

The ISTM Body of Knowledge for the Practice of Travel Medicine, revised 2017

Introduction

The field of travel medicine has grown dramatically as greater numbers of people travel to exotic and remote destinations. Almost a billion travelers cross international borders annually. However, studies suggest that very few seek pre-travel health advice. Many of those who obtain pre-travel advice receive information from practitioners who are ill equipped to provide current and accurate information. Travel medicine has become increasingly complex due to dynamic changes in global infectious disease epidemiology, changing patterns of drug resistance, and a rise in the number of travelers with chronic health conditions.

Why do we need a Body of Knowledge?

This Body of Knowledge was created to guide the professional development of individuals practicing travel medicine and to shape curricula and training programs in travel medicine. It is also expected to serve as a vehicle for establishing the content validity of a credentialing process.

What is a Body of Knowledge?

It is the scope and extent of knowledge required for professionals working in the field of travel medicine. Major content areas include the global epidemiology of health risks to the traveler, vaccinology, malaria prevention, and pre-travel counseling designed to maintain the health of the traveling public.

How was the Body of Knowledge developed?

In September 1999, the ISTM Executive Board established a group of travel medicine experts from its membership to define the scope of knowledge in the field of travel medicine worldwide. The final draft of their report was converted to survey format and mailed to 110 ISTM members worldwide, who were representative of the diversity within the profession. The respondents provided further input into the relative importance of each of the content areas. The results of their efforts contributed significantly to the Body of Knowledge. Since its inception the Body of Knowledge was reviewed and updated in 2006, 2012 and most recently in 2017. Each update has been based on expert review and extensive surveys to hundreds of CTH Holders and ISTM Members

INTERNATIONAL SOCIETY OF TRAVEL MEDICINE
Body of Knowledge for the Practice of Travel Medicine - 2017
by Physicians, Nurses and Other Travel Health Professionals

01. EPIDEMIOLOGY (10%)

01. Basic concepts (e.g. morbidity, mortality, incidence, prevalence)
02. Geographic specificity/global distribution of diseases and potential health hazards

02. IMMUNOLOGY/VACCINOLOGY (20%)

01. Basic concepts and principles (e.g., live vs. inactivated vaccine, measurement of immune response)
02. Handling, storage, and disposal of vaccines and related supplies

Types of Vaccines/Immunizations/Immunobiologics

Indications/contraindications, routes of administration, dosing regimens duration of protection, immunogenicity, efficacy, potential adverse reactions and medical management of adverse reactions associated with the following vaccinations/combination vaccinations:

03. Bacille Calmette-Guerin
04. Cholera
05. Diphtheria
06. Encephalitis, Japanese
07. Encephalitis, tick-borne
08. Haemophilus influenzae type B
09. Hepatitis A
10. Hepatitis B
11. Hepatitis A and B combined
12. Human Papilloma Virus
13. Immune globulin
14. Influenza
15. Measles
16. Meningococcal
17. Mumps
18. Pertussis
19. Pneumococcal
20. Poliomyelitis
21. Rabies
22. Rotavirus
23. Rubella
24. Tetanus
25. Typhoid
26. Varicella
27. Yellow Fever
28. Zoster
29. Other combined vaccines
30. Other

03. **PRETRAVEL ASSESSMENT/CONSULTATION** (35%)

Patient Evaluation

01. Assessment of fitness/contraindications to travel (e.g. pre-existing illness, fitness to fly)
02. Evaluation of travel itineraries/risk assessment (e.g. pre-existing activities, travel to rural vs. urban areas)
03. Relevant medical history (e.g. previous vaccinations, allergies, chronic illness, mental health history and concurrent medications)
04. Screening for good mental health and personal resilience to stress in hostile environments

Special Populations

Unique management issues pertaining to the following populations:

05. Athletes
06. Business travellers
07. Elderly travellers
08. Expatriates/long term travellers
09. Immigrants
10. Infants and children
11. Travel for the purpose of international adoption
12. Missionaries/volunteers/health clinicians/humanitarian health workers
13. Pregnant travellers and nursing mothers
14. Teachers, trainers and students
15. Travellers with chronic diseases (diabetes, chronic obstructive pulmonary disease, cardiovascular disease, mental health illnesses)
16. Travellers with disabilities
17. Travellers to hostile environments to include: journalists, armed service personnel, scientists, academics
18. Travellers who are immunocompromised, including AIDS and HIV
19. VFR's (those visiting friends and relatives in their countries of origin)
20. Other

Special Itineraries

Unique management issues associated with the following activities/itineraries:

21. Armed conflict zones
22. Cruise ship travel/Sailing
23. Diving
24. Extended stay travel
25. Extreme/wilderness/remote regions travel
26. High altitude travel
27. Last minute travel
28. Mass gatherings (e.g. the Hajj)
29. Travel for the purpose of medical care
30. Natural disaster areas
31. Sex Tourism

- 32. Travel to areas experiencing disease outbreaks
- 33. Other

Prevention and Self-Treatment

- 34. Chemoprophylaxis
 - 01. Altitude illness
 - 02. Leptospirosis
 - 03. Malaria
 - 04. Travellers' diarrhea
 - 05. Other
- 35. Personal protective measures (e.g. restriction of outdoor activity at dawn and dusk) and barrier protection (e.g., bed nets, insect repellents)
- 36. Self-treatment
 - 01. Diarrhea
 - 02. Malaria
 - 03. Other
- 37. Travel health kits
- 38. Other travel medicine medications and pharmacological issues

Risk communications regarding:

- 39. Animal contact (including birds)
- 40. Close interpersonal contact (e.g. sexually transmitted diseases)
- 41. Contact with fresh and salt water
- 42. Food consumption
- 43. Safety and security
- 44. Walking barefoot
- 45. Water consumption and purification
- 46. Antimicrobial resistance
- 47. Other (e.g., skin trauma, infection...)

04. DISEASES CONTRACTED DURING TRAVEL (12%)

Geographic risk, prevention, transmission, possible symptoms and appropriate referral/triage of:

Diseases Associated with Vectors

- 01. African Tick Bite Fever
- 02. Chikungunya
- 03. Dengue
- 04. Encephalitis, Japanese
- 05. Encephalitis, tick-borne
- 06. Filariasis (e.g. Loa loa, bancroftian, onchocerciasis)
- 07. Hemorrhagic fevers
- 08. Leishmaniasis
- 09. Lyme, anaplasma, babesia
- 10. Malaria
- 11. Plague
- 12. Rickettsia (typhus)

13. Rift Valley Fever
14. Trypanosomiasis, African
15. Trypanosomiasis, American, (Chagas disease)
16. West Nile
17. Yellow fever
18. Zika
19. Other (Emerging Infections)

Diseases Associated with Person-to-Person Contact

20. Diphtheria
21. Hepatitis B
22. Hepatitis C
23. Influenza
24. Measles
25. Meningococcal disease
26. Mumps
27. Pertussis
28. Pneumococcal disease
29. Rubella
30. Sexually transmitted diseases
31. Tuberculosis
32. Varicella
33. Other

Diseases Associated with Ingestion of Food and Water

34. Amebiasis
35. Brucellosis
36. Cholera
37. Cryptosporidiosis
38. Cyclosporiasis
39. Giardiasis
40. Hepatitis A
41. Hepatitis E
42. Norovirus
43. Poliomyelitis
44. Seafood poisoning/toxins
45. Travellers' diarrhea
46. Typhoid and Paratyphoid fever
47. Other

Diseases Associated with Bites and Stings

48. Envenomation (e.g. jelly fish, sea urchin, scorpion, snake, spiders)
49. Herpes B virus
50. Rabies
51. Other

Diseases Associated with Water/Environmental Contact

52. Cutaneous larva migrans
53. Legionella
54. Leptospirosis

- 55. Schistosomiasis
- 56. Tetanus
- 57. Other

05. OTHER CLINICAL CONDITIONS ASSOCIATED WITH TRAVEL (10%)

Conditions Occurring During or Immediately Following Travel

Symptoms, prevention, and treatment of:

- 01. Barotrauma
- 02. Jet Lag
- 03. Motion sickness
- 04. Thrombosis/embolism
- 05. Other

Conditions Associated with Environmental Factors

Symptoms, prevention and treatment of:

- 06. Altitude sickness
- 07. Frostbite and hypothermia
- 08. Respiratory distress/failure (associated with humidity, pollution, etc.)
- 09. Sunburn, heat exhaustion and sun stroke
- 10. Other

Threats to Personal Security

Precautions regarding:

- 11. Accidents (e.g. motor vehicle, drowning)
- 12. Violence-related injuries
- 13. Other

Psychological and Psycho-social Issues

Unique management issues associated with:

- 14. Acute stress reactions, post-traumatic stress disorder
- 15. Culture shock/adaptation (e.g., travellers, refugees)
- 16. Psychiatric and psychological sequelae of travel or living abroad
- 17. Other (e.g., flight phobia)

06. POST-TRAVEL ASSESSMENT (8%)

- 01. Screening/assessment of returned asymptomatic travelers
- 02. Screening/assessment of immigrants
- 03. Triage of the ill traveller

Diagnostic and management implications of the following symptoms:

- 04. Diarrhea and other gastro-intestinal complaints
- 05. Eosinophilia
- 06. Fever
- 07. Respiratory illness
- 08. Skin problems
- 09. Other

07. ADMINISTRATIVE AND GENERAL TRAVEL MEDICINE ISSUES (5%)

Medical Care Abroad

- 01. Aeromedical evacuation (including repatriation of deceased)
- 02. Blood transfusion guidelines for international travellers
- 03. Procedures and considerations regarding medical and mental health care and recommendations regarding access of medications in resource-poor areas
- 04. Other

Travel Clinic Management

- 05. Documentation and record-keeping (e.g. vaccination certificate requirements, reporting of adverse events)
- 06. Equipment
- 07. Infection control procedures
- 08. Management of medical emergencies
- 09. Resources for laboratory testing
- 10. Supplies and disposables including medications
- 11. Other

Travel Medicine Information/Resources

- 12. Accessing health information for travellers including commercial and proprietary sources
- 13. International Health Regulations
- 14. National/regional recommendations, including national/regional differences
- 15. Principles of responsible travel
- 16. Other

Conclusion

The field of travel medicine encompasses a wide variety of disciplines including epidemiology, infectious disease, public health, tropical medicine, immigrant and refugee health, and occupational medicine. As a unique and growing specialty, it has become necessary to establish standards of practice in the field. These standards have been established to identify the scope of competencies expected of travel medicine practitioners, guide their professional training and development, and ensure an acceptable level of patient care.

This Body of Knowledge serves as the basis for the Certificate of Knowledge examination that is available through the ISTM for all travel health professionals. This exam is currently administered at least once each year and always prior to the biennial ISTM conferences Practitioners who

successfully complete this examination will be awarded a Certificate in Travel Health (CTH®) by the ISTM. Information about the Certificate of Knowledge examination is available at www.ISTM.org.