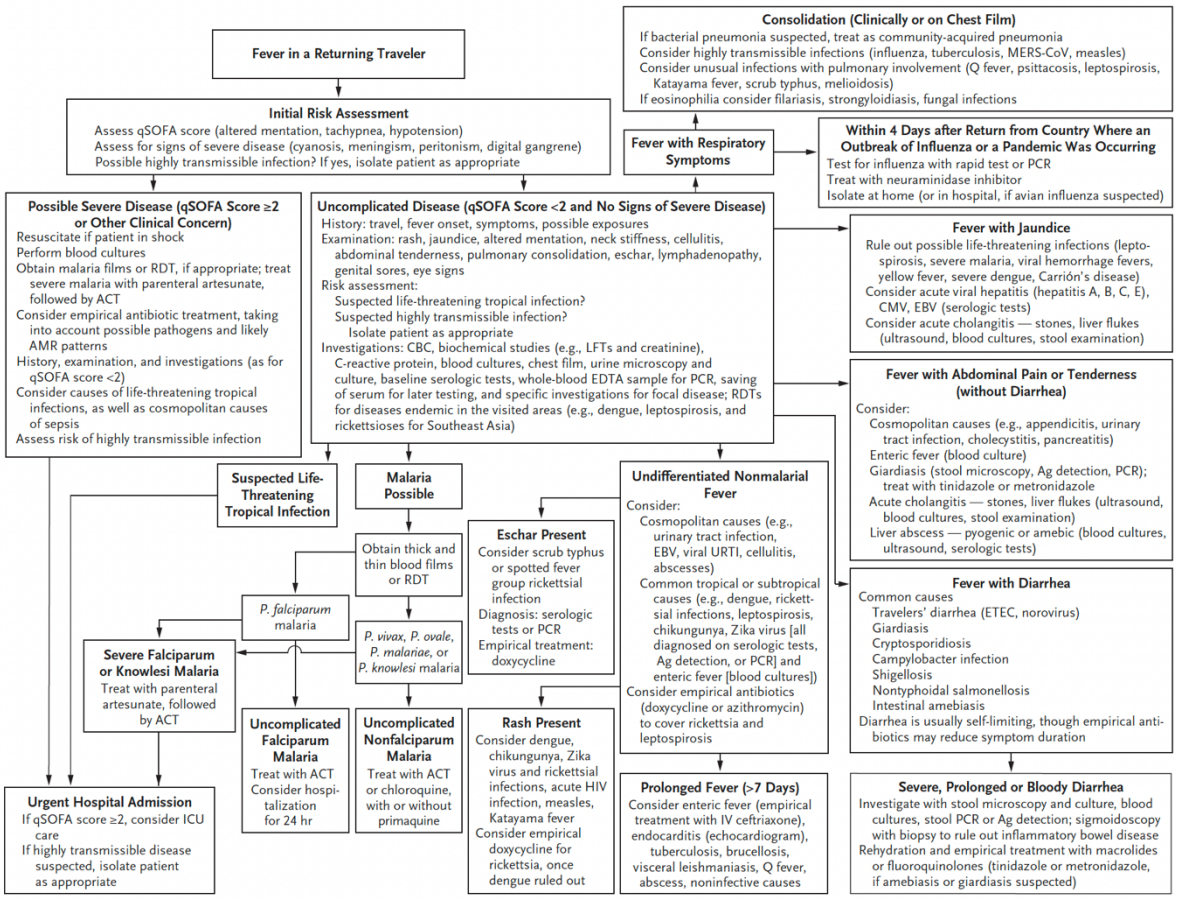
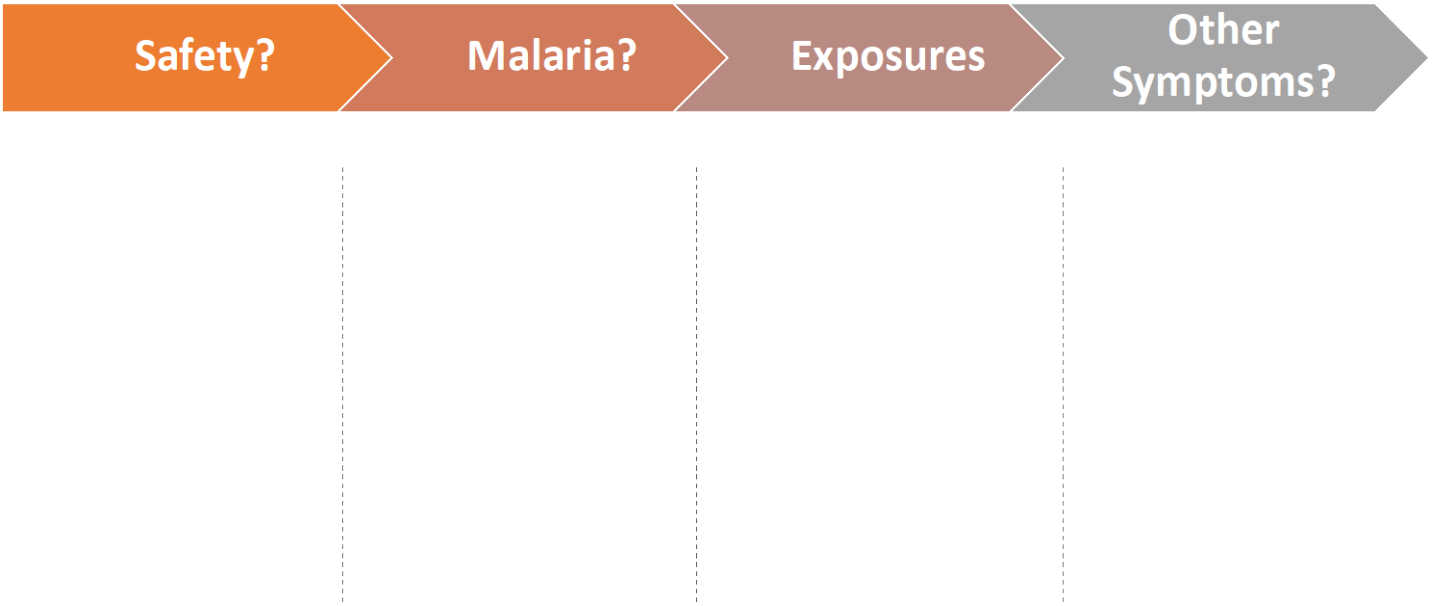
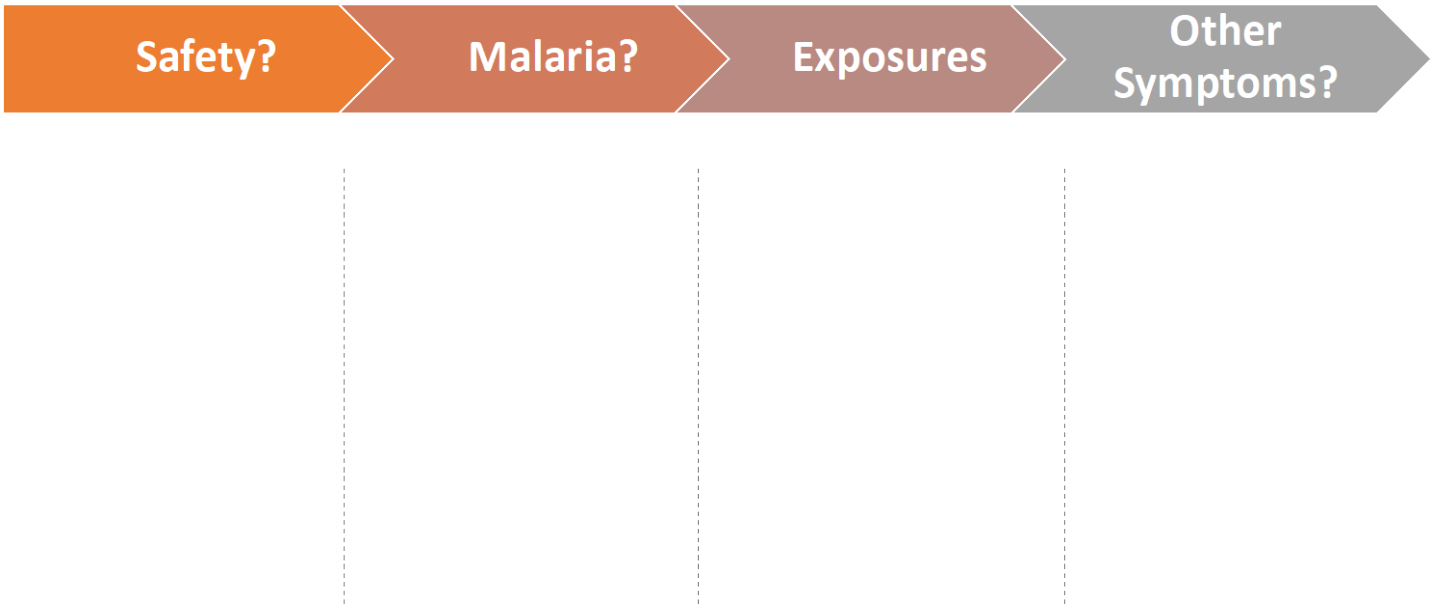


Fever in a Returning Traveler
Initial Risk Assessment
Assess qSOFA score (altered mentation, tachypnea, hypotension)
Assess for signs of severe disease (cyanosis, meningism, peritonism, digital gangrene)
Possible highly transmissible infection? If yes, isolate patient as appropriate
Consolidation (Clinically or on Chest Film)
If bacterial pneumonia suspected, treat as community-acquired pneumonia
Consider highly transmissible infections (influenza, tuberculosis, MERS-CoV, measles)
Consider unusual infections with pulmonary involvement (Q fever, psittacosis, leptospirosis, Katayama fever, scrub typhus, melioidosis)
If eosinophilia consider filariasis, strongyloidiasis, fungal infections
Fever with Respiratory Symptoms
Within 4 Days after Return from Country Where an Outbreak of Influenza or a Pandemic Was Occurring
Test for influenza with rapid test or PCR
Treat with neuraminidase inhibitor
Isolate at home (or in hospital, if avian influenza suspected)
Possible Severe Disease (qSOFA Score ≥2 or Other Clinical Concern)
Resuscitate if patient in shock
Perform blood cultures
Obtain malaria films or RDT, if appropriate; treat severe malaria with parenteral artesunate, followed by ACT
Consider empirical antibiotic treatment, taking into account possible pathogens and likely AMR patterns
History, examination, and investigations (as for qSOFA score <2)
Consider causes of life-threatening tropical infections, as well as cosmopolitan causes of sepsis
Assess risk of highly transmissible infection
Uncomplicated Disease (qSOFA Score <2 and No Signs of Severe Disease)
History: travel, fever onset, symptoms, possible exposures
Examination: rash, jaundice, altered mentation, neck stiffness, cellulitis, abdominal tenderness, pulmonary consolidation, eschar, lymphadenopathy, genital sores, eye signs
Risk assessment:
Suspected life-threatening tropical infection?
Suspected highly transmissible infection?
Isolate patient as appropriate
Investigations: CBC, biochemical studies (e.g., LFTs and creatinine), C-reactive protein, blood cultures, chest film, urine microscopy and culture, baseline serologic tests, whole-blood EDTA sample for PCR, saving of serum for later testing, and specific investigations for focal disease; RDTs for diseases endemic in the visited areas (e.g., dengue, leptospirosis, and rickettsioses for Southeast Asia)
Fever with Jaundice
Rule out possible life-threatening infections (leptospirosis, severe malaria, viral hemorrhage fevers, yellow fever, severe dengue, Carrión's disease)
Consider acute viral hepatitis (hepatitis A, B, C, E), CMV, EBV (serologic tests)
Consider acute cholangitis — stones, liver flukes (ultrasound, blood cultures, stool examination)
Fever with Abdominal Pain or Tenderness (without Diarrhea)
Consider:
Cosmopolitan causes (e.g., appendicitis, urinary tract infection, cholecystitis, pancreatitis)
Enteric fever (blood culture)
Giardiasis (stool microscopy, Ag detection, PCR); treat with tinidazole or metronidazole
Acute cholangitis — stones, liver flukes (ultrasound, blood cultures, stool examination)
Liver abscess — pyogenic or amebic (blood cultures, ultrasound, serologic tests)
Suspected Life-Threatening Tropical Infection
Malaria Possible
Undifferentiated Nonmalarial Fever
Consider:
Cosmopolitan causes (e.g., urinary tract infection, EBV, viral URTI, cellulitis, abscesses)
Common tropical or subtropical causes (e.g., dengue, rickettsial infections, leptospirosis, chikungunya, Zika virus [all diagnosed on serologic tests, Ag detection, or PCR] and enteric fever [blood cultures])
Consider empirical antibiotics (doxycycline or azithromycin) to cover rickettsia and leptospirosis
Eschar Present
Consider scrub typhus or spotted fever group rickettsial infection
Diagnosis: serologic tests or PCR
Empirical treatment: doxycycline
Obtain thick and thin blood films or RDT
P. falciparum malaria
P. vivax, P. ovale, P. malariae, or P. knowlesi malaria
Fever with Diarrhea
Common causes
Travelers' diarrhea (ETEC, norovirus)
Giardiasis
Cryptosporidiosis
Campylobacter infection
Shigellosis
Nontyphoidal salmonellosis
Intestinal amebiasis
Diarrhea is usually self-limiting, though empirical antibiotics may reduce symptom duration
Severe Falciparum or Knowlesi Malaria
Treat with parenteral artesunate, followed by ACT
Uncomplicated Falciparum Malaria
Treat with ACT
Consider hospitalization for 24 hr
Uncomplicated Nonfalciparum Malaria
Treat with ACT or chloroquine, with or without primaquine
Rash Present
Consider dengue, chikungunya, Zika virus and rickettsial infections, acute HIV infection, measles, Katayama fever
Consider empirical doxycycline for rickettsia, once dengue ruled out
Prolonged Fever (>7 Days)
Consider enteric fever (empirical treatment with IV ceftriaxone), endocarditis (echocardiogram), tuberculosis, brucellosis, visceral leishmaniasis, Q fever, abscess, noninfective causes
Severe, Prolonged or Bloody Diarrhea
Investigate with stool microscopy and culture, blood cultures, stool PCR or Ag detection; sigmoidoscopy with biopsy to rule out inflammatory bowel disease
Rehydration and empirical treatment with macrolides or fluoroquinolones (tinidazole or metronidazole, if amebiasis or giardiasis suspected)
Urgent Hospital Admission
If qSOFA score ≥2, consider ICU care
If highly transmissible disease suspected, isolate patient as appropriate


Safety?
Malaria?
Exposures
Other Symptoms?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