

38 °C for a short time, vomiting or transient rash. In very rare cases, neuritis of varying severity may be seen, although the etiological relationship to vaccination is uncertain. The vaccination has been suspected of aggravating autoimmune diseases such as multiple sclerosis and iridocyclitis, but this remains unproven. Sensitivity to thiomersal (a vaccine preservative) is a contraindication.

Type of vaccine:	Killed
Number of doses:	Two, given i.m. 4–12 weeks apart, plus booster
Booster:	9–12 months after second dose
Contraindications:	Sensitivity to the vaccine preservative thiomersal; adverse reaction to previous dose
Adverse reactions:	Local reactions occasionally; rarely fever
Before departure:	Second dose 2 weeks before departure
Recommended for:	High-risk individuals only
Special precautions:	Avoid ticks; remove immediately if bitten

TUBERCULOSIS

Disease and occurrence

See Chapter 5.

Risk for travellers

Most travellers are at low risk for tuberculosis (TB). The risk for long-term travellers (>3 months) in a country with a higher incidence of TB than their own may be comparable to the risk for local residents. Living conditions, as well as duration of travel, are important in determining the risk of infection: high-risk settings include health facilities, prisons and shelters for the homeless.

Vaccine

BCG vaccine is of very limited use for travellers. In the first year of life it provides good protection against complications of TB. In countries with high TB prevalence, infants are generally immunized as soon after birth as possible with a single dose of BCG, which protects against severe forms of TB in infancy and early childhood. Other protective benefits of the vaccine are uncertain. BCG should be considered for infants travelling from an area of low incidence to one of high incidence.

For health workers BCG provides some level of protection and one dose should be offered.

Many industrialized countries with a low incidence of TB have ceased giving BCG routinely to neonates; instead, a dose is given in adolescence. Other countries do not use BCG at all but rely on early detection and treatment to control the disease.

Booster doses of BCG are not recommended by WHO.

Precautions and contraindications

BCG is one of the more difficult vaccines to administer and the reconstituted vaccine must be given intradermally. Symptomatic HIV-infected individuals should not be vaccinated.

Type of vaccine:	Live bacterial (BCG)
Number of doses:	One
Contraindications:	Symptomatic HIV infection
Adverse reactions:	Local: abscess, regional lymphadenitis. Distant (rare): osteitis, disseminated disease
Before departure:	4 weeks
Consider for:	Infants under 6 months of age travelling to high-risk countries and health workers
Special precautions:	Skin test adults before administration; do not vaccinate if reaction is greater than 5 mm

TYPHOID FEVER

Disease and occurrence

See Chapter 5.

Risk for travellers

All travellers to endemic areas are at potential risk of typhoid fever, although the risk is generally low in tourist and business centres where standards of accommodation, sanitation and food hygiene are high. The risk is particularly high in the Indian subcontinent. Even vaccinated individuals should take care to avoid consumption of potentially contaminated food and water.