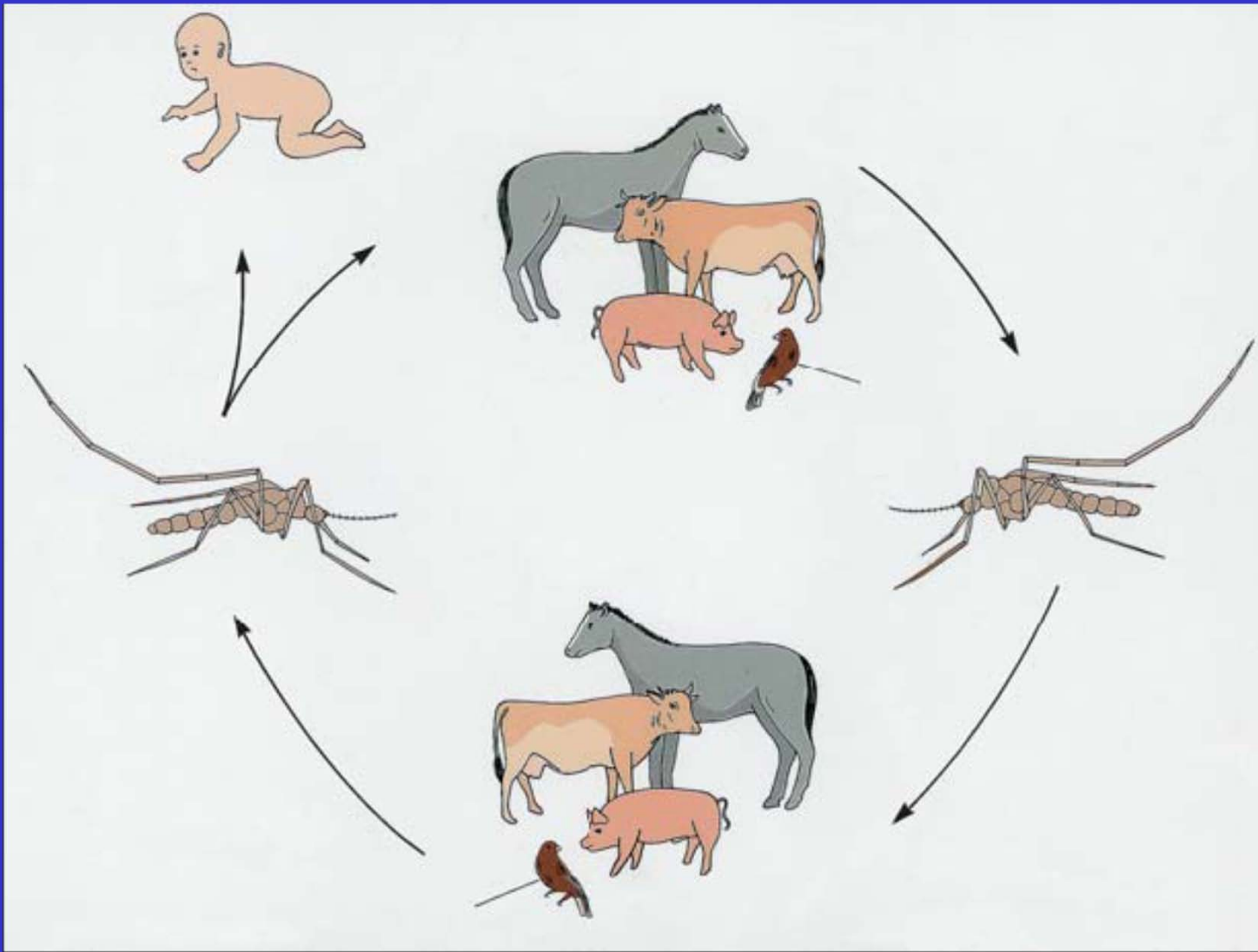


Obviously, nobody want to come
back from...

LIKE THAT.....











日本腦炎 登革熱
齊來預防 把蚊滅

Bovens of
Japanese Encephalitis
and Dengue Fever
Get Now!

學園生圖書社
2348 9000
Phone: 2348 9000
Fax: 2348 9000



Geographic distribution of Japanese encephalitis.



JE –JE vaccine ?

- **Most** of the infections are :
 - asymptomatic
 - acquired in the country**
 - with a nighttime transmission**
 - during /after the rainy season
- **Cases in tourists/short term travellers are rare:**
 - less than 40 in 30-40thy years
- But it may happen everywhere.....
 - including (recently) in Bali !**

JE vaccine and...

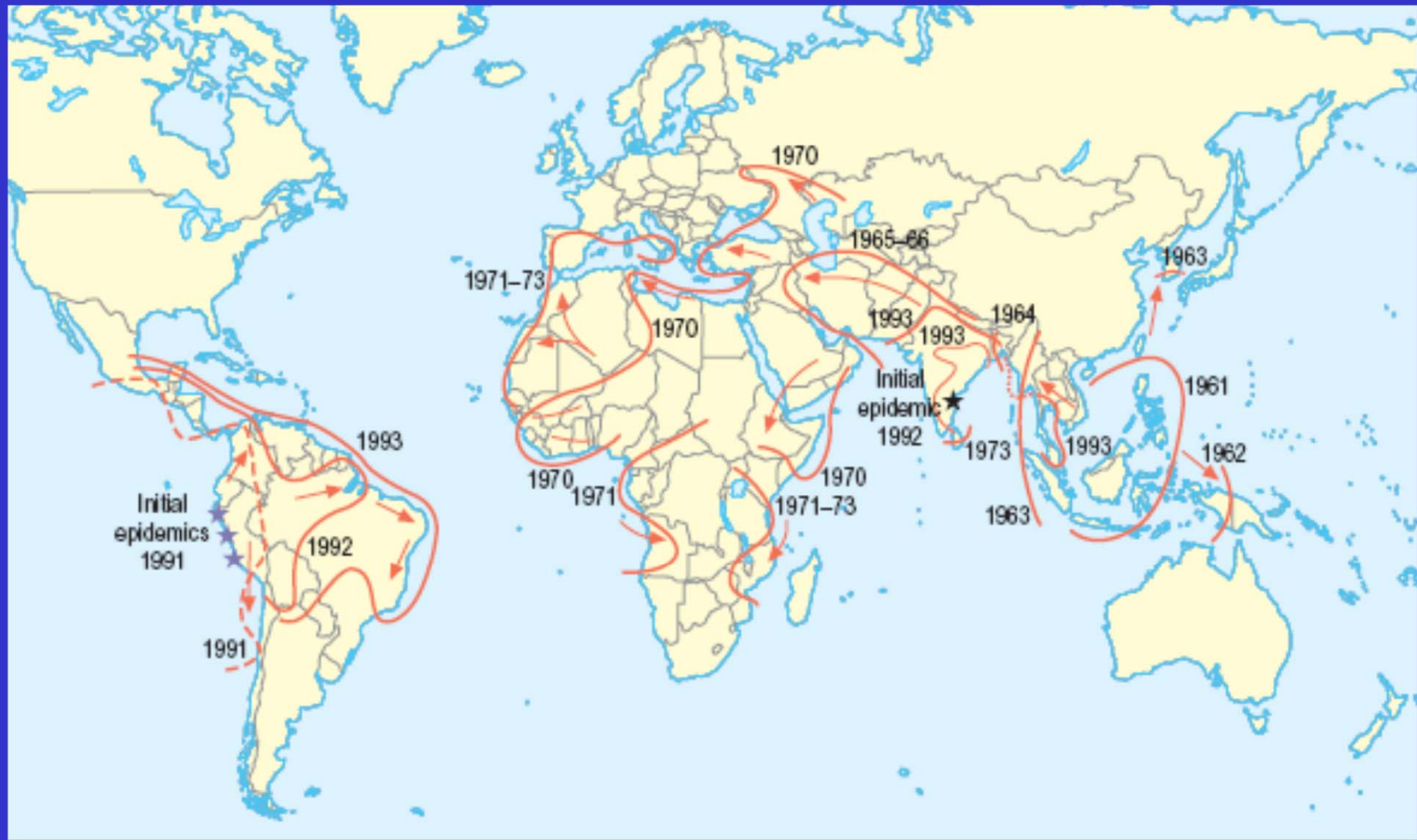
- **IXIARO** made it simpler:
 - Two injections – 4 weeks interval
 - No major side effects/Indication (price?)
 - At least 2 y protection

IF - adventurous travel

- (deep) inside the country
- with nighttime risk ≥ 1 month
including expats !

For the others: repellent/bednets !!

And the cholera...?



But, NO, this shall not be
your hotel room...



Cholera

- Risk is very very very...low !

Nearly limited to Japanese tourists

eating (a lot) of raw fish and other....

in Indonesia,....

NO VACCINE INDICATION

Schistosomiasis?

- **Yes**, in the **Philippines** (*S. japonicum*)

Mostly in Mindanao, Leyte and Samar

Rare at the east of Luzon and Mindoro

- → Swimming pools and the ocean are so nice....



Malaria

**No problem at all in
Singapour-Australia-New Zealand
Large cities in the other countries**







WWW.FunOnTheNet.IN

Malaria

No problem at all in

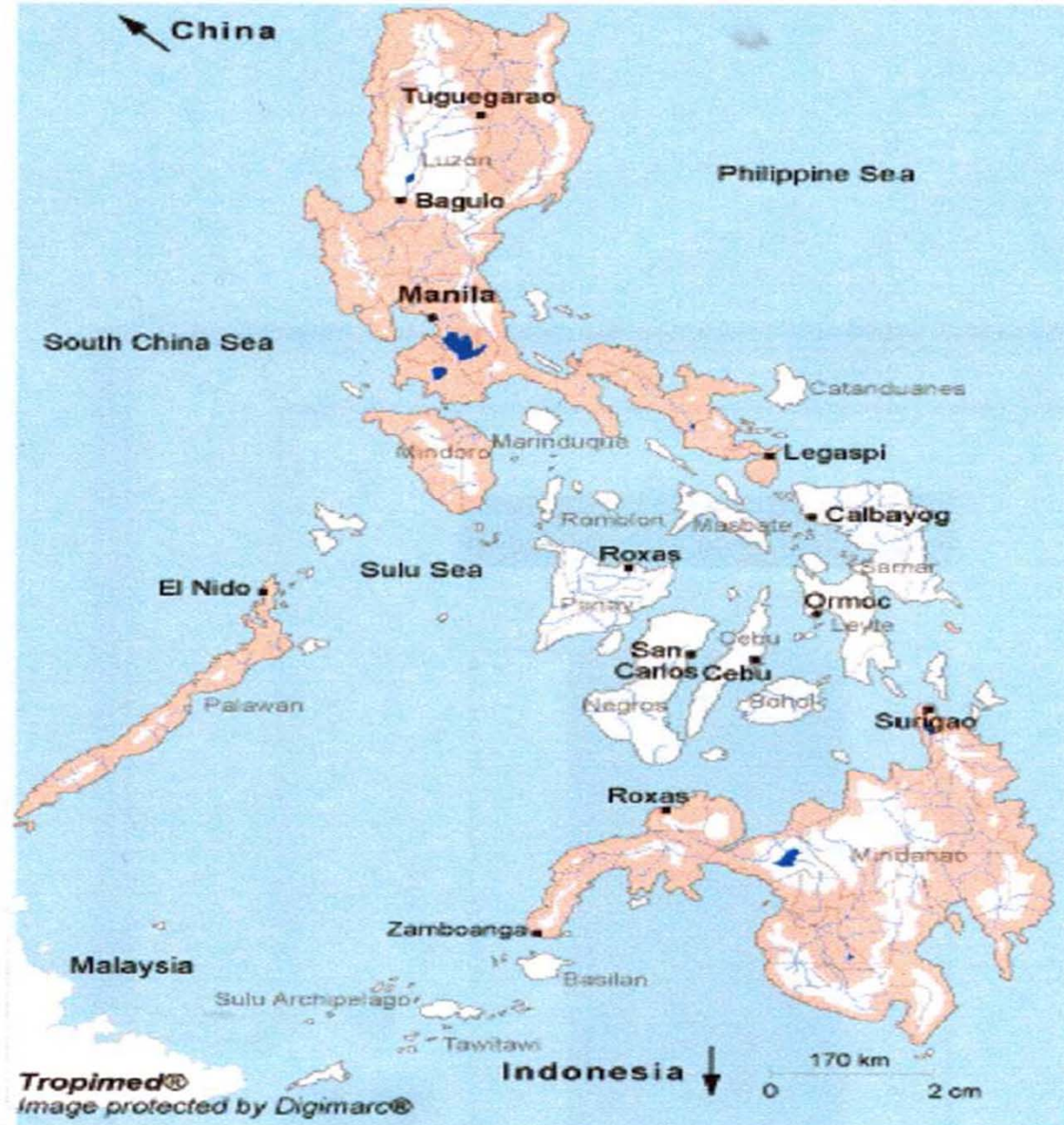
Singapour-Australia-New Zealand

Large cities in the other countries









Philippines

Zones d'endémie du paludisme

- Risque faible
régions rurales < 600 m
de Luzon, Mindoro, Palawan
et Mindanao
- Pas de paludisme ou
risque minime
reste du pays,
Manila City et autres villes

Malaria in the Philippines

- **Most of the time:**

NO prophylaxis: large cities-some islands

- **For some travellers , on some islands**
(a few weeks, adventurous,...)

-consider prophylaxis (Zone C)

-allways use mechanical protection !!







MYANMAR

CAMBODIA

VIETNAM

PHILIPPINES

Gulf of Thailand

THAILAND

South China Sea

Sulu Sea

Langkaw
Kangar
Alur Setar
Kota Baharu
George Town
Taiping
Pinang
Ipoh
Kuala Terengganu
Mount Tahan
Kuala Dungun
Kuantan
MAIN RANGE
Pahang
Kelang
KUALA LUMPUR
Petaling Jaya
Seremban
Melaka
Tiomau
Mersing
Batu Pahat
Johor Baharu

MALAYSIA

BRUNEI

Mount Kinabalu
Kota Kinabalu
Kinabalu N.P.
Kinabatangan
Sandakan
Lahad Datu
Tawau

Banggi

Natuna Is. (Indonesia)

Anambas Is. (Indonesia)

Lutong
Miri
CROCKER RANGE
SARAWAK
Borneo
Sibu
Sarikeri
Kuching
Rajang
Sri Aman

SINGAPORE

Strait of Malacca

INDONESIA

INDONESIA

Celebes Sea

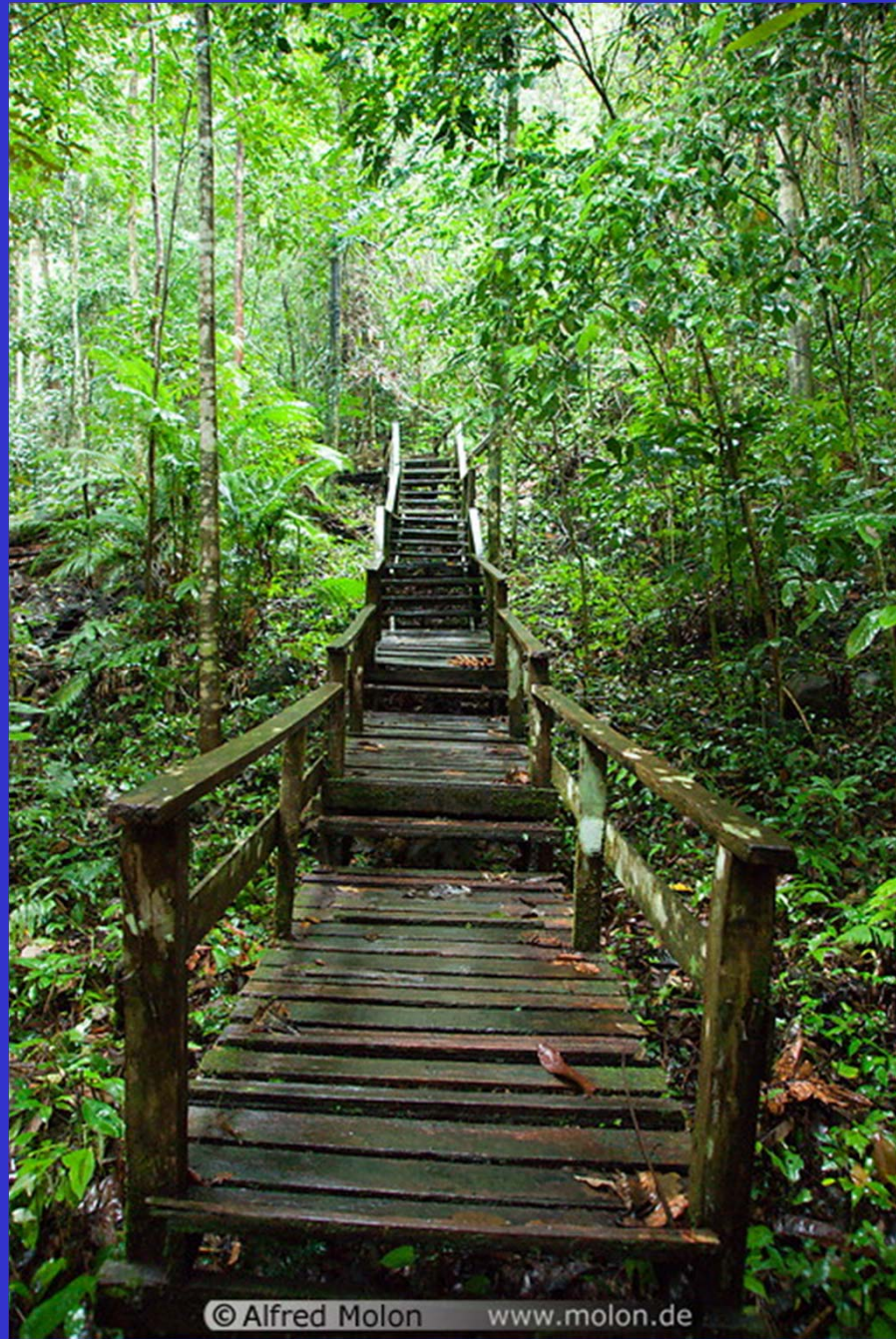
Indian Ocean

Java Sea





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Malaisie

Zones d'endemie du paludisme

- Risque faible
Sabah und Sarawak
- Risque minimal
- Pas de paludisme
côtes et villes

Malaria in Malaysia

- (Nearly) **NO RISK on**
 - peninsular Malaysia
 - the coast of Sabah and Sarawak

Nothing to do; repellent in the centrum
of the peninsula

- **IF *inside* Sabah and Sarawak:**
 - mechanical protection !
 - consider prophylaxis (zone C)

NB: the house of *P. knowlesii*....



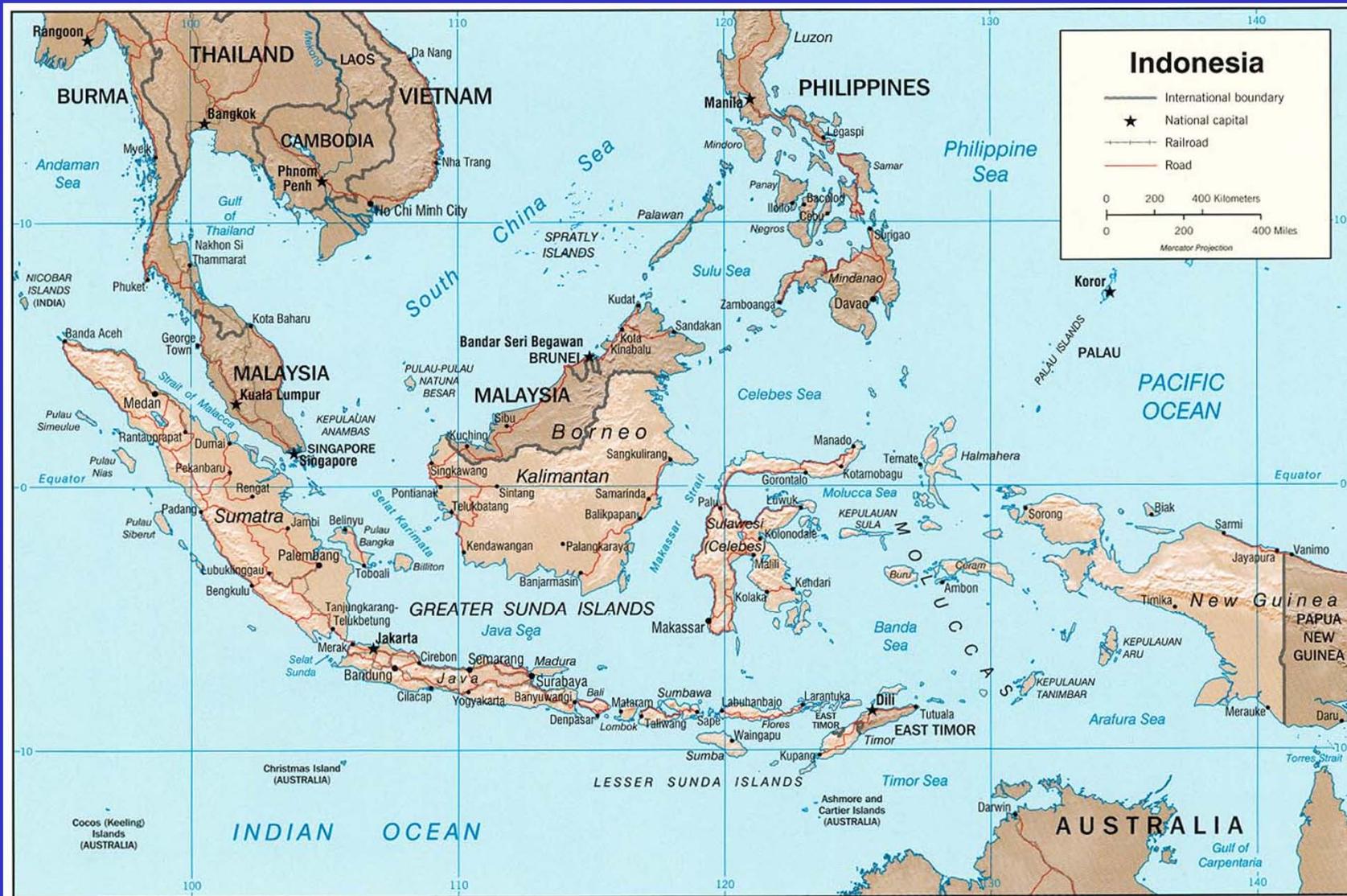
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Indonésie

Zones d'endémie du paludisme

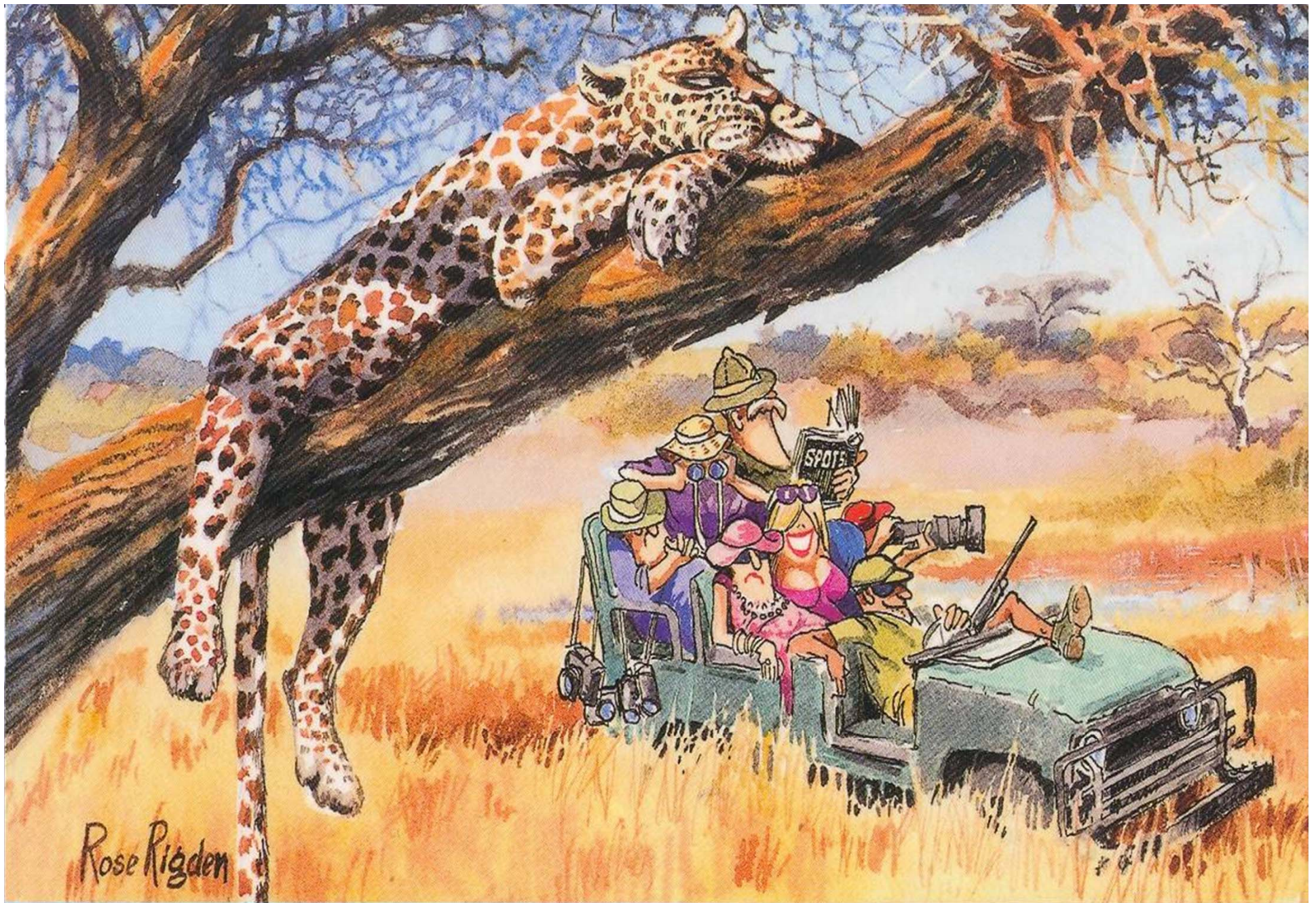
- Risque élevé
 Irian Jaya et toutes les îles à l'est de Bali, incl. Lombok, Gilli Islands, Sumba, Sumbawa, Flores, Timor, Moluques etc.
- Risque faible
 reste du pays

Pas de paludisme
 grandes villes,
 principaux lieux
 touristiques



Malaria in Indonesia

- **AT THE EAST OF BALI** (since Gili and Lombok)
prophylaxis (zone C)
in addition to mechanical protection
- **Bali and main places in Sumatra-Java:**
no prophylaxis at all
- **Sumatra, Sulawesi, Borneo :**
consider prophylaxis versus
(most of the time) mechanical protection



Here they come ~ a full set of experts!

Australia, a so nice country...



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Australia





Australia...is also:

- **Alphaviruses** (same family: Chikungunya)

Ross river virus

Barmah Forest virus: \approx similar; ↑rash

Sindbis virus: similar

- **Flaviviruses**

Murray valley

West Nile

Ross River fever

- **Influenza-like illness + polyarthritits + rash**

Also in Papua, Samoa, Fidji,....

- Most cases in Queensland, Nothern Territory and tropical Western Australia

- especially during the « **wet season** »

- mostly in **rural areas**

Arthralgia may last for several weeks/months

Protection with repellent,..from sunset

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Australia

Murray Valley encephalitis

- Related to JE virus
- **Mosquito-waterbird cycle** in the north (Kimberley-Northern Territory) and western part of Australia
- After 1 to 4 weeks:
 - asymptomatic/self-limiting febrile illness
 - encephalitis in 1/1000 cases



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- Related to JE virus
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West Nile-JE

- Yes...but rare !!

A few cases of WN encephalitis in 30 years...!!

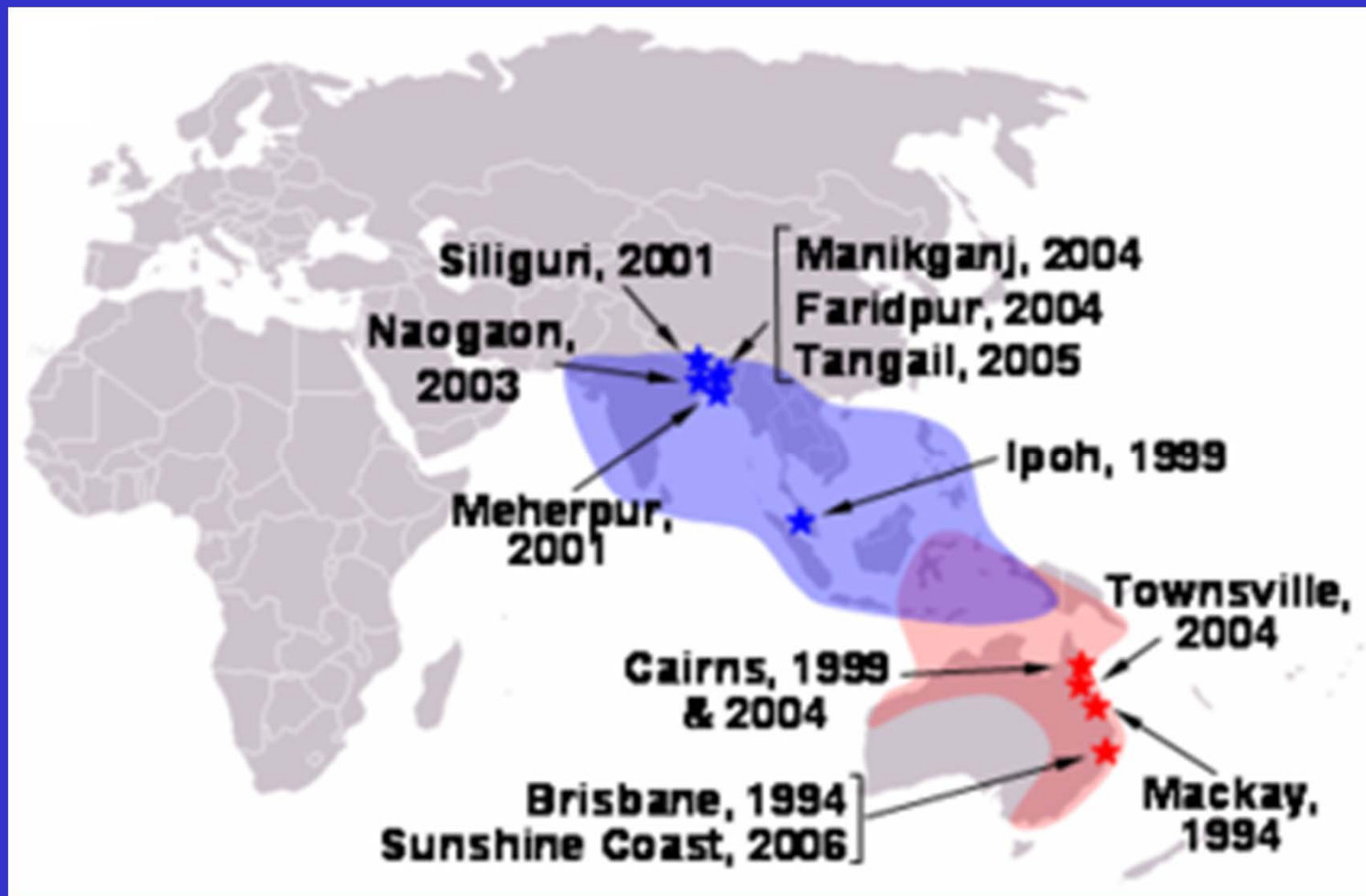
A few cases of JE in the islands
of the Torres Strait/North Queensland



Photo courtesy of CSIRO

Hendra virus

- **New genus: Henipaviruses**
 - Close to Nipah virus (Malaysia,...)**
- From fruit bats
- Problem for horses around
Brisbane (Queensland)
contaminated during grazing to pasture
contaminated by saliva of the bats eating
fruits in the trees
- 10 human cases /high fatality rate....



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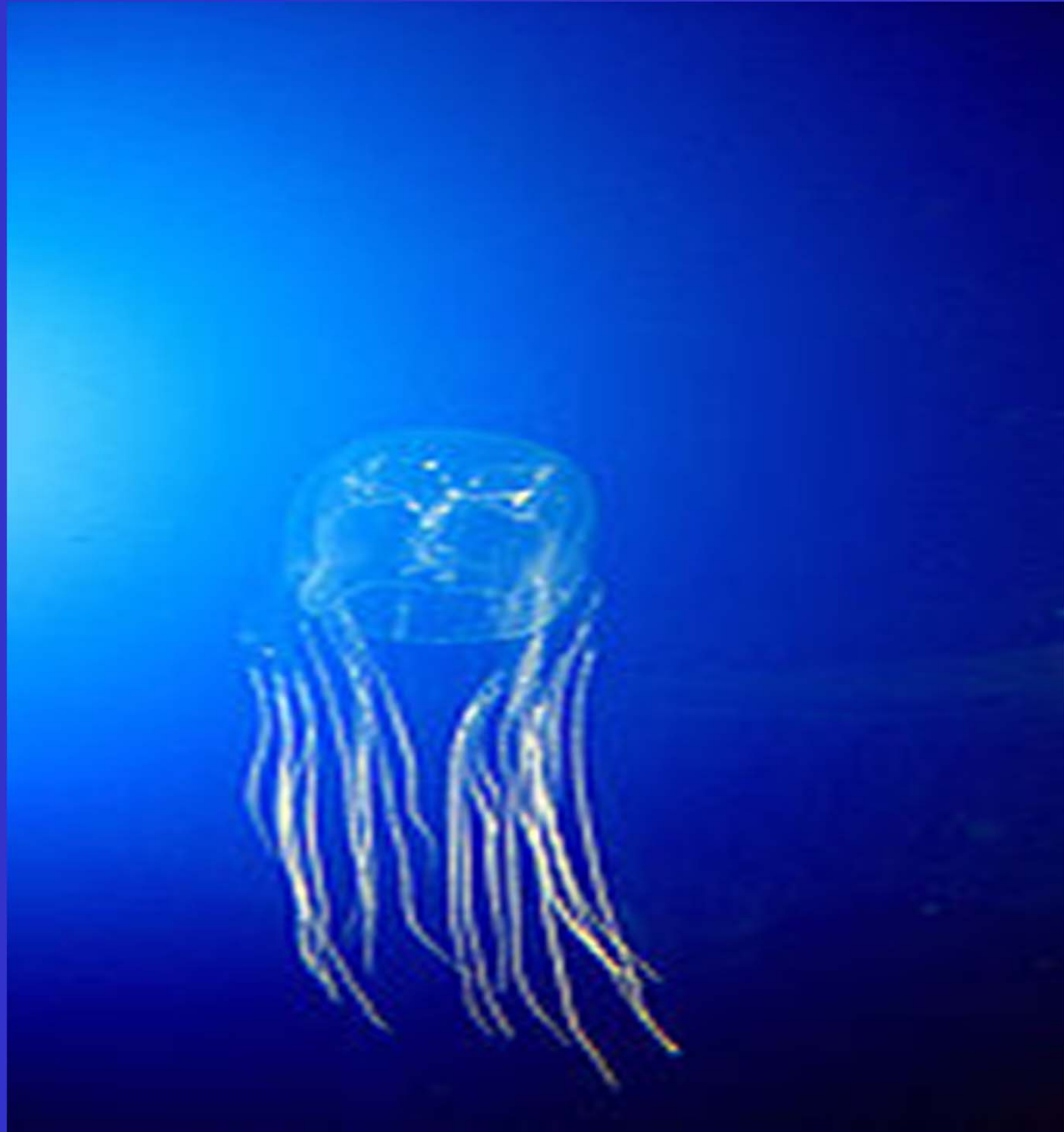




But also.....

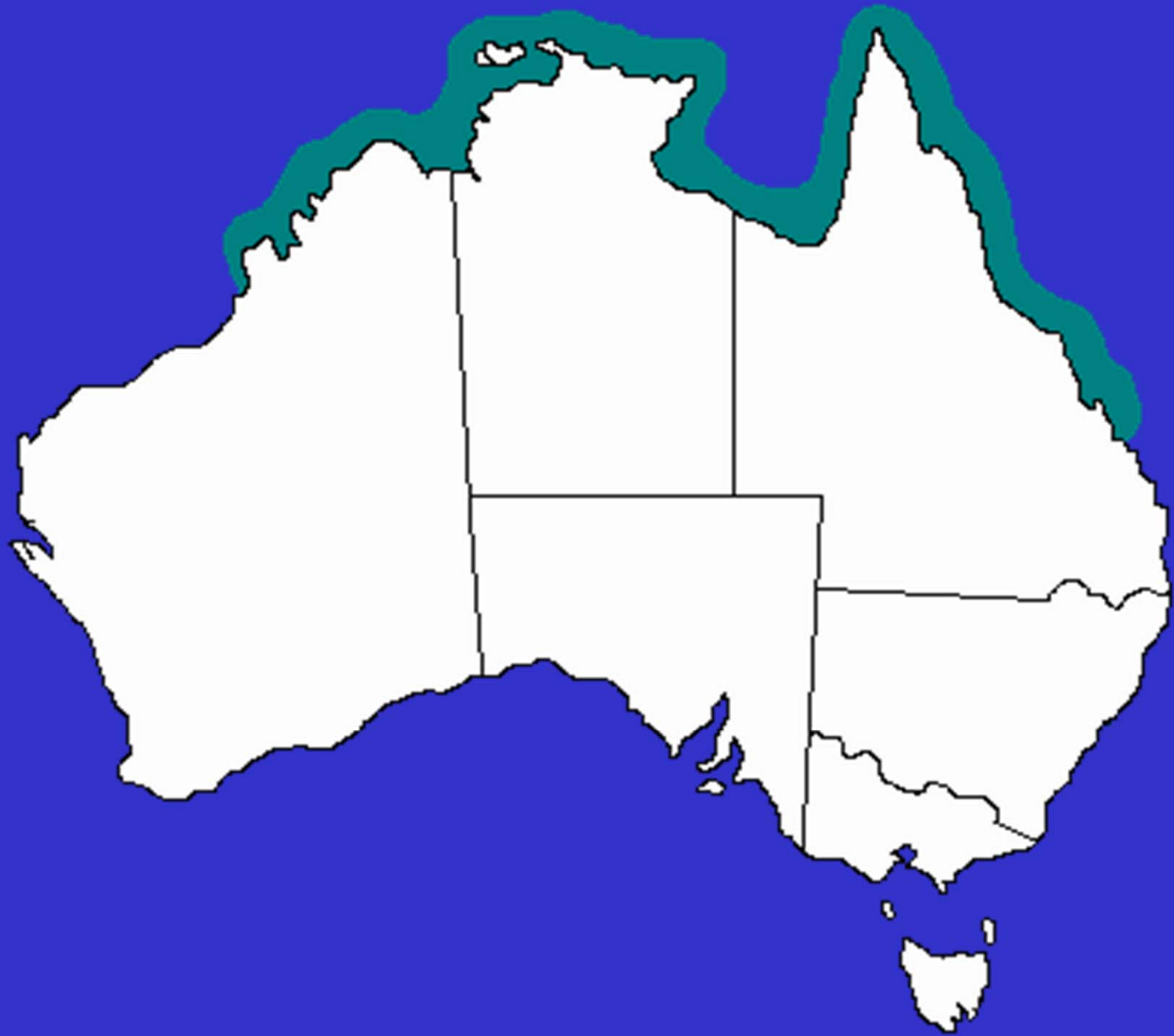


**MARINE STINGERS
ARE PRESENT
IN THESE WATERS
DURING THE
SUMMER MONTHS**













© Carl Rossett







So, to be (nearly) totally safe

Go to New Zealand !

No snakes, spider, jelly fish, croco,
dengue,...

If there is not earthquake !

