





# MIGRANT POPULATIONS: TRAVEL AND HEALTH

Health advice for persons returning to their country of origin



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#### Edited by:

Dr. G. Napoletano, Dr. Z. Bisoffi, Dr. E. Conti, Dr. C. Postiglione, ASV C. Liera.

#### Illustrations by:

Marco Marangone and Roberto Albertini.

#### Translated by:

Anthony Steele, Dr. E. Conti

#### Info to:

Programma Regionale per i Viaggiatori Internazionali V. S. D'Acquisto, 7 – 37122 Verona giuseppina.napoletano@ulss20.verona.it

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## INTRODUCTION

This booklet provides health information for non-EU immigrants periodically returning to their countries of origin.

Many diseases present in tropical areas can be prevented by having vaccinations and adopting simple precautions.

In all the "Azienda Ulss" (Local Health Authority) of the Veneto Region there is a Travel Clinic for the prevention of diseases of travellers, where they can receive advice and have the vaccinations useful for their travel.

## 1 - WHAT TO BRING ON THE TRIP

A medical kit should be carried for all destinations where there may be significant health risk, especially developing countries. We suggest to bring with you:

- Your own medications, in adequate supply
- Mosquito nets
- Insecticides and insect repellents
- Antimalarial drugs, if necessary
- Antipyretics analgesics (e.g. paracetamol)
- Antibiotics for respiratory tract infections (e.g. amoxicillin clavulanate) and skin infections
- Antidiarrhoeal medication: antibiotics for severe abdominal infections (e.g. ciprofloxacin - not to use in children under 17 years); rifaximin for mild abdominal infection (e.g. without fever or blood in stool)
- Antihistamines for insect bites or allergic reactions (tablets or ointment)
- Antibiotic ointment and cortisone
- Emollient eye drops
- Condom (if necessary)



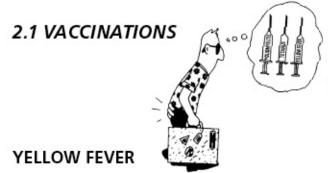
## 2 - BEFORE LEAVING

Before travelling you should contact your family doctor and your children's paediatrician in order to obtain information and advice on certain drugs you should take with you and which may be useful.

At least **one month before your departure** you can fix an appointment with the staff of the Travel Clinic of your Local Health Authority so as to receive the vaccinations in good time.

Even if your departure is imminent, you should still ask the advice of the clinic's health care providers so as to reduce health risks during your travel and stay abroad.

Travelling is not advised for pregnant women and very young infants.



## What is yellow fever? How is it transmitted?

Yellow fever is a very serious and often fatal disease that affects the liver and is caused by a virus transmitted to man by a mosquito that generally bites during the day. It is present throughout equatorial Africa and in the northern areas of South America.

## When should you have the vaccination?

At least 10 days before leaving and it is valid for 10 years. Children can be vaccinated from the 9th month of life onwards, or from the 6th month in particular situation (e.g. epidemics, official recommendations).

## TETANUS-DIPHTHERIA

## What are tetanus and diphtheria? How are they transmitted?

Tetanus is a very serious and often fatal disease due to a bacillus transmitted through wounds and even minor abrasions or also by using non-sterile materials for tattooing, circumcision, abortion or during childbirth. Diphtheria is caused by a bacterium transmitted by droplets of saliva

expelled into the air by the spitting, sneezing or couching of a sick person or of a carrier who does not present any symptoms of the disease. It can damage the heart, kidneys and brain; very dense membranes are formed in the throat that may lead to suffocation and death.

## When should you have the vaccinations?

You can have the vaccinations even only shortly before travelling and they afford protection for at least 10 years. Children born in Italy are vaccinated during the first year of life.

#### POLIOMYELITIS

## What is poliomyelitis? How is it transmitted?

The disease is due to a virus transmitted by ingesting contaminated water or food and pharyngeal secretions, causing paralysis mainly of the limbs in the severer cases. In some cases polio can be a cause of death.

## When should you have the vaccination?

Children born in Italy are vaccinated during the first year of life. You can have the vaccination shortly before leaving for your trip and it will protect you for at least 10 years. It is indicated for both adults and children who have never been vaccinated and are returning to their countries, especially if epidemics are underway there. In such cases, even if the vaccination schedule has been completed, you should think about taking a booster dose of the vaccine.

## TYPHOID FEVER

## What is typhoid fever? How is it transmitted?

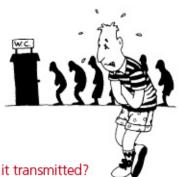
Typhoid fever is a serious feverish infection accompanied by diarrhoea/ constipation, headache, malaise and anorexia. It is caused by a bacterium transmitted by ingesting contaminated water or food.

## When should you have the vaccination?

The vaccination should be administered 10 to 15 days before leaving. Two typhoid vaccines are available:

- Oral vaccine, consists of 3 capsules: 1 taken every other day; the capsules should be kept refrigerated (not frozen). It is inactivated by concomitant administration of antibiotics.
  - Not be administered to children aged < 5 years.
- Injectable vaccine, a single dose given intramuscularly. Not be administered to children aged < 2 years.</li>

If you travel frequently, it is wise to repeat the vaccination every 3 years.



## HEPATITIS A

## What is hepatitis A? How is it transmitted?

This is a disease caused by a virus that affects the liver and is transmitted by consumption of contaminated food or drinking-water.

## When should you have the vaccination?

A dose can be administered even shortly before your departure and the protection it affords lasts at least 1 year. If a second dose is taken after 6 to 12 months the protection lasts at least 25-30 years.

Vaccination is advisable above all for children, who can be vaccinated any time after the age of 12 months.

#### HEPATITIS B

## What is hepatitis B?

This is a contagious disease that affects the liver. It is caused by a virus that penetrates into the body via the blood or other body fluids, including semen and vaginal fluid.

It is transmitted by sick people or by carriers of the virus who may not present symptoms of the disease.

#### How is it transmitted?

By sexual intercourse or contact with infected blood, even through minor wounds (contaminated needles, razors, tooth-brushes, combs and any sharp or cutting instrument), tattoos, and hypodermic needle pricks. Children can be infected at birth by a sick mother or carrier of the virus.

## When should you have the vaccination?

At least one month before leaving. Children born in Italy are vaccinated during the first year of life.

The vaccination schedule is 3 intramuscular injections, the second and third doses administered 1 and 6-12 months, respectively, after the first dose. For responders, booster dose of hepatitis B vaccine is not recommended. For those who have occasional sexual intercourse, in addition

to the vaccination, the use of a condom is recommended, which also affords protection against other diseases such as AIDS, syphilis, gonorrhoea and other sexually transmitted infections.

## MENINGOCOCCAL MENINGITIS

## What is meningococcal meningitis? How is it transmitted?

This is a disease caused by bacteria and is transmitted by saliva droplets of sick people or people who have the microbe but do not present symptoms. The disease manifests with fever, headache, vomiting and stiff neck; in the severest cases it can cause brain damage and death.

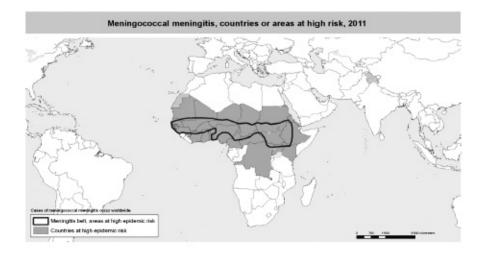
## When should you have the vaccination?

At least 10 to 15 days before leaving, and it will protect against four of the major causes of meningitis (quadrivalent meningococcal vaccine). The current vaccines can immunize against serogroups A, C, W and Y:

- protein conjugate vaccine: consists of a single dose in persons > 1 year and provides long-term immunity;
- capsular polysaccharide vaccine: in persons > 2 years; individuals at high risk for meningococcal disease require boosters every 3 - 5 years.

The vaccination certificate is a compulsory requirement for pilgrims travelling to the Mecca (Saudi Arabia).

Vaccination is indicated for travellers returning to their countries of origin, especially equatorial Africa (see map), for long periods or if epidemics are underway there.



#### MEASLES

#### What is measles? How is it transmitted?

Measles is a highly contagious disease caused by a virus. It is transmitted by saliva droplets or by direct contact with the nasal secretions of a sick person. In young children, in particular, it can cause pneumonia and damage to the hearing apparatus and the brain.

## When should you have the vaccination?

The vaccination should be administered at least 10 days before leaving. Children born in Italy are generally vaccinated between 12 and 15 months of age and re-vaccinated at 5 to 6 years.

The vaccine can be given at any age to people who have never been vaccinated or have not yet had the disease. It is given in the form of a triple vaccine that combines mumps and rubella vaccines (MMR), these being two other important diseases caused by viruses.

## RABIES

#### What is rabies? How is it transmitted?

This is a widespread disease in all tropical and subtropical countries and is due to a virus found in the saliva of infected animals (dogs, foxes, jackals, bats, etc.). It is transmitted by bites and scratches and is invariably fatal once symptoms appear.

## When should you have the vaccine?

At least one month before leaving, with three intramuscular injections given on days 0, 7 and 21 or 28. It protects you for about 3 years.

It is indicated in order to prevent the disease in those who spend lengthy stays in high-risk areas, especially if the vaccine might not be immediately available.

In view of the serious nature of the disease, in cases of bites inflicted by suspect animals, even when vaccinated, you should consult a hospital or other healthcare facility as soon as possible to receive further treatment.

## CHOLERA

#### What is cholera? How is it transmitted?

Cholera is a disease caused by bacteria transmitted in contaminated food and water and manifests with a major attack of diarrhoea.

## When should you have the vaccination?

The vaccination consists of two oral doses (three doses in children aged 2 - 5 years) that should be administered at least 10 days before leaving and affords 2 years' protection.

In view of the incomplete protection afforded by the vaccine, it is important, if you wish to avoid cholera infection, to closely follow the advice regarding water, food and personal hygiene described in the section here below.

## 3 - WHILE TRAVELLING

## 3.1 RISKS ASSOCIATED WITH FOOD AND DRINK

A number of infectious diseases, manifesting mainly in the form of diarrhoea, can be contracted in food and drink. This risk is higher in tropical or subtropical countries. If you are returning to your country of origin, particularly when you have children born in Italy where eating habits are different, you would be well advised to follow some simple advice which will help you to experience your stay in good health.



## Did you know that water that does not come from a safe source can be the cause of disease?

You will be surer of not falling sick if you take the following precautions:

- always drink water from sealed bottles or from safe sources (deep wells);
- if you do not have bottled water, you can drink tea or normal water after boiling it for a few minutes;
- use ice only if prepared with water from a safe source;
- when cleaning your teeth, always use water that has been boiled or that comes from a safe source.

## Did you know that food must be eaten well cooked?

The cooking of food destroys the germs that may be responsible for major forms of diarrhoea and consequently:

- eat well-cooked food and food served still hot after cooking:
- avoid uncooked food, particularly meat, fish, eggs, green salad, and fruit salad;
- · uncooked fruit and vegetables can be eaten if washed with water

from a safe source; fruit with peel should be peeled personally only after washing your hands thoroughly;

 use milk that has been properly bottled/packaged and pasteurized or boil it before drinking.

## Did you know it is important to wash your hands properly?

Your hands may be responsible for spreading a number of infectious diseases during the preparation and consumption of food.

Always wash your hands with soap and water, particularly every time you use the toilet and before starting to eat a meal.

## Did you know that the hygiene of places where food is bought or consumed is important?

Food stored in rooms which are not very clean and infested with insects may cause intestinal infections.

We therefore advise you to purchase food and drink in places which are clean and where the food has been stored properly: hawkers or open markets offer few guarantees of proper hygiene.

If you decide to eat out, choose clean places protected against flies.

## 3.2 INFORMATION ABOUT MALARIA

## Are you familiar with malaria? Do you know how it is transmitted?

Malaria is a disease which is present in the tropical areas of the world and particularly in sub-Saharan Africa, Asia and Central and South America. It is caused by parasites that are transmitted to man by mosquitoes, that bite mainly between sunset and sunrise.

## What are the manifestations of the disease?

The disease manifests mainly with fever. There may also be associated shivering, headache, pain and muscular debility, vomiting, diarrhoea and coughing.

The symptoms set in within approximately 7 to 30 days of being bitten by the infected mosquito, and more rarely after a few months.

The disease must be diagnosed as early as possible (in the first 24 hours) after the onset of symptoms, otherwise, if neglected, it can prove very serious and even fatal.

Recommendations before organizing a trip to a country where malaria is rife:

- bear in mind that during the rainy season the risk of contracting malaria is higher because of the increased presence of mosquitoes;
- pregnant women, if possible, should postpone their trip, because they can get very sick and even lose their baby;



 do not take newborn babies and infant children to malaria areas, unless it is absolutely necessary, since the disease may be very serious in such young infants.

What protective measures can you take to reduce the risk of contracting malaria?

## Bear in mind that the most important thing in absolute terms is to protect yourself well against mosquito bites, and consequently:

- stay, if possible, in accommodation that is well built and in a good state of upkeep and protect the doors and windows with mosquito nets. If you don't have any mosquito netting, keep the doors and windows closed from dusk onwards. Before going to bed make sure there are no mosquitoes in the room;
- cover the bed with a mosquito net fixing it firmly under the mattress.
   Make sure that the net is not torn and that there are no mosquitoes under the net. For greater protection impregnate it with an insecticide, like permethrine;



- if you go out in the evening (remember that the risky period is from dusk to the early hours of the morning), wear sufficiently thick, lightcoloured clothing with long sleeves and thick socks;
- do not use perfumes and aftershave lotions, because they attract mosquitoes;
- smear insect repellent lotions every 6-8 hours on the uncovered parts of the body; be careful because the lotions are eliminated by rubbing and by rain. The most effective are Icaridina or DEET based products (e.g. Autan Plus@/Autan Tropical@ or Off Active@) which should not, however, be used in pregnancy or in children under 2 months;
- use permethrine-based insecticides (e.g. Biokill®) to be sprayed on clothing to prevent mosquitoes from biting you through your garments;

 do not spray insect repellent products or insecticides directly on the face, eyes or lips.

## How to choose a drug to prevent malaria?

Antimalarial drugs must be prescribed by your family doctor or by the Travel Clinic doctor for international travellers: they will indicate the most suitable prophylaxis for you and your family.

Drugs most commonly used for malaria prevention are mefloquine, doxycycline, atovaquone-proguanil.

## Mefloquine (Lariam, tablet 250 mg)

Adult dosage: 1 tablet to be taken once a week, after meals.

Children's dosage: 5 mg per kg body weight once a week, after meals.

When should you take the drug: start one week before arriving in the malaria risk zone and keep taking it throughout your stay and up to 4 weeks after leaving the risk zone.

What unwanted effects may the drug cause? Nausea, insomnia, dizziness, fatigue, state of agitation, anxiety, headache, depression, hallucinations.

Contraindications: drug hypersensitivity, psychiatric illness, epilepsy, severe liver failure; children under the age of 3 months or weighing less

than 5 kg; it is not recommended for heart rhythm defects. Caution in those taking digoxin, beta or calcium channel blockers. Although there is no evidence to suggest that mefloquine has caused harm to the foetus, it should preferably be avoided during the first trimester of pregnancy or women should avoid pregnancy during 3 months after taking mefloquine, while it can be safely used during breast feeding.

Doxycycline (Bassado, Miradin, tablet 100 mg)

Adult dosage: 1 tablet daily.

Children's dosage: 1,5 mg/kg daily.

When should you take the drug: begin just before arrival (e.g. 2 days), continue through exposure and for 4 weeks afterwards. Because heartburn is common, doxycycline should be taken with a full glass of water and preferably while standing upright.

What unwanted effects may the drug cause? Erythema (sunburn), occasionally diarrhoea, candida infection.

**Contraindications:** drug hypersensitivity, pregnancy, breast feeding, children < 8 years, severe liver failure. It may reduce the effectiveness of the oral contraceptive pill.

Women should avoid pregnancy in the first week after taking doxycycline.

**Atovaquone-proguanil** (Malarone; adult tablet contains 250 mg atovaquone plus 100 mg proguanil hydrochloride; children tablet contains 62,5 mg atovaquone plus 25 mg proguanil hydrochloride).

Adult dosage: 1 tablet daily.

Children's dosage: 1 tablet daily (11-20 kg); 2 tablets (21-30 kg); 3 tablets (31-40 kg).

When should you take the drug: 1 or 2 days before entering the malarious area, throughout exposure, and for 7 days after leaving the infected area.

What unwanted effects may the drug cause? It is usually well tolerated; abdominal pain, headache, nausea, anorexia can occur.

**Contraindications:** drug hypersensitivity, pregnancy, breast feeding children weighing less than 5 kg, severe renal or liver failure.

Women should avoid getting pregnant in the first 3 weeks after assuming the drug.

#### REMEMBER!!!

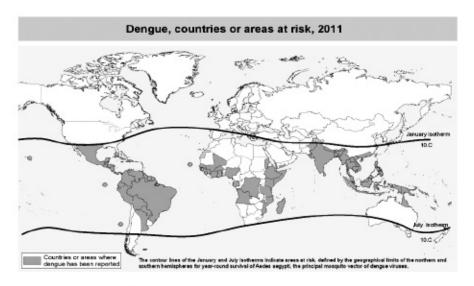
It is important to continue taking antimalarial drugs even after returning from your trip. Many cases of malaria occur in people who have stopped taking the prophylaxis too soon. If the drug prescribed causes unwanted effects, talk to your doctor about it in order to decide whether to go on taking the drug or replace it with another.

Even if you are taking antimalarial drugs, if fever occurs one week or more after a stay in an area where malaria is rife, you are advised to consult a doctor or healthcare centre immediately (at most within 24 hours) to find out whether you are sick and start appropriate treatment.

## 3.3 INFORMATION ABOUT DENGUE FEVER

## Are you familiar with dengue? Do you know how it is transmitted?

Dengue is a viral infection transmitted principally by the *Aedes aegypti* mosquito, which bites during daylight hours, in both rural and urban areas. The infection is widespread in most tropical and subtropical countries of the South Pacific, Asia, the Caribbean, the Americas, and Africa (see map).



## What are the manifestations of the disease?

Symptoms of dengue include fever, severe headache, pain behind the eyes, joint and muscle pain, skin rash, nausea/vomiting, hemorrhagic (bleeding) manifestations.

Usually dengue fever causes a mild illness, but it can be severe and lead to dengue hemorrhagic fever (DHF), which can be fatal.

## What protective measures can you take to reduce the risk of contracting dengue?

Unfortunately, no vaccine is available and there is no specific medicine to prevent and to cure the illness. Aspirin (acetylsalicylic acid) should be avoided because of the possibility of bleeding.

Travellers should protect themselves from mosquito bites:

- when indoors, stay in well screened rooms or air conditioned and spraying with insecticide to reduce the mosquito population;
- when outdoors, wear long-sleeved shirts and long pants;
- clothing may be sprayed with a repellent containing permethrin (e.g. Biokill®);
- use insect repellent on uncovered skin, e.g. Autan Plus®/Autan Tropical® or Off Active®.

If you return from a trip abroad ad get sick with fever, you should seek medical care right away. Be sure to tell the doctor or other health care provider about your recent travel.

## 4 - AFTER YOUR RETURN

A number of diseases of tropical areas may manifest some time after your trip. If, on returning to Italy, you experience symptoms such as fever, diarrhoea, belly-ache, or skin rashes, consult a doctor and tell him about your stay in the country concerned.

You can ask for advice and information at the Travel Clinic for the prevention of disease in travellers, which works in close collaboration with the regional and national specialist reference facilities.

It is important, on your return, to complete the vaccination schedules initiated before leaving.

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