

Travel vaccinations



Immunisation to protect you against a number of diseases is recommended before travelling to certain countries where there is a high risk for that disease. You should talk to your doctor or a travel medicine professional well in advance of your trip so you know what vaccinations are needed and when they should be administered, and to ensure you have enough time to complete the course or have any booster doses required. Depending on the vaccine, a full course could take 6 months. Generally it takes at least 2 weeks following a vaccination for your body to produce enough antibodies to protect you against the disease. So for the first week or so after having a new vaccination you will have no protection at all.

It is also best to have your doctor here in Australia administer the vaccinations so that you are assured of safe needle and sterilisation techniques. If you do need a vaccination overseas make sure that it is administered with a single-use sterile needle under hygienic conditions, if possible.

Some countries require proof of vaccination against certain diseases before they will allow you entry and these requirements change according to status of outbreaks. The World Health Organization provides a country by country list of vaccination requirements, including certificate requirements, on its website.

The following are the most common vaccinations required by travellers.

Tetanus and diphtheria

Tetanus and diphtheria vaccination is recommended for many people (especially for those working in high risk areas). Normally given as a triple vaccine "diphtheria, tetanus and pertussis (whooping cough)" in childhood in Australia, the Australian National Immunisation Program Schedule recommends a booster between the ages of 15 and 17 years and again at 50 years. However, more frequent intervals may be needed for travellers who will be in higher risk areas or situations, such as those going on jungle expeditions, working with animals, or undertaking active or outdoor travel in countries where there is a known risk.

Measles

Measles is caused by a virus and, unfortunately, is still one of the most common causes of vaccine preventable childhood disease in many developing countries. It is spread by droplets when an infected person breathes, coughs or sneezes and is highly infectious. If you have not had measles or an immunisation against this infection, you should discuss with your doctor whether you are at risk when travelling in countries where measles is prevalent. Routine immunisation against measles is usually given as a triple vaccine called MMR (measles, mumps, rubella) at 12 months and at 4 years. MMR is recommended in the Australian National Immunisation Program Schedule for adults born during, or since, 1966 who have not had 2 doses of MMR previously.

Women who are not pregnant or who are planning to get pregnant should also consider having rubella (German measles) vaccination if they have not already done so. However, there should be a gap of a minimum of 28 days between vaccination and getting pregnant.

Poliomyelitis

Poliomyelitis (or polio) is still prevalent in many developing countries. The condition is an acute infectious disease caused by a virus. Polio in young children is often mild, but in older children it can attack the central nervous system and then cause paralysis which most often affects the legs, but can also paralyse the muscles needed for breathing or swallowing.

Polio vaccine is a routine childhood immunisation, recommended by the Australian National Immunisation Program Schedule to be given as 3 doses at 2, 4 and 6 months, then at 4 years. A fifth dose at 15 to 17 years is no longer recommended. Any person who has never been vaccinated against polio should be vaccinated regardless of travel plans. Booster doses are recommended for those who have been vaccinated in the past if they are travelling to areas or countries where poliomyelitis still occurs (including India, Nigeria and Pakistan). For those exposed to a continuing risk of infection, booster doses are recommended every 10 years.

Hepatitis A

Hepatitis A is a liver disease caused by the hepatitis A virus. It is one of the most serious risks for travellers as it is extremely contagious and can be passed on through people putting in their mouths food or objects contaminated by the faecal matter of an infected person (called faecal-oral transmission).

Hepatitis A immunisation is used as a preventive treatment (prophylaxis) for this disease. You should discuss with your doctor or travel medicine professional whether this vaccination is relevant to the areas in which you will be travelling. A single dose of hepatitis A vaccine is usually given as primary vaccination and then a booster dose can be given 6-12 months after the first vaccination to prolong its effect. Ideally, the vaccination should be given 4 weeks before travel.

A combined hepatitis A and hepatitis B vaccine is also available in Australia. It is given as a course of 3 doses of vaccine: one vaccination is given immediately, the second is given one month later, and the third is given 5 months after that. (This is sometimes described as being given at zero, one and 6 months.) There is also an accelerated schedule of injections for people needing fast protection due to limited time before departure. This comprises 3 doses given on days 0, 7 and 21 with a booster given at 12 months.

There is also a combined hepatitis A and typhoid vaccine. This requires a booster dose of hepatitis A vaccine 6 to 36 months later.

Hepatitis B

Hepatitis B is caused by the hepatitis B virus and is one of the most serious forms of viral hepatitis. It can lead to chronic liver disease, cirrhosis or liver cancer. Hepatitis B can be spread by blood, infected blood transfusions, needle sharing among injecting drug users or sexual contact with an infected person.

Vaccination to prevent hepatitis B is usually recommended for you if you are staying for more than 6 months in a high-risk area, you anticipate sexual contact, or blood transfusions are unscreened in the country you are visiting. You will need to discuss with your doctor your risks and when you should start the immunisation programme, as you will require a series of 3 injections starting at least 60 days before you travel, preferably 6 months before. A 2-dose schedule of a hepatitis B vaccine is also available as an alternative to the 3-dose schedule for adolescents aged 11 to 15 years. A rapid schedule for a combined hepatitis A and B vaccine is available. This comprises 3 doses given on days 0, 7 and 21, with a booster given at 12 months.

Typhoid

Typhoid is an infection caused by a bacterium called *Salmonella typhi* and is usually caused when contaminated food, milk or water is consumed. Symptoms of the condition do not usually appear for 10-14 days. Typhoid is still a problem in many countries so you should discuss with your doctor the areas you will be travelling through and if this vaccination is required. Typhoid vaccination is usually recommended for travellers to countries with unsafe drinking water and poor hygiene and high levels of the disease in the population. There are roughly 50 to 70 new cases of typhoid every year in Australia – most are brought back by returning travellers.

You will need to start the doses before you leave and, if you require other vaccinations, these will need to be timed to make sure there are no adverse reactions. There is an oral typhoid vaccine and also vaccines given by injection, including a combined hepatitis A and typhoid vaccine. Your doctor or travel health consultant will advise which is the right one for you.

Influenza

Influenza is a common viral infection that can be spread from person to person very easily. As such, this is an important vaccination for travellers over the age of 65 as flu infection can be passed very quickly in crowded areas or areas of close contact (such as on your plane flight). Other people who are at risk and should consider the vaccination include people with chronic obstructive pulmonary disease and any serious respiratory conditions. The vaccine is reviewed every year to create immunity to the most likely strains of flu to be circulating that year/winter. Vaccination in adults requires one single injection.

Swine flu vaccination may also be recommended, and this is available separately.

Meningococcal meningitis

Meningococcal meningitis is caused by the bacterium *Neisseria meningitidis*, more commonly known as the meningococcus. Most cases of bacterial meningitis (inflammation of the lining of the brain and the spinal cord) can be put down to infection with either the meningococcus or one of 2 other bacteria, *Haemophilus influenzae* or *Streptococcus pneumoniae*.

A vaccine is available for travellers that offers protection against 4 serotypes of the meningococcus. This is different from the vaccine now routinely given in childhood in Australia, which gives protection against one serotype which is common in Australia, known as group C meningococcus. Vaccination against meningococcus is not usually necessary if you are travelling to developed countries such as the United States, but is required for travel in endemic areas such as many areas of sub-Saharan Africa, especially for those living in rural accommodation, hitchhiking, backpacking and trekking. A certificate of meningitis vaccination is also required for all Hajj pilgrims entering Saudi Arabia.

The vaccination for travellers is a single dose and immunity generally lasts for 3 to 5 years.

Rabies

Rabies is a serious viral infection that is life threatening. It is transmitted by the bite or scratch of an infected animal, such as a dog, cat, bat, fox, raccoon, skunk or monkey. It is quite prevalent in some developing countries but vaccination against it is not usually required. However, if you are planning to hike, cycle or go on adventure trips where you may come in contact with animals, vaccination may be advisable. Your doctor will be able to advise you. Pre-exposure vaccination consists of 3 injections with a booster given after 2 years. Vaccination after a bite or exposure to a rabid animal consists of 6 injections given at set intervals.

Japanese encephalitis

Japanese encephalitis is a viral infection that results from the bite of a carrier mosquito and is commonly seen in areas of Asia such as the Philippines, Korea, China, Nepal and India. Outbreaks have also occurred in the Torres Strait and north Queensland. Japanese encephalitis is not of great risk to short-term travellers (those staying less than 2 weeks) but vaccination is recommended if you are staying in rural areas of Asia or in Papua New Guinea, particularly in the wet season, for more than a month or making repeated visits. It is also recommended for travellers spending a year or more in urban areas of Asia (excluding Singapore).

The vaccination schedule is 3 doses over a month (on days 0, 7 and 28). The last dose should be given at least 10 days before starting travel to ensure that immunity is complete and that, in the event of delayed adverse reaction, you are close to good medical care. An accelerated vaccination schedule can be given at 0, 7 and 14 days, but this should be followed by a fourth dose one to 3 months later. A booster dose may be given after 3 years if necessary.

Yellow fever

Yellow fever is another condition that is contracted through the bite of an infected mosquito. The name comes from some of the symptoms – fever and jaundice (yellowing of the skin and eyes). It is fatal in up to 50 per cent of cases in travellers.

The vaccination is required only if travelling through endemic areas, e.g. some areas of Africa and South America, or if you are staying long term in high-risk areas. Some neighbouring countries to those where the disease is present may require you to have a vaccination certificate before allowing you in.

Vaccination is carried out only by approved yellow fever vaccination providers. Details can be obtained from your state or territory health department. Those with allergy to egg cannot be vaccinated. The vaccine is very effective and usually offers protection for at least 10 years after a single dose.

Cholera

Cholera is a type of gastroenteritis that is commonly contracted through contaminated water supplies. There have been outbreaks in South America, sub-Saharan Africa and the Indian subcontinent. Cholera produces profuse watery diarrhoea of sudden onset that leads to profound dehydration and collapse and can cause death if not treated promptly. There is little or no fever or vomiting.

There is an oral cholera vaccine but it is not given routinely. Its effect is relatively short lasting. Vaccination is needed only if you will be in high-risk situations in high-risk areas. Discuss this with your doctor or travel medicine professional. The vaccine is given in a single dose with boosters recommended every 6 months.

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