**FEVER IN THE RETURNED TRAVELLER**

[**www.starship.org.nz**](http://www.starship.org.nz) **accessed 25th September 2025**

**Typical incubation periods**

|  |  |
| --- | --- |
| **Short (<10 days)** | -    Respiratory tract infection (viral, bacterial) -    Bacterial infections -    Arbovirus infections (Dengue, Chikungunya, Zika) -    Gastroenteritis (bacterial and viral) -    Enteric fevers (Typhoid) -    Japanese encephalitis -    Rickettsial infection -    Malaria -    Measles  -    [Rabies](https://www.starship.org.nz/guidelines/rabies-post-exposure-prophylaxis/) |
| **Intermediate (10-21 days)** | -    Malaria -    Enteric fevers (Typhoid) -    Viral haemorrhagic fevers (Yellow fever, Ebola) -    Leptospirosis -    Measles -    Rickettsial infection -    Rabies |
| **Long (>21 days)** | -    [Rabies](https://www.starship.org.nz/guidelines/rabies-post-exposure-prophylaxis/) -    Tuberculosis  -    Malaria  -    Enteric fevers *(Typhoid)* -    Hepatitis A – E -    HIV |

**Key Diseases with incubation times, epidemiological distribution and clinical symptoms**

| **Key diseases** | **Possible clinical features and considerations** | **Geographical area** | **Incubation period** |
| --- | --- | --- | --- |
| **ARBOVIRAL INFECTIONS:** |  |  |  |
| **Dengue** | Fever, rash, myalgia, headache, retro orbital pain, petichiae  *- Severe dengue carries risk of shock, high or rising haematocrit and falling platelet counts are early indicators.* | Tropics/Subtropics, Latin America, South Asia, Central Asia, South East Asia including Singapore, Pacific Islands (Also occur but under-recognised in Africa) | 3 - 14 days |
| **Chikungunya** | Fever, rash, myalgia - generalised arthralgia prominent feature |
| **Ross River Fever** | Fever, rash, myalgia, flu like symptoms, polyarthritis | Coastal regions of Australia especially Queensland |
| **Japanese Encephalitis** | Fever, neurological change (encephalitis) | Asia including South East Asia (rainy season, rural > urban), Papua New Guinea | 5 - 14 days |
| **MALARIA**  **P.falciparum**  **P.vivax, Ovale (liver phases)** | Malaise, fever, diarrhoea, myalgia, jaundice, altered neurological state (cerebral malaria)  Consider regions with known antimalarial resistance when initiating treatment.  [CDC Malaria Information and Prophylaxis by country](https://www.cdc.gov/malaria/travelers/country_table/a.html) | Widespread in tropics and subtropics. In Pacfific - Papua New Guinea, Solomon Islands and Vanuatu | Incubation times vary depending on species  5 days – 2 years (liver phase) |
| **RICKETTSIAL INFECTIONS** | Fever, rash, eschar (bite history), headache, lymphadenitis, hepatosplenomegaly, reactive arthritis, meningoencephalitis | Regional species variation  Sub Saharan Africa,  Asia (including India, China, South East Asia), Northern Australia, Europe, Americas | 3 - 21 days |
| **HEPATITIS A** | Fever, malaise, abdominal pain and vomiting, jaundice | Worldwide | 2 - 7 weeks |
| **ENTERIC FEVERS**  **Typhoid/Paratyphoid** | Fever with relative bradycardia, abdominal pain, constipation, diarrhoea (uncommon). May have cough or confusion.  Fever can be persistent. Where isolate is known to be sensitive, failure to defervesce is not reason to change antibiotics | Worldwide – developing countries, including Asia, Pacific Islands | 7 days – 3 months |
| **LEPTOSPIROSIS** | Fever, vomiting, jaundice, conjunctivitis, in severe cases hepato/renal failure, aseptic meningitis or pulmonary involvement | Tropical and subtropical areas, including Northern Australia | 7 - 14 days (up to 30 days) |
| **BACTERIAL GASTROENTERITIS** | Fever, Diarrhoea |  |  |
| **Campylobacter** |  | 2 - 5 days |
| **Non typhi Salmonella** | Non typhi Salmonella gastroenteritis in the < 1 year child requires careful systemic evaluation | 1 - 3 days |
| **Cholera** | Watery diarrhoea | 2 hours - 5 days |
| **PARASITIC CAUSES OF DIARRHOEA** | Diarrhoea, abdominal pain, bloating |  |  |
| **Giardia** | 1 - 14 days |
| **Amoebiasis** | 2 - 4 weeks |
| **VIRAL RESPIRATORY INFECTIONS** |  |  |  |
| **Measles** | Fever, rash, respiratory symptoms | 8 - 12 days |
| **Influenza** | Respiratory symptoms, fever | 1 - 4 days |
| **COVID-19 (SARS-CoV2)** | Fever, respiratory symptoms, sore throat, anosmia, rash, diarrhoea, headache | 4 - 14 days |

**Initial investigations**

**This will vary depending on the history and examination**

* FBC, UEC, LFT
* Blood culture
* Urine and stool microscopy and culture
* Nasopharyngeal respiratory viral PCR panel - if respiratory symptoms present
* *Consider chest X-Ray and other imaging as guided by clinical indication*
* *Consider opportunistic storing of serum (plain serum bottle red top) for future serology testing*

**If returned from endemic country**

* Thick and thin films for malaria
  + ***ADHB patients:****Attach “URGENT” sticker, include clinical information, countries visited on request form*
  + *Availability of additional malaria testing is laboratory dependent. Malaria antigen testing may be available in some laboratories*
* Arboviral blood PCR panel (dengue, Zika, chikungunya)
* Dengue serology and NS1 antigen
  + *Further discussion may be required, investigation will depend on duration of illness.*

**Other specific tests to consider - if unsure consider paediatric infectious diseases consult**

* Measles PCR (epidemiological risk)
* Mumps PCR
* Meningococcal PCR
* Hepatitis serology
* Bartonella serology
* Rickettsial serology
* Leptospirosis serology
* Tuberculosis investigation (**discuss**with Paediatric Infectious Diseases before initiating investigation)