



After you've been vaccinated:

Take note!

- 1** Monitor yourself for an hour or so after you finish getting vaccinated. Although extremely rare, serious reactions such as anaphylaxis can occur.
- 2** On the day of your vaccination, you can go about your day as you normally would but should avoid drinking alcohol and strenuous exercise. It is all right to bathe.
- 3** During the 2 weeks after your vaccination, you may have redness or other local reactions at the injection site or, rarely, systemic reactions such as seizures, fever, headache, and muscle aches. Contact us at the Travel Clinic if you feel you have a side effect or are unable to do daily activities.

**Travel Clinic, Disease Control and Prevention Center
Center Hospital of the National Center for
Global Health and Medicine**

1-21-1 Toyama, Shinjuku-ku, Tokyo 162-8655, Japan
Phone: +81-3-3202-1012 (direct line)
Fax: +81-3-3207-1038 (main hospital fax)
travel@hosp.ncgm.go.jp

<https://travelclinic.ncgm.go.jp/025/index.html>

[@travelclinicjp](https://twitter.com/travelclinicjp)

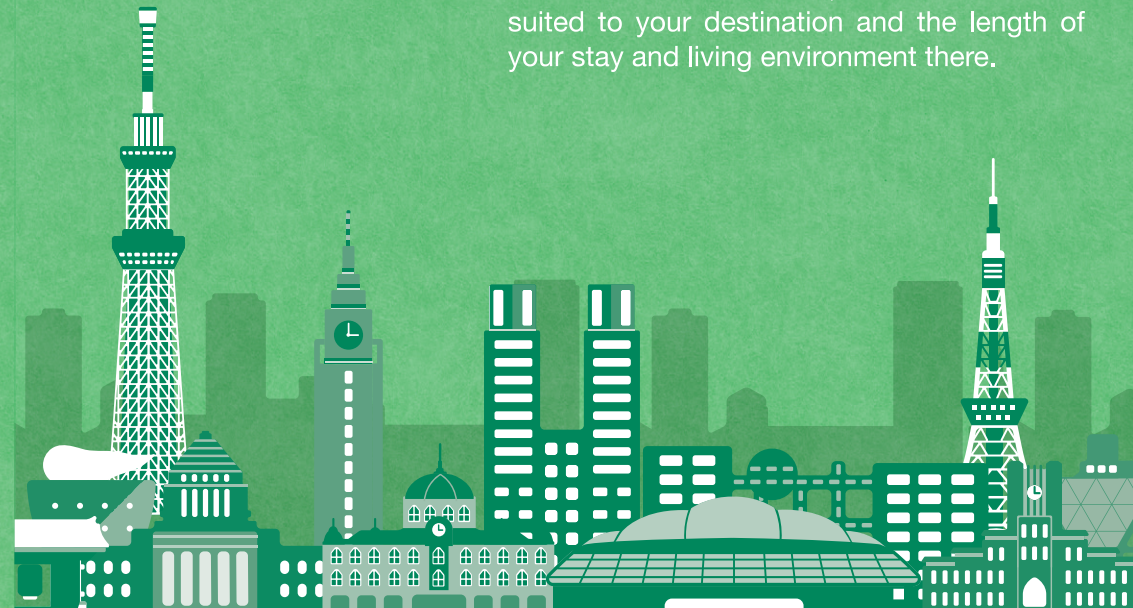
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Vaccines for Travelers

Information for People Planning to be Vaccinated

Here at the Travel Clinic, we have vaccines suited to your destination and the length of your stay and living environment there.



Reducing the Health Risks of Overseas Travel



Vaccination Prevents Disease

Overview of Vaccines

Vaccines give the body resistance (immunity) to infections, protecting against infections and severe illness. Vaccines are broadly classified as live and inactivated vaccines.

Live vaccines

Live vaccines are made from a live but weakened bacterium or virus.

- ▶ Examples are measles, rubella, mumps, varicella, BCG, yellow fever, and rotavirus vaccines.

Inactivated vaccines

Inactivated vaccines are made from an inactivated part or parts of a bacterium or virus that produce an immune response.

- ▶ Examples are diphtheria, pertussis, and tetanus (DTP), Japanese encephalitis, pneumococcal conjugate, Hib, hepatitis A, hepatitis B, rabies, influenza, HPV, meningococcal, and DPT-IPV vaccines.

Generally long	Duration	Generally short
Generally few (1 to 3)	Number of vaccinations	Generally many (3 to 4 plus boosters)
General reactions such as fever and malaise are relatively common	Side effects	General reactions are rare; local injection site reactions
At least 1 month between live vaccine doses	Time between vaccinations	No medical limits on time between vaccinations
Cannot use vaccine	Immunocompromised people	Can use vaccine (but efficacy is low)
Cannot use vaccine	Pregnant women	Depending on the level of risk
Avoid conception for 1 to 2 months after vaccination	Pregnancy	Effects on post-vaccination conception are limited

Unapproved Imported Vaccines

The term “unapproved imported vaccines” refers to vaccines that have been shown to be effective and safe and are sold outside Japan but have not been approved in Japan. Vaccines personally imported by a physician are available to those who require them. Since these vaccines are not approved in Japan, government compensation is not provided for serious side effects of vaccination, but compensation programs offered by certain private companies may be available in certain situations. The imported vaccines the Travel Clinic offers have been used extensively in other countries and rarely cause serious side effects.

Health Evaluation

- Health examination
- Issuance of English medical certificate and referral letter
- Mental health counseling

National law requires that people stationed abroad for 6 or more months undergo a medical exam before leaving and after returning. Those being treated for a disease can ask for an English medical certificate to use when receiving medical care at their destination.

Getting Foreign Travel Insurance

Care provided by medical institutions abroad is not covered by Japanese National Health Insurance and can be costly. Moreover, a lack of health care facilities and testing in certain locations may require evacuation to a hospital far away. It is advisable to get health insurance suited to the health care options available at your destination.

Sources of Infections During Overseas Travel

Overseas travelers can get infected in a variety of ways. Knowing what can cause infections will help keep you from becoming infected or seek immediate treatment so an infection does not become severe.

Water and soil

- Tetanus
- Leptospirosis
- Schistosomiasis

Food and beverages

- Traveler's diarrhea
- Typhoid fever/paratyphoid fever
- Hepatitis A and E
- Brucellosis

Arthropods

- Mosquitoes
 - Dengue fever, Chikungunya, malaria, yellow fever, Japanese encephalitis, Zika
- Ticks and lice
 - Rickettsiosis, Lyme disease, tickborne encephalitis

Animals

- Rabies
- Tularemia
- Highly pathogenic avian influenza

Humans

- Sexually transmitted diseases
 - HIV infection, hepatitis B, syphilis
- Contact with infected people
 - Influenza, measles, meningitis, polio

Vaccines in the News

Feel free to ask your doctor for more information.

- In Japan, the human papillomavirus (HPV) vaccine is available free of charge to girls 12 to 16 years of age, but vaccine uptake has been poor because the national government stopped strongly recommending the vaccine from June 2013 to November 2021. Consider getting vaccinated when you see your doctor.

- Pertussis is most common in children of school age. Pregnant women in Western countries are given a pertussis vaccine booster to protect their to-be-born baby from getting pertussis before the baby receives its routine vaccines. Ask us about the DPT vaccine if you will be in contact with babies.
- A highly effective herpes zoster vaccine became available in Japan in 2020. If you are 50 years of age or older and have weakened immunity, consider getting vaccinated when you see your doctor.

Vaccines for Travelers

Live vaccine

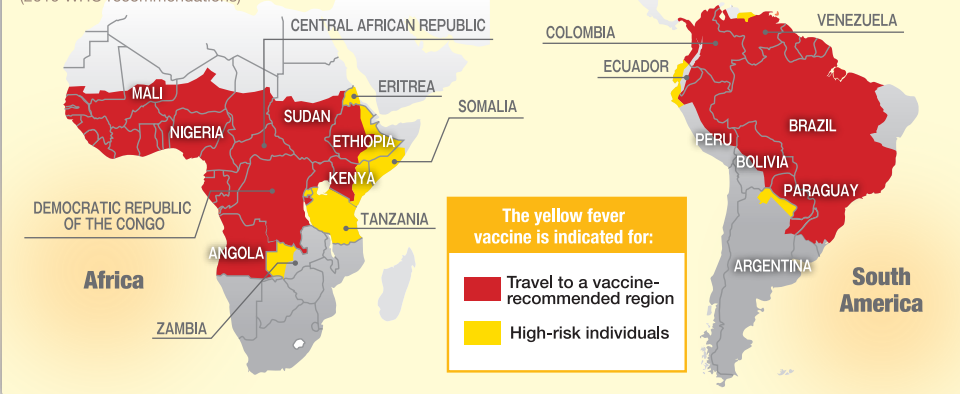
Yellow Fever



Level of recommendation

Regions Where Yellow Fever Vaccination is Recommended

(2019 WHO recommendations)



The yellow fever vaccine is indicated for:

- Travel to a vaccine-recommended region
- High-risk individuals

✓ Facts [pre-vaccination informed consent]

- ✓ Regions with risk and the International Health Regulations (IHR)
- ✓ You will receive a yellow card (vaccination certificate) that is valid beginning 10 days after vaccination and remains valid for the rest of your life unless lost.

Side effects

- ✓ About 10% of those vaccinated get a fever and joint pain 3 to 7 days after vaccination.
- ✓ Rare but serious side effects include organ damage and nerve damage (1 event per 300,000 vaccinations). About half of those with organ damage die.
- ✓ Side effects are more common in immunocompromised and elderly people.
- ✓ In pregnant women who are vaccinated, the virus could infect the fetus.

Contraindications

- ✓ Absolute contraindications (vaccination not allowed): People with a hypersensitivity to vaccines, infants younger than 9 months of age, people with a symptomatic HIV infection or CD4 count less than 200, people with a thymus disease that features immunosuppression, people with primary immunodeficiency or cancer, organ transplant recipients, immunosuppressant users, and pregnant women
- ✓ Relative contraindications (vaccination should be avoided for certain travel circumstances): People 60 years of age or older, people with an asymptomatic HIV infection or CD4 count of 200 to 499, breastfeeding women

Know before your next visit:

- ✓ The yellow fever vaccine cannot normally be given to someone who has received another live attenuated vaccine within 28 days.

What is Yellow Fever?

Yellow fever is a viral disease transmitted primarily by a mosquito species called *Aedes aegypti*. The initial symptoms of fever and headache are followed by yellowing of the skin throughout the body (jaundice) as the disease weakens the liver. With no effective medications available, yellow fever has a death rate of around 30%.

Yellow Fever Vaccine

The 2005 edition of the International Health Regulations (IHR 2005) requires travelers to certain areas to be vaccinated so as to prevent the spread of yellow fever to other areas. A yellow fever vaccination certificate (yellow card) issued as proof of vaccination may be requested on departure or arrival. In Japan, the vaccine is available only at quarantine stations and certain medical institutions. The yellow fever vaccine is generally safe but in very rare cases causes encephalitis, organ failure, and other serious side effects. If your doctor decides that you should not be vaccinated, you will receive an English waiver instead of a yellow card.

Causes of infection

Coming into contact with a person who has the yellow fever virus or being bitten by a blood-feeding mosquito

Eligible people

People traveling to an area with the risk of yellow fever, travelers with an itinerary that necessitates vaccination under the IHR

Duration of efficacy

Vaccination certificates (yellow cards) are valid for life, beginning 10 days after vaccination

Dosage

One live vaccine dose

Hepatitis A (Aimmugen)

Unapproved

Hepatitis A (Havrix)



✓ Facts

- Prevalent in many developing countries (especially in South Asia and Africa).
- Difficult to prevent because infection can occur via food.
- Vaccination provides reliable and lasting protection.
- Many people born before 1940 or born in a developing country are immune.

• Causes of infection

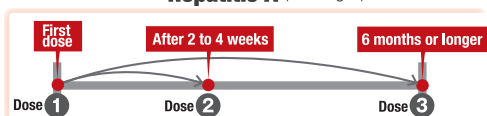
Consuming raw or undercooked vegetables, water, ice, or seafood

• Eligible people

Long-term travelers to an endemic region; travelers to countries or regions with poor sanitation

• Dosage

Hepatitis A (Aimmugen)



Hepatitis A (Havrix), unapproved

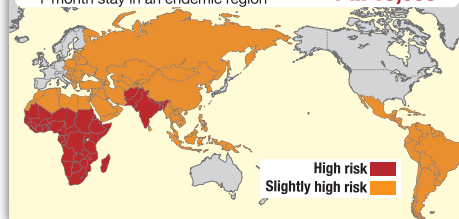
1 year old or older



Regions with high risk

Probability of getting hepatitis A during a 1-month stay in an endemic region

1 in 10,000



High risk
Slightly high risk

- **Duration of efficacy** 10 to 20 years or more

Rabies (Rabipur)

Unapproved

Rabies (Verorab)



✓ Facts

- There is a risk of rabies in many countries.
- The death rate after symptom onset is about 100%.
- Rabies is often transmitted through contact with animals.
- Even vaccinated people must seek care after being bitten.
- Vaccinated people do not require rabies immune globulin therapy after being bitten.

• Causes of infection

Entry of the saliva of an infected animal into the body (through a bite or scratch), can occur in animal handlers and rabies researchers

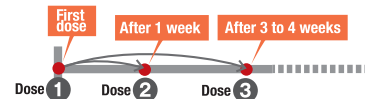
• Eligible people

Long-term travelers to an endemic region; travelers to countries or regions with poor sanitation

• Dosage

Pre-exposure vaccination

Rabies (Rabipur and Verorab)



The WHO states that 2 doses provide adequate immunity. Please ask us about a 2-dose regimen if your travel plans do not allow for 3 doses.

Regions with high risk

Probability of coming into contact with an affected animal during a 1-month stay in an endemic region

1 in 700



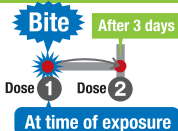
High risk
Slightly high risk

• Duration of efficacy

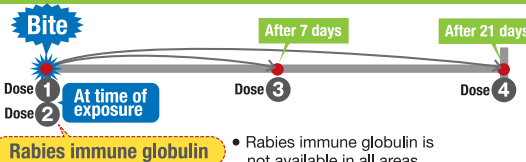
No booster is generally needed, but people in high-risk occupations receive a booster every 2 to 5 years

Post-exposure vaccination

With at least 3 pre-exposure doses



With fewer than 3 pre-exposure doses (typical)



- Rabies immune globulin is not available in all areas.

Typhoid fever (Typhim Vi)

Unapproved

✓ Facts

- Difficult to prevent because infection can occur via food.
- The risk is highest in South Asia (5 to 10 times higher).
- The vaccine is 60% to 70% effective at preventing typhoid fever but does not prevent paratyphoid fever.
- Cannot be used in children younger than 2 years of age.

• Causes of infection

Consuming raw or undercooked vegetables, water, ice, or seafood

• Eligible people

Long-term travelers to an endemic region; travelers to countries or regions with poor sanitation

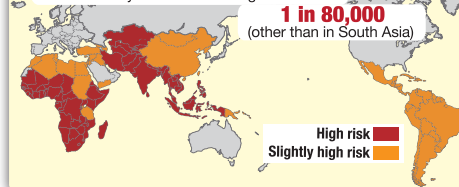
- **Duration of efficacy** 2 to 3 years

- **Dosage** One inactivated vaccine dose

Regions with high risk

Probability of getting typhoid fever during a 1-month stay in an endemic region

1 in 80,000 (other than in South Asia)



High risk
Slightly high risk

Meningococcal ACWY conjugate vaccine (Menactra)

Unapproved

Meningococcal group B vaccine (Bexsero)



✓ Facts

- In the African meningitis belt, disease is prevalent during the dry season (November to May).
- Some people have these bacteria in their sinuses, and infection can occur via nasal droplets.
- There are 5 major types (groups ABCWY), Menactra protects against groups ACWY, and Bexsero protects against group B.
- Some Western countries include these in their routine vaccination schedule.

• Causes of infection

Being in places where people gather (e.g., dormitories, Mecca pilgrimage), being immunocompromised (e.g., having no spleen)

• Eligible people

Long-term travelers to an endemic region

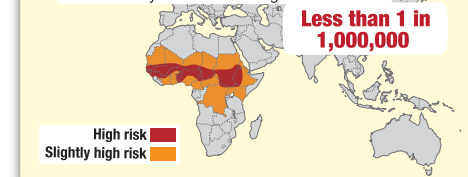
• Duration of efficacy

Menactra lasts for 3 to 5 years, and there is not enough data on Bexsero

Regions with high risk

Probability of meningococcal infection during a 1-month stay in an endemic region

Less than 1 in 1,000,000



High risk
Slightly high risk

• Dosage

One to 3 inactivated vaccine doses depending on age (normally 1 dose)

Tickborne encephalitis (FSME-IMMUN)

Unapproved

✓ Facts

- Endemic to areas from Eastern Europe to Central Asia and also occurs in Hokkaido, Japan.
- This viral infection is transmitted via ticks.
- Prevalent from spring to summer.

• Causes of infection

Outdoor activity in forested or grassy areas

• Eligible people

Long-term travelers to an endemic region

• Duration of efficacy

3 years (5 years with booster doses)

Regions with high risk

Probability of getting tickborne encephalitis during a 1-month stay in an endemic region

1 in 30,000 (suburban areas of Austria)



High risk

• Dosage



MR

Measles and rubella conjugate (Mearubik)

MMR

Measles, mumps, and rubella conjugate (Priorix)

✓ Facts

- These diseases are highly transmissible and can become severe in adults (especially measles).
- Two lifetime doses are recommended.
- A measles or rubella infection during pregnancy can cause miscarriage or congenital anomalies.
- The Travel Clinic will need to see your vaccination and infection records (and can give antibody tests).

• Causes of infection

Measles is transmitted in the air, and rubella and mumps are transmitted via droplets from coughing and sneezing. These diseases are most common in Asia and Africa but occur everywhere in the world.

• Eligible people

People at least 1 year of age who have not been previously infected and have not received 2 doses (people who are immunocompromised or pregnant are not eligible)

• Duration of efficacy

Boosters are generally not needed after the second dose

• Dosage

Two doses separated by at least 1 month



Level of recommendation

Diphtheria, tetanus, and pertussis conjugate (Tribik)

For adults and adolescents

Diphtheria, tetanus, and pertussis conjugate (Tdap)

✓ Facts

- Tetanus is a severe infection that requires intensive care.
- The tetanus bacterium is found in soil in Japan and throughout the world.
- Many people who get tetanus in Japan are elderly (routine vaccination began in 1968).
- Infants younger than 1 year of age are at high risk of severe pertussis.

• Causes of infection

Cuts (even very minor ones) and exposure to soil; pertussis is transmitted via droplets

• Eligible people

Long-term travelers to developing countries; travelers who will be outdoors or are susceptible to cuts

• Duration of efficacy

At least 10 years (5 years for pertussis)

• Dosage



Level of recommendation

Hepatitis B (Heptavax II, Bimmugen)

✓ Facts

- Prolonged infections can cause chronic hepatitis, hepatic cirrhosis, and liver cancer.
- Contact with the bodily fluids of an infected person can cause infection.
- Hepatitis B vaccination is included in the routine vaccination schedule of Japan and most other countries.
- About 90% of those who receive 3 doses develop antibodies that protect against hepatitis for at least 20 years.

• Causes of infection

Sexual intercourse, exposure to blood (e.g., transfusion, accidental needle sticks), mother-to-child transmission, close contact (e.g., childcare, contact sports)

• Eligible people

Long-term travelers to an endemic region; healthcare professionals whose work involves contact with blood

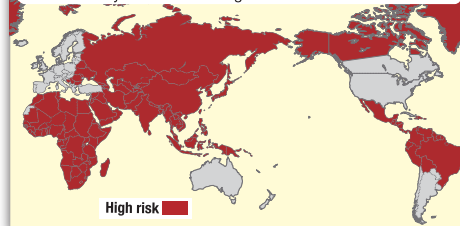
• Duration of efficacy

A booster is normally not required after immunity is acquired

Regions with high risk

Probability of getting hepatitis B during a 1-month stay in an endemic region

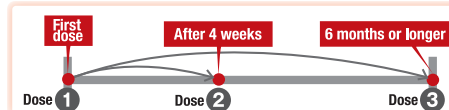
1 in 50,000



High risk

• Dosage

- A third booster dose is given to those negative for antibodies after vaccination (5% to 10%). Further doses are not normally given.



Level of recommendation

Varicella (chicken pox) and **herpes zoster** (varicella vaccine)

Herpes zoster (Shingrix)

✓ Facts

- These diseases are highly transmissible and can become severe in adults.
- Previous infections are reliably and easily clinically diagnosed.
- Vaccination can prevent herpes zoster even in previously infected people (for those 50 years old or older).

• Causes of infection

Via the air or contact; more common in temperate than tropical regions

• Eligible people

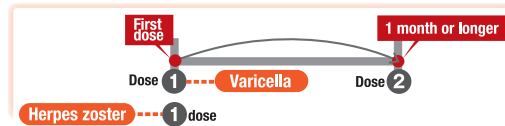
People 1 to 50 years of age who have not been previously infected and have not received 2 doses (people who are immunocompromised or pregnant are not eligible); people 50 years of age or older who want protection from herpes zoster

• Duration of efficacy

Boosters to prevent varicella are generally not needed after the second dose

• Dosage

Varicella vaccine



Shingrix



Japanese encephalitis (Jebik)

✓ Facts

- Vaccination was first recommended in 1954.
- The disease is transmitted via the bite of mosquitoes that have bitten a pig or bird.
- Infections can occur in Japan, but only several cases a year are reported.
- About 20% of those affected die, and 40% of survivors have aftereffects.

• Causes of infection

Living in a suburban area near a farming area with pig enclosures; tropical summer, tropical rainy season, and other seasons when mosquitoes are plentiful

• Eligible people

Long-term travelers to suburban and farming areas in Southeast Asia



Regions with high risk

Probability of getting Japanese encephalitis during a 1-month stay in an endemic region

1 in 600,000 to 6,000,000

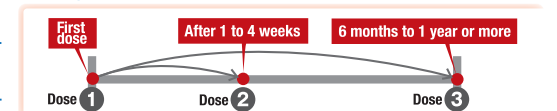


High risk

• Dosage

• Duration of efficacy

3 to 4 years or more



Polio (Imovax Polio)

Regions with high risk

Afghanistan, Pakistan

✓ Facts

- The WHO is engaged in a Global Polio Eradication Initiative. (Over the middle to long term, endemic countries and reported cases are declining).
- Travelers who will stay for at least 4 weeks in an endemic country may be asked to present a vaccination certificate on departure and entry. Be sure to check the latest infection trends and entry and departure requirements.
- Global standards recommend 3 to 4 or more doses.
- People born from 1975 to 1977 tend to have lower immunity.

• Causes of infection

Exposure to droplets of an infected person, oral infection from contaminated food and beverages

• Eligible people

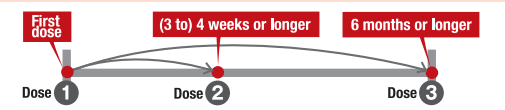
Long-term travelers to countries with cases of polio or infections from poliovirus vaccine

• Duration of efficacy

Not specified

• Dosage

- 1 to 3 booster doses after vaccination with live attenuated oral poliovirus vaccine



Level of recommendation