

INTERNATIONAL SOCIETY OF TRAVEL MEDICINE (ISTM) CERTIFICATE OF KNOWLEDGE

ISTM will offer its eighth Certificate of Knowledge in Travel Medicine examination on 2 May 2012 prior to the opening of 5th Regional Conference of the International Society of Travel Medicine in Singapore. The certificate recognizes professionals who have demonstrated expertise in the unique body of knowledge associated with pre-travel care and consultation. Professionals passing the exam will be granted a Certificate in Travel Health® or CTH®. ISTM members who receive the certificate will be given special recognition in the “*ISTM Directory of Travel Medicine*” Providers.”

THE INTERNATIONAL SOCIETY OF TRAVEL MEDICINE

ISTM is a not-for-profit organization committed to the promotion of healthy and safe travel. In cooperation with international health care providers, academic centers, the travel industry and the media, ISTM advocates and facilitates education, service and research activities in the field of travel medicine. Travel medicine includes preventive and curative medicine within many specialties, such as tropical medicine, infectious diseases, high altitude physiology, travel-related obstetrics, psychiatry, occupational health, military and migration medicine and environmental health.

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KNAPP & ASSOCIATES INTERNATIONAL, INC.

ISTM retains Knapp & Associates International, Inc. (K&AI) of Princeton, New Jersey, USA, to provide assistance in the administration of the Certificate of Knowledge Program and the development of the examination. K&AI is a consulting firm that assists organizations in developing professional credentialing programs.

HOW WAS THE CERTIFICATE OF KNOWLEDGE PROGRAM DEVELOPED?

The eligibility requirements and examination materials for the ISTM Certificate of Knowledge Program were developed based on a study of the current state of knowledge in travel medicine practice. An international survey of expert travel medicine practitioners was conducted to define the body of knowledge for travel medicine and determine the content areas appropriate for the examination. The survey was designed to identify the knowledge used by travel medicine professionals in day-to-day practice. A representative panel of travel medicine practitioners reviewed the results of the survey and identified the body of knowledge for travel medicine based on these data. This was updated in early 2006. The content of the examination is based on this body of knowledge. A detailed content outline can be found on pages 6-8.

The examination questions are written by travel medicine practitioners and reviewed and validated by a panel of experts prior to being selected for the examination. Great care has been taken to develop exam questions that are appropriate for professionals from different geographic regions and professional disciplines.

The examination question pool is updated on a regular basis to reflect current practice in travel medicine. Individual questions that are shown by statistical analysis to be unclear or unfair have been modified or deleted from the pool.

The ISTM Certificate of Knowledge examination is designed to meet testing industry standards for validity and reliability.

Validity is the degree to which the content of the examination reflects the knowledge required to competently perform the responsibilities of a travel medicine practitioner.

Reliability is the accuracy of the examination scores (i.e., the degree to which the examination scores are free from measurement error).

CERTIFICATE OF KNOWLEDGE PROGRAM?

The purposes of the ISTM Certificate of Knowledge Program are to:

- establish internationally recognized standards of knowledge for travel medicine practitioners;
- assess the level of knowledge demonstrated by travel medicine practitioners in a valid and reliable manner;
- encourage professional development in the field of travel medicine;
- formally recognize individuals who meet the requirements set by ISTM;
- serve the public by encouraging quality travel medicine practice services; and
- demonstrate the global validity of epidemiological data and preventive strategies.

The ISTM Examination Committee, with the assistance and advice of an international panel of travel health experts representing a variety of professional disciplines, including medicine and nursing, has attempted to develop a Certificate of Knowledge Program that will recognize accepted levels of expertise in the profession, with the goal of improving professional standards in travel medicine. However, no certificate of knowledge program can guarantee professional competence. In addition, given the frequent changes in the field of travel medicine, ISTM cannot warrant that the examination materials will reflect, at all times, the most current state-of-the-art travel medicine guidelines. ISTM welcomes constructive comments and suggestions from the public and the profession.

WHAT ARE THE BENEFITS OF THE ISTM CERTIFICATE OF KNOWLEDGE?

Travel medicine practitioners who obtain the ISTM Certificate of Knowledge (CTH[®]) can benefit from:

- international recognition of your expertise and commitment to the field of travel health;
- continued professional development;
- enhanced professional credibility;
- increased patient referrals; and
- tools for promoting your travel clinic.

WHO CAN TAKE THE EXAMINATION?

The ISTM welcomes applications from all qualified professionals who provide travel health-related services. If you currently provide such services on a full- or part-time basis, and are a licensed healthcare professional (physician, nurse, pharmacist or other), we invite you to apply for the ISTM Certificate of Knowledge Exam.

ISTM highly recommends (but does not specifically require) that professionals applying for the Certificate have at least three (3) years of experience in travel medicine and/or formal training or education in the field.

WHEN IS THE EXAMINATION GIVEN?

The examination will be given on Wednesday, 2 May 2012, 12.00 – 17.15 at the Grand Copthorne Waterfront Hotel in Singapore. **Check-in begins at 10:30. All examinees must be seated by 11:30 for pre-exam instructions. Please have your midday meal before you arrive.**

WHAT IS THE FORMAT FOR THE EXAMINATION?

The examination will be given in a single, four-hour-and-forty-five-minute (4:45) session. The examination will consist of 200, multiple-choice questions. Each question contains four (4) options or choices, only one of which is the correct or best answer. You will be asked to select the correct or best answer from these options. Sample questions can be found on pages 8-10.

HOW MUCH DOES IT COST?

The fees for taking the ISTM Certificate of Knowledge examination are as follows (all fees are listed in U.S. Dollars):

Fees paid on or before 31 December 2011

ISTM Members:

Doctoral Level USD 450.00

Non Doctoral Level USD 300.00

Non-Members: USD 650.00

Fees paid beginning 1 January 2012

ISTM Members:

Doctoral Level USD 550.00

Non Doctoral Level USD 400.00

Non-Members: USD 750.00

Fees are payable only in U.S. Dollars and payment must be made by VISA, MasterCard or American Express. All credit card payments will be charged in U.S. Dollars. Currency conversions will be handled through the credit card company's billing arrangement with the cardholder. Please contact the ISTM Secretariat at ISTM@ISTM.org should you require special payment arrangements.

A nonrefundable processing charge of USD 50.00 is included in the application fee. This USD 50.00 charge is incurred upon receipt of your application by ISTM. If for some reason you are unable to sit for the exam, your fee will be refunded, less the USD 50.00 nonrefundable charge.

HOW DO I REGISTER?

You must complete the application electronically found on the ISTM web site at www.ISTM.org and submit it through the website with your credit card information to register for the examination. To complete your application you will also be required to upload a current photograph of yourself. Photos must clearly present your full face, and not include anyone other than you. The image should be like one used in a passport or identification document. The file you select to upload cannot be larger than 2MB (2,000,000 bytes) and it must be in one of the following formats: digital photo JPG (.jpg or .jpeg), image PNG (.png) or Adobe PDF (.pdf). Warning: Attempting to upload a file larger than the 2MB limit can result in a web site error, so be sure your file is smaller than the 2MB limit.

To take the examination, complete applications must be filed electronically by **1 April 2012**. When your application has been reviewed and accepted, you will receive an acknowledgment via e-mail and your name will be entered on the roster of candidates eligible to take the exam.

By **15 April 2012** you will receive an email with instructions on how to access and print your examination confirmation packet from the ISTM website. The packet will contain specific information about the date, time and location of the testing site, onsite instructions and information about the test delivery, and your admissions card. Your admissions card will contain your individual identification/seat number and photograph. If for some reason your photograph does not print on your admissions card, please contact the ISTM Secretariat at ISTM@ISTM.org. You **MUST** bring a printed copy of the admissions card and a government issued photo identification (e.g. a passport or driver's license) with you to be admitted into the exam room. Please add the following two email addresses: ISTM@ISTM.org and ISTMWebMailer@shoreland.com to your email address book to be sure the spam filters on your email account will accept email from this address. Notice of how to access exam results when available will also come from this email address.

If you do not receive the examination packet email by 17 April 2012, please contact the ISTM Secretariat at ISTM@ISTM.org.

If, for any reason, you have registered but are unable to take the examination, you may request a refund of the examination fee no later than 1 April 2012. ISTM will retain the USD 50.00 nonrefundable processing charge. If you wish to take the examination at a future date, you must submit a new application and application fee.

HOW ARE SPECIAL TESTING ACCOMMODATIONS REQUESTED?

A candidate may request a special accommodation due to disability, handicap, or other condition that may impair the ability of the candidate to take the exam. To request special accommodations, a candidate should contact ISTM as early as possible to request a Special Accommodations Request Form. A candidate must also provide written documentation from an appropriate health care professional, including a diagnosis of the health condition and a specific accommodation requested. The Request Form and medical documentation must be submitted with the application on or before the deadline of 1 April 2012. ISTM will make reasonable efforts to accommodate eligible candidates. The accommodations may include auxiliary aids and services that do not present an undue burden to ISTM and do not fundamentally alter the measurement of the knowledge the examination is intended to test. If such request is granted, ISTM will provide reasonable testing accommodations without charge to the candidate.

WHAT ARE THE TESTING SITE REQUIREMENTS?

- You must present your admission card and separate government issued photo identification (e.g., passport, driver's license) at the testing site in order to take the examination.
- You should arrive at the testing site approximately 1 hour prior to the examination to allow sufficient time for you to check-in and locate your seat. **Late arrivals will not be admitted to the examination.**
- You may not use devices with memory capabilities, audible beepers, cellular phones, books or papers in the testing room.
- Unauthorized visitors will not be allowed at the examination site.
- Water will be provided in the testing room, and you may bring a bottle of water into the room with you. All other food and beverages are prohibited.
- Purses, luggage, study materials and other objects may not be kept with you during the test. If you are uncomfortable leaving these items at the front of the room, please do not bring them with you to the test center.
- No testing aids or materials will be permitted in the examination room except for printed translation dictionaries without maps. (Proctors will physically check your translation dictionary as you enter the exam room.) Electronic translation dictionaries are not permitted.

Before you take the examination, you will be asked to sign the following statement:

Due to the confidential and secure nature of this examination, I agree that I will not copy or retain examination questions or transmit them in any form to any other person or organization.

If you do not sign this statement, you will not be permitted to take the examination, or your examination results may be invalidated. The theft or attempted theft of the examination or the copying or disclosure of examination questions is punishable by law.

WHAT ARE THE REQUIREMENTS DURING THE EXAMINATION?

The examination will be given under strict security. You will be required to show government issued photo identification in order to enter the testing site and trained proctors will supervise the examination. Irregularities observed during the examination, such as creating a disturbance, giving or receiving unauthorized information or aid to or from other examinees, or attempting to remove examination materials or notes from the testing room may be sufficient cause to end your participation in the examination or to invalidate or cancel your scores. Examination proctors may identify irregularities by observation, evidence of subsequent statistical analysis of answer sheets or other means. ISTM reserves the right to investigate each incident of possible misconduct or irregularity and to take appropriate response actions.

HOW IS THE EXAMINATION SCORED?

Following the examination, the questions are analyzed statistically to identify any hidden flaws. Questions that appear to be flawed are discussed by the ISTM Examination Committee to determine if they should be deleted from scoring entirely or if credit should be given for more than one answer. Once these issues are resolved, the examination is scored.

Your performance on the examination will be measured against a predetermined standard of knowledge. This standard is the level of knowledge that can reasonably be expected of individuals with basic competence in travel medicine practice. You will NOT be measured against the performance of the other individuals taking the examination. This means that if everyone who takes the examination meets the knowledge standard, everyone will pass. It also means that there is no pre-determined passing score; the required number of questions answered correctly to pass the exam changes each time the exam is presented. Unfortunately there will always be some people who miss passing by one or two correct answers. Please realize that to maintain the integrity of the examination, no exceptions can be made regarding the score required to pass the examination.

The passing score for the ISTM examination is set by an international panel of experts, representative of the field of travel medicine, supervised by the ISTM Exam Committee. These experts review each examination question, evaluate the difficulty of the question and judge how a professional with basic competence would perform on the question. These judgments are analyzed statistically to determine the passing score.

WHAT INFORMATION WILL I RECEIVE ABOUT MY SCORE?

The examination is designed only to distinguish those who have the basic level of professional knowledge from those who do not. A candidate who receives a high score on the examination will not necessarily be a better practitioner than another who passes with a lower score. Therefore, if you pass the examination, you will be informed only that you have successfully completed the Certificate of Knowledge process. You will NOT be notified of your actual score.

If you fail the examination, you will be notified of your score and the minimum score required to pass that version of the exam. You will also receive a diagnostic report showing your performance in each content area. This information is provided to assist you in deciding whether to retake the examination and how to plan your study efforts for future examinations.

WHEN WILL I RECEIVE MY EXAMINATION RESULTS?

Within six to seven weeks after the exam date you will receive an email from ISTM@ISTM.org with the instructions on how to retrieve your exam results through the secure portal on the ISTM website. **TO PROTECT THE CONFIDENTIALITY OF YOUR EXAMINATION SCORE, NO RESULTS WILL BE GIVEN OTHER THAN THROUGH THE SECURE PORTAL ON THE ISTM WEBSITE.** Please be sure to add ISTM@ISTM.org to your email address book to be sure the spam filters on your email account will accept email from this address.

Request for Hand Scoring

If you fail the examination, you may ask that your examination be rescored by hand to verify the reported score. The cost to have your examination hand-scored is USD 55.00. If you wish to request a hand-scoring of your exam, please email the ISTM Secretariat at ISTM@ISTM.org for more information. Requests for hand scoring can be honored only up to six (6) months after the testing date.

Cancellation of Scores

If, for any reason, you decide that you do not want your score reported, you may follow either of two procedures:

1. Tell an examination proctor before leaving the examination site that you wish to cancel your scores, and complete and sign a Score Cancellation Form.
2. Write to the ISTM Secretariat at ISTM@ISTM.org requesting cancellation of your scores. Your written request must be signed and must be received within five (5) days after the date of the examination.

A cancelled score will not be reported to you or to ISTM, nor will a record be kept of your examination results. No refunds will be given for score cancellations. To retake the examination after a score cancellation, a new application and fee must be submitted.

Retaking the Examination

There is no limit on the number of times that you may apply for and take the examination. A new application form and all applicable fees must be submitted each time reexamination is requested.

Appeals

All complaints and appeals related to the Certificate of Knowledge Program are governed by the ISTM Certificate of Knowledge Program Appeals Procedures. This appeals process is the only way to resolve any application, eligibility, examination, qualification or other related challenge, complaint and claim of irregularity.

Please note that the examination booklets are destroyed immediately after the examination and answer sheets are destroyed six (6) months after the examination date, unless the candidate submits a written request to the ISTM Examination Committee, which sets forth a sufficient reason for longer preservation of the answer sheet. Such requests must be received by the ISTM within six (6) months of the test administration and will be resolved solely by the committee. ISTM Exam Committee decisions concerning such requests are not subject to appeal.

Nondiscrimination Policy

ISTM does not discriminate against any person on the basis of age, gender, sexual orientation, race, religion, national origin, medical condition, physical disability, marital status or any other characteristic protected by the law.

WHAT ARE THE GUIDELINES FOR USE OF THE ISTM CERTIFICATE?

Candidates who pass the examination will receive a Certificate in Travel Health[®] suitable for framing, and will be allowed to represent that they have received such a certificate and use the CTH[®] designation. Successful candidates will receive more detailed information concerning the CTH[®] mark use policy with the

certificate. An individual who represents that he/she has received a Certificate in Travel Health[®] or CTH[®] without having fulfilled the Certificate of Knowledge Program requirements may be denied future examination eligibility and/or be subject to legal action.

HOW DO I PREPARE FOR THE EXAMINATION?

ISTM offers the following suggestions for preparing for the examination:

1. Review the examination content outline (pages 7-9) and ask yourself the following questions:
 - Do I have a good understanding of the content area?
 - Do I use this knowledge area regularly in my practice?

Plan your studying based on your answers to these questions. For example, for content areas in which you have a good understanding and use every day, you may only need to do a quick review to prepare for the examination. Whereas for areas in which you are less familiar, you may decide that you need more in-depth study or training before taking the examination.

When planning your studying, you should also think about the general percentage of the examination questions that may be devoted to each major content area (pages 7-9). If you are not very familiar with a content area that may be included in a significant proportion of the examination questions, you probably should spend some additional time studying this area.

2. Decide which resources will best help you to prepare for the examination.

You may choose to study on your own or you may decide to take a course or workshop to gain a better understanding of one or more content areas. **The ISTM provides both online and in-person courses to assist with your exam preparation. Information about these courses is available on the ISTM website at www.ISTM.org or contact the ISTM Secretariat at ISTM@ISTM.org for more information.** If you know other travel medicine practitioners in your area who are taking the examination, you may want to form a study group.
2. Answer the sample questions (pages 10-12) in this bulletin to help familiarize yourself with the types of questions on the examination.

If you have any questions about the exam and the application process, please contact the ISTM Secretariat at ISTM@ISTM.org.

WHAT DO I NEED TO KNOW FOR THE EXAMINATION?

The following is a detailed outline of the seven major content areas of the examination, with an indication (in parentheses) of the approximate percentage of the examination devoted to each area. The final content of each examination is determined by the ISTM Examination Committee alone, and is subject to modification.

I. EPIDEMIOLOGY (10%)

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

II. IMMUNOLOGY/VACCINOLOGY (20%)

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

Types of vaccines/immunizations

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/combo vaccinations:

- C. Bacille Calmette-Guérin
- D. Cholera
- E. Diphtheria
- F. Encephalitis, Japanese
- G. Encephalitis, tick-borne
- H. Haemophilus influenzae type B
- I. Hepatitis A
- J. Hepatitis B
- K. Hepatitis A and B combined
- L. Immune globulin
- M. Influenza
- N. Measles
- O. Meningococcal
- P. Mumps
- Q. Pertussis (DTaP)
- R. Plague
- S. Pneumococcal
- T. Poliomyelitis
- U. Rabies
- V. Rubella

- W. Tetanus
- X. Typhoid
- Y. Varicella
- Z. Yellow Fever

III. PRE-TRAVEL CONSULTATION/MANAGEMENT (35%)

Patient evaluation

- A. Relevant medical history (e.g. previous vaccinations, allergies, chronic illness)
- B. Evaluation of travel itineraries/risk assessment (e.g. pre-existing activities, travel to rural vs. urban areas)
- C. Assessment of fitness/contraindications to travel (e.g. pre-existing illness, fitness to fly)

Special populations

Unique management issues pertaining to the following populations:

- D. Athletes
- E. Corporate travelers
- F. Disaster/relief workers
- G. Elderly travelers
- H. Infants and children
- I. Immigrants/expatriates
- J. International adoptees
- K. Missionaries/volunteers
- L. Pregnant travelers
- M. Students
- N. Travelers with chronic diseases (diabetes, chronic obstructive pulmonary disease, cardiovascular disease)
- O. Travelers with disabilities
- P. Travelers who are immunocompromised, including HIV and AIDS
- Q. VFR's (those visiting friends and relatives in their countries of origin)

Special itineraries

Unique management issues associated with the following activities/itineraries:

- R. Cruise ship travel
- S. Diving
- T. Extended stay travel
- U. Extreme/wilderness/remote regions travel
- V. Last minute travel
- W. Mass gatherings (e.g., the Hajj)

- X. High altitude travel
- Y. Travel to areas experiencing disease outbreaks
- Z. Air travel

Prevention and self-treatment

- AA. Travel health kits
- BB. Chemoprophylaxis (e.g. malaria, travellers' diarrhea, filariasis)
 - 1. Malaria
 - 2. Travellers' diarrhea
 - 3. Filariasis
 - 4. Altitude illness
- CC. Self-treatment
 - 1. Malaria
 - 2. Diarrhea
- DD. Personal protective measures (e.g. restriction of outdoor activity at dawn and dusk and barrier protection ([e.g., bed nets, insect repellents])

Precautions (and reasons for precautions) regarding:

- EE. Food consumption
- FF. Water consumption and purification
- GG. Contact with fresh and salt water
- HH. Walking barefoot
- II. Animal contact
- JJ. Close interpersonal contact (e.g., sexually transmitted diseases)
- KK. Safety and security

IV. DISEASES CONTRACTED DURING TRAVEL (10%)

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

Diseases associated with vectors

- A. African Tick Bite Fever
- B. Dengue
- C. Encephalitis, Japanese
- D. Encephalitis, tick-borne
- E. Filariasis (e.g. Loa loa, bancroftian, onchocerciasis)
- F. Hemorrhagic fevers
- G. Leishmaniasis
- H. Lyme
- I. Malaria
- J. Plague

- K. Rift Valley Fever
- L. Trypanosomiasis, African
- M. Trypanosomiasis, American
- N. Typhus Fever
- O. West Nile
- P. Yellow fever
- Q. Other (Emerging Infections)

Diseases associated with person-to-person contact

- R. Diphtheria
- S. Hepatitis B
- T. Hepatitis C
- U. Influenza
- V. Measles
- W. Meningococcal disease
- X. Mumps
- Y. Pertussis
- Z. Pneumococcal disease
- AA. Rubella
- BB. Sexually transmitted diseases
- CC. Tuberculosis
- DD. Varicella
- EE. Other

Diseases associated with ingestion of food and water

- FF. Amebiasis
- GG. Cholera
- HH. Cryptosporidiosis
- II. Cyclosporiasis
- JJ. Giardiasis
- KK. Hepatitis A
- LL. Hepatitis E
- MM. Poliomyelitis
- NN. Seafood poisoning/toxins
- OO. Transmissible spongiform encephalopathy
- PP. Travellers' diarrhea
- QQ. Typhoid fever
- RR. Other

Diseases associated with bites and stings

- SS. Envenomation (e.g., jellyfish, sea urchin, scorpion, snake)
- TT. Herpes B Virus
- UU. Rabies

Diseases associated with water/environmental contact

- VV. Cutaneous larva migrans
- WW. Legionella
- XX. Schistosomiasis
- YY. Tetanus

V. OTHER CONDITIONS ASSOCIATED WITH TRAVEL (15%)

Conditions Occurring During or Immediately Following Travel

Symptoms, prevention and treatment of:

- A. Motion sickness
- B. Barotrauma
- C. Thrombosis/Embolism
- D. Jet lag

Conditions Associated with Environmental Factors

Symptoms, prevention and treatment of:

- E. Sunburn, heat exhaustion and sun stroke
- F. Frostbite and hypothermia
- G. Respiratory distress (associated with humidity, pollution, etc.)
- H. Altitude sickness

Threats to Personal Safety and Security

Precautions regarding:

- I. Accidents (e.g. motor vehicle, drowning)
- J. Other transportation
- K. Violence-related injuries

Psychocultural issues

Unique management issues associated with:

- L. Culture shock/adaptation (e.g., travellers, refugees)
- M. Repatriation

VI. POST-TRAVEL MANAGEMENT (5%)

- A. Screening/Assessment of returned travellers
- B. Emergencies and triage
- C. Conditions requiring referral to a specialist

Diagnostic and management implications of the following signs or symptoms:

- D. Diarrhea

- E. Eosinophilia
- F. Fever
- G. Nausea and/or vomiting
- H. Respiratory illness
- I. Skin problems
- J. Other

VII. GENERAL TRAVEL MEDICINE ISSUES (5%)

Medical care abroad

- A. Procedures and considerations regarding locating medical care and recommendations regarding access of medications in resource-poor areas
- B. Blood transfusion guidelines for international travellers
- C. Limitations of standard medical coverage during international travel and alternative medical insurance for international travellers
- D. Aeromedical evacuation

Travel clinic management

- E. Equipment
- F. Supplies and disposables
- G. Resources for laboratory testing
- H. Documentation and record keeping (e.g. vaccination certificate requirements, reporting of adverse events)
- I. Infection control procedures
- J. Management of medical emergencies

Travel medicine information resources

- K. International health recommendations/advisories (e.g. World Health Organization and national public health organizations)
- L. International Health Regulations
- M. National/Regional recommendations, including issues regarding national/regional differences
- N. Accessing health information for travellers

Please note that the questions from each content area will be mixed throughout the examination. The questions will NOT be presented in content area order on the examination.

SAMPLE QUESTIONS

Below are 20 sample questions that examinees may want to review before taking the ISTM Certificate of Knowledge in Travel Medicine Exam. An international panel of travel medicine experts, representing a variety of professional disciplines, developed the questions. Each question has only one correct answer. An answer key appears at the bottom of page 11. Please note that the difficulty of these sample questions may not be representative of the overall difficulty of the examination.

1. According to International Health Regulations, national governments must report which of the following diseases to the World Health Organization (WHO) for maintenance of an infected area list?
 - A. Meningococcal meningitis
 - B. Ebola hemorrhagic fever
 - C. Yellow fever
 - D. Human immunodeficiency virus
2. A 25-year-old male is admitted to the hospital for unexplained high fever and diarrhea over the last week. He returned 4 months ago from a 1-month trip to India. He states that he took mefloquine weekly as prescribed (without missing any doses) prior to his trip, during his trip, and for 4 weeks after he returned. The most appropriate first diagnostic step is
 - A. a stool examination for ova and parasites
 - B. a blood culture to rule out typhoid fever
 - C. a blood smear for malaria parasites
 - D. an amoebic serology
3. Which of the following vaccinations is contraindicated for a traveller who has the Acquired Immunodeficiency Syndrome (AIDS) and a CD4 count of $<200/\mu\text{L}$ (normal range $400/\mu\text{L}$ - $1500/\mu\text{L}$)?
 - A. Japanese B encephalitis
 - B. Hepatitis A
 - C. Pneumococcal
 - D. Varicella
4. A traveller to Mexico develops sudden onset of severe, watery diarrhea, with four bowel movements in the first hour and a fever of $38.5\text{ }^{\circ}\text{C}$ ($101.3\text{ }^{\circ}\text{F}$). The best treatment at this time is
 - A. metronidazole
 - B. ciprofloxacin
 - C. oral rehydration solution
 - D. bismuth subsalicylate tablets
5. Malaria chemoprophylaxis should always be recommended to travellers who are going for a 2-week visit to oceans or beaches in which of the following countries?
 - A. Kenya
 - B. Morocco
 - C. Thailand
 - D. Fiji
6. The risk of death from hepatitis A for a traveller 50-years-old or greater is approximately
 - A. $< 1\%$
 - B. 1-3%
 - C. 5-8%
 - D. 10-13%
7. The risk of developing dengue hemorrhagic fever or dengue shock syndrome is increased among travellers who have a history of
 - A. being bitten frequently by mosquitoes of different species
 - B. allergy to bee stings
 - C. past dengue infection
 - D. no prior travel to dengue risk areas
8. A traveller with chronic obstructive pulmonary disease and who is oxygen-dependent wishes to take a long-distance flight. Which of the following statements regarding oxygen use aboard commercial aircraft is correct?
 - A. Airlines are required to provide oxygen without prior notification.
 - B. Airlines are prohibited from providing oxygen for medical use aboard aircraft except in an emergency.
 - C. Individuals who are oxygen-dependent at sea level should not fly on commercial airlines.
 - D. Arrangements for oxygen use must be made with the airline several days in advance of a flight.
9. An unvaccinated traveller is at risk of contracting yellow fever in which of the following countries?
 - A. Nicaragua
 - B. South Africa
 - C. Brazil
 - D. Indonesia
10. Two tablets of bismuth subsalicylate taken 4 times daily during a 1-week trip to a developing country decreases the incidence of traveller's diarrhea by approximately what percentage?
 - A. 15
 - B. 40
 - C. 60
 - D. 90

11. The most common cause of death among travellers to developing countries is
- malaria
 - motor vehicle accidents
 - drowning
 - hepatitis A
12. The term "morbidity" is used to describe
- recovery rates after an illness
 - death rates
 - illness rates
 - time of illness to recovery
13. *Plasmodium falciparum* resistance to mefloquine is found primarily in
- sub-Saharan Africa
 - Central America
 - South America
 - Southeast Asia
14. Wild polio virus is still in circulation in which of the following countries?
- India
 - Brazil
 - Turkey
 - Vietnam
15. Travellers' diarrhea due to quinolone-resistant *Campylobacter* species is most common in which of the following countries?
- Peru
 - Mexico
 - Nepal
 - Thailand
16. How many people worldwide die from malaria each year?
- 50,000 - 100,000
 - 500,000 - 750,000
 - 1,000,000 - 3,000,000
 - 10,000,000 - 12,000,000
17. The concurrent administration of which of the following pairs of vaccines and medications may result in a reduced efficacy of the vaccine?
- Oral typhoid vaccine and ciprofloxacin
 - Meningococcal meningitis vaccine and rifampin
 - Yellow fever vaccine and mefloquine
 - Japanese B encephalitis vaccine and acyclovir
18. Which of the following regimens is inappropriate for malaria chemoprophylaxis for a healthy adult travelling to India?
- Mefloquine
 - Chloroquine
 - Atovaquone/Proguanil
 - Doxycycline
19. A family of four is leaving in January for a 2-year stay in Chad. The family consists of a 46-year-old father, a 34-year-old mother who is 5 months pregnant, a 4-year-old boy, and a 2-year-old girl. They have learned of a meningitis epidemic that has just begun in Chad. Assuming that the epidemic strain is covered by an available vaccine, which members of the family should be vaccinated?
- Father and mother only
 - Father, mother, and 4-year-old boy
 - Father and the two children
 - The entire family
20. A traveller who has had no prior rabies immunization is bitten by a dog in Nepal. The traveller does not seek rabies postexposure treatment in Nepal, but presents 2 weeks after the bite. The recommended treatment at this point is to administer
- a series of rabies vaccine, but do not give human rabies immune globulin (HRIG) as more than 7 days has elapsed between the bite and the start of the vaccine
 - nothing as more than 7 days have elapsed since the bite
 - HRIG alone since more than 7 days have elapsed since the bite
 - HRIG and begin a series of injections of rabies vaccine

Sample Questions Answer key

1(C) 2(C) 3(D) 4(B) 5(A) 6(B) 7(C) 8(D) 9(C) 10(C) 11(B)
12(C) 13(D) 14(A) 15(D) 16 (C) 17(A) 18(B) 19(D) 20(D)