

Travel in Pregnancy

MotherSafe - Royal Hospital for Women

Updated February 2023

Information in this leaflet is general in nature and should not take the place of advice from your healthcare provider. With every pregnancy there is a 3 to 5% risk of having a baby with a birth defect.

Many women travel when pregnant. In general, the ideal time for a pregnant woman to travel is in the second trimester when she is feeling her best and the chances of pregnancy complications such as miscarriage or premature birth are lowest.^{1,2,3}

Travel within Australia is usually safe and reasonable if you are comfortable to do so. When travelling long distances or overseas, it is important to consult with your doctor, especially if your pregnancy is considered high-risk or you are travelling to countries with increased risks from infectious diseases. You should also check with your airline if they have specific rules and requirements.

Safety considerations involving long-distance travel or travel to regions with specific infection risks^{1,3}

The chance of pregnancy complications significantly increases while travelling if a pregnant woman has any of the following high-risk factors:

- Obstetric high-risk: these include placental abnormalities, incompetent cervix, **history of premature labour**, diabetes, multiple pregnancy (twins, triplets) or high blood pressure in the current or a previous pregnancy
- Medical high-risk: history of blood clots, valvular heart disease, severe anaemia, sickle cell disease or any chronic disease that requires medical treatment of the mother
- Travel destination associated risks: these include areas that have an outbreak of a life-threatening food, insect-borne or respiratory infection, areas that require a live virus vaccination, areas endemic for malaria, dengue, Japanese encephalitis virus or Zika and high-altitude areas (>2500meters). These risks may affect both you and your unborn child. Pregnant women are more at risk of mosquito borne illnesses because they have a higher likelihood of being bitten by mosquitoes than non-pregnant women. Read the travel advisory for the country you are travelling to and in particular, note the health risks and available medical services. All pregnant women who have travelled to high altitude should postpone exercise until acclimatized.
- Coronavirus (COVID-19) is a worldwide infection risk and needs to be considered prior to travel (see **Travel and coronavirus (COVID-19)** below).

Pre-travel planning^{1,2,3}

It is recommended that you consult your doctor or midwife and obtain a letter to take with you on your trip listing any medical problems you may have and a brief antenatal history. Also, consider the following:

- Things can go wrong quickly when you're pregnant, for example going into premature labour (particularly if this has occurred in a previous pregnancy). Think ahead about the medical facilities available during transit and at destination such as level of healthcare, maternity and newborn care available. Also consider whether your destination allows entry of pregnant travellers to their hospitals and whether will you be within reach of hospital and doctors. Consider the policies of destination countries regarding viability of pregnancy in case you have to deliver prematurely. Be aware that many developing countries have different policies to Australia and would not have intensive care facilities for very premature babies
- Risks of infectious disease and preventive treatment i.e., malaria and anti-malarial drugs, zika
- Vaccination requirements (consult with a Travel Doctor if necessary)

- Risks of nausea and vomiting/motion sickness (see Sea Travel below, the MotherSafe factsheet on Nausea and Vomiting in Pregnancy or ring MotherSafe for options)
- Risks of air travel such as deep venous thrombosis (DVT), which is blood clot formation in the deep veins
 of the leg
- Medical travel insurance- make sure you are covered for coronavirus (COVID-19) and pregnancy and understand what is covered: in particular, check that insurance covers the unborn child if you go into labour while you are away
- Timing of routine tests such as nuchal translucency and fetal morphology ultrasound
- Packing a medical kit that helps you treat common pregnancy complaints such as heartburn, thrush, constipation, nausea and haemorrhoids (see relevant MotherSafe factsheets)

Air Travel^{1,2,3}

Check your airline's cut-off date for pregnant travellers. For local flights, it is generally 36 weeks, and international flights from 32 weeks. A significant risk of air travel especially in pregnancy includes deep vein thrombosis (DVT) or clot. Ways to reduce the risk of DVT are

- Staying well-hydrated by drinking lots of fluid especially water
- Wearing fitted knee-high compression stockings
- Regularly walking around and doing frequent leg exercises to improve blood circulation
- Women at high risk may need medication to prevent clots

Land Travel^{1,2,3}

It is generally wise to avoid long, tiring journeys and limit travel to 5 to 6 hours a day when pregnant. To prevent clots or DVT's associated with long-distance travel, frequent leg exercises are recommended. Make sure you are comfortable and well-hydrated. In vehicles, make sure the seatbelt lap sash is worn across the hips and under your pregnancy bump while the shoulder sash should be fitted above your bump. Move your seat well back from the steering wheel if you are driving or the dashboard if you are the passenger to reduce airbag impact in case of an accident. See your doctor if you are involved in an accident, even if it is minor.

Sea Travel^{1,2}

Check with your cruise line when planning a cruise while pregnant as most of them restrict travel beyond 28 weeks of pregnancy and have certain requirements for pregnant women. Sea travel can sometimes trigger motion sickness or nausea and vomiting —that combined with the increased risk of falls on a moving vessel may lead many pregnant women to postpone sea travel until after the baby is born, particularly if they haven't travelled by sea before. Respiratory and food-borne Infection is also a risk of cruising. Travelling by boat or ferry for short distances is generally safe in pregnancy. There are medicines you can take for motion sickness such as hyoscine hydrobromide (Travacalm®, Kwells®), doxylamine (Restavit®)⁴ or other antihistamines. However, you should first consult your doctor, pharmacist or MotherSafe for the best choice for you.

Food and Water^{1,2}

To reduce the risk of food or water-borne illness, the basic precaution of "boil, cook, bottle, peel" is sensible advice in at-risk countries. This means boil all water or drink bottled water only (including using bottled water to brush teeth), eat freshly prepared and cooked food, peel all fruit before eating or wash with bottled water. Avoid raw, undercooked food (especially meat and seafood), fresh salads, peeled fruit, unpasteurised milk or milk products, soft cheeses and pates, unboiled water and ice to avoid infections such as listeria, toxoplasmosis and other diarrhoeal illness (refer to the **other resources** section below for links to information sheets on listeria and toxoplasmosis in pregnancy).

Travellers' diarrhoea (TD) can be caused by different pathogens including bacteria, viruses and parasites and can potentially lead to dehydration, low blood pressure and shock in pregnancy. It is therefore important to prevent or treat TD. Destinations considered high risk for TD include Asia, Latin America, Africa, and the Middle East but it can happen anywhere in the world. In addition to using boiled or bottled water, you can use chlorine-based purification tablets to purify water. Avoid iodine to purify water after 10 weeks of pregnancy as it can affect your unborn baby's thyroid.⁵ Wash your hands thoroughly after going to the toilet and before preparing or eating food. Hand sanitiser is a reasonable option. For symptomatic treatment, pack loperamide (Imodium®,Gastrostop®) and oral rehydration preparations such as Gastrolyte®.³



Immunisations^{1,2}

Another issue when considering travel to a developing country is the need to be vaccinated while pregnant to prevent specific infectious diseases. Many immunisations are not recommended routinely when pregnant. That said, inactivated vaccines have not been shown to be a risk in pregnancy and may be given if the pregnant woman will be at increased risk of contracting the disease (for example injectable typhoid and hepatitis A vaccines). However, live virus vaccines such as measles, mumps, rubella (MMR) and chicken pox (varicella) vaccines are contraindicated in pregnancy. Furthermore, yellow fever vaccine should only be given when the risk of contracting the disease is substantial and travel is unavoidable.⁶ Please consult with your GP and/or travel doctor. These vaccinations are ideally given **before** pregnancy, so it is worth planning ahead.

Malaria and prevention of Mosquito bites^{1,2,}

Malaria is transmitted by mosquitoes and can lead to miscarriage, stillbirth, low birth weight, or premature delivery in pregnancy. It can also lead to anaemia or death in the mother. Therefore, it is important to prevent or treat malaria in pregnancy. If possible, avoid travel to malaria-endemic areas. If travel is unavoidable, mosquito bites can be avoided by minimising outdoor activities from dusk to dawn, wearing long-sleeved clothing, using mosquito nets, insect screens and effective insect repellents. A commonly used ingredient in these repellents is **DEET**. **DEET** poorly crosses the placenta and has not been shown to have adverse effects at any stage of pregnancy. Medium strength formulations are preferred to high strength (avoid 80%) as they give the same level of protection with a lower exposure level (see Other Resources below for link to factsheet on DEET). Picaridin can also be used in pregnancy.

<u>Zika</u>

Zika is a virus that can be spread by mosquito bites in areas that are known to have both the virus and the specific types of mosquitoes that carry it.⁷ It is a concern for pregnant women, women planning pregnancy and their partners because it is associated with a range of severe abnormalities in babies born to infected mothers. Many areas worldwide are known to have Zika virus - if you are travelling overseas, it is important to check whether your destination is a Zika affected area. See guidelines from the Australian Department of Health regarding Zika - http://www.health.gov.au/internet/main/publishing.nsf/Content/ohp-zikavirus

Travel and coronavirus (COVID-19)

It is expected that most vaccinated pregnant women infected with COVID-19 will experience mild or moderate symptoms and most of these women are expected to make a full recovery. However, studies of COVID-19 infection have shown that unvaccinated pregnant women are at a significantly increased risk of severe illness and hospital admission (including ICU) compared to non-pregnant women.⁸ Before making plans to travel, particularly if travelling overseas, talk with your maternity healthcare provider about how to minimise your risk.

Japanese Encephalitis(JE)⁹

Japanese encephalitis (JE) is an infection of the brain caused by the Japanese encephalitis virus (JEV) that spreads to humans through mosquito bites. It is an uncommon infection and usually does not cause symptoms but can rarely lead to serious illness. Infected pigs and some waterbirds are the animals that cause infection in mosquitos. JEV is widespread in much of Asia and parts of the Pacific. However, for most short-term travellers in these regions, the risk of being infected with JEV is very low. JEV has been recently detected in humans and pigs in New South Wales, South Australia, Victoria and Queensland. Local infection risk in Australia is likely to be highest among people working at or living close to piggeries which have tested positive for JEV and people who engage in outdoor activities (e.g camping, fishing, hiking) in the vicinity of significant mosquito populations, particularly near rivers and lakes.

JEV infections during the first and second trimesters have been associated with miscarriage.³ Vaccination against JEV is currently only recommended for those at highest risk of infection.^{9,10} General prevention measures include avoiding mosquito bites though personal protective measures⁹ (see **Malaria and prevention of mosquito bites** section in this factsheet). If you are pregnant and are deemed to be at high risk of exposure to JEV you should get vaccinated with the JEspect vaccine which is a killed vaccine and is considered safe to receive in pregnancy if it is required.¹⁰

Royal Hospital for Women Barker Street, Randwick, NSW 2031 Telephone: 02 9382 6111 www.seslhd.health.nsw.gov.au/rhw/



References

1. Centers for Disease Control and Prevention, USA.2018 Yellow Book Travelers' Health. Chapter 8-Advising travellers with specific needs. Available at https://wwwnc.cdc.gov/travel/yellowbook/2018/advising-travelers 'Health. Chapter 8-Advising travellers with specific needs. Available at https://wwwnc.cdc.gov/travel/yellowbook/2018/advising-travelers-with-specific-needs/pregnant-travelers Accessed February 2023

2. The Royal Australian and New Zealand College of Obstetricians and Gynaecologists. Travelling during pregnancy.

Available at <u>Travelling during pregnancy (ranzcog.edu.au)</u> Accessed February 2023

3. Antony KM, Ehrenthal D, Evensen A, Iruretagoyena JI. Travel During Pregnancy: Considerations for the Obstetric Provider. Obstet Gynecol Surv. 2017 Feb; 72(2):97-115

4. Rossi S(ed). Australian Medicines Handbook (internet). Adelaide: Australian Medicines Handbook Pty Ltd; Jan 2022. Accessed May 2022 5. Centers for Disease Control and Prevention, USA.2018 Yellow Book Travelers' Health. Chapter 2. Preparing International Travelers. Water Disinfection. Available at <u>https://wwwnc.cdc.gov/travel/yellowbook/2020/preparing-international-travelers/water-disinfection</u> Accessed February 2023

6. Australian Technical Advisory Group on Immunisation (ATAGI). Australian Immunisation Handbook. Australian Government Department of Health. Canberra, 2022. Vaccination of women who are planning pregnancy, pregnant or breastfeeding. September 2021. Available at https://immunisationhandbook.health.gov.au/contents/vaccination-for-special-risk-groups/vaccination-for-women-who-are-planning-pregnancy-pregnant-or-breastfeeding Accessed February 2023

7. Australian Government Department of Health. Zika virus. Updated 18 December 2020. Available at

http://www.health.gov.au/internet/main/publishing.nsf/Content/ohp-zikavirus Accessed February 2023

8. The Royal Australian and New Zealand College of Obstetricians and Gynaecologists ((RANZCOG). COVID-19 vaccination when pregnant or breastfeeding and for those planning pregnancy. Available from <u>COVID-19 vaccination when pregnant or breastfeeding and for those planning pregnancy - RANZCOG</u> Accessed February 2023

9. NSW Health. Japanese encephalitis fact sheet. March 9 2022. Available at

https://www.health.nsw.gov.au/Infectious/factsheets/Pages/japanese_encephalitis.aspx Accessed February 2023

10. Australian Government Department of Health. Japanese encephalitis virus (JEV) vaccines. March 24 2022. Available at

https://www.health.gov.au/health-alerts/japanese-encephalitis-virus-jev/vaccines . Accessed February 2023

Other resources

Food Standards Australia New Zealand. Listeria. 2021. Available at

https://www.foodstandards.gov.au/consumer/safety/listeria/Pages/default.aspx

MotherToBaby. Listeria. OTIS. Organization of Teratology Information Specialists. April 2022. Available at <u>https://mothertobaby.org/fact-sheets/listeriosis-pregnancy/</u>

MotherToBaby. Toxoplasmosis. OTIS. Organization of Teratology Information Specialists. July 2022. Available at https://mothertobaby.org/fact-sheets/toxoplasmosis-pregnancy/

MotherToBaby. Zika. OTIS. Organization of Teratology Information Specialists. December 2021. Available at

https://mothertobaby.org/fact-sheets/zika-virus-pregnancy/

MotherToBaby. DEET. OTIS. Organization of Teratology Information Specialists. August 2021. Available at <u>https://mothertobaby.org/fact-sheets/deet-nn-ethyl-m-toluamide-pregnancy/</u>

MotherToBaby. Insect repellents. OTIS. Organization of Teratology Information Specialists. July 2022. Available at https://mothertobaby.org/fact-sheets/insect-repellents/



NSW Medications in Pregnancy & Breastfeeding Service

For more information call MotherSafe: NSW Medications in Pregnancy and Breastfeeding Service on 9382 6539 (Sydney Metropolitan Area) or 1800 647 848 (Non-Metropolitan Area) Monday -Friday 9am-5pm (excluding public holidays)

