#### Tetanus

Adults should have had 5 doses with the last booster within the last 10 years.

Tetanus is a vaccine-preventable disease caused by a toxin produced by bacteria called *Clostridium tetani*. Tetanus spores are found in soil throughout the world. The disease is acquired when material containing these spores, such as soil, contaminates a wound.

Price: free if due on the NHS. £30 if not due on the NHS

# MMR (measles, mumps, rubella)

Adults should have had 2 doses of measles, mumps and rubella AFTER their first birthday.

Measles: Measles is spread by airborne or droplet transmission. Initial symptoms can include fever, runny nose, conjunctivitis and cough. A rash usually appears a few days later that starts at the head and spreads to the trunk and limbs over three to four days.

Rubella: The main symptom of rubella is a spotty rash that starts on the face or behind the ears and spreads to the neck and body. The rash takes 2 to 3 weeks to appear after getting rubella.

Price: free if due on the NHS

## Meningococcal disease

Adults under the age of 25 should have had 1 dose of ACWY. A booster dose is not given on the NHS, this would be paid for.

Meningococcal disease is a rare, but potentially devastating infection. It is caused by the bacteria Neisseria meningitidis of which there are 6 disease-causing strains called serogroups (A, B, C, W, Y and X). Spread between individuals occurs through coughing, sneezing, kissing or during close contact with a carrier. Carriers do not have symptoms.

Price: free if under the age of 25 and no previous dose has been given. If over the age of 25 or is a booster dose: £55

## Typhoid

Previous doses will have been given for travel purposes only.

Typhoid and paratyphoid are infections acquired by the ingestion of food or water contaminated by the bacteria *Salmonella Typhi* or *Salmonella Paratyphi*. Symptoms of typhoid and paratyphoid include fever, headache, muscle or joint pains, constipation or diarrhoea and a rash.

Typhoid schedule: 1 dose before travel. This will give 3 years of protection from Typhoid.

Price: free on the NHS if indicated

#### Cholera

Cholera is a disease, characterised by profuse, watery diarrhoea, caused by certain toxin-producing forms of the bacteria called Vibrio cholera. Cholera is transmitted by ingesting (eating and drinking) contaminated water or food. It is common in many low-income countries and is largely linked to poverty, bad sanitation and poor access to clean drinking water.

Travellers living in unsanitary conditions, including humanitarian workers in disaster/refugee areas, are also at risk as well as those drinking untreated water or eating poorly cooked food in areas with an outbreak.

Cholera outbreak areas:

NaTHNaC- Cholera

Price: free on the NHS if indicated

## Hepatitis B

Hepatitis B is a viral infection of the liver spread through contact with blood or body fluids contaminated with hepatitis B virus (HBV). It occurs worldwide with highest rates of infection reported in the Western Pacific and African regions.

Travellers may be at increased risk if they: have unprotected sex with new partners, undertake healthcare work or humanitarian aid work, are injecting drugs, are travelling for medical reasons or with medical conditions requiring medical treatment whilst overseas, participating in contact sports, adopting children from intermediate/high risk countries and long-stay travel of over 1 month.

A full course of Hep B vaccines consists of 3 vaccines given at 0, 1 and 6 months.

Price: £40 per dose.

Price: free on the NHS if indicated

## Rabies

Rabies is a virus carried in animal saliva that usually spreads to humans from a bite, scratch, lick to an open wound from an infected animal (typically a dog). It can also be a risk if an animal spits and saliva gets into the eyes, mouth or nose.

A full course of rabies consists of 3 vaccines at day 0, 7 and 21 or 28 days, an accelerated schedule can be followed if needed.

Price: £85 per dose.

# Japanese Encephalitis

Japanese encephalitis (JE) is a viral infection of the brain transmitted to humans by mosquitoes in parts of Asia and the Western Pacific. The mosquitoes that transmit JE feed mostly at night, between dusk and dawn and are prolific in rural areas, where rice cultivation and pig farming are common. Although, the mosquitos may also be found in peri-urban locations. The risk for most travellers to Asia is very low, especially for short-term travellers visiting urban areas.

A course of Japanese Encephalitis consists of 2 vaccines at least 4 weeks apart.

Price: £105 per dose