



Recommendations for the practice of travel medicine

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Summary Travel Medicine has emerged as a distinct entity over the last two decades in response to a very substantial increase in international travel and is now forging its own identity, remit and objectives for care of the traveller.

Crucial to the formation of any speciality is the definition of recommendations for its practice. This is particularly important and needed for travel medicine as it overlaps with and forms part of day-to-day work in a number of different medical specialities.

This document defines a set of recommendations for the practice of travel medicine from the Faculty of Travel Medicine of the Royal College of Physicians and Surgeons of Glasgow.

Their objective is to help raise standards of practice and achieve greater uniformity in provision of services, better to protect those who travel.

As travel medicine moves towards applying for speciality status, these standards will also contribute to that process.

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Introduction

Travel Medicine focuses on the health and well-being of international travellers. Also known as Travel Health or Travel Health Medicine, Travel Medicine has emerged as a distinct entity over the last two decades in response to a very substantial increase in international travel. Most

frequently practised part-time by health professionals in a variety of fields, notably primary care and infectious diseases, recent years have seen the emergence of full time practitioners at Consultant level. We now see travel medicine forging its own identity, remit and objectives for care of the traveller. At the time of publication Travel Medicine is not a speciality as recognised under UK legislation (as listed in the General and Specialist Medical Practice (Education, Training and Qualifications) 2010 order). Therefore, this set of recommendations should be seen in that light.

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Glossary

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| CPD | Continuing Professional Development |
| FCO | Foreign and Commonwealth Office |
| GMC | General Medical Council |
| HPA | Health Protection Agency |
| HPS | Health Protection Scotland |
| MFTM | Member of the Faculty of Travel Medicine |
| NaTHNaC | National Travel Health Network and Centre |
| RCN | Royal College of Nursing |
| RCPSG | Royal College of Physicians and Surgeons of Glasgow |
| RPSGB | Royal Pharmaceutical Society of Great Britain |
| SPC | Summary of Product Characteristics |
| VFRs | Visiting Friends and Relations |

Its core practice is risk assessment and risk management, not only of communicable diseases but also conditions resulting from the natural environment (eg extremes of temperature; altitude), local circumstances (eg road traffic hazards; risks to personal security) and underlying illness in the traveller which might be affected by the circumstances of travel.

Travel medicine also considers the influence of travel on the country visited. Mass tourism can have a considerable effect on the people, environment and economy of the host country.

Crucial to the formation of any speciality is the definition of recommendations for its practice. This is particularly important for travel medicine as it overlaps with and forms part of day-to-day work in a number of different medical specialities.

In recent years there has been a move to improving standards of travel health advice in the UK and internationally. The Royal College of Nursing (RCN) has published *Travel Health Nursing: Career and Competence Development* which is endorsed by the Faculty of Travel Medicine (FTM) of the Royal College of Physicians and Surgeons of Glasgow (RCPSG). The National Travel Health Network and Centre (NaTHNaC) has mandated standards of training and practice in the administration of Yellow Fever Vaccine at centres across England, Wales and Northern Ireland. Health Protection Scotland has similar authority for centres in Scotland.

Training has traditionally been supported by the appropriate medical Royal College. In line with this the FTM aims to support education and professional development in travel health and strives for improvement in the quality of care provided by its practitioners.

This document defines a set of recommendations from the Faculty of Travel Medicine for the practice of travel medicine in the UK. Their objective is to help raise standards of practice and achieve greater uniformity in provision of services, in line with generally agreed criteria. As travel medicine moves towards applying for speciality status, these standards will help in the production of a draft training syllabus. With that in mind, they have been mapped to the curriculum for the MFTM examination of the RCPSG (available via the College web site <http://www.rcpsg.ac.uk/>) which was itself mapped against the

General Medical Council's publication *Good Medical Practice*. The MFTM examination is designed for those health professionals aspiring to the standard of an independent practitioner in travel health. It is recognised that certain sections of this document include specialised recommendations which may be outside the expertise of many general travel health practitioners. In those situations the recommendations relate to the advice a traveller should receive from the appropriate specialist, to whom referral may be made. Nurses undertaking general travel health practice should follow the RCN Guidelines.

The Infectious Diseases Society of America has published its own set of guidelines which should be consulted by those practising in North America.

Statutory regulations and/or information sources relevant to all sections

In the UK, the principal resource for travel health professionals is the "Yellow Book" Health Information for Overseas Travel, Prevention of illness in Travellers from the UK. National Travel Health Network and Centre, London UK 2010.

<https://connect3.communisis.com/NHS/Public/Catalogue.aspx>

Other important resources (listed alphabetically) are:

- Department of Health. Immunisation Against Infectious Disease www.dh.gov.uk/greenbook
- European Centre for Disease Control and Prevention <http://ecdc.europa.eu/en/Pages/home.aspx>
- General Medical Council – Good Medical Practice www.gmc-uk.org/guidance/good_medical_practice/index.asp
- Health Protection Agency (HPA) Advisory Committee on Malaria Prevention (ACMP) Guidelines for Malaria Prevention in UK Travellers www.hpa.org.uk (search under index for malaria)
- Health Protection Agency Malaria Reference Laboratory www.malaria-reference.co.uk
- Health Protection Scotland Travel Unit www.hps.scot.nhs.uk/travel/index.aspx and www.travax.nhs.uk
- International Society of Travel Medicine www.istm.org

- National Travel Health Network and Centre www.nathnac.org
- NHS Choices www.nhs.uk
- Nursing and Midwifery Council – Code of Professional Conduct www.nmc-org.uk
- Royal College of Nursing. Travel Health Nursing: Career and Competence Development www.rcn.org.uk (access through publications section)
- Royal Pharmaceutical Society of Great Britain – www.rpsgb.org.uk/
- The Journal of Travel Medicine
- Travel Medicine and Infectious Disease – The official journal of the Faculty of Travel Medicine
- US Centers for Disease and Control and Prevention www.cdc.gov
- World Health Organization International Travel and Health www.who.int/ith

Section 1|Providing a travel medicine service

Standards of practice

Provision of a travel medicine service to include:

- Infrastructure: buildings, consulting rooms, information technology, suitable storage and medical equipment
- Health and Safety
- Staffing/time
- Professional registration
- Protocols and Patient Group Directions/Patient Specific Directions
- Continuous Professional Development (CPD) for all staff in travel health
- Record keeping including risk assessment forms, advice leaflets etc.
- Accounts

Measurable outcomes

- Provision of a service meeting general professional standards laid down by the appropriate regulatory body (if a private service – see below for different UK country bodies) Health Protection Scotland (yellow fever); NaTHNaC (yellow fever); RCN; RPSGB; or GMC

Practitioner knowledge, understanding and skills

- Understands the principles of organising a travel clinic.
- Understands the medico-legal aspects of a travel medicine service
- Understands the Guidelines for Medicines Management
- Able to undertake risk assessment and management
- Able to apply evidence-based practice
- Understands appropriate use of audit
- Aware of and acts on published guidelines for practice
- Understands and acts on requirements for correct professional behaviour under the appropriate professional code
- Understands and acts on guidelines for medical ethics

- Identifies own learning and development needs and incorporates these into own personal development plan.

Attitudes and behaviours

- Able to work in a multidisciplinary team
- Understands the skills of other team members
- Understands the roles of other team members
- Uses effective communication skills
- Committed to maintaining knowledge base, appraisal, continuous professional development and revalidation
- Appreciates need to comply with policies, procedures and guidelines
- Seeks and uses feedback from others
- Committed to reflection on practice and continuous improvement
- Committed to evidence-based practice
- Sensitive to the traveller's needs
- Adopts a non judgemental approach
- Acts as an advocate for the traveller.

Statutory regulations and information sources relevant to this section see second page and in addition:

- For private clinics
 - England – Care Quality Commission <http://www.cqc.org.uk/>
 - Northern Ireland – Regulation Quality Improvement Authority <http://www.rqia.org.uk/home/index.cfm>
 - Scotland – Scottish Commission for the Regulation of Care <http://www.carecommission.com/>
 - Wales – Healthcare Inspectorate Wales <http://www.hiw.org.uk/>

Section 2|Geographical issues

Standards of practice

- Applies working knowledge of world geography to permit recognition of travellers' destinations
- Understands the effects of geographical location on the safety of travel including: altitude; weather/seasons; desert; flood risk; tsunami risk etc
- Understands the effects of geography on population distribution
- Understands the effects of geography on disease distribution, e.g. vector distribution.

Measurable outcomes

- Uses an up-to-date atlas or online maps to identify relevant geographical areas and global destinations
- Uses the internet to find relevant information to inform practice, including country-specific recommendations made by national and international travel health authorities
- Traveller documentation reflects all relevant travel-related risks identified applicable to the geographical area to which the individual is travelling.

Practitioner knowledge, understanding and skills

- Knows how to use an atlas or internet maps
- Has good geographical knowledge
- Applies knowledge of epidemiology of disease to risk assessment and risk management advice
- Knows how to access further information regarding global destinations and their political security
- Has knowledge of the common travel-related illnesses and other risks to health.

Attitudes and behaviours

- As for Section 1

Statutory regulations and information sources relevant to this section see second page and in addition:

- A good atlas or access to an online resource such as Google maps
- Royal Geographical Society <http://www.rgs.org/HomePage.htm>
- Royal Scottish Geographical Society <http://www.rsgs.org/>
- World Health Organization Global Health Atlas <http://www.who.int/GlobalAtlas/>

Section 3|Risk assessment

Standards of practice

- Knows how to undertake risk assessment effectively
- Performs a comprehensive risk assessment
- Interprets the risk assessment and applies critical analysis to manage the risk by accessing the latest recommendations for travel health advice, immunisations required and malaria chemoprophylaxis appropriate to the risk assessment for the journey
- Identifies those with special risks to enable tailored risk management advice
- Recognises own limitations in relation to complex travel health issues
- Supports and educates other team members in the process of risk assessment
- Selects or develops appropriate risk assessment tools.

Measurable outcomes

- Obtains and documents accurate pre-travel medical history and previous travel history
- Completed documentation of a comprehensive risk assessment
- Specifies actual and potential risks associated with travel and the traveller and anticipated destination/s
- Keeps clear records of accurate consistent advice to travellers based on a comprehensively completed risk assessment
- Works with access to specialist advice.

Practitioner knowledge, understanding and skills

- Understands the risk assessment process and how to use a risk assessment tool.
- Knows how to perform a comprehensive risk assessment
- Able to advise on risk management
- Awareness of the hazards of different types of travel
- Understands the particular risks associated with different groups of traveller (eg children, elderly, chronic diseases)
- Knows how to access the latest information, risk assessment tools, support and advice
- Puts the information from these sources into correct perspective when giving advice.

Attitudes and behaviours

- As for Section 1

Statutory regulations and information sources relevant to this section see second page.

Section 4|Giving the advice

Standards of practice

- Provides advice to the individual traveller reflecting their particular needs
- Communicates information effectively to explain:
 - The risk of non-vaccine preventable infections e.g. Chikungunya, schistosomiasis, many sexually-transmitted infections
 - Other travel-related risks e.g. accidents, personal safety and security
 - The risk of vaccine preventable infections
 - Vaccine recommendations and malaria prevention advice appropriate to the risk assessment
 - General risk management advice relevant for all travellers e.g. food, water and personal hygiene, management of a potential rabies exposure
 - Specialist risk management advice relevant to the risk assessment e.g. high altitude advice
- Advises appropriately in situations where a traveller's time or financial situation does not allow the optimum recommendations
- Manages language barriers as effectively as possible
- Uses verbal and non-verbal communication and written advice as required
- Assesses anxieties, especially to vaccination, and acts appropriately.

Measurable outcomes

- The traveller's medical record clearly describes the advice the individual is given specific to the risks identified
- Clear documentation of accurate explanation given and of the traveller's having understood, appropriate to the risk assessment

- Clear documentation of the reason for prioritisation where the traveller is unable to meet the optimum recommendations
- Clear documentation of accurate advice given, implications for the traveller and consent received.

Practitioner knowledge, understanding and skills

- Awareness of disease and other travel-related risks relevant to the traveller
- Awareness of vaccine recommendations and requirements
- Has good knowledge of strategies for malaria prevention
- Knows how to prioritise tasks
- Knows how to access advice and information to aid prioritisation
- Uses verbal and non-verbal communication and written advice as required
- Awareness of relaxation strategies and how to use them.

Attitudes and behaviours

- As for Section 1

Statutory regulations and information sources relevant to this section see second page:

Section 5|Consent

Standards of practice

- Understands the issues of informed consent in relation to travel health and acts accordingly
- Understands Gillick competence in UK law for those under 16 years of age.

Measurable outcomes

- Obtains and documents valid informed consent for the procedures involved in the travel health consultation.

Practitioner knowledge, understanding and skills

- Understands the issues of informed consent in relation to travel health.
- Understands the issues relating to minors and adults who do not have competence to consent.

Attitudes and behaviours

- As for Section 1

Statutory regulations and information sources relevant to this section see second page and in addition:

- British Medical Association – Consent tool kit (Fifth Edition 2009) http://www.bma.org.uk/images/consenttoolkitdec2009_tcm41-193139.pdf
- Department of Health, *Reference guide to consent for examination or treatment*, 2nd edition 2009 http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_103643

Books

- Dimond, B. 2009. *Legal Aspects of Consent: (Legal Aspects of Healthcare)* 2nd Edition, Quarry Books: London

Section 6|Principles of immunisation

Standards of practice

- Demonstrates ability to order, store and handle vaccines to prevent wastage and keep vaccines in optimum condition prior to administration
- Balances the risks and potential benefits of immunisation in the context of risk of exposure to vaccine preventable disease at destination/s
- Demonstrates knowledge of the vaccine preventable diseases and the vaccines used to prevent them
- Schedules vaccinations in an appropriate way
- Checks if childhood immunisation schedules are up-to-date according to the applicable national programme and acts appropriately if not
- Demonstrates an excellent vaccine administration technique
- Keeps up-to-date with adult and paediatric resuscitation and anaphylaxis training
- Understands the need to report a suspected adverse drug reaction (ADR) or a side effect from a medicine or vaccine via the Yellow Card Scheme.

Measurable outcomes

- Orders, stores and handles vaccines in optimum conditions
- Recommends and administers immunisations as necessary
- Keeps accurate records of vaccines administered
- Documents evidence of checks made and gaps identified in traveller's immunisation history
- Clear, accurate, documented evidence of corrective action undertaken as required
- Vaccines are administered safely and correctly with minimal discomfort to the traveller
- Records an ADR through the Yellow Card Scheme
- Traveller satisfaction.

Practitioner knowledge, understanding and skills

- Has good theoretical knowledge of immunology and vaccines
- Understands the benefits of immunisation
- Awareness of the availability, efficacy and safety of vaccines
- Awareness of the correct ordering, storing and handling of vaccines
- Awareness of national childhood immunisation schedules and updates to them.
- Understands the corrective action required where the schedule is not complete
- Has knowledge of the legal requirements which apply to Yellow Fever Vaccination Centres
- Awareness of the correct dosage and route of administration as per Summary of Product Characteristics and prescription
- Competently and confidently administers vaccinations
- Able to diagnose and manage allergic reactions including anaphylaxis
- Awareness of the requirement to report an ADR via the Yellow Card Scheme.

Attitudes and behaviours

- As for Section 1

Statutory regulations and information sources relevant to this section see second page and in addition:

- Department of Health. Protocol for ordering, storing and handling vaccines http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_120010
- Department of Health Immunisation Training http://www.dh.gov.uk/en/PublicHealth/Immunisation/Localcoordinatorstoolkit/DH_110285
- Health Protection Agency Immunisation Training Resources for Healthcare Professionals <http://www.hpa.org.uk/EventsProfessionalTraining/InfectionsTraining/InfectionsTrainingResources/ImmunisationTrainingResources/>
- Health Protection Agency. Vaccination of Individuals with Uncertain or Incomplete Immunisation Status. http://www.hpa.org.uk/web/HPAwebFile/HPAweb_C/1194947406156
- Health Protection Scotland. Immunisation training <http://knhswww1.the-knowledge-business.com/KNHSIMM/index.asp>
- Medicines and Healthcare products Regulatory Agency (MHRA) Patient Group Directions <http://www.mhra.gov.uk/Howweregulate/Medicines/Availabilityprescribing-selling-and-supplying-of-medicines/ExemptionsfromMedicinesActrestrictions/PatientGroupDirectionsintheNHS/index.htm>
- MHRA Yellow Card Scheme <http://yellowcard.mhra.gov.uk/>

- NHS Core Learning Unit Immunisation and Vaccination programme, training online <http://www.corelearningunit.nhs.uk>
- NHS Patient Group Directions <http://www.portal.nelm.nhs.uk/PGD/default.aspx>
- NHS National Prescribing Centre. Patient Group Directions December 2009 http://www.npc.nhs.uk/non_medical/resources/patient_group_directions.pdf
- Nursing and Midwifery Council – Standards for medicines management <http://www.nmc-uk.org/Documents/Standards/nmcStandardsForMedicinesManagementBooklet.pdf>

Books

- Plotkin S, Orenstein W, Offit P. Vaccines. 5th Edition, 2008. Saunders, Elsevier

Section 7|Injuries and accidents

Standards of practice

- Demonstrates education of the traveller regarding accident risks whilst abroad
- Demonstrates identification of key risks associated with roads, water, sports and accommodation
- Provides appropriate advice to the traveller on the effect of alcohol and drugs on accident risks
- Provides appropriate advice on adequate insurance cover and advises regarding potential invalidation of insurance cover depending on behaviour/activity.

Measurable outcomes

- The traveller's documentation shows that the above-mentioned Standards of Practice have been followed and clearly articulates the advice the individual is given specific to the risks identified.

Practitioner knowledge, understanding and skills

- Knows and understands the causes of common accidents and injuries suffered by travellers abroad
- Able to give practical advice on minimising the chance of suffering accidents or injuries whilst abroad
- Awareness of issues regarding access to medical help and repatriation.

Attitudes and behaviours

- As for Section 1

Statutory regulations and information sources relevant to this section see second page and in addition:

- Royal Society for the Prevention of Accidents. <http://www.rosipa.com/>

- World Health Organization. Road traffic injuries http://www.who.int/violence_injury_prevention/road_traffic/en/

Section 8|Gastrointestinal infections

Standards of practice

- Explains the nature of the organisms which cause gastrointestinal infections
- Explains the route of transmission of gastrointestinal infections
- Explains the principles of food, water and personal hygiene measures
- Explains the methods available for water purification
- Advises the use of vaccines where appropriate for the prevention of gastrointestinal infection, whilst emphasising that most such infections are not currently vaccine preventable
- Advises on the use of antibiotic or other prophylaxis for travellers where indicated
- Advises on self-management of travellers' diarrhoea

Measurable outcomes

- There is clear documentation that accurate advice relevant to the risk assessment has been given and the traveller's understanding has been checked
- There is clear documentation of the reason for prioritisation where the traveller is unable to meet the optimum recommendations
- Traveller satisfaction.

Practitioner knowledge, understanding and skills

Has knowledge and understanding of:

- The nature of the organisms which cause gastrointestinal infections
- The route of transmission of gastrointestinal infections
- The principles of food, water and personal hygiene measures
- The methods available for water purification
- The use of vaccines for the prevention of gastrointestinal infection
- The use of antibiotic or other prophylaxis for travellers where indicated
- Self-management of travellers' diarrhoea

Attitudes and behaviours

- As for Section 1

Statutory regulations and information sources relevant to this section see second page and in addition:

Health Protection Agency. Travellers' Diarrhoea. <http://www.hpa.org.uk/Topics/InfectiousDiseases/InfectionsAZ/TravellersDiarrhoea/>

Hill DR, Ryan ET. Management of travellers' diarrhoea. *British Medical Journal* 2008. 6; 337:a1746.

Patient resources

NHS Choices. Travellers' Diarrhoea. <http://www.nhs.uk/conditions/travellersdiarrhoea/Pages/Introduction.aspx>

Section 9|Malaria prevention

Standards of practice

- Demonstrates understanding of malaria and its transmission
- Demonstrates understanding of the geographic distribution and degrees of malaria risk
- Demonstrates understanding of the methods for personal protection and malaria chemoprophylaxis
- Demonstrates ability to undertake a risk-benefit assessment for malaria prevention measures
- Advises the traveller on the effective use and safety of antimalarial prevention measures.

Measurable outcomes

- Record that a risk-benefit assessment has been performed and advice communicated to the traveller
- Record that the ABCD of malaria prevention has been communicated to the traveller
- Record that necessary antimalarials +/- stand by emergency medication have been prescribed
- Record that possible side effects have been explained to the traveller
- Patient satisfaction.

Practitioner knowledge, understanding and skills

- Understands the malaria parasite life cycle
- Has good knowledge of the geographical distribution of malaria and where to find current resources to provide this
- Understands the principles of malaria prevention and is able to explain them to the traveller to cover: awareness of risk, bite prevention, appropriate chemoprophylaxis and the importance of compliance
- Has good knowledge of correct choice of antimalarial for the country visited
- Has good knowledge of the main drug interactions and side effects of antimalarial drugs
- Understands the symptoms of malaria to permit rapid diagnosis and treatment of a traveller with the disease
- Knows how to access specialist advice for complex queries.

Attitudes and behaviours

- As for Section 1

Statutory regulations and information sources relevant to this section see second page and in addition:

- Health Protection Agency (HPA) Advisory Committee on Malaria Prevention (ACMP) Guidelines for Malaria Prevention in UK Travellers www.hpa.org.uk (search under index for malaria)
- Wellcome Trust <http://malaria.wellcome.ac.uk/>
- Information for travellers
 - HPA Malaria leaflet: Information for people travelling overseas (available in several languages) http://www.hpa.org.uk/web/HPAweb&HPAwebStandard/HPAweb_C/1279888827959
 - NHS Choices: Malaria information for the general public <http://www.nhs.uk/conditions/malaria/pages/introduction.aspx>
 - www.fitfortravel.nhs.uk
 - www.nathnac.org/travel/index.htm

Section 10|Vector avoidance methods

Standards of practice

- Demonstrates awareness of biting patterns of the vectors of arthropod-borne infections
- Demonstrates awareness of barrier methods to protect against arthropod bites
- Demonstrates awareness of available insect repellents, their duration of action, side effects and contraindications
- Demonstrates awareness of available insecticides for use in dwellings, on clothing and on bed nets.

Measurable outcomes

- The traveller's documentation clearly articulates the advice the individual is given is appropriate and specific to the risks identified

Practitioner knowledge, understanding and skills

- Understands the factors which influence arthropod biting of humans
- Knows which barrier methods are effective against biting arthropods
- Knows which insect repellents are available, how long they provide individual protection, their side effects and contraindications
- Knows which insecticides are suitable for use in dwellings, on clothing and on bed nets and understands how they should be used
- Is able to explain vector avoidance methods to the traveller.

Attitudes and behaviours

- As for Section 1

Statutory regulations and information sources relevant to this section see second page and in addition:

- Debboun, M., Frances, S. P., Strickman, D. A. editors. 2007. *Insect Repellents: Principles, Methods, and Uses*. CRC Press: Boca Raton, p. 495

Section 11|Excessive sun and solar damage

Standards of practice

- Demonstrates ability to assess different skin types
- Demonstrates ability to advise travellers on the recognition, treatment and prevention of sunburn and heatstroke
- Demonstrates ability to recognise skin lesions suspicious of melanoma or other skin cancers and refer for further assessment.

Measurable outcomes

- Documented evidence that the consultation adequately covers the competencies listed
- Traveller satisfaction surveys.

Practitioner knowledge, understanding and skills

- Knowledge of the effect of ultra violet (UV) light exposure on the skin
- Understands the use of sun block preparations to include UVA and UVB protection, Sun Protection Factor (SPF) values; mode of application; interaction with insect repellents
- Knowledge of the risk of skin malignancies
- Knowledge of the risk of photosensitive dermatoses associated with medication
- Understands the mechanism of heat-related illness.

Attitudes and behaviours

- As for Section 1

Statutory regulations and information sources relevant to this section see second page and in addition:

- British Association of Dermatologists <http://www.bad.org.uk/>
- Cancer Research UK: SunSmart <http://info.cancerresearchuk.org/healthyliving/sunsmart/>

Section 12|Swimming, snorkelling and diving

Standards of practice

- Demonstrates ability to advise the traveller on potential risks when they plan to swim, snorkel or scuba dive

- Demonstrates understanding of the effects of water immersion on human physiology
- Demonstrates understanding of the mechanisms of fresh water and salt water drowning
- Demonstrates understanding of the risk factors for the development of cramp whilst swimming
- Demonstrates ability to explain the safety aspects of the act of diving into water
- Demonstrates ability to perform a medical assessment of fitness for scuba diving
- Demonstrates understanding of the mechanism for and prevention of the 'bends'
- Demonstrates understanding of the implications of planned scuba diving for the choice of malaria prevention and other planned medication.

Measurable outcomes

- The patient's documentation shows that the above-mentioned Standards of Practice have been followed and clearly records the advice the individual is given specific to the risks identified.

Practitioner knowledge, understanding and skills

- Knowledge of the physiology of swimming, snorkelling or scuba diving on the traveller and their interactions with any underlying health problems
- Knowledge of and ability to discuss safety issues
- Knowledge of expert resources where further information can be obtained.

Attitudes and behaviours

- As for Section 1

Statutory regulations and information sources relevant to this section see second page and in addition:

- British Swimming and the Amateur Swimming Association <http://www.britishswimming.org/>
- British Sub Aqua Club <http://www.bsac.com/>
- UK Diving <http://www.ukdiving.co.uk/index.php>

Section 13 | Travel health issues associated with flying

Standards of practice

Civilian

- Demonstrates awareness of those conditions which contraindicate flying or can be made worse by flying, and an ability to take a relevant medical history
- Demonstrates ability to advise patients with medical, psychiatric or other conditions on the advisability of flying and what actions can be taken to make flying possible and safe, including carriage of personal medications in hand luggage where relevant

- Demonstrates familiarity with fear of flying and other psychological issues
- Demonstrates an understanding of the factors associated with development of deep vein thrombosis (DVT) and the available measures to reduce their occurrence
- Demonstrates understanding of special issues related to flying with children
- Demonstrates knowledge of regulations relating to transporting medical equipment and medication through customs
- Demonstrates understanding of issues relating to flying with a disability
- Demonstrates understanding of issues associated with effects of crossing time zones, both physiological (i.e. jet lag) and logistic (e.g. timing of doses of medications such as insulin)
- Demonstrates ability to undertake a fitness to fly assessment and complete a Medical Information for Fitness to Fly (MEDIF) form.

Professional civilian aviators

- Demonstrates understanding of the potential effects of both disease and medications (vaccines and drugs, including malaria chemoprophylaxis) on the ability to fly aircraft
- Demonstrates an understanding of the physiological aspects of the aviation environment. These include the effects of hypoxia, altitude, acceleration ("G forces"), disorientation, extremes of temperature, and ionising radiation.

Measurable outcomes

- The traveller's documentation clearly states the advice the individual is given specific to the risks identified.

Practitioner knowledge, understanding and skills

- Knowledge and understanding of the interactions and effect of flying on underlying disorders and the special requirements imposed upon a traveller planning to fly consequent upon their underlying health condition
- Knowledge and understanding of fear of flying and other psychological issues
- Knowledge of the evidence-base relating to DVT prophylaxis
- Knowledge that airlines can refuse to carry passengers whose known illness is likely to worsen during flight.

Attitudes and behaviours

- As for Section 1

Statutory regulations and information sources relevant to this section see second page and in addition:

- Assessing fitness to fly— guidelines from the Civil Aviation Authority http://www.caa.co.uk/docs/923/Fitness_To_Fly_-_Dec_2011.pdf

- Bor, R. 2003 *Passenger Behaviour*. Ashgate Publishing Limited: Aldershot. p. 323
- British Airways Health Services. Your patient and air travel. A guide to physicians http://www.britishairways.com/health/docs/before/airtravel_guide.pdf
- British Medical Association. Aviation Medicine http://www.bma.org.uk/library_medline/electronic_resources/factsheets/LIBAviationMedicine.jsp
- British Medical Association. The impact of flying on passenger health BMA report 2004 http://www.bma.org.uk/images/Impactofflying_tcm41-20362.pdf
- British Thoracic Society guidelines "Managing Passengers with Respiratory Disease Planning Air Travel." <http://www.brit-thoracic.org.uk/guidelines/air-travel-guideline.aspx>
- Campbell, R.D., Bagshaw, M. 2002. *Human Performance and Limitations in Aviation*. 3rd edition Blackwell: Oxford. 196 pp
- Cummin A, Nicholson A, (eds). *Aviation Medicine And The Airline Passenger*. Hodder Arnold, Oxford. 2002; 224 pp
- Faculty of Occupational Medicine, Royal College of Physicians, Diploma in Aviation Medicine <http://www.facocmed.ac.uk/edtrain/diplomas/davmed.jsp>
- Rainford D, Gradwell D. (eds). *Ernsting's Aviation Medicine*. Hodder Arnold. 4th Ed 2006; 864 pp
- Royal College of Nursing In-Flight Nurses community http://www.rcn.org.uk/development/communities/specialisms/in_flight

Fear of flying courses -

- <http://www.airfraid.com>
- <http://www.aviatours.co.uk/venues.html>
- <http://flyingwithoutfear.info/thecourses.htm>
- <http://www.to-fly.co.uk/>

Section 14|Psychological issues for travellers

Standards of practice

- Demonstrates ability to recognise those who have risk factors for the development of mental illness
- Demonstrates ability to take a psychiatric history
- Demonstrates ability to recognise psychiatric illness in different cultural groups
- Demonstrates ability to advise on specific issues such as fear of flying, the effects of environment, culture shock and language barrier and how these may impact on adult and child travellers
- Demonstrates the ability to recognise psychological issues related to recent service in areas of conflict.

Measurable outcomes

- Documented evidence that the travel consultation reflects the above-mentioned Standards of Practice.

Practitioner knowledge, understanding and skills

- Knowledge and understanding of common psychiatric conditions
- Understands the relationship between psychiatric disorders and physical illness
- Understands drug interactions and how they might affect the choice of antimalarial and other medications
- Awareness of possible access to medical care whilst abroad for those requiring regular supervision
- Understands issues affecting long term expatriates, including culture shock, reverse culture shock, alcohol abuse, and the effect of deployment on spouses +/- children
- Knowledge of psychological issues affecting migrants.

Attitudes and behaviours

- As for Section 1
- Emphasises the importance of not stigmatising mental illness

Statutory regulations and information sources relevant to this section see second page and in addition:

- British Psychological Society. <http://www.bps.org.uk/home-page.cfm>
- Royal College of Psychiatrists. <http://www.rcpsych.ac.uk/default.aspx?page=0>

Section 15|Travel health issues for children

Standards of practice

- Adheres to appropriate national vaccination schedules
- Identifies additional vaccine requirements
- Advises on child-specific issues relating to malaria prevention
- Understands the non specific features of malaria and the speed with which death may occur in young children with malaria
- Pays special attention to prevention of diarrhoea and other faecal-oral diseases, dehydration and heatstroke
- Advises on personal hygiene issues, especially for infants
- Advises on personal security especially prevention of kidnap
- Advises on personal safety eg drowning accidents
- Advises on increased risk of animal bites for children
- Advises on sun protection
- Advises on the purpose and use of rehydration therapy
- Understands the importance of early medical attention for post-travel illness in children.

Measurable outcomes

- The traveller's documentation clearly indicates the advice the child and parents and/or guardians are given specific to the risks identified

- Clear documentation of accurate explanation given and understanding checked appropriate to the risk assessment
- Clear documentation of the reason for prioritisation where the patient is unable to meet the optimum recommendations
- Traveller and parent/guardian satisfaction.

Practitioner knowledge, understanding and skills

- Able to communicate effectively with children, parents and/or guardians
- Has knowledge and understanding of:
 - The child-specific risk of travel-related injury and disease
 - The child-specific risk of tuberculosis
 - Malaria prevention for children
 - The purpose and methods of rehydration
 - Childhood immunisation schedules
- Is aware of child-specific features of the common travel-related diseases, especially malaria and enteric infections.

Attitudes and behaviours

- As for Section 1
- Has tolerance and understanding of children's behaviour and parental concerns

Statutory regulations and information sources relevant to this section see second page and in addition:

- NHS Immunisation information <http://www.nhs.uk/Planners/vaccinations/Pages/Landing.aspx>
- Royal Society for the Prevention of Accidents <http://www.rosipa.com/leisuresafety/default.aspx>
<http://www.rosipa.com/leisuresafety/adviceandinformation/watersafety/child-holiday-swimming-pool-safety.aspx>

Books

- Wilson-Howarth, J., Ellis, M. 2005. *Your Child Abroad: A Travel Health Guide*. 2nd Edition Bradt Travel Guides Ltd.England

Section 16|Travel health issues for women

Standards of practice

- Advises on safety and security issues especially for women travelling alone
- Advises on cultural and local custom awareness eg appropriate clothing
- Advises on management of menstruation
- Advises on management of contraception especially for long term travel and access to a continued supply of contraceptives.
- Advises on vaccination and malaria chemoprophylaxis in relation to contraception, pregnancy and breast feeding

- Advises on HIV, blood-borne viruses and sexually-transmitted infections (STIs) and their prevention
- Advises on fitness to fly in pregnancy
- Advises on access to antenatal care for long term expatriates

Measurable outcomes

- There is clear documentation that accurate advice relevant to the risk assessment has been given and the traveller's understanding has been checked
- There is clear documentation of the reason for prioritisation where the traveller is unable to meet the optimum recommendations
- Traveller satisfaction.

Practitioner knowledge, understanding and skills

Has knowledge and understanding of female-specific risks relevant to travel:

- Menstruation
- Pre-conception
- Pregnancy including vaccines, malaria prevention and other medication, fitness to fly, access to medical care overseas.
- Breast feeding
- Personal security
- Protection against STIs.

Attitudes and behaviours

- As for Section 1

Statutory regulations and information sources relevant to this section see second page and in addition:

- Foreign and Commonwealth Office Women Travellers <http://www.fco.gov.uk/en/travelling-and-living-overseas/ta-relevant-to-you/women-travellers>

Patient resources

- Back Pocket Travel Guide to Sexual Health Around the World — www.maristopes.org.uk/documents/travelguide.pdf
- International Planned Parenthood Federation — <http://www.ippf.org/en/> (has a searchable directory of oral contraceptive pills around the world)

Section 17|Travellers with pre-existing health problems/disabilities

Standards of practice

- Takes a full medical, social and drug history

- Determines the relevance of pre-existing health problems to the traveller's itinerary/destination and tailors risk assessment and risk management advice accordingly
- Considers the potential influence of malaria chemoprophylaxis, other drugs or vaccines on the traveller's underlying medical condition
- Explains how treatment schedules for underlying conditions may need to be modified or monitored during travel and whilst in the country of destination
- Advises on variability in quality of healthcare at the destination
- Advises on the existence of variation in availability of suitable quality medication between different countries
- Liaises with/informs the practitioner responsible for managing the traveller's underlying medical condition.

Measurable outcomes

- Clear documentation of accurate explanation given and the traveller's having understood specific risk factors and advice offered on management of the underlying condition
- Record of advice given to the traveller on managing medication whilst abroad
- Record of advising the traveller on insurance issues relating to travel with an underlying medical condition.

Practitioner knowledge, understanding and skills

- Knowledge of the effects of flying, climate and other environmental issues on chronic diseases
- Knows where to get additional information regarding fitness to fly protocols

Attitudes and behaviours

- As for Section 1

Statutory regulations and information sources relevant to this section see second page and in addition:

- British Airways http://www.britishairways.com/travel/healthmedinfo/public/en_gb
- British Heart Foundation. Air Travel http://www.bhf.org.uk/publications/view_publication.aspx?ps=1000738
- British Medical Association. The impact of flying on passenger health http://www.bma.org.uk/health_promotion_ethics/transport/Flying.jsp
- British Thoracic Society. Managing Passengers with Respiratory Disease Planning Air Travel <http://www.brit-thoracic.org.uk/guidelines/air-travel-guideline.aspx>
- Diabetes UK – http://www.diabetes.org.uk/Guide-to-diabetes/Living_with_diabetes/Travel/
- Epilepsy and Travel Abroad <http://www.epilepsy.org.uk/info/travelling-abroad>
- Sickle Cell Society Travel Tips http://www.sicklecellsociety.org/websites/123reg/LinuxPackage22/si/ck/le/sicklecellsociety.org/public_html/resources/view/10

- The Global Database on HIV-Specific Travel and Residence Restrictions www.hivtravel.org
- Travel and Cancer <http://www.macmillan.org.uk/Cancerinformation/Livingwithandaftercancer/Practicalissues/Travel/Travel.aspx>

Patient resources of particular note

- Variety of leaflets from FCO <http://www.fco.gov.uk/en/travel-and-living-abroad/publications>
- NHS Choices, Travelling Abroad <http://www.nhs.uk/carersdirect/yourself/timeoff/pages/travellingabroad.aspx>

Section 18|Travel health issues for travellers visiting friends and relatives (VFRs)

Standards of practice

- Demonstrates awareness of special risks to VFRs (as compared with tourists) e.g. accommodation; activities; contact with local population and gives pre-travel advice accordingly
- Demonstrates awareness of VFRs' perception of the need for pre-travel advice and potentially different economics of travel
- Demonstrates awareness of the additional risk to second and third generation VFRs (health, culture shock)
- Demonstrates awareness of communication issues and language barriers
- Demonstrates awareness of the special importance of malaria in VFRs
- Pays special attention to the prevention of malaria and typhoid for those travelling to endemic countries.

Measurable outcomes

- Documented record of communication of specific risks to the VFR traveller

Practitioner knowledge, understanding and skills

- Knowledge of the risks at the destination and an awareness of the likely barriers to receiving advice or the misconceptions that the VFR traveller may have
- Knowledge of the increased risk of malaria and typhoid for those travelling to endemic countries
- Knowledge of local community groups where key messages may be conveyed
- Knowledge of interpreting services available
- Skilled in delivering culturally sensitive practice.

Attitudes and behaviours

- As for Section 1
- Uses a diplomatic approach in helping the traveller to cope with conflicting advice that may be given by family and friends

Statutory regulations and information sources relevant to this section see second page and in addition:

- Foreign and Commonwealth Office. <http://www.fco.gov.uk/en/>
- Health Protection Agency. Foreign travel-associated illness – a focus on those visiting friends and relations <http://www.hpa.org.uk/hpr/archives/2009/hpr0109.pdf>
- Health Protection Agency, Travel and Migrant Health Section. <http://www.hpa.org.uk/web/HPAweb&HPAwebStandard/Page/1191942149486>

Patient resources

- Foreign and Commonwealth Office leaflet – Support for British Nationals Abroad <http://www.fco.gov.uk/en/travelling-and-living-overseas/publications>
- HPA Malaria: Information for people travelling overseas http://www.hpa.org.uk/web/HPAweb&HPAwebStandard/HPAweb_C/1279888827959
- Sickle Cell Society Travel Tips http://www.sicklecellsociety.org/websites/123reg/LinuxPackage22/si/ck/le/sicklecellsociety.org/public_html/resources/view/10

Section 19|Travel health issues for asylum seekers, refugees and migrants

Standards of practice

- Demonstrates ability to work with interpreters and patient support groups
- Demonstrates understanding of problems of access to health services
- Demonstrates understanding of psychiatric/psychological issues
- Demonstrates understanding of post traumatic stress disorder
- Demonstrates understanding of health issues relating to poverty
- Demonstrates understanding of cultural differences between migrant groups
- Demonstrates awareness of different healthcare experience in home country e.g. immunisation schedules
- Demonstrates awareness of geographical differences in disease risk among migrants
- Demonstrates ability to assess the potential value of screening migrants for underlying infection and non infectious conditions
- Demonstrates ability to assess the relevant health protection measures required for failed asylum seekers scheduled for repatriation.

Measurable outcomes

- Accurately completed records of advice given, vaccines administered and malaria prevention strategies advised
- Patient documentation reflects all relevant psychosocial and travel-related issues identified, applicable to

the geographical area from which the individual has travelled.

Practitioner knowledge, understanding and skills

- Knowledge and understanding of the health needs of different migrant groups
- Knowledge and understanding of the health risks applicable to the geographical area from which the patient has travelled
- Knowledge of public health issues pertaining to persons seeking asylum
- Understanding of health issues in relation to repatriation processes
- Provide culturally competent and appropriate travel advice.

Attitudes and behaviours

- As for Section 1
- Awareness of patient dignity, confidentiality, ethnic issues, rights and responsibilities

Statutory regulations and information sources relevant to this section see second page and in addition:

- United Nations. UNHCR <http://www.unhcr.org.uk>
- WHO Refugees <http://www.who.int/topics/refugees/en/>
- HPA Migrant Health: infectious diseases in non-UK born populations in the UK http://www.hpa.org.uk/webc/HPAwebFile/HPAweb_
- HPA – Flowchart – vaccination of individuals with unknown or incomplete immunisation status www.hpa.org.uk/web/HPAwebFile/HPAweb_C/1194947406156
- HPA Migrant Health Guide <http://www.hpa.org.uk/migranthealthguide>
- Refugee Council <http://www.refugeecouncil.org.uk>
- Home Office <http://www.ind.homeoffice.gov.uk>
- Medical Foundation for the Care of the Victims of Torture <http://www.freedomfromtorture.org/>
- Better Health <http://www.better-health.org.uk/resources/research>

Section 20|Long term travellers

Standards of practice

Pre-travel

- Conducts a risk assessment and provides advice specific to the long term traveller with special reference to duration and type of exposure
- Demonstrates ability to assess psychological profile and previous psychiatric history
- Demonstrates ability to perform a risk assessment for the development of psychiatric/psychological illness
- Demonstrates ability to advise on the principles of access to medical care in the host country

- Demonstrates ability to advise on availability of regular medication overseas e.g. for diabetes
- Demonstrates ability to direct the traveller towards appropriate resources on culture shock; social isolation; stressors for intimate partnerships; family issues e.g. job for spouse and schooling for children; language difficulties; diet; culture and religion of host country; alcohol; HIV and sexually-transmitted infections
- Demonstrates ability to advise on the specific aspects of malaria prevention in long term travellers
- Advises on the need for periodic health assessments during long term postings.

Post-travel

- Demonstrates ability to advise on resettlement issues
- Demonstrates ability to undertake or refer for post-tropical screening.

Measurable outcomes

- The traveller's documentation shows that the above-mentioned Standards of Practice have been followed and clearly records the advice the individual is given is appropriate and specific to the risks identified.

Practitioner knowledge, understanding and skills

- Knowledge and understanding of personal and family pressures related to overseas posting and on return from working abroad
- Ability to apply that knowledge in the consultation.

Attitudes and behaviours

- As for Section 1

Statutory regulations and information sources relevant to this section see second page and in addition:

- Foreign and Commonwealth Office. Living overseas. <http://www.fco.gov.uk/en/travelling-and-living-overseas/living-overseas/>
- People In Aid Code of Good Practice <http://www.peopleinaid.org/code/default.aspx>
- Inter-cultural training at Farnham Castle <http://www.farnhamcastle.com>

Section 21|Medical tourism (elective medical treatment abroad)

Standards of practice

- Demonstrates ability to determine the underlying condition for which treatment is being sought
- Demonstrates ability to assess the effects of the condition on fitness to travel (mobility; the need for treatment or medical support during the journey) for both pre-and post procedure travel

- Demonstrates ability to assess the possible effects of travel on the underlying condition
- Assesses the travel health needs of the medical tourist, including malaria chemoprophylaxis and necessary vaccinations
- Demonstrates ability to assess the traveller's expectations of medical care in the destination country
- Advises the traveller on need to be aware of medical facilities at the destination e.g. the risk of blood-borne infections
- Advises the traveller on the need to make provision for medical insurance and repatriation
- Advises the traveller on the risk of flying post operatively
- Assesses the likely need for post treatment medical support when back in own country.

Measurable outcomes

- The traveller's documentation shows that the above-mentioned Standards of Practice have been followed and clearly records the advice the individual is given is appropriate and specific to the risks identified.

Practitioner knowledge, understanding and skills

- Knowledge and understanding of variation in healthcare standards between different countries
- Knowledge and understanding of the risk of infectious disease in different countries
- Able to impart information in a sympathetic way.

Attitudes and behaviours

- As for Section 1

Statutory regulations and information sources relevant to this section see second page and in addition:

- Foreign and Commonwealth Office. Travelling abroad for medical treatment <http://www.fco.gov.uk/en/travelling-and-living-overseas/ta-relevant-to-you/medical-treatment>

Section 22|Cruise travel

Standards of practice

- Demonstrates ability to assess fitness for cruise travel
- Pre-travel demonstrates ability to identify specific risks such as history of claustrophobia; propensity to sea sickness; the elderly; lack of mobility (risk of accidents); chronic medical conditions; recent infectious illness
- Demonstrates ability to provide advice on how to minimise cruise-related risks.

Measurable outcomes

- The traveller's documentation shows that the above-mentioned Standards of Practice have been followed and clearly records the advice the individual is given is appropriate and specific to the risks identified
- Accurately completed records of advice given, vaccines administered and malaria prophylaxis advised.

Practitioner knowledge, understanding and skills

- Knowledge of the health risks peculiar to cruising both on board ship and in the countries to be visited
- Awareness of any current disease outbreak issues at destination/s
- Able to advise on appropriate immunisations and malaria prophylaxis for cruise travellers
- Knowledge of International Certificate of Vaccination or Prophylaxis (Yellow fever) and International Health Regulations 2005.

Attitudes and behaviours

- As for section 1

Statutory regulations and information sources relevant to this section see second page and in addition:

- CDC Travelers' Health. Cruiseship travel <http://www.cdc.gov/Travel/yellowBookCh7-CruiseShip.aspx>
- Health Protection Agency <http://www.hpa.org.uk> and search under cruise ships
- Health Protection Scotland. Designation of Yellow Fever Vaccination Centres: Information Pack, July 2011. <http://www.documents.hps.scot.nhs.uk/travel/yfvc-information-pack-2011-07.pdf>
- National Travel Health Network and Centre. Designation of Yellow Fever Vaccination Centres, England, Wales, Northern Ireland: Information Pack, September 2011. <http://www.nathnac.org/pro/documents/YFInfoPack.pdf>
- World Health Organization. International Health Regulations (2005). Geneva: World Health Organization, 2005:1–60. <http://www.who.int/csr/ihr/en/>
- World Health Organization. Ship sanitation http://www.who.int/water_sanitation_health/publications/2011/ship_sanitation_guide/en/index.html

Section 23|Expeditions

Standards of practice

Pre expedition

- Provides advice to expedition leaders, members and expedition medical staff about precautions required prior to an expedition departure, including psychological profile and physical fitness

- Advises on malaria prevention and vaccination recommendations and requirements specific to the trip
- Advises on special requirements for very remote travel eg elective appendectomy, drugs and equipment required for medical support to an expedition
- Advises on the need for first aid training for expedition members
- Advises the traveller that arrangements for medical evacuation must be in place.

Post expedition

- Advises on appropriate health precautions and screening after return from an expedition
- Arranges a psychological debrief if relevant.

Measurable outcomes

- The traveller's documentation shows that the above-mentioned Standards of Practice have been followed and clearly records the advice the individual is given is appropriate and specific to the risks identified.

Practitioner knowledge, understanding and skills

- Knowledge, understanding and ability to practice the standards listed above
- Knowledge and understanding of how expedition and "wilderness medicine" differs from "routine" travel medicine. Skill to communicate these differences to expedition team
- Knowledge of drugs and equipment needed in remote places with few re-supply options
- Knowledge of conditions that can be detected by screening following expedition in remote areas
- For those specialising in expedition medicine, possession of a qualification or certificate of attendance at an appropriate course (e.g. Diploma in Mountain Medicine or Liverpool School of Tropical Medicine Expedition Medicine Course) is highly desirable.

Attitudes and behaviours

- As for Section 1
- For healthcare professionals accompanying an expedition, ability to work alone without immediate support
- Open minded about aims of expeditions and working with those from less conventional medical backgrounds.

Statutory regulations and information sources relevant to this section see second page and in addition:

- Johnson, C. Anderson, S., Dallimore, J., Winsler, S., Warrell, D.A. 2008. *Oxford Handbook of Expedition and Wilderness Medicine*. Oxford University Press: Oxford

- Royal Geographical Society <http://www.rgs.org/HomePage.htm>
- Royal Scottish Geographical Society <http://www.rsgs.org/>
- Wilderness Medical Society <http://www.wms.org/>

Section 24|Extreme climatic conditions

Standards of practice

Cold

- Demonstrates ability to advise the traveller who will be exposed to extreme cold and potentially extremely remote locations
- Demonstrates ability to understand the effects of exposure to cold on human physiology
- Demonstrates ability to understand wind chill factor
- Demonstrates ability to understand the principles of prevention of heat loss
- Demonstrates ability to advise the traveller on nutritional and fluid requirements for those exposed to cold environments
- Demonstrates ability to advise the traveller on the symptoms, signs, prevention and treatment of hypothermia and frostbite.

Heat +/- humidity

- Demonstrates ability to advise the traveller on effects of exposure to high environmental temperature +/- high humidity on human physiology
- Demonstrates ability to advise the traveller on the symptoms, signs, prevention and treatment of prickly heat, heat exhaustion and heatstroke
- Demonstrates a firm knowledge of the importance of adequate fluid replacement in hot, humid conditions.

Measurable outcomes

- Documentation shows recognition of extreme environmental thermal risks for the traveller and specific hazards for the wilderness traveller
- The patient's documentation clearly articulates that the advice given to the traveller is appropriate and specific to the risks identified.

Practitioner knowledge, understanding and skills

- Knowledge of the physiological effects of thermal extremes.
- Ability to offer advice on preventative strategies
- Ability to encourage the traveller to ensure adequate preparation for such trips
- Ability to make the traveller aware of the need for specialist insurance.

Attitudes and behaviours

- As for Section 1

Statutory regulations and information sources relevant to this section see second page and in addition:

- Royal Geographical Society. <http://www.rgs.org/HomePage.htm>
- Royal Scottish Geographical Society. <http://www.rsgs.org/>
- US Department of Commerce. National Climatic Data Center. <http://www.ncdc.noaa.gov/oa/climate/severeweather/extremes.html>
- US Environmental Protection Agency. Extreme Events. <http://www.epa.gov/climatechange/effects/extreme.html>
- Wilderness Medical Society. www.wms.org

Section 25|Effects of altitude

Standards of practice

- Demonstrates ability to advise the traveller intending to travel to a high altitude destination
- Demonstrates awareness of the effects of living at high altitude on human physiology – acute and chronic
- Demonstrates awareness of the symptoms and signs, prevention and acute management of acute mountain sickness; high altitude pulmonary oedema; and high altitude cerebral oedema
- Demonstrates familiarity with the correct use of a portable hyperbaric chamber
- Demonstrates ability to advise the traveller on contraindications to travel to areas of high altitude
- Demonstrates ability to counsel travellers with pre-existing medical conditions who intend to travel to high altitude destinations.

Measurable outcomes

- The patient's documentation clearly records that the practitioner recognises altitude as a potential hazard at the traveller's destination and gives advice specific to the risks identified.

Practitioner knowledge, understanding and skills

- Knowledge of human physiology at high altitude
- Awareness of the potential severity of high altitude cerebral oedema and pulmonary oedema
- Ability to explain preventive strategies to the traveller.

Attitudes and behaviours

- As for Section 1

Statutory regulations and information sources relevant to this section see second page and in addition:

- British Mountaineering Council <http://www.thebmc.co.uk/>

- International Society for Mountain Medicine <http://www.ismmed.org/>
- International Mountaineering and Climbing Federation http://www.theuiaa.org/medical_advice.htm
- Medex <http://www.medex.org.uk/> includes downloadable booklet entitled *Travel at High Altitude* available in many languages

Books

- Pollard, A. J., Murdoch, D. R. 2003 *The High Altitude Medicine Handbook* Radcliffe Medical Press
- West, J.B., Schoene, R.B., Milledge, J.S. 2007. *High altitude medicine and physiology*. 4th edition, Hodder Arnold. London. pp.484

Section 26|Effects of tourism on host countries

Standards of practice

Demonstrates an understanding of the advantages and disadvantages of tourism including:

- Economic growth
- Risk of over dependence on tourism
- Risk of local inflation
- Social unrest due to tensions between tourists and the local population
- Exploitation, including sex tourism
- Environmental issues – over-development, destruction of wildlife habitats, pollution.

Measurable outcomes

- Records reflect discussion of responsible tourism issues throughout the consultation and provision of links to information sources to enable the traveller to read further on this matter.

Practitioner knowledge, understanding and skills

- Knowledge and understanding of ways in which tourism can affect the host country
- Knows where to refer the traveller for further information on this topic.

Attitudes and behaviours

- As for Section 1
- Includes a “responsible traveller” approach to the travel consultation.

Statutory regulations and information sources relevant to this section see second page and in addition:

- ECPAT International (End child prostitution and trafficking). <http://www.ecpat.net/EI/index.asp>
- International Centre for Responsible Tourism <http://icrtcic.wordpress.com/>

- International Institute for Peace through Tourism <http://www.iipt.org/>
- International Porter Protection Group. <http://www.ippg.net/>
- International Society of Travel medicine www.istm.org. see the ‘Responsible Traveller’ publication
- Tourism Concern www.tourismconcern.org.uk

Section 27|The returned traveller

As well as physical ill-health, psychological ill-health is common, including bereavement responses to the loss of place, depression, and Post Traumatic Stress Disorder, particularly in long term travellers.

It is recognised that many travel medicine practitioners concentrate on providing pre-travel services and may have little exposure to illness in the returning traveller, whereas others may devote most of their time to the practice of infectious and/or tropical diseases, of which the returning traveller is an important part. Therefore, for this chapter, the sections *Standards of Practice and Practitioner knowledge, understanding and skills* are subdivided according to different levels of practice.

Standards of practice

For all levels of practice

- Demonstrates ability to use printed and electronic information sources
- Demonstrates ability to use the knowledge of post-travel illness appropriately in the clinical setting.

Nurse

- Demonstrates ability to suspect malaria in an unwell returned traveller and refer urgently to a doctor.

Specialist nurse

- As above.
- Demonstrates ability to arrange basic post-tropical screening of asymptomatic returned travellers where appropriate, according to protocol
- Demonstrates ability to identify psychological ill-health and arrange for appropriate referral.

Pharmacist

- Demonstrates ability to suspect malaria in an unwell returned traveller and refer urgently to a doctor (using out of hours service if needed)
- Demonstrates ability to question previous travel history and consider post-travel diseases when presented with specific symptoms such as fever, rash, pruritis or short/long term diarrhoea and refer appropriately.

GP

- Demonstrates ability to suspect malaria in an unwell returned traveller and arrange an urgent malaria test or immediate admission to hospital if appropriate
- Demonstrates an awareness of the potential implications of recent travel when assessing an ill patient
- Demonstrates ability to undertake basic syndromic assessment of the unwell returned traveller, eg fever; diarrhoea; skin disease; respiratory symptoms
- Demonstrates ability to identify psychological ill-health and arrange for appropriate referral.

GP with an interest in travel medicine

- As above, plus
- Demonstrates ability to undertake basic post-tropical screening of asymptomatic returned travellers where appropriate
- Demonstrates ability to assess, investigate and manage uncomplicated imported infections e.g. gastrointestinal and skin infections.

Specialist

- Demonstrates ability to recognise both acute and chronic infections in migrants
- Demonstrates ability to identify symptomatic and asymptomatic infections
- Demonstrates ability to recognise unusual infections when tertiary level care/advice is needed and to seek it
- Demonstrates ability to identify psychological ill-health and arrange for appropriate referral.

Measurable outcomes

- Documentary evidence of keeping relevant CPD updated
- Documentary evidence of regular appraisal
- Traveller satisfaction surveys
- Documentary evidence of taking part in audit of clinical outcome.

Practitioner knowledge, understanding and skills**Nurses, pharmacists and GPs**

- Knowledge of the importance of malaria as an imported disease
- Knowledge of the common imported infections
- Knowledge of correct place for referral, appropriate to the state of physical and mental health of the traveller.

GPs with an interest in travel medicine

- As above, plus
- Knowledge of the epidemiological and clinical features of imported infection in migrant groups
- Knowledge of the mechanisms for reporting imported travel-related infections to the relevant statutory body.

Specialist

- As above, plus
- Understands the tests available for the diagnosis of microbial diseases and their interpretation
- Has detailed knowledge of the use of antimicrobial agents, including antimalarials
- Has knowledge of the location and availability of tertiary care and advice lines.

Attitudes and behaviours

- As for Section 1
- Aware of own limitations and need for specialist advice

Statutory regulations and information sources relevant to this section see second page and in addition:

- BIS/HPA Malaria Algorithm <http://www.britishinfectionsociety.org/documents/MalariaAlgorithm07.pdf>
- Hospital for Tropical Diseases www.thehtd.org
- Malaria Reference Laboratory www.malaria-reference.co.uk

Specialists should consider joining the Royal Society of Tropical Medicine and hygiene <http://www.rstmh.org/>

Section 28|Research methods, critical analysis and presentations

This section is directed primarily at the specialist travel health practitioner.

Standards of practice

- Demonstrates critical analysis of the scientific literature
- Demonstrates ability to design research studies
- Demonstrates highly developed specialist knowledge of the whole range of topics in travel medicine.

Measurable outcomes

- Educates doctors, nurses and others working in the field of travel health
- Speaks/presents research at travel medicine educational events at a national level/international level
- Publishes research papers and reviews in medical journals
- Contributes to the evidence-base for travel health practice to support and promote travel health practitioners
- Identifies areas for further research.

Practitioner knowledge, understanding and skills

- Has highly developed specialist knowledge of the whole range of topics in travel medicine

- Knowledge of research methods, literature search methods and critical analysis
- Knowledge of the requirements for ethics approval for research studies
- Knowledge of Good Medical Practice as applied to research.

Attitudes and behaviours

- As for Section 1

Statutory regulations and information sources relevant to this section see second page and in addition:

- World Health Organization. Health Research Methodology http://www.wpro.who.int/publications/pub_929061157X.htm

Section 29|Audit

Standards of practice

- Assists in the collation and development of audit in travel health clinical practice
- Uses expert knowledge to inform protocol development in relation to travel health and guides others in this process
- Audits travel health documentation to ensure appropriate standards and guidance are maintained.

Measurable outcomes

- Documented evidence of undertaking clinical audit in travel health practice and acting on findings to develop and improve standards of care
- Current up-to-date protocols for safe effective travel healthcare are easily accessible within the clinic setting.
- High quality documentation is maintained
- Completed audits should be available for review for CPD.

Practitioner knowledge, understanding and skills

- Expert knowledge of travel health
- Able to undertake protocol development
- Understands audit processes
- Understands local/national standards and guidance.

Attitudes and behaviours

- Recognises the importance of clinical audit
- Committed to maintaining a programme of clinical audit
- Seeks and uses feedback from others
- Committed to reflection on practice and continuous improvement
- Committed to evidence-based practice

- Applies knowledge to practice
- Appreciates the need to comply with policies, procedures and guidelines.

Statutory regulations and information sources relevant to this section see second page and in addition:

- Department of Health <http://www.dh.gov.uk/en/AdvanceSearchResult/index.htm?searchTerms=Clinical%20audit>
- GMC <http://www.gmc-uk.org/>
- Intute <http://www.intute.ac.uk/> For audit see <http://www.intute.ac.uk/healthandlifesciences/cgi-bin/search.pl?term1=Audit&limit=0&subject=healthandlifesciences>
- National Institute for Clinical Excellence. Principles for Best Practice in Clinical Audit. Radcliffe Medical Press Limited, Abingdon. 2002; 186 pp
- National Travel Health Network and Centre – Yellow Fever Programme – Audit and Assessment http://www.nathnac.org/pro/yf_procedure.htm

Section 30|Teaching

This section is specifically for those who undertake teaching in travel medicine.

Standards of practice

- Assesses learning needs, learning objectives and learning outcomes for the group to be taught
- Demonstrates ability to deliver structured teaching on a travel medicine topic
- Seeks and acts on feedback from their own teaching performance.

Measurable outcomes

- Performance as assessed by student or delegate evaluation forms
- Outcome of peer review of lectures, teaching material and teaching methods
- Outcome of statutory inspections if applicable.

Practitioner knowledge, understanding and skills

- Has good communication skills
- Has comprehensive knowledge of the subject matter to be taught
- Knowledge and understanding of the learner's situation and needs
- Able to design, plan and deliver lectures and other learning materials
- Keeps knowledge up-to-date.

Attitudes and behaviours

- As for Section 1
- Sensitive to the learner's needs

Statutory regulations and information sources relevant to this section see second page and in addition:

- Higher Education Academy. Health Network Group <http://www.health.ac.uk/>
- Institute of Education <http://www.ioe.ac.uk/>
- Institute for Learning <http://www.ifl.ac.uk/>
- NHS Education for Scotland <http://www.nes.scot.nhs.uk/>
- NMC. Standards to support learning and assessment in practice <http://www.nmc-uk.org/Educators/Standards-for-education/Standards-to-support-learning-and-assessment-in-practice/>

Section 31|Continuous professional development (CPD)

Standards of practice

- Ensures that travel health knowledge is always up-to-date
- Evaluates own travel healthcare practices against accepted standards and guidance
- Ensures that any relevant guidelines on CPD/revalidation (e.g. Faculty of Travel Medicine, General Medical Council) are adhered to.

Measurable outcomes

- Uses recognised online databases on a frequent and regular basis to ensure the latest national recommendations are always followed
- Reads appropriate travel medicine journals
- Reads update information to ensure awareness of issues such as disease outbreaks
- Uses a variety of other recognised travel health resources online
- Conducts self assessment of own practice in relation to the accepted standards and guidance, identifies own development needs and incorporates these into the individual's personal development plan
- Assesses personal development needs continuously in dialogue with manager or peer contact, summarised annually during appraisal process
- Achieves recommended level of CPD each year while practising.

Practitioner knowledge, understanding and skills

- Awareness of valid sources of online information in relation to travel health

- Awareness of the latest national recommendations
- Awareness of online travel health databases and how to use them
- Awareness of standards and guidance in relation to travel healthcare.

Attitudes and behaviours

- As for Section 1

Statutory regulations and information sources relevant to this section see second page and in addition:

- British Global and Travel Health Association <http://www.bgtha.org/>
- RCN guidelines *Delivering Travel Health Services* available on www.rcn.org.uk
- RCN Public Health Forum, Travel Health Network <http://www.rcn.org.uk/>
- Royal College of Physicians and Surgeons of Glasgow http://www.rcpsg.ac.uk/Education/Revalidation_CPD/Pages/mem_spedrevalidation.aspx

Conflict of interest

None.

Dedication

These recommendations are dedicated to the memory of Dr Darryl Robert DipTravMed RCPS(Glasg).

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