

Pilgrims to Mecca

Y. Van Laethem

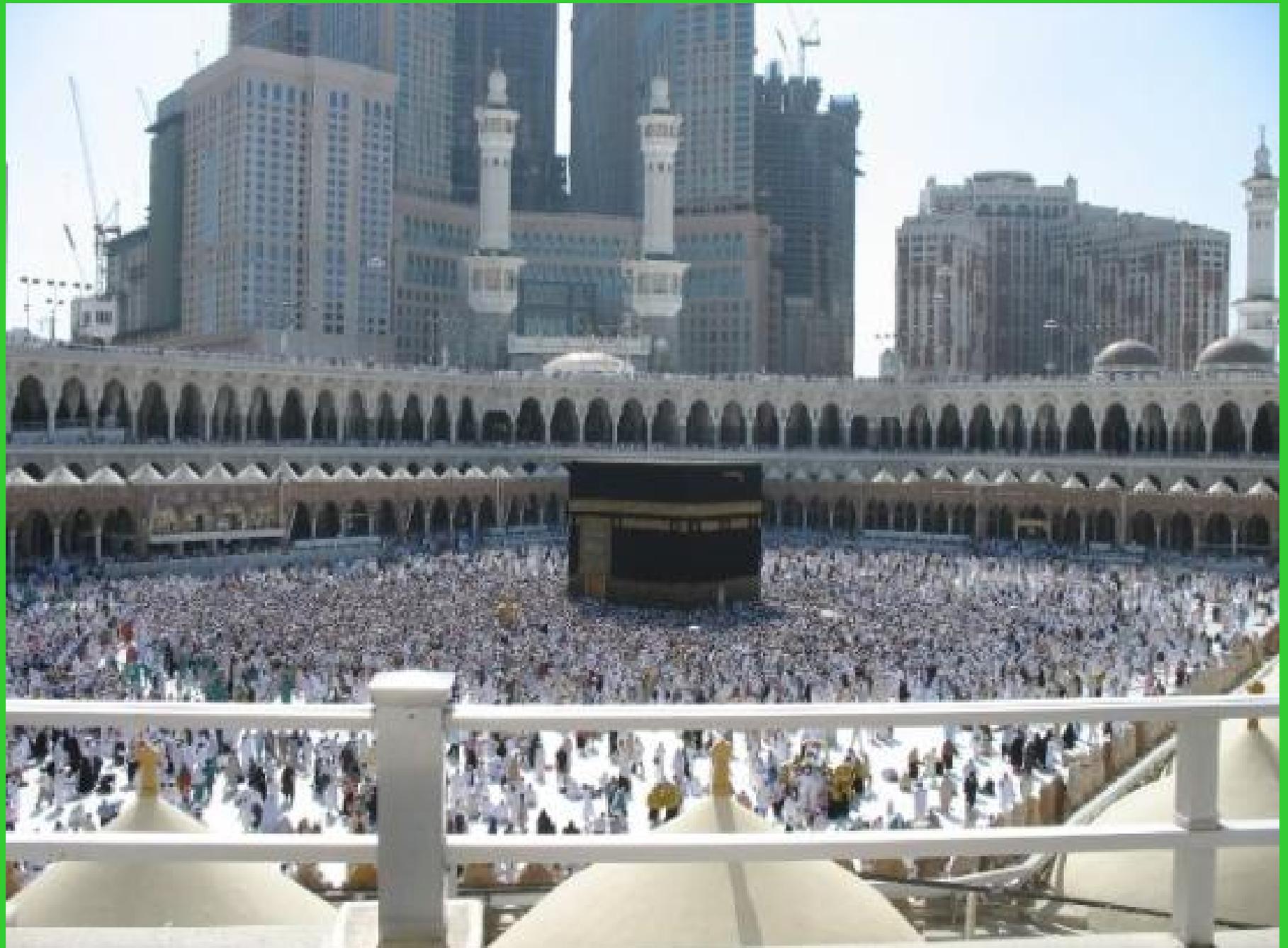
Travel Clinic - CHU St Pierre

Brussels



Mecca

- The Holy Place with the larger number of pilgrims at the same time:
 - between 2 – 3. 10⁶ people during the Hajj :
 - 60% from Asia, 25% from Arabic Countries
 - 10 % from Africa, and <5% from Europa
- Leading to transmission of several diseases:
 - tuberculosis
 - meningitis
 - influenza,...





Pilgrims to Mecca

- From more than 140 countries...and:
 - Netherlands: +/- 6.000/year
 - Belgium: +/- 3.000/year
- At Travel Clinic CHU St Pierre, meningo vaccination for:
 - +/- 1.500 pilgrims in 2007
 - 1.100 pilgrims in 2008 and 2009
 - ≈ 20 to 130/day, mostly during 1 month after the end of ramadan

Hajj

- One of the five pillar of Islam
 - Once a year, for a period of 5 days during the 12th month of the lunar islamic calendar
 - ever-changing seasonal dates (10-11 days « earlier » each year)
 - ≠ environmental/epidemiological conditions
- NB: Umrah : shorter pilgrimage, may be done at every time

Hajj

- 7 hospitals...
- 74 health-care centers...
- >10.000 specialized health care personnel
for healthcare free of charge

For pilgrims staying in:

- hotels and appartement(from? to 5 stars !)
- tents (by nationality) for a few nights







Meningococcal infection

- Vaccination for pilgrims from the meningitis belt required since a long time.

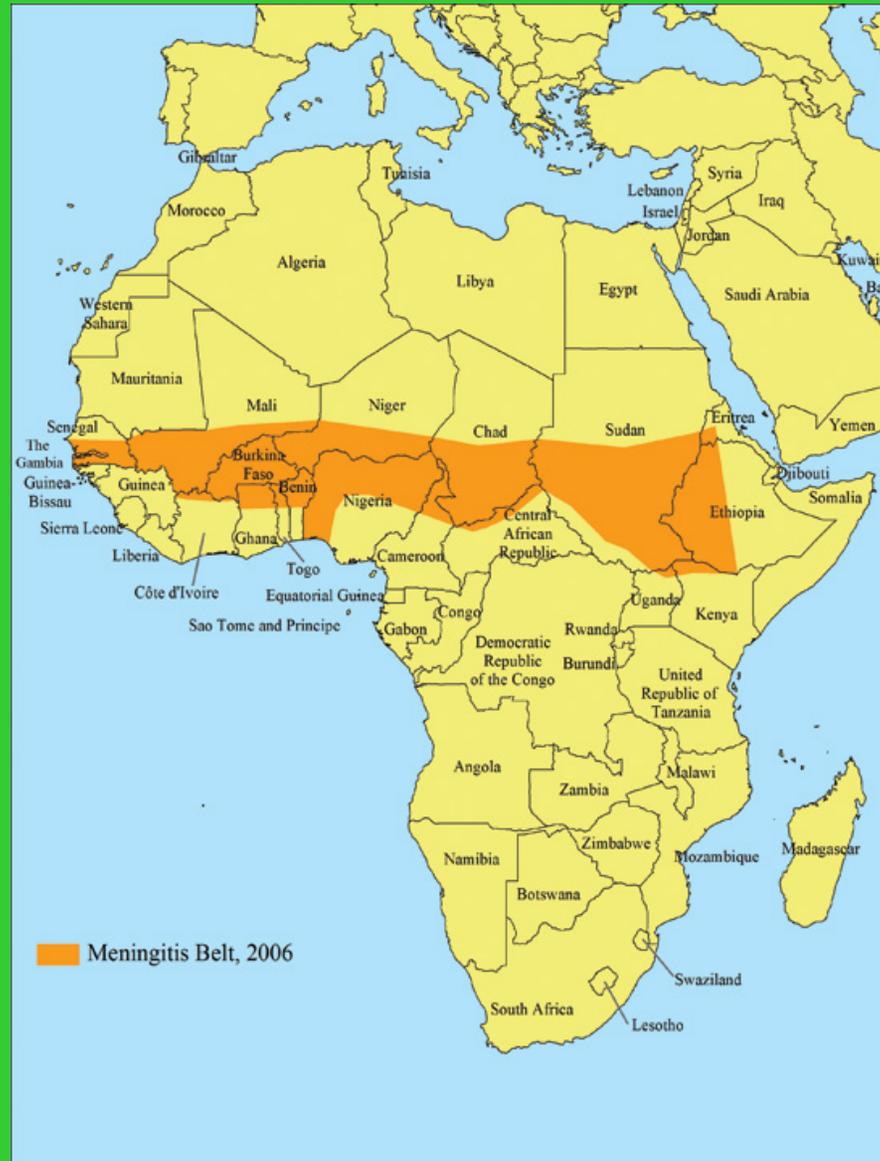
Several outbreaks of serogroup A disease following the 1987 Hajj:

-19 cases/10.000 UK pilgrims

- 15 secondary cases in UK

with carriage +/- 10 %(US pilgrims)

Areas with frequent epidemics of meningococcal meningitis.



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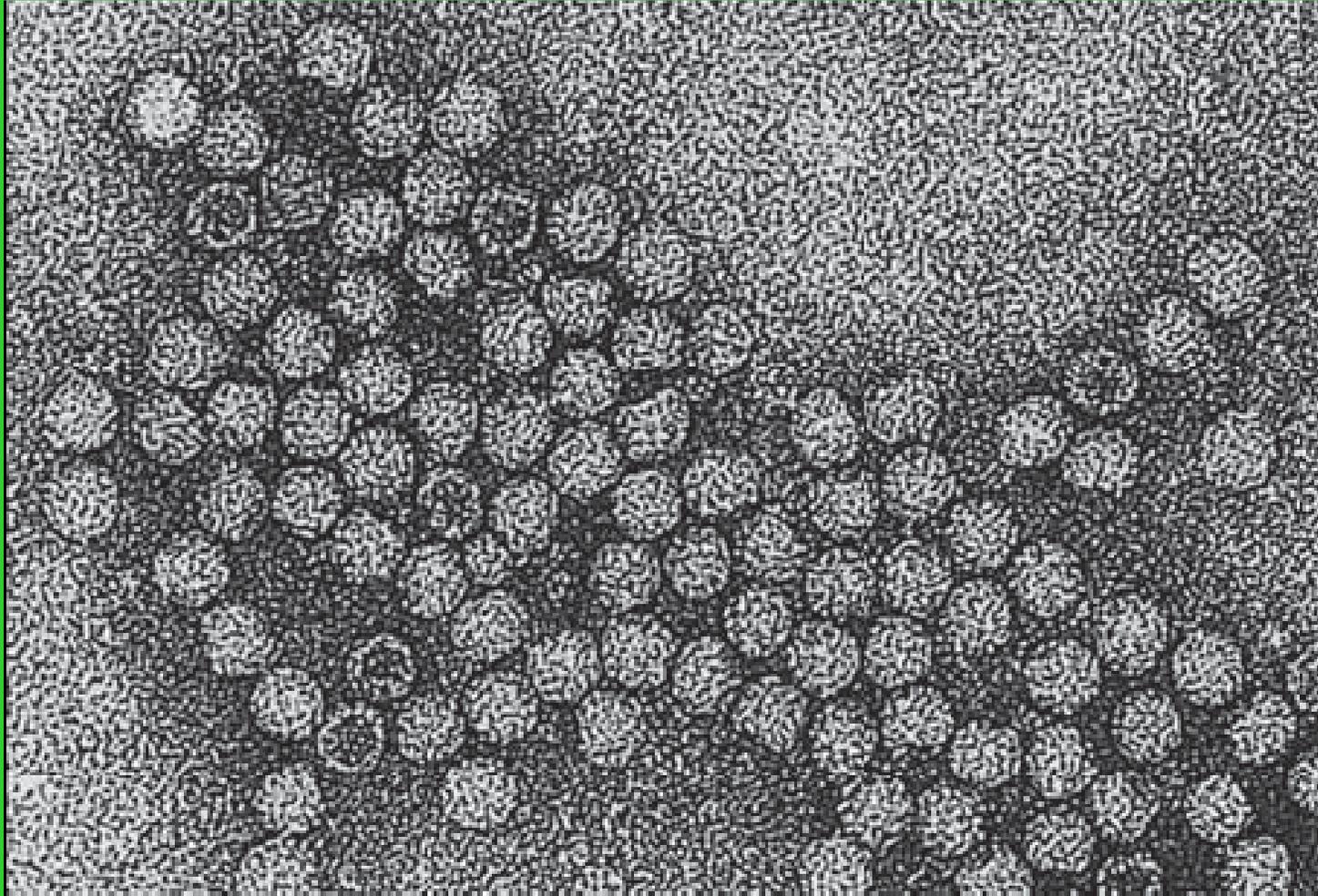
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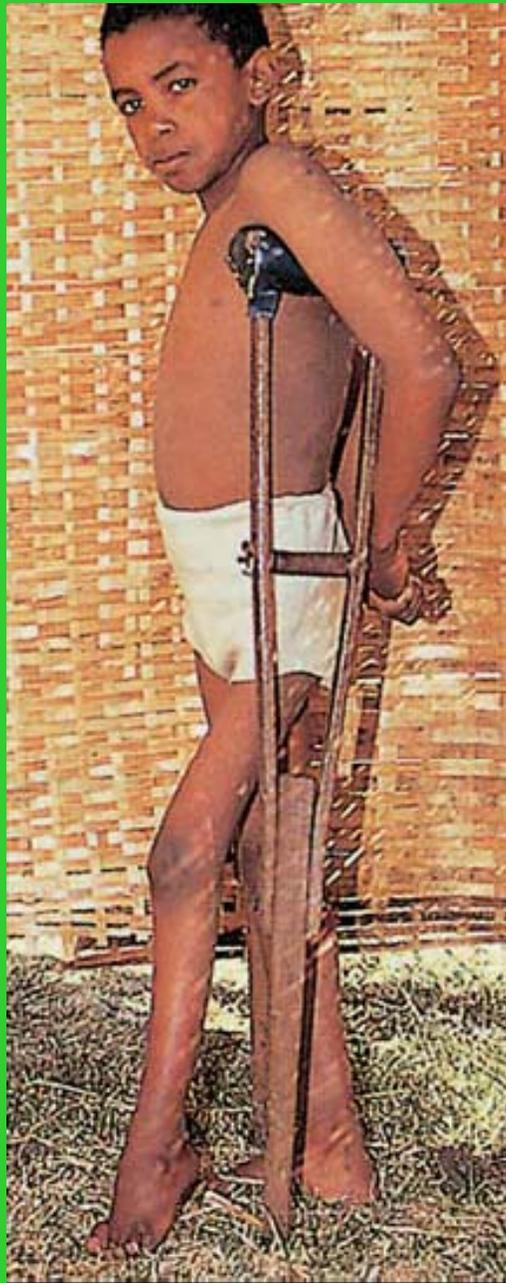
Meningococcal infection

- Vaccine(A and C) required since 1988
- Quadrivalent vaccine since 2001(W135 cases)
 - if older than 2 years
 - issued >10 days and < 3 years

NB: if arriving from countries of the meningitis belt,
administration at the port of entry:

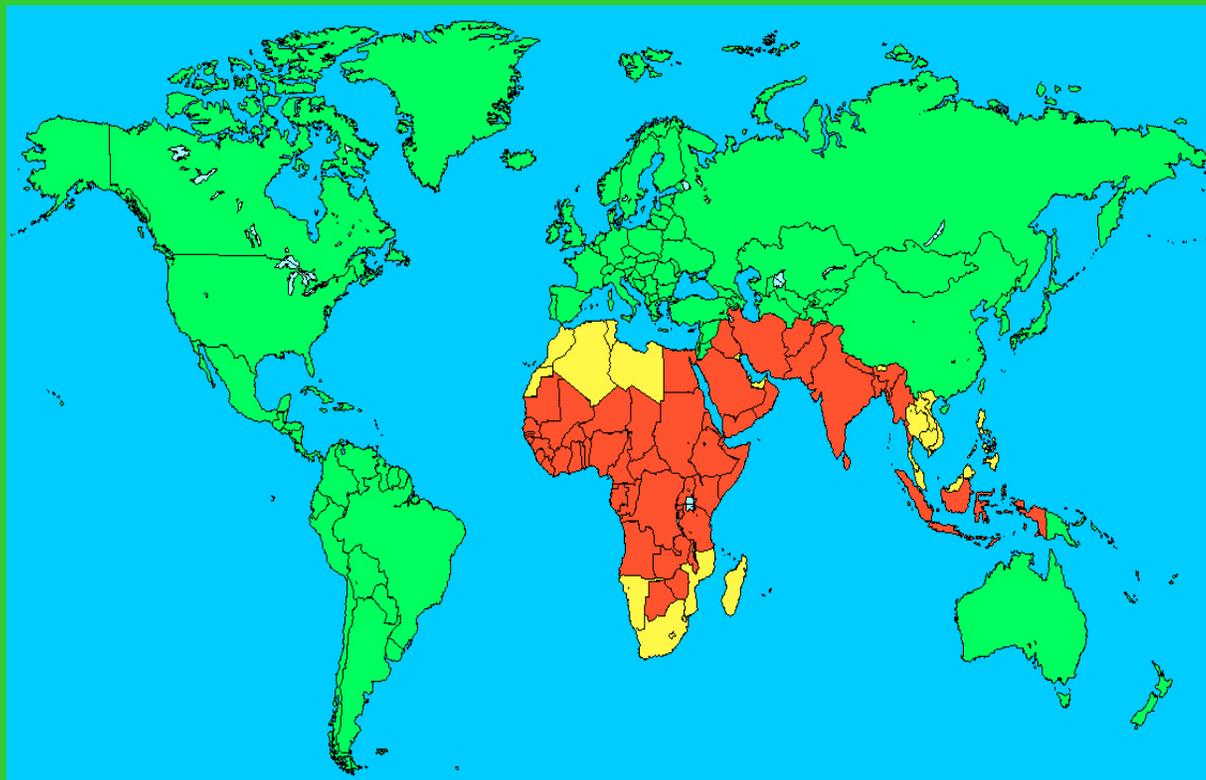
- adults: 500 mg cipro
- children: rifampicin tablets
- pregnant women: ceftriaxone IM





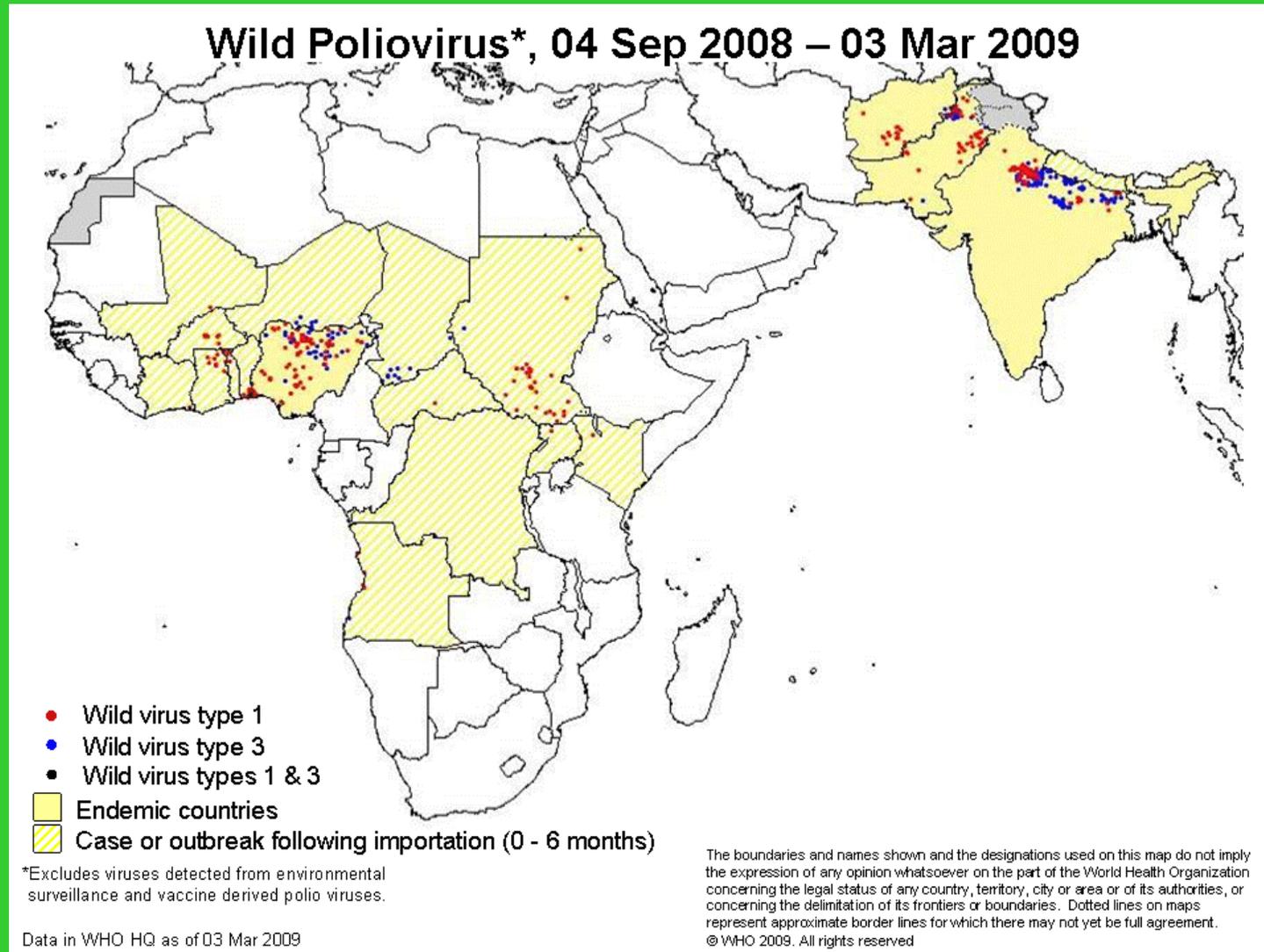
Poliomyelitis vaccination (WHO 2006)

"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"



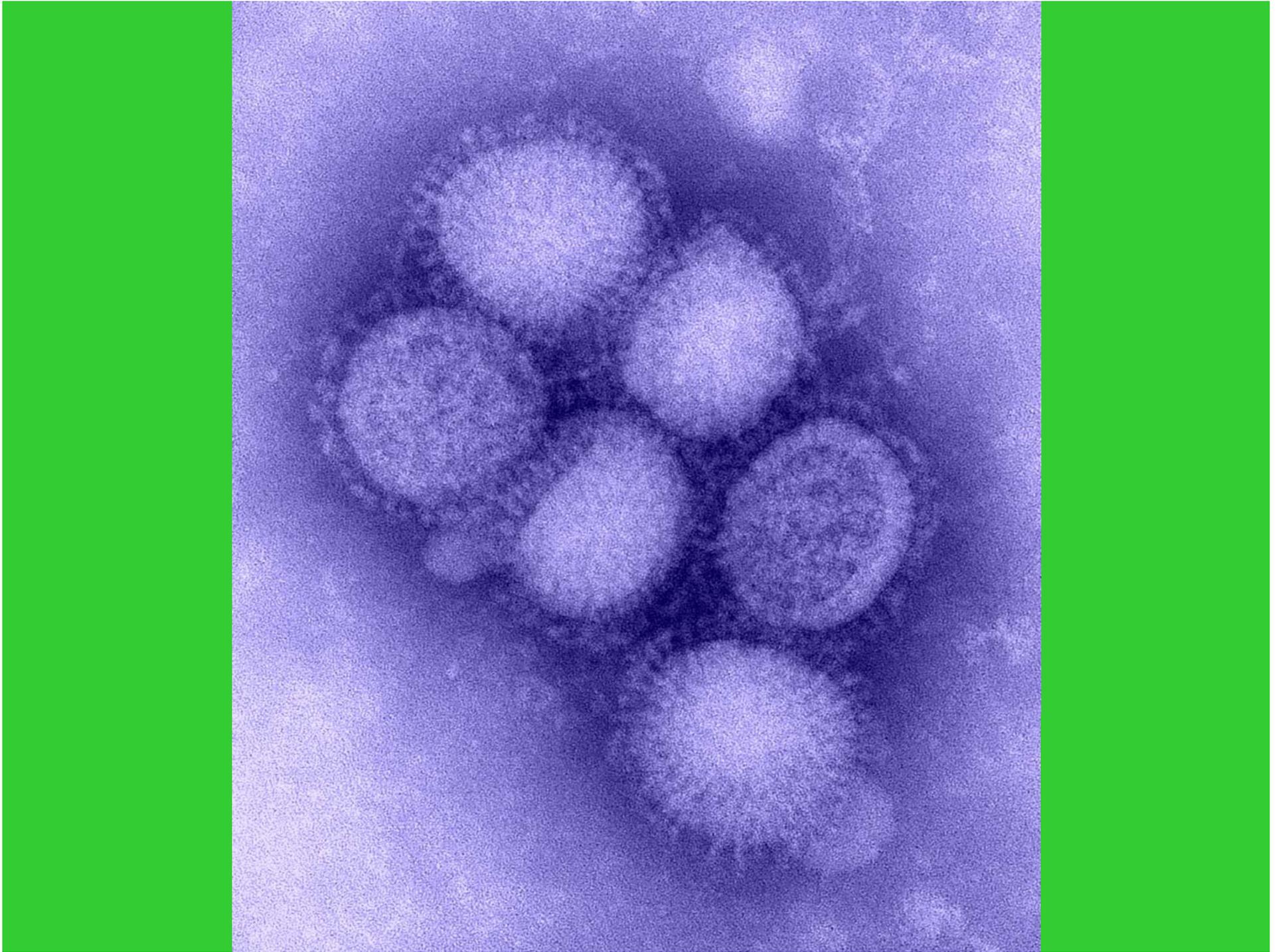
-  Certified free of polio
-  Free of polio since 2000 or earlier
-  Poliomyelitis not yet eradicated (incl. imports)

Wild Poliovirus Weekly Update



Poliomyelitis

- Imported from Nigeria into Saudi Arabia in 2004
- Since 2005: requirement for documented proof of up to date oral vaccination
 - 6 weeks before application for a visa
 - in < 15 y old from countries where polio still occur
- + 1 dose administered to all those < 15 y at the border
- IF arriving from India, Pakistan, Afghanistan or Nigeria:
 - ALL pilgrims (regardless of age,..) should receive
 - 1 dose 6 weeks prior to departure
 - 1 dose at the border



Influenza (pandemic)

- Vaccination mandatory IF the vaccine is available in the country of origin FOR those pilgrims (risk groups,...)
- IF not available:
 - visa issued;responsability of the health authorities of each country...
also responsible for educating / advising !

Influenza (seasonal)

- Mandatory
 - at least 2 weeks before arriving
in Saudi Arabia

IF available in the country of origin

Yellow fever

- Required for all pilgrims arriving from or transiting through any country infected with yellow fever
- → **For Belgium:** important only if the pilgrim is first going to a/his subsaharian country of origin
- Valid if > 10 days and < 10 years

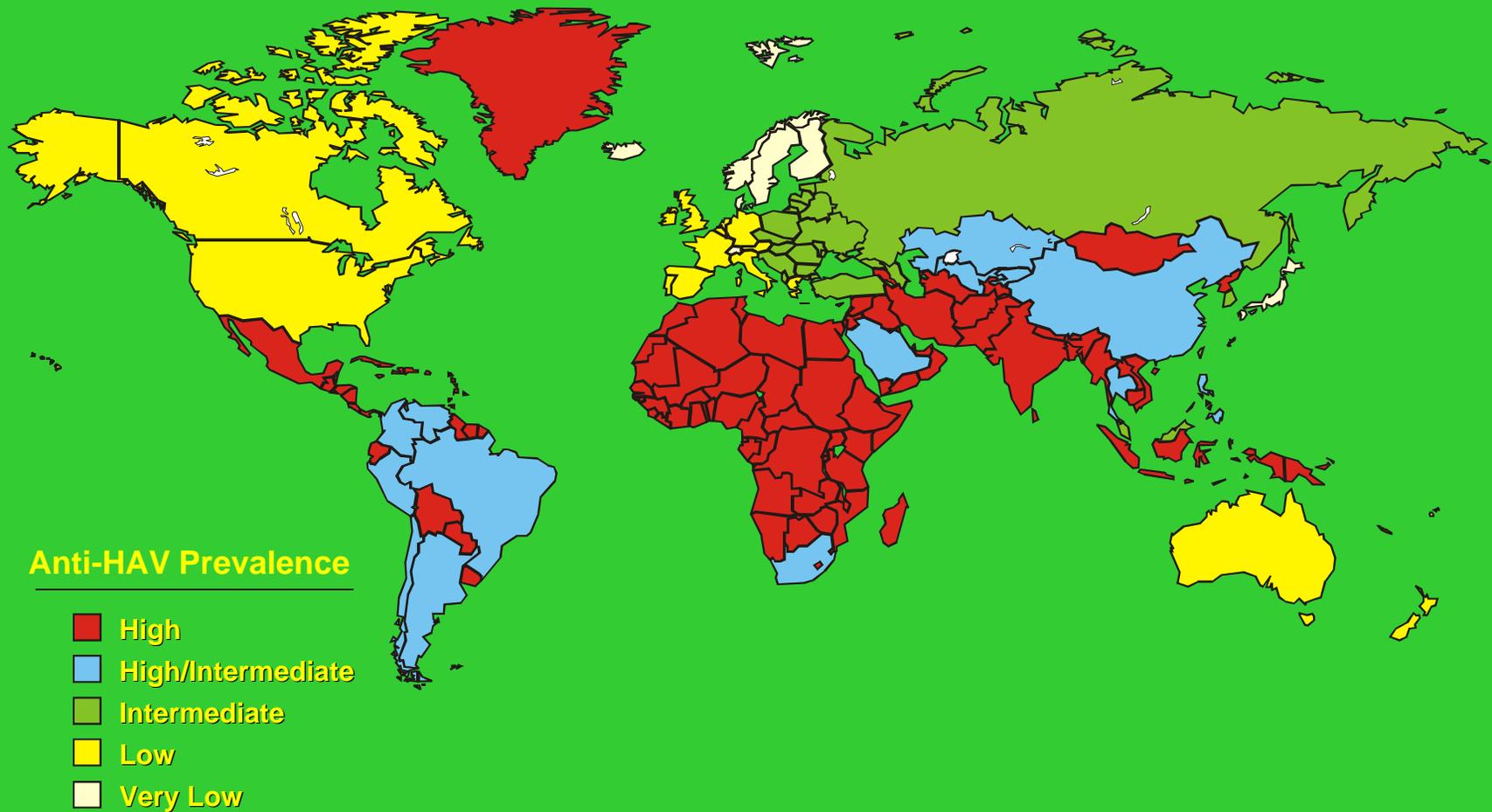
Yellow fever-endemic zones in Africa, 2007.



Hepatitis A

- S Arabia: High/moderate endemicity country
...but most pilgrims coming from
high endemicity countries !
- (Most) older pilgrims naturally protected
→ vaccination for youngsters born
in european countries!

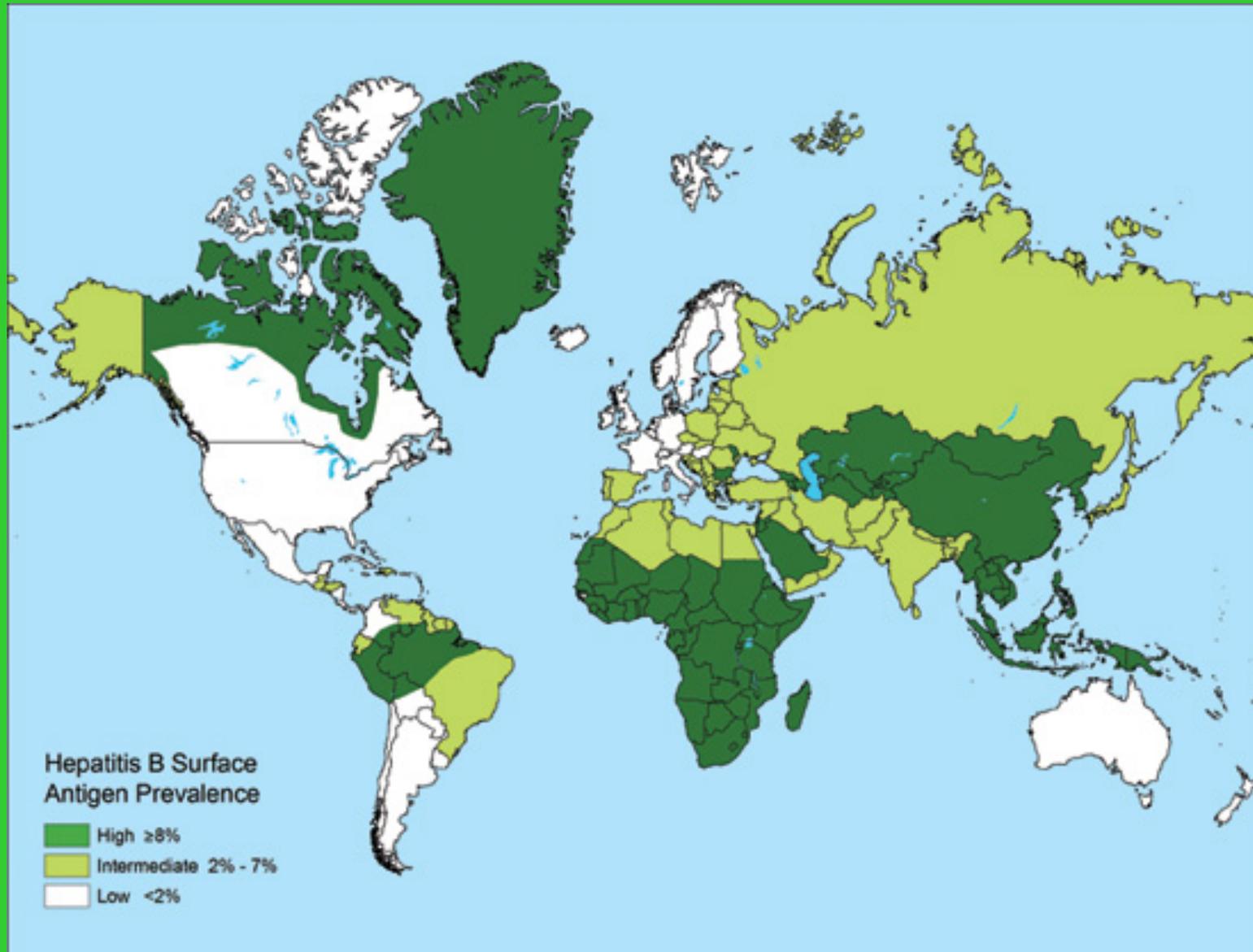
Geographic Distribution of Hepatitis A Virus Infection



Hepatitis A

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...but most pilgrims coming from
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Prevalence of chronic infection with hepatitis B virus, by country, 2006



Hepatitis B

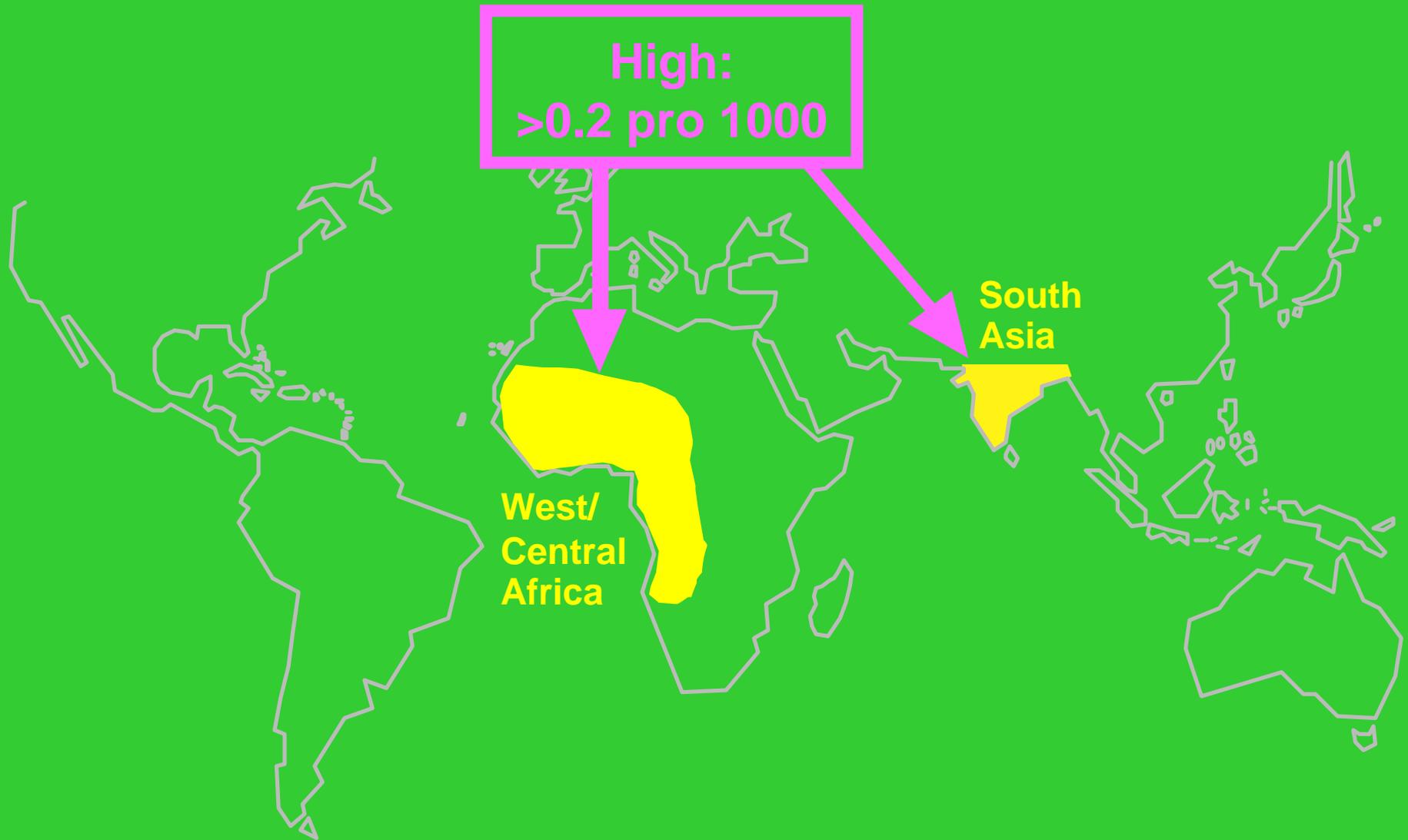
- Low risk
(no sexual relation allowed for pilgrims)
- Mostly linked to ritual shaving
by non official barbers
→ either vaccinate and /or advice to :
 - be shaved by official barbers
 - use your own razor blades..!...Hepatitis C....



Typhoid fever

- Few data available....
- Local risk seems low for most
 - -vaccine not obviously useful for most pilgrims
 - consider for long stays in « poor » conditions

Typhoid fever – estimated incidence rates



Dengue fever

- Low endemicity around Medine/Mecca
- Few available data/transparency...
 - Non official reports:
 - 150 hospitalized in Mecca/3 months
 - +/- 100 cases/month in Jedda
 - beginning 2009

Sand fly fever

- Small risk of this endemic viral disease, especially between april and october in periurban areas
- Same protection as for dengue:
DEET 20-30% during the day

Malaria

- NO risk around Mecca-Medine-Jedda



Diarrhea

- Water from distribution systems is safe in major urban areas, as the Holy Places
- Remaining risk linked to local food but few epidemiological data ...
- Risk of deshydration, especially during the summer months!

NB:importation of food is not allowed
no cholera anymore since 1989



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Infections of the U/LRT

- Most frequent complain and reason for local hospital admission...

...but nothing to do specifically...

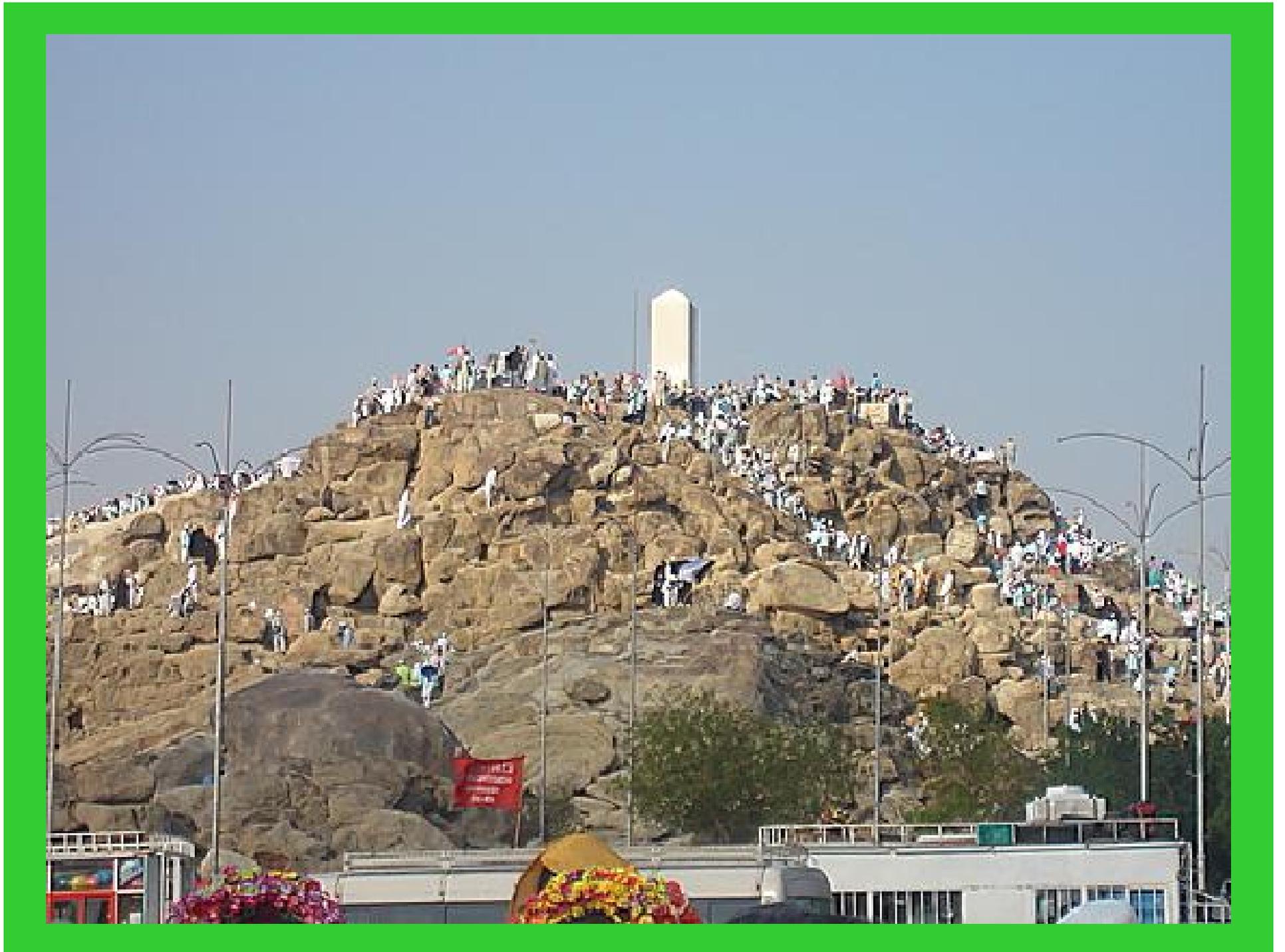
...outside flu vaccine!

Trauma

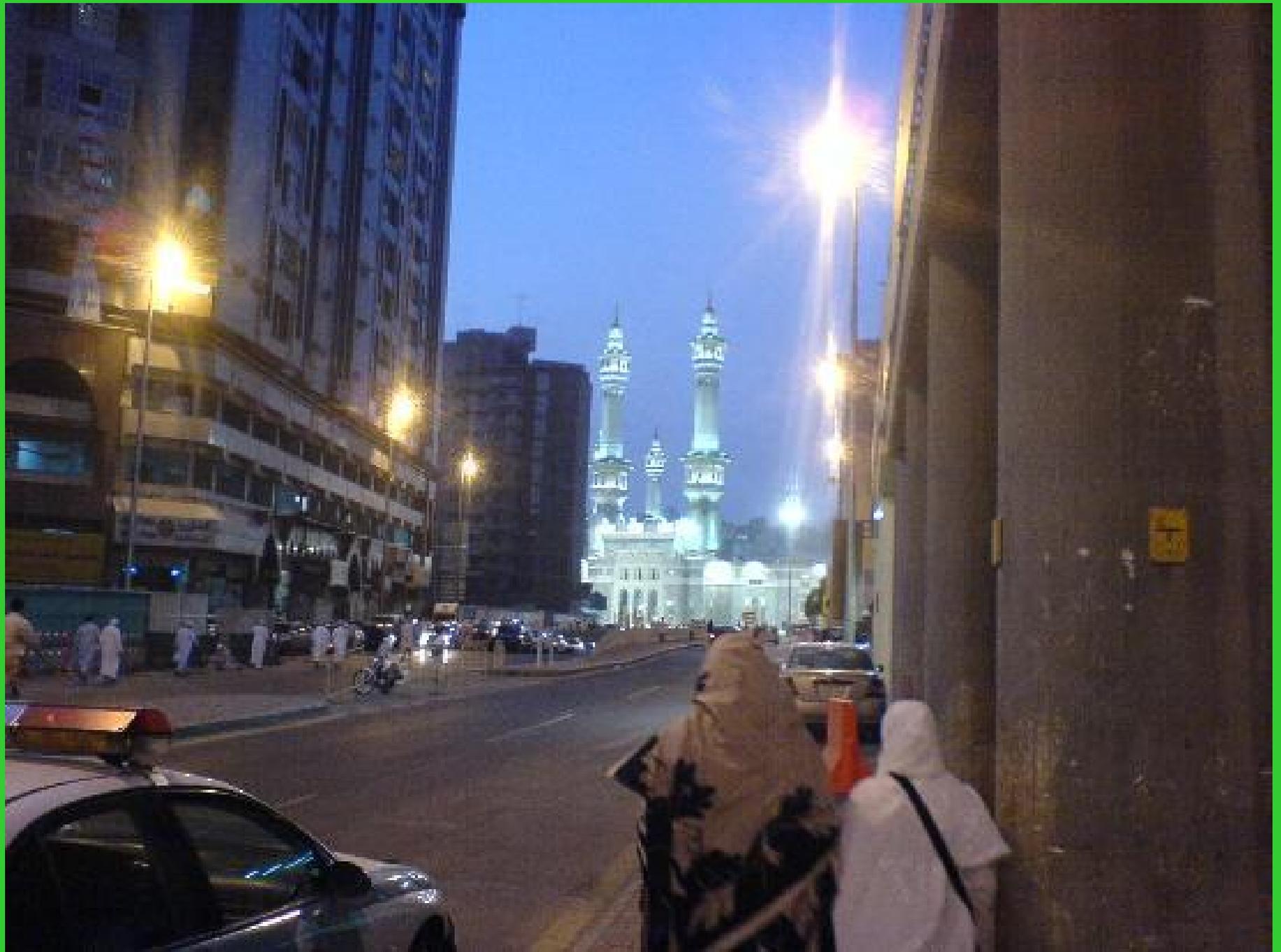
- Mostly focused on the Jamaraat sites:
occasional unfortunate crowd stampedes
(380 death in 2006...)

But may happen everywhere...









Cardiovascular diseases

- Most frequent cause of death...

As in other travellers worldwide !

MABROUK HADJ

