GENERAL ADVICE
The pregnant traveller faces a variety of health hazards, and travelling during pregnancy, particularly to tropical areas in developing countries, should only be undertaken if it is truly necessary. Health hazards include the problems of air travel itself and an increased susceptibility to certain infectious diseases (esp malaria, hepatitis A & E, travellers diarrhoea and common Influenza A). The safest time for pregnant women to travel is during the second trimester. Don’t travel during the last six weeks of your pregnancy unless essential. A letter is required by all airlines and even then some may refuse.

NAUSEA AND VOMITING
The tendency to nausea and vomiting in early pregnancy may be aggravated by travel. Apart from maxolon, drugs given for motion sickness should be avoided during the first trimester. Consult your obstetrician about any medication you plan to use. Carry your medications with you rather than packing them in your check-on luggage.

ACTIVITIES
Exercising within the limits of your fitness and comfort is generally a good idea. Vigorous exercise like running may cause hyperthermia (high body temperature). This can be dangerous to the developing baby. Saunas and very hot tubs should also be avoided for this reason especially in the first 3 months. Swimming is an excellent exercise for the pregnant traveller, but water-skiing and other activities with an increased risk of injury are best avoided. Scuba diving to depths greater than 18 m (60 ft) is not considered safe.

AIR TRAVEL
Up to 24 weeks gestation: No restrictions unless complicating obstetric or medical risk factors exist. 24-36 weeks gestation: No restrictions unless complicating obstetric or medical risk factors exist. The pregnant traveller should carry a letter from her obstetrician. After 36 weeks gestation: Air travel is discouraged unless unavoidable. If travel is essential, a doctor’s letter is required by all airlines.

GENERAL INFORMATION
Most commercial jetliners are pressurised to about 1600 to 2300 m. Above 1600 m there is a risk of hypoxia (low oxygen), especially if the traveller is anaemic. It is advisable to wear your seat belt low around your pelvis. Carbonated drinks are best avoided as they may cause gaseous distension which can be uncomfortable. A particular problem of long haul air travel is deep vein thrombosis (blood clot in the legs). Sitting in a cramped position for a long period favours the development of thrombosis. Take an aisle seat and stand up and walk about the cabin regularly. Tense up your legs and wriggle your toes from time to time. Wear preventative DVT stockings. Dehydration also predisposes to thrombosis, and the low humidity in aircraft is said to aggravate dehydration. (not according to WHO). Avoid fluids not containing alcohol (or caffeine). Taking half an aspirin daily does not reduce the risk of thrombosis (blood clot) occurring in the legs. Those who have a past history of deep vein thrombosis should consider the use injectable low molecular heparin. (safe in pregnancy) Discuss this with your doctor.

VACCINATIONS
It is preferable to avoid vaccinations, in the first 3 months of pregnancy and to avoid live viral vaccines, particularly (MMR) throughout pregnancy. Avoid vaccines which may be associated with a febrile reaction (fever) in the first 3 months of pregnancy. Safe Vaccines: (after the 1st 3 months) - Immune globulin, aDT, IPV, Hep A, Hep B, Typhium Vi, Meningococcal and Rabies. Influenza may be a serious infection in pregnancy and influenza vaccine is indicated. Unsure Vaccines: Yellow Fever, BCG, oral typhoid and JE vaccine should only be given if substantial risk of infection. Boosterix (dTpa) before planning pregnancy, or for both parents as soon as possible after delivery of an infant, (preferably prior to hospital discharge), unless contraindicated. This recommendation is based on evidence from a study of infants hospitalised with pertussis around Australia in 2001, which indicated that parents were the presumptive source of infection in over 50% of cases. (page 136 Australian Immunisation Handbook, 8th Edition 9/2003)

TRAVELLER’S DIARRHOEA
Most episodes of diarrhoea are short-lived and require no particular treatment The need to treat diarrhoea depends on either its severity or persistence. Transmission is mostly via contaminated food or water.

- Choose food which is freshly and thoroughly cooked and served stemming hot
- Eat fruit or vegetables that you can peel or cut open yourself, eg. banana, citrus fruits, papaya.
- Dry foods and Breads are generally safe.
- Canned and bottled drinks are generally safe.
Dangers

- Avoid milk, ice cream and other milk products unless made with pasteurised (or boiled) milk.
- Avoid sauces, mousses, mayonnaise.
- Avoid smorgasbord even in 5 star restaurants (reheated foods & food sitting at room temperature).
- Avoid prawns, oysters, fish, unless thoroughly cooked. Hamburger meat can be dangerous as they are often precooked and stand at room temperature.
- Avoid uncooked leafy vegetables, eg. in salads.
- Ciguatera: At certain times of the year various species of fish and shellfish (especially the larger reef fish including shark) contain poisonous toxins. The risk of illness is reduced by washing the flesh. *Cooking does not inactivate the toxins.*
- Ice is only as safe as the water it is made from.

OTHER FOOD SELECTION

Avoid dehydrations in pregnancy. Severe dehydration increases the risk of miscarriage.

Eating uncooked meat may cause toxoplasmosis, an infection that can affect the foetus.

Listeriosis can be avoided by not eating the following (see also pamphlet)

- Smoked fish and smoked mussels.
- Pre-mixed raw vegetable salads, such as coleslaw.
- Pre-cooked meat products which are eaten without further cooking or heating, such as pate, sliced deli meats, including diced chicken
- Any unpasteurised milk or foods made from it
- Soft serve ice creams.
- Soft cheeses, such as brie, camembert, ricotta.

Drugs such as diphenoxylate (Lomotil) & loperamide (Imodium) should be avoided.

MALARIA (more severe and life threatening in pregnancy)

Doxycycline is contraindicated during pregnancy and Mefloquine is not approved for the first 3 months of pregnancy although recent reports suggest that it is probably safe. Chloroquine with or without Proguanil and meticulous avoidance of mosquito bites is safe in pregnancy. Malarone (Atovaquone + proguanil) is class B2 and cannot be recommended as yet because of very little data. Azithromycin may be recommended *WHO* (under "Amounts of ORS solution to drink")

If emergency treatment for malaria is required for a pregnant woman, quinine is preferred and artemisinins have been used.

OTHER INFECTIONS

A wide range of conditions are more severe in pregnancy. Many infections adversely affect the baby as well as the mother. Pregnant travellers should therefore take particular care to avoid biting insects and to disinfect minor cuts and abrasions. The use of iodine as a water steriliser is best avoided as this can affect the baby's thyroid gland. Pregnant women, already prone to thrush, should be aware of the increased risk in the tropics.

HEPATITIS E

Hepatitis E, formerly called non-A, non-B hepatitis is particularly serious in the 2nd & 3rd trimesters of pregnancy. Epidemics have occurred in Afghanistan, Bangladesh, western China, Eritrea, Ethiopia, India, Indonesia, Iran, Kenya, Mexico, Myanmar, Nepal, Pakistan, Somalia, Sudan, and the Asian republics of the former USSR. It is probably widespread in Asia, north and sub-Sahara Africa, and the eastern Mediterranean area.

*There is no treatment available and 15-20% of women will die from fulminant hepatitis.* 

As it is spread in the same way as Hepatitis A (ie. by contaminated food or drink) the need to eat and drink safely and observe good hygiene is paramount. Again reconsider the need to travel whilst pregnant. *WHO* year book - www.who.int/ith/chapter05_04.html#hepatitise

Medical Examination after travel:

- It is advisable (if not essential) to visit your local doctor promptly if you
  - suffer from a chronic disease, such as cardiovascular disease, diabetes mellitus, chronic respiratory disease;
  - experience illness in the weeks following their return home, particularly if fever, persistent diarrhoea, vomiting, jaundice, urinary disorders, skin disease or genital infection occurs;
  - consider that you may have been exposed to a serious infectious disease while travelling;
  - have spent more than 3 months in a developing country.

Information mostly taken from: "International Travel and Health" (WHO year book)

Centre for Disease Control, USA - www.cdc.gov/travel Manual of Travel Medicine, Melbourne, 3rd edition 2011.

Last edit: 22-Jul-2012

This leaflet cannot be completely comprehensive and is intended as a guide only. The information may change in the future. Visit relevant website for updates. If you have further questions you should raise them with your own doctor. NEVDGP Disclaimer Website: http://www.nevdgp.org.au/info/travel