

# **BELGIAN CONSENSUS MEETING ON TRAVEL MEDICINE**

**13-06-2008**

The consensus meeting was chaired by A. Van Gompel.

Secretary of the meeting was W. Peetermans.

The hand-out (in Dutch and French) with highlighted proposals for changes was distributed during the meeting. A PowerPoint presentation was prepared by A. Van Gompel. The discussions and recommendations of the meeting will be included into this PowerPoint presentation. The complete presentation will be sent to all participants for additional remarks and approval. This document will serve as the basis for the approval by the “Superior Health Council”

The sources for the update were the editions of International Travel and Health (WHO: edition 2008, available as book and on the website), Health Information for International Travel (CDC: edition 2008, available as book and on the website), international literature and congresses, discussion forum ISTM, and the E-edition of Medasso 2008-2009.

## **Yellow fever**

### **1. Change of the yellow fever certificate.**

The new International Health Regulation (yellow) booklet is implemented since early 2008. Due to lack of space in the yellow fever section all stamps must be put in a vertical way. If a waiver has to be declared, it must be specified that the waiver is given for a limited period of time. The proposed statement says “yellow fever vaccination temporarily not indicated”. It seems wise to give an explanatory letter to the patient who then must decide to whom this letter is given in order to explain the medical reason for the yellow fever vaccination waiver (CDC 2008).

During the international meeting of WHO in September 2008 in Geneva, the remarks about the difficult layout of the yellow booklet will be addressed by Dr Daniel Reynders.

## 2. New package and leaflet

The new delivery package of the yellow fever vaccine is demonstrated. If there is loss of reconstituted vaccine the volume must be added. The insert mentions that the vaccine is not recommended for children at the age of 6 to 9 months unless particular circumstances. It further specifies that starting from 60 years of age the risk of side effects increases. WHO 2008 says : “yellow fever vaccination is in general recommended for all areas with risk of yellow fever transmission and wherever mandatory. An individual risk assessment based on duration of travel, activity during travel, risk of exposure, medical history, age and previous immunization status is indicated.”

## 3. Geography of yellow fever endemic areas.

Check WHO website.

Recently an outbreak occurred in Brazil, Argentina and Paraguay. The Iguassu falls are considered endemic area. There probably was epidemiological silence before (wild-type virus in nature but no human cases) . Recently human cases have been identified.

For Brazil, the endemic area now reaches the costal areas in certain provinces. See the adjusted CDC map.

For Bolivia, some embassies say that yellow fever vaccination is required for all travelers. WHO on the contrary was not officially informed about this change of policy.

For Ecuador, some embassies say that yellow fever vaccination is required for all travelers and for travelers going to endemic provinces; as well as for nationals and residents of Ecuador itself.

For Paraguay , recent outbreak motivates the vaccination requirement for all travelers.

For Tanzania, some embassies say that yellow fever vaccination is required for all travelers, but WHO was not officially informed about this change of policy. Because many tourist do not know whether there will be a stop-over in Nairobi when coming back from Zanzibar, it was decided to recommend again yellow fever vaccination also in cases of direct flights to Zanzibar.

## 4. Side effects of yellow fever vaccination

WHO book mentions viscerotropic disease in 0,4 – 3 per million doses and 20 per million doses for persons above 60 years of age. To be compared with the risk of dying from yellow fever in endemic areas is estimated to be between 20-1600 per million per month (source : Monath).

5. Additional remarks

FARES-VRGT warns for the suppression of the Mantoux test following yellow fever vaccination. There are no data for yellow fever in the Plotkin book, but this effect is well documented for other live-attenuated vaccines such as measles.

Yellow fever hypersensitivity can be a topic for the 2009 seminar.

**Cholera**

No new data. Stamp to waive cholera vaccination is given for Africa especially when several borders have to be crossed.

**Polio**

CDC and E-CDC consider polio vaccination obligatory for all pilgrims to Haj. WHO only recommends polio vaccination for pilgrims coming from endemic areas. Due to ongoing outbreaks the maps of polio had to be adjusted.

**Measles**

E-CDC has declared to reach elimination of measles in Europe in 2010. Therefore vaccination status must be checked. All persons born before 1960 are considered immune via natural infection. For adults born after 1960 two doses of the vaccine are required to obtain full immunization (WHO, CDC). For naïve adults two injections can be given with one month interval.

**Hepatitis A**

It is not recommended to determine hepatitis A antibodies following vaccination. The laboratory test has become more sensitive and detects total IgG one month after vaccination.

Northern Africa & Turkey are considered risk areas; Eastern Europe is intermediate risk area. Several outbreaks in our country emerged from an imported hepatitis A case.

**Hepatitis B**

Non-responders after three injections are given one additional injection and antibodies are checked one month later. If still negative, the remaining additional two doses can be given at the same time and antibodies checked after one month.

There are preliminary data that intradermal administration may enhance immunogenicity. The higher dose of antigen in Fendrix, used for hemodialysis patients, also contains an adjuvant that proved to be safe in the Fendrix vaccine as well as in Cervarix. Fendrix can be an option for non-responders (= off-label use !!).

### **Typhoid fever**

No new data. Vivotif® is expected to return on the market by the end of the year. No data about the conjugated vaccine.

### **Meningococcal vaccine**

No new data. The conjugated quadrivalent vaccine is available in USA and will become available in France in one year. No information for Belgium.

### **Japanese encephalitis**

The distribution of the JE-Vax is discontinued. Several centers have already chosen for the Green Cross JE vaccine. This vaccine can be obtained via SBL in Sweden. A new JE vaccine, derived from cell cultures, is expected for the future. The dosing schedule for Green Cross JE is day 0; 7; and 14-30. Booster dose every three years. The guideline (4 weeks travel in rural area in endemic zone) has not changed.

### **Rabies**

The Pasteur vaccine is often not available. Every yellow fever vaccination center agrees to have Rabipur® vaccine available. A traveler can decide to go to Brussels himself to find out whether the Pasteur vaccine (cheaper and partly reimbursed) is available. It is stressed that therapeutic vaccination is organized for all cases by the Pasteur institute.

### **Malaria**

The malaria map 2008 by the ITG-ITM is identical to previous years. The Belgian map still uses the A/B/C classification.

Nivaquine + Paludrine or Savarine is no alternative anymore for Africa. Double resistance goes up to more than 30 %.

*Plasmodium knowlesi* has been identified as the 5<sup>th</sup> plasmodium species. It is more dangerous than *P.malariae*, *P.vivax* and *P.ovale*. In the microscope it resembles *P.malariae* but parasitemia is much higher. The replication cycle is 24 hours. It is mainly found in (the forests of) South-East Asia.

Nivaquine will become available again from July onwards. Plaquenil has been used as substitute. The calculation table is added in addendum. In short, 150 mg Plaquenil (salt) equals 100 mg Nivaquine (base).

It is wise to do a tolerance test of a few days for doxycycline before departure.

Standby treatment with Riamet is not generally recommended. The insert mentions risk of QT prolongation. This risk becomes more pronounced in combination with macrolides or fluoroquinolones. Malarone remains first choice for standby treatment. If Riamet is used by expatriates it is recommended to perform an ECG to document the QT interval.

Intravenous artesunate for severe malaria will be available in Belgium in the near future. It was proven to result in better survival in cases of severe malaria in Asia. Intravenous artesunate will possibly be imported by ITG-pharmacy in UZA and can be distributed to other referral centers.

In case of a missing dose of Malarone prophylaxis, the causal prophylaxis is no longer valid and the prophylaxis must be continued up to 4 weeks after leaving the malaria endemic area.

Picaridin (Bayrepel, Autan Active) is no longer available in Belgium. Because this repellent is safe and efficacious, ways will be sought to have it on the Belgian Market again.

Geographical issues.

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Mefloquine resistance has been reported in Myanmar, Cambodia, Thailand and Vietnam (see CDC book 2008). Specific information on malaria risk and resistance is available for Phi Phi island, Fangang, Koh Samui, Koh Chang, Koh Kut, Koh Mak islands of Thailand and Cambodia.

The malaria risk in the Dominican Republic, Kingston Jamaica and Bahamas is similar to previous year (zone A).

India remains B-C zone and will be studied in depth next year. There is malaria in the population but very low risk for travelers.

For passengers of cruise ships malaria risk remains real unless the ship is 5 km out of the coastline.

Bayrepel (based on picaridin repellent) is no longer available. All current repellants are based on DEET.

### **Travelers diarrhea**

The self treatment scheme recommends a one-day dose. If diarrhea persists the next day, the patient can take the same one-day dose on day two and /or on day three.

Azithromycin has become first choice for India East-Asia. The reason is the increasing resistance of Campylobacter and E. coli to fluoroquinolones. Clinical data with azithromycin are promising and in vitro data for Salmonella and Shigella show good activity. A single dose of azithromycin 500 mg per day is recommended. If diarrhea persists the 500 mg dose can be repeated on day two and/or day three. There is a small difference in price between ofloxacin and azithromycin.

### **Varia**

#### **Deep vein thrombosis**

WHO research into global hazards of travel (Wright) considers the risk for deep vein thrombosis increased for flights with a duration of more than 4 hours . The risk increases with the flying time. Several consecutive flights within a short notice have an accumulated risk. The risk is the highest in the two weeks following longhaul flights but the risk remains elevated up to week 8. Aspirin has no indication in the prevention of deep vein thrombosis for travelers (WHO-CDC).

Elastic stockings, hydration and leg movements are recommended. If other risk factors for deep vein thrombosis are present, one injection of low molecular weight heparin before departure is recommended.

#### Jetlag

Melatonin (Cicardin) two mg with extended release is registered for sleeping disturbances in patients older than 55 years of age. Research on the influence of diet to reset the biological clock is ongoing.

#### Mountain sickness

Diamox can be prescribed as acetazolamide. If the patient has an allergy to sulfonamides there is a low risk of cross reaction when using Diamox.

#### Olympic games in Beijing

A specific advice is added in addendum.

#### Legionella risk

All imported cases of legionellosis must be declared via the medical department of the communities. There is an European collaboration to investigate hotel sources of Legionella.

#### Books and congresses

ISTM congress will be held in Budapest from 24 to 28 May 2009. The national consensus meeting next year will be delayed by one week. It is highly stimulated to pass the ISTM exam. Preparation for the exam can be based on the WHO, CDC and Medasso books.

The textbook "Vaccines" by Plotkin et al, has a new 2008 edition.

The book "Travel Medicine" by Keystone et al, has its second edition 2008.

Both books do not longer add a CD-rom but give access to a website.

Suggestions for the 2009 seminar : deep vein thrombosis; sexually transmitted infection and travel; rabies vaccination; yellow fever hypersensitivity.

New topics and speakers can be mailed to the Study Group.