



# emporiatics

News, views and reviews  
from the Faculty of Travel Medicine



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# Editorial

Planning for this edition has been a collaborative effort with Sharon Graham now on board. Among the highlights:

The UK sporting calendar doesn't get any bigger than the 2012 London Olympics (well maybe as a Scot I should mention Wimbledon 2013!) and on Page 5 Dr Brian McCloskey looks at mass gatherings and lessons learned from that event. John Kitchen provides background knowledge on tick-borne diseases on Page 6. The history and epidemiology of dengue fever is fascinating, particularly as the number of cases globally has been increasing. Jo Lawrence provides an overview on Page 8, followed on Page 10 by Jane Chiodini's summary of the latest update of the UK Malaria Guidelines, published in August. Clare Henderson talks about her dual career as an academic and entrepreneur on Page 12. My thanks as always to all contributors.

The Royal College of Physicians and Surgeons Glasgow Triennial Conference, Advancing Excellence in Healthcare 2014 takes place in Glasgow in 2014 just ahead of the XX Commonwealth Games. Information about the sports themed Travel Medicine Programme, speakers and presentations is available at <http://aeh2014.rcp.sg> so do keep the date free. Meanwhile, I hope you enjoy this edition and perhaps we'll meet soon at one of the many travel medicine meetings listed for 2014.

With best wishes

**Sandra Grieve**

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# Letter from the Dean of the Faculty of Travel Medicine

**Dr Mike Jones FFTM RCPS(Glasg) takes inspiration from an American revolutionary and invites more international representation on the Board**

Since the last issue of *Emporiatics* many members of the Faculty attended the Conference of the International Society of Travel Medicine (CISTM) in Maastricht and several gave lectures or presented posters. Most notably this was the conference when, as the first British President of the ISTM, Fiona Genasi handed over to Dr David Shlim. Fiona is a founder Fellow of the Faculty and we wish her well as she steps down after two memorable years.

This was my first visit to Maastricht and I was glad for time to explore the old town. The CISTM content was excellent and if I had to pick out one outstanding lecture it was by the American Veterinary Pathologist Professor Corrie Brown who combined fantastic humour with serious content on the 'One Health' theme. A personal highlight was receiving a best poster award for the presentation that Andy McCallum and I composed on intradermal hepatitis B vaccine for poor responders. The prize is free registration for both of us at CISTM in May 2015 in Quebec – a great incentive to return to a city I've visited only briefly.

Each year brings further change on the Faculty Board and this year we lose two outstanding members, Dr Alex Grieve and Dr Gerard Flaherty. Both will be sadly missed. Alex preceded me by a couple of years at Aberdeen (Scotland's best medical school!), joined the Army, looked after the SAS and then went into industry with Royal Dutch Shell and GKN. He's one of those rare individuals who is not only wise but also totally dependable, delivering what he says he will do, and to a superlative standard. Gerard, a distinguished academic at the National University of Ireland, Galway and President of the Travel Medicine Society of Ireland, received the Cameron Lockie Prize when he completed the Diploma in Travel Medicine in 2006. His input to both the formation of the MFTM examination and more

recently as Education Convener has been hugely appreciated, particularly for stepping in when Lorna Boyne was recovering from surgery to lead the examiners for the first MFTM OSCE examination. An expert on high altitude, he's contributed to several 'Nets and Bolts' courses.

Gerard is our only non-UK Board member which brings me to an area which concerns me. The FTM has become an international Faculty, not just because it involves medical issues raised by international travel, but by virtue of our diverse membership. While we continue to promote growth in the UK, one third of our Members and Fellows reside outside the UK and we need to continue growing internationally. The second Nordic Foundation Course will be held this year and is a cause for rejoicing. We are also delighted that since the CISTM in Maastricht we have been able to explore ways in which we can support South African colleagues. In 2011 at the CISTM in Boston, my wife Elizabeth and I took the opportunity to soak up some local history and the events that led up to the American war of independence. Recalling now the Boston politician James Otis's slogan 'no taxation without representation', I'm determined that our Board should be accessible to our valued international Fellows and Members, and that they should feel fully represented. Please get in touch with comments. The Board will discuss this at a future meeting.

We have an exciting programme with brilliant speakers at our next Faculty Symposium in Glasgow on 10 October and I hope to see you then.



A handwritten signature in black ink that reads "Michael E Jones".

[mike.jones@rcpsg.ac.uk](mailto:mike.jones@rcpsg.ac.uk)

Meet the FTM Executive Board:  
<http://rcp.sg/ftmboard>

## BULLETIN BOARD

### PGDs from NICE

The National Institute for Health and Care Excellence has issued good practice recommendations for individuals and organisations involved with patient group directions at: <http://goo.gl/bDt1w7> The aim is to make sure patients receive safe and appropriate care, and timely access to medicines in line with legislation. Written within the context of the NHS in England, it includes independent organisations or contractors commissioned to provide NHS services and also applies in Wales. Current legislation for PGDs is contained in The Human Medicines Regulations 2012. A useful list of key resources is in Appendix B: <http://goo.gl/VEBDHI>

### Travel health for schools

Health Protection Scotland (HPS) Travel and International Health Team TRAVAX has produced an excellent resource for health professionals advising school parties going on international travel at: <http://goo.gl/xeZzMb> (login required) This guidance is also useful for organisers, parents and pupils and is available to the general public at: <http://goo.gl/Kd9Mtk>. It is not intended to replace an individual risk assessment which should be carried out by a qualified health professional.



### West Nile

The European Centre for Disease Prevention and Control (ECDC) has published an update on reported cases of West Nile fever for the European Union and neighbouring countries. It's at: <http://goo.gl/AmWB2>

ECDC maps on vector distribution introduce enhanced information on the spread of mosquitoes, ticks and sand-flies in Europe. The updated map on geographical distribution of *Aedes albopictus* mosquito is also available at: <http://goo.gl/6V1xp>



### Brits abroad and behaving, well, not quite so badly

Time once more for the FCO's annual rundown of British travellers needing consular assistance while travelling abroad. Figures were gathered between April 2012 and March 2013. Some of the key points:

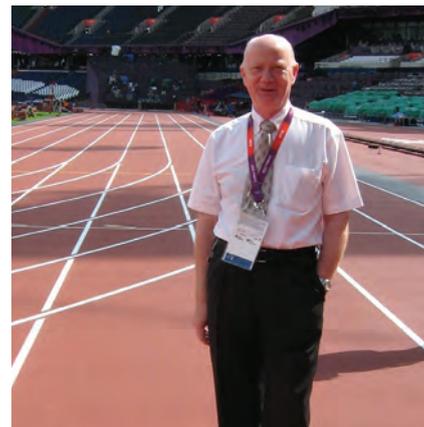
- In general there has been a significant drop in arrest and detention cases, although some countries including Canada, Italy, the Netherlands and the United Arab Emirates report an increase.
- Hospitalisations increased in some countries, including Australia, India, Portugal, Thailand and the United Arab Emirates.
- Deaths and hospitalisations in Thailand increased by a third, mainly owing to road traffic accidents and an ageing expatriate population.

- Alcohol remains a major factor in cases involving young Britons visiting the Balearics (Spain), the Greek islands and Turkey.
- Drugs are a problem in many countries, including France, Jamaica, and Portugal although drug-related arrests have gone down.

Published by the British Foreign and Commonwealth Office, a summary and interactive map are available at: <http://goo.gl/ajRRM5> and <http://goo.gl/gDo1Xb>

# Mass gatherings and public health: Do the benefits outweigh the risks?

Dr Brian McCloskey CBE, Director of Global Health with Public Health England, looks at the legacy of the 2012 London Olympic and Paralympic Games.



**In the summer of 2012, London hosted the largest and second largest international sporting mass gatherings in the world. The Olympics involved 10,500 competitors from 205 nations in 26 sports, while the Paralympics had 4,200 competitors from 147 nations in 21 sports. Over nine million tickets were sold for the Games with an estimated 11 million spectators across all venues.**

Mass gatherings, usually defined as a gathering of people in such numbers as might be expected to compromise the local health system, are seen as a potential risk for infectious diseases. Given the scale of international travel often associated with these events it is not surprising that they are seen as a potential means of spreading diseases around the world.

Our public health planning started seven years before the Games, considering three basic questions:

- What might happen?
- How will we know when it happens?
- What will we do when it happens?

We recognised that we would have to address public health issues with more urgency during the Games. The most important challenge was to know in real time what was happening throughout the duration: we needed to have the right systems in place to be sure that we could identify any public health issue that might arise.

The UK has well established public health surveillance, including syndromic reporting systems which are based on what symptoms

people complain of rather than the diagnosis by a clinician. While these are very effective systems, the risk assessment for the Games suggested that they would not be sufficient in terms of speed and comprehensiveness of coverage.

We therefore implemented a number of enhancements to give us a wider range of surveillance and include the systems which visitors would likely use (emergency departments and out-of-hours care) and the systems the athletes would use (the Olympic and Paralympic Polyclinic).

We developed a system to extract information from across our local case reporting systems about any events that might be Olympic-related and a system to review international events that might affect the UK during the Games.

## New surveillance systems for London 2012

Emergency Department Syndromic Surveillance

GP Out-of-hours Syndromic Surveillance

Olympic Polyclinic Surveillance

Event-based Surveillance

International Epidemic Intelligence

## And what did we find?

Only a small number of gastrointestinal and respiratory illness outbreaks were recorded during the Games and overall infectious disease

reports were at rates typical for mass gatherings and unexceptional for an average UK summer. No food borne illness was directly linked to a Games venue, despite the tendency for those reporting them to label them as such. Some vaccine preventable diseases required more sensitive consideration to balance the need to prevent spread against the desire of elite athletes not to be treated invasively while training and performing.

Overall there were no public health incidents of significance during the 2012 London Olympic and Paralympic Games. However, to state this confidently, we put in place a number of enhancements to the UK surveillance and reporting systems.

## Much ado about 'nothing'?

Providing reassurance that nothing was happening proved to be a very critical role of the public health surveillance systems, but it is not what these systems are designed for. The importance of this reassurance role is not well described in the literature and careful planning was necessary to ensure the role could be delivered.

Many of the improved surveillance and reporting systems, and new ways of working developed for the Games have now been embedded in the public health service in the UK as a direct legacy of the Games.

So not only were the 2012 Games in London a success, but for us, on this occasion, the benefits outweighed the risks.



## COVER STORY

# Tick-borne disease and activity tourism

## The pharmacist perspective

Pharmacists should start displaying tick repellents and removal tools right alongside the sun screen, says John Kitchen AFTM RCPS(Glasg), but his fact-laden article contains information travel advisors in all disciplines will find relevant – and perhaps alarming!

Activity holidays in the northern temperate zone comprise the most rapidly growing sector of the tourism market. A wide range of destinations offered by low cost airlines has increased the popularity of outdoor pursuits including hiking, angling, camping and mountain biking.

Typically, these are short trips to rural or coastal areas. Activities often involve crawling through bracken or shrubbery to reach remote rivers, taking the unwary into tick habitats where tick-borne diseases (TBD) are just waiting for them. Their risk of infection, already greater than for casual visitors, increases according to the length of stay and amount of exposure. There is little research into the incidence of acquiring infection this way, but one study led to orienteers in Norway being required to wear protective clothing during competition.

Lyme disease (LD), tick borne encephalitis (TBE), anaplasmosis and babesiosis are endemic in many countries. Locations vary from mountain and moor to lush pasture and coastal regions with localised hotspots. The geographic range of TBD is expanding rapidly: generally west and north toward the Arctic Circle and also to greater altitudes. Reasons for this are thought to be associated with climate change, bird migrations and the population of suitable hosts that amplify the pathogenic load. The percentage of infected ticks also varies by the disease(s) borne and by geographical location.

In the northern hemisphere LD is by far the most common tick-borne disease, causing chronic illness to thousands annually. Anaplasmosis, a serious bacterial infection, and babesiosis, a parasitic illness, are emerging diseases, increasing their range and the number of victims. Multiple concurrent infections with several diseases have been recorded following just one single bite.

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### Use a mirror or a good friend to examine those less visible nooks and crannies.

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In areas of Siberia popular with anglers and hunters TBE infected ticks are estimated to exceed 40 percent. Given that TBE virus (TBV) is passed transovarially to the egg, the larva is capable of infection from hatching through development to adult when the cycle is repeated. There is a high incidence of TBE in the High Tatra Mountains, Estonia, Slovenia and the Alps around Grenoble. TBE can also be transmitted via unpasteurised milk.

Clinical cases of TBD are the tip of the iceberg with many more sub-clinical cases presenting (possibly by a factor of 10-to-20 times).

In the UK, Lyme disease cases are increasing annually with approximately 15 per cent of the cases in England and Wales acquired abroad. The World Health Organization estimates 100,000 cases in Northern Europe and Scandinavia, while in Russia and Siberia TBE incidence and morbidity is far higher.

Most travellers planning an activity holiday in the northern hemisphere won't seek travel health advice because of similarities with their home domicile. Those aware of ticks often confuse LD with leptospirosis and most haven't even heard of TBE. Fewer still know of anaplasmosis and babesiosis. Not only do they not seek advice pre-travel, they don't consider that they've been 'abroad'. Even the UK has tick endemic areas of its own.

Special interest blogs often denigrate the risk of tick bites and TBD as unnecessary scare-mongering, which may explain the low uptake of recommended TBE vaccination. Similarly insect repellents, whether DEET- or picaridin-based, are seldom used to deter ticks but rather to reduce the misery of midges, mosquitos or horse flies. In the Lake District, leaflets exhorting prevention methods are also routinely ignored.



### Tick, tick, ticking...

TBD transmission is related to the length of time ticks have been embedded. TBEV is transmitted within hours of a bite, but LD infection occurs after an excess of 24 hours. Ticks are frequently overlooked for this period, mainly because people don't tend to give their bodies more than a perfunctory examination after activity.

Ticks are often removed by coating them in alcohol, butter or sun oil, or by applying heat from cigarettes. This gets rid of the tick, but unfortunately can cause regurgitation of gut contents thus escalating the chance of infection. Few of us carry tweezers or tick tools to aid removal.

Optimally, TBD education should take place pre-travel to emphasise the potentially serious, even life-changing consequences of infection. Some group activity leaders proactively advocate repellents, protective clothing and checking, possibly motivated by their duty of care. In the UK, landowners, foresters, agricultural workers and their employers face a legal responsibility under RIDDOR\* relating to LD. If there are no warning notices in known endemic areas, it will be hard to defend litigation by someone infected by LD while on legitimate activities. It is the same for organised parties to tick endemic destinations abroad where due diligence and duty of care obligations lie with the party leader and organisers.

### Multiple concurrent infections with several diseases have been recorded following just one single bite.

Community pharmacists can improve awareness by using point-of-sale material and TBD leaflets, and by displaying repellents and tick removal tools alongside sun protection products. Pharmacists often know clubs or individuals that may be affected and a well-placed word may improve awareness. Counter staff need training on appropriate and effective products. Such measures help, but as long as travellers view the temperate northern hemisphere as 'safe', the majority will continue to see it as an extension of home.

Over half of those with TBD have no recollection of being bitten. Initial stages of each type of infection may be similar, with headache, nausea, aching limbs and vomiting. The expanding erythema migrans rash of LD doesn't always present. Such symptoms are regularly presented to pharmacists by people looking for advice.

Without knowing their recent travel history, including likely exposure to TBD, the community pharmacist's advice is of little use. In a climate of perceived care it is always wise to start with a simple question: 'Have you been away or done anything out of the ordinary lately?'

\*Reporting of Injuries, Diseases and Dangerous Occurrences Regulations (1995) are at: [www.hse.gov.uk/riddor/](http://www.hse.gov.uk/riddor/)

### At a glance

- Tick borne disease is preventable
- Ticks are dispersed throughout the northern hemisphere
- TBE is the only vaccine-preventable TBD
- Insect repellents DEET and picaridin are effective
- Impregnating clothing with permethrin lasts about 20 washes and is a very effective acaricide
- Check your body thoroughly after exposure: use a mirror or a good friend to examine those less visible nooks and crannies
- If you find a tick remove it immediately using a tick tool or fine tweezers. Do not use fingernails, cigarette ends or butter!
- Seek medical advice if you become ill

### Important information for clinician:

- Has the person been bitten by a tick: when and where?
- If there's no history of a bite, still seek information about activities and country visited.
- Suspicion of tick borne disease is sufficient grounds to commence treatment immediately as diagnostic tests often prove negative in the first week or two of infection.

CLINICAL

# DENGUE FEVER: What, where and why we must be vigilant

A comprehensive round-up of the current state of play from Joanne Lawrence, Senior Scientist (Travel Health) in the Travel and Migrant Health Section at the Centre for Infectious Disease Surveillance and Control (CIDSC), Public Health England.

**Dengue fever is also known as 'break bone' fever because of the severe muscle, joint and bone pains that can accompany the illness. It is a mosquito-borne infection caused by the dengue virus, a member of the Flaviviridae family of which there are four serotypes: Den 1,2,3 and 4. The virus is transmitted by Aedes spp mosquitoes, most commonly Aedes aegypti and Aedes albopictus.**

Symptoms of classic dengue fever range from non-existent or just a mild flu-like illness, with or without a rash, to a more severe illness with high fever, mild haemorrhage, rash, headache and muscle pains. Symptoms may vary according to the age of the patient. In some cases, potentially lethal complications of dengue haemorrhagic fever and dengue shock syndrome may develop although these complications are extremely rare in travellers.

Dengue is under reported worldwide, but it is estimated by the World Health Organization that 50-to-100 million new infections occur each year in over 100 endemic countries in Africa, the Americas, the eastern Mediterranean, South East Asia and the western Pacific (figure 1).

However, a study by Bhatt et al estimated that the number of global infections may be up to three times more than the WHO estimate. In 2012, WHO described dengue as the most important mosquito-borne infection in the world, with the global incidence of dengue increasing 30-fold in the last 50 years.

In recent years, local transmission of dengue has occurred in new areas such as France and Croatia in 2010 and the autonomous region of Madeira in Portugal, where an outbreak involving over 1,800 cases was reported toward the end of 2012. Dengue has also re-emerged in Florida in the United States where 74 locally-acquired cases were reported between 2010 and August 2013. (Figure 2)

In the UK, dengue fever is a travel-associated infection; in 2012, some 343 cases were reported in England, Wales and Northern Ireland (EWNI) by the Public Health England (PHE) Rare and Imported Pathogens Laboratory (RIPL), an increase of 54 per cent compared to 2011. Cases have continued to increase into 2013 with 141 cases reported as of the end of April, a 2.8-fold increase compared to the average reported during the same period each year since 2009.

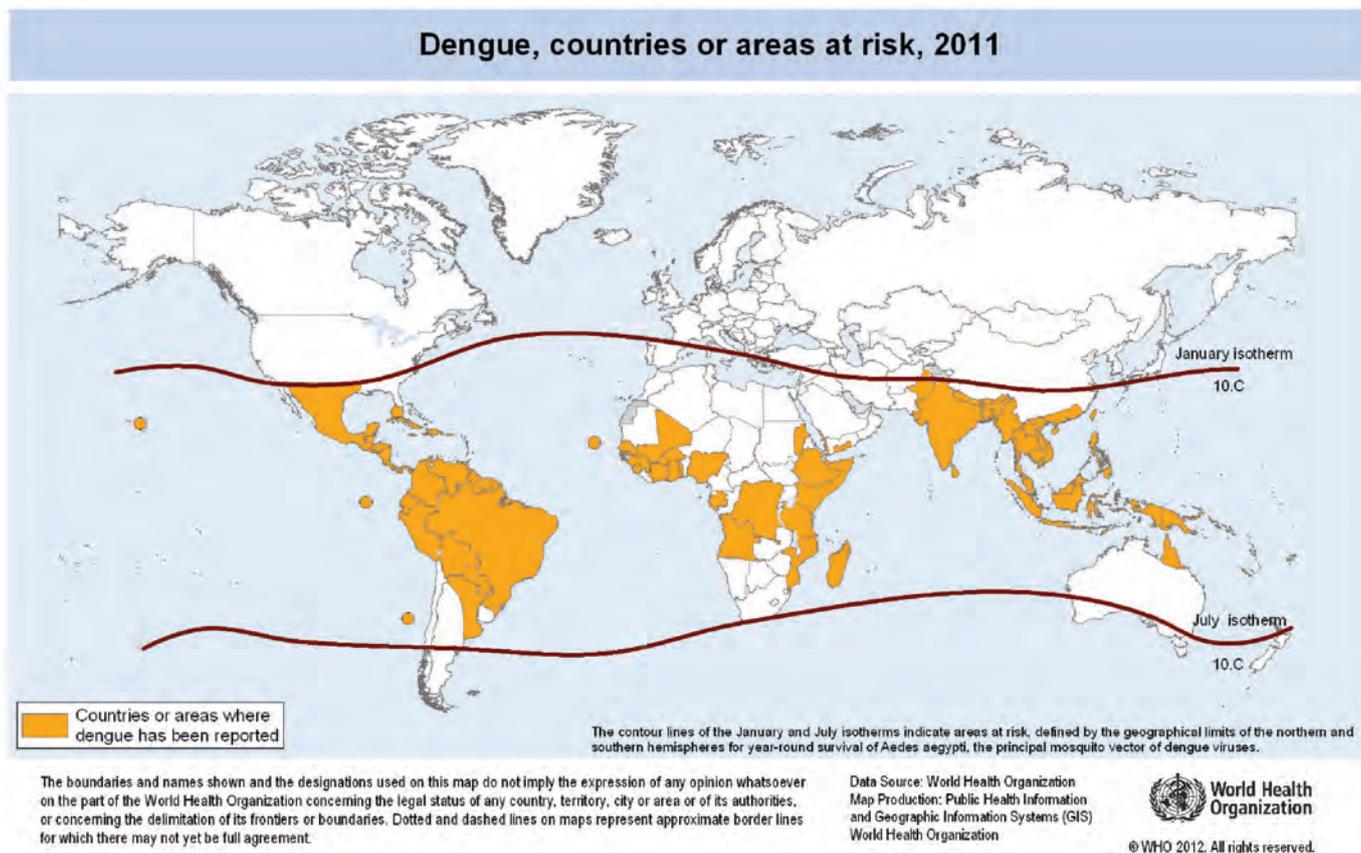
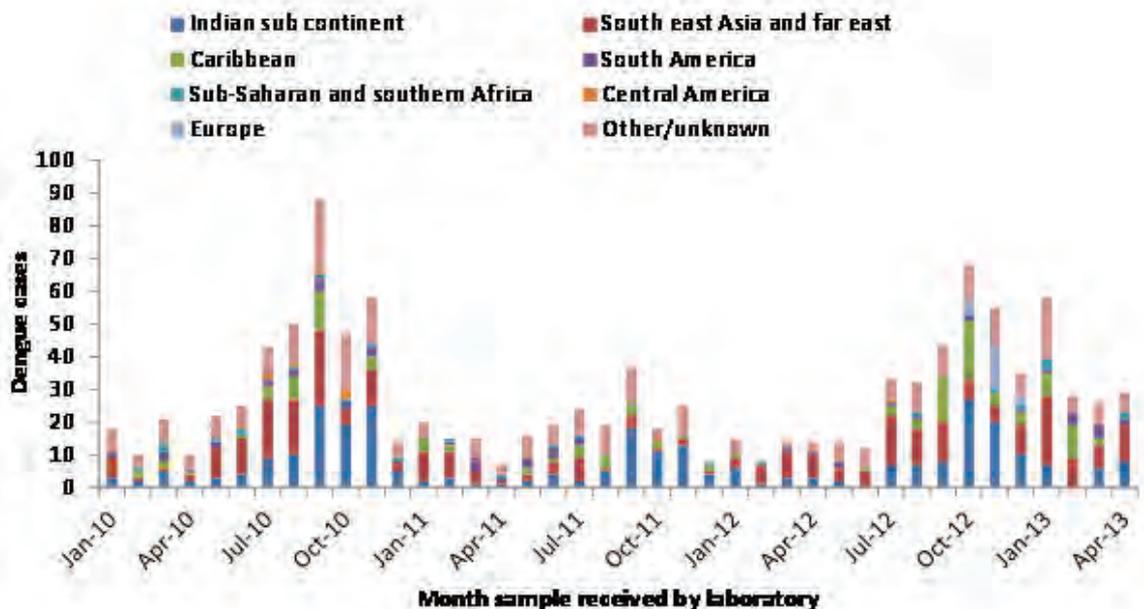


Figure 1: Global risk map for dengue fever, WHO 2012. Source: World Health Organization: International Travel and Health 2012

**Figure 2: Cases of dengue fever in England, Wales and Northern Ireland by month and world region of travel: 2010 - April 2013**

Data source:  
Laboratory reports from the PHE Rare and Imported Pathogens Laboratory

Source: World Health Organization: International Travel and Health 2012



In 2012, just over two-thirds of cases (where a country of travel was indicated) reported recent travel to the Indian sub-continent or South East Asia. These regions consistently account for the majority of infections each year (figure 2). Thailand and India were the most frequently reported countries of travel between 2010 and 2012, accounting for 40 per cent of all cases. However, in 2012 an increase in cases associated with travel to Jamaica was also seen (33 compared to just three in 2011) as well as 20 cases associated with the outbreak in Madeira. At the beginning of 2013, cases associated with travel to Thailand continued to increase and increases in cases associated with travel to Brazil, Barbados and Sri Lanka were also reported.

According to various media reports, all of these countries have been experiencing outbreaks or a recent surge in reported cases. Dengue fever epidemics in endemic countries can also be cyclical (occurring every two-to-three years in response to the introduction of a new serotype or a new susceptible population) and are often weather dependent – that is, more likely to occur after a long period of rain and in humid conditions. This can be reflected in the trend of traveller-associated cases as well. (Figure 2).

Dengue is not preventable by vaccination although there are many trials on-going to develop a vaccine. Currently travellers have to rely on obtaining knowledge about their travel destination and their own personal behaviour to avoid infection by using mosquito bite avoidance measures such as repellents containing DEET and cover-up clothing. *Aedes* spp mosquitoes bite during daylight hours -predominantly at dawn and dusk - so particular vigilance to bite avoidance is advised during those times. See the Resources box for useful websites.

It is important for travel health practitioners to keep up to date with the latest global epidemiology of dengue so they can advise travellers to take precautions where and when necessary. A number of resources are freely available for this.

Health professionals should be aware of the possibility of dengue fever in febrile travellers who have recently visited tropical or sub-tropical destinations. If they suspect a case, they should send appropriate samples for testing (including a full travel and clinical history with relevant dates) to the PHE Rare and Imported Pathogens Laboratory. The PHE Imported Fever Service can also provide specialist advice to local infectious disease clinicians or microbiologists if needed.

## Resources

### General travel health advice

National Travel Health Network and Centre (NaTHNaC):  
[www.nathnac.org](http://www.nathnac.org)

### Surveillance and outbreak information

NaTHNaC outbreaks surveillance database:  
[www.nathnac.org/countrysearch.aspx](http://www.nathnac.org/countrysearch.aspx)

NaTHNaC clinical updates:  
[www.nathnac.org/pro/clinical\\_updates/index.htm](http://www.nathnac.org/pro/clinical_updates/index.htm)

Public Health England: dengue fever  
[www.hpa.org.uk/Topics/InfectiousDiseases/InfectionsAZ/DengueFever/](http://www.hpa.org.uk/Topics/InfectiousDiseases/InfectionsAZ/DengueFever/)

### Clinical information and prevention

NaTHNaC information sheet on insect bite avoidance:  
[www.nathnac.org/pro/factsheets/liba.htm](http://www.nathnac.org/pro/factsheets/liba.htm)

NaTHNaC Information Sheet on dengue:  
[www.nathnac.org/pro/factsheets/dengue.htm](http://www.nathnac.org/pro/factsheets/dengue.htm)

NaTHNaC country information pages:  
[www.nathnac.org/ds/map\\_world.aspx](http://www.nathnac.org/ds/map_world.aspx)

World Health Organization dengue fact sheet:  
[www.who.int/mediacentre/factsheets/fs117/en/index.html](http://www.who.int/mediacentre/factsheets/fs117/en/index.html)

Public Health England Imported Fever Service:  
**0844 778 8990**

Information is also available from TRAVAX:  
[www.travax.nhs.uk](http://www.travax.nhs.uk)

# Guidelines for prevention of malaria in UK travellers

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An overview of the recent update by Jane Chiodini FFTM RCPS(Glasg), including a summary of some of the more significant changes.  
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**Guidelines for practitioners advising travellers who are visiting malaria endemic areas have been available for some time now and published in journals such as the BMJ. However, in 2007 a completely new publication was written, taking the form of an A5 sized book that was attractive both visually and practically. This created a comprehensive and, importantly, a far more user-friendly guidance document for all healthcare professionals.**

Written by the Health Protection Agency (HPA) Advisory Committee for Malaria Prevention (ACMP), the guidelines were available both in hard copy and electronic format. A revision of the guidelines was released on 22 August 2013, written again by the ACMP, now part of Public Health England (PHE), and one's first impression is about how different it looks! Printed as an A4 document with no illustrations (apart from a few charts and maps), and only available electronically, the difference is perhaps a sign of the times.

However, having got over the initial shock, I've found it to be equally user friendly, more cost effective to print out if a paper copy is needed and possibly easier to read given the page layout. As with the previous edition, the Executive Summary on page six suggests that the guidelines may be of use to prospective travellers who wish to read about the options themselves.

### Some of the significant changes

These changes will affect your day-to-day practice when advising travellers who need malaria prevention advice. I strongly recommended reading the UK Malaria Guidelines themselves for a fuller explanation before acting on any of the information summarised here. The document is easy to read and printing off charts such as the malaria chemoprophylaxis dosages for both adults and children could provide useful aide memoirs in your consultation.

- Leaflets have been created to give advice to your travellers and are now available in Bengali, Gujarati, Punjabi and Urdu in addition to English.
- Additional information about a fifth species of *Plasmodium knowlesi* has been included, with the comment that it is very rarely imported at present, but is capable of producing severe illness. Within the malaria lifecycle, *P.knowlesi* divides over 24 hours once inside the red cell, making progression of the illness more rapid.
- Added information on bite prevention includes knowledge that DEET is reportedly used worldwide by approximately 200 million people each year. A variety of studies has concluded that there is a low risk of adverse effects when DEET is applied according

to product directions. DEET is useful as a clothing repellent, but its duration on clothing is shortened by its volatility. Most of the nets now available are long-lasting impregnated nets. In these products the pyrethroid is incorporated into the material of the net itself or bound to it with a resin.

- Advice regarding obtaining malaria chemoprophylaxis has been changed to read: "ACMP advises those purchasing antimalarial drugs over the Internet to ensure that they are dealing with a bona fide supplier or web site."
- Dosage of chloroquine base is stated as 155mg and therefore the adult dose of chloroquine is 310mg (2 tablets). There is a very good explanation regarding the dose steps for chloroquine syrup not being the same as chloroquine tablets, resulting in a child possibly being prescribed a different dose of chloroquine, depending on whether they take tablets or syrup.
- Chemoprophylaxis and female-related issues:
  - > Guidance has been removed regarding additional contraceptive precautions needed when taking doxycycline, but with a reminder that if the traveller suffers vomiting or diarrhoea, the usual additional precautions should be observed.
  - > Doxycycline is best avoided for antimalarial prophylaxis during pregnancy. However, if required before 15 weeks' gestation, it should not be withheld if other options are unsuitable. The course of doxycycline, including the four weeks after travel, must be completed before 15 weeks' gestation.
  - > Additional information for breast feeding concludes with ACMP's view that doxycycline should not be used in breast feeding unless other options are unsuitable and its use is felt to be essential.
  - > ACMP advises against the use of atovaquone/proguanil for antimalarial chemoprophylaxis in pregnancy. However, if there are no other options, its use may be considered in the second and third trimesters after careful risk assessment. If it is used in pregnancy, a folate supplement should also be given.
  - > Mefloquine: Caution is advised in the first trimester, but it can be used in all trimesters for travellers to high risk areas.

- ACMP advises that children can be given atovaquone/proguanil from 5kg in weight, but a child weighing 5-8 kg would be given ½ paediatric tablet and children weighing >8 to 10 kg would be given ¾ paediatric tablet.
- Detailed country-by-country advice for 117 different countries has been provided in a table. Risk of malaria and recommendations for chemoprophylaxis have been revised for some countries and/or geographical areas, and some geographical areas of risk have been re-defined. Clinical updates posted on NaTHNaC and TRAVAX provided this statement:

"Both NaTHNaC and Health Protection Scotland (HPS) have representation on the Advisory Committee for Malaria Prevention in UK travellers (ACMP). HPS, through the Scottish Malaria Advisory Group, produces country recommendations and accompanying maps which are updated on an on-going basis; in some instances, there may be differences between the ACMP (and NaTHNaC) and HPS guidance. Health professionals are encouraged to be consistent in their choice of resource, and are assured that if they follow either standard their travellers will be receiving expert advice based on evidence-based recommendations."

- 'Students and children at boarding school' includes a new section providing suggestions for specific written instruction/advice for the parents.

For links to all the information on malaria mentioned here and more, go to: [www.janechiodini.co.uk/education/malaria/](http://www.janechiodini.co.uk/education/malaria/)



## IN FOCUS

# Clare Henderson

## MFTM RCPS(Glasg)

Nurse, entrepreneur and now the new part-time FTM Foundation and Diploma in Travel Medicine Course Manager, Clare Henderson reckons it's all about synergy.



Originally from the Scottish Highlands, Clare Henderson lives near Glasgow with her husband, a paramedic, and their six-year-old daughter. 'She's one of the reasons I came to travel medicine', says Clare, who qualified as an RGN in the early-1990s at Dundee School of Nursing & Midwifery 'I was working in A&E in Surrey, but we wanted a family and shift work was not for me. I saw an advert for a nurse in a clinic, doing occupational health, which interested me, and travel medicine, which I'd never thought about: "No experience necessary". And that's how I came to the field of practice I love!'

She received extensive in-house training in travel health and did a residential course at the London School of Hygiene and Tropical Medicine before taking a job back in Scotland at a private travel clinic. When the owners closed the clinic, an entrepreneur was born: 'I saw an untouched market and that's when I opened my travel clinic at Glasgow Airport.'

**'When people in the industry see you have the Dip.Trav.Med. they know you know your stuff!'**

Realising she needed a formal qualification, in 2006 she completed the Diploma in Travel Medicine, a year-long blended e-learning course, run at that time by Health Protection Scotland and awarded by the Royal College of Physician and Surgeons Glasgow. 'What a great course the Diploma is: what it teaches you, how it's put together, the high standards. When people in the industry see you have the Dip.Trav.Med. they know you know your stuff!'

With the birth of her daughter in 2007, Clare employed another nurse and became part-time at her own clinic. She kept her practice up to date

through public speaking, sharing her specialist knowledge with practice nurses. 'My talks were research-based so I had to stay current, but I was out there on my own. Thankfully the Faculty of Travel Medicine had emerged from the Royal College of Physician and Surgeons Glasgow and I saw how I could continue my professional development.

'In addition to the Foundation and Diploma courses, the FTM offers four categories of membership. I already had the Diploma so I was halfway to full Membership.' She successfully sat part 2 of the FTM Membership exam in 2012, earning the distinguished post-nominals MFTM RCPS(Glasg).

**'Those letters mean I have been benchmarked by my peers as being fit to provide an independent specialist travel clinic.'**

'I enjoyed studying for the exam, reinforcing areas where I was strong and acquiring new knowledge and skills. It's a hard exam – it has to be – and I was nervous on the day, but passing it was a real boost to my confidence: those letters mean I have been benchmarked by my peers as being fit to provide an independent specialist travel clinic.'

By the time Clare was ready to go back to full-time work, she realised she quite liked the arrangement she had for working part-time at her clinic, freeing her up to seek new challenges. 'I believe in synergy. It seems things come together and work out for a reason and, with great timing, this position came up with the Faculty.'

Since May 2013 she's been sharing the role of Foundation and Diploma in Travel Medicine Course Manager with Ann McDonald. 'The

Diploma takes a year to complete so it will take me a full year to see the whole cycle of it, but already it's fascinating, supporting people all over the world as they undertake these courses.'

Clare is passionate about how the multidisciplinary FTM opens up professional opportunities for nurses, aware that travel advice is too often left to 10-minute sessions with over-worked practice nurses. 'I couldn't run an asthma clinic. I couldn't run a diabetes clinic. Why would a practice nurse without specialist training be expected to run a travel clinic? I hope that I can show nurses what high standards they can attain.'

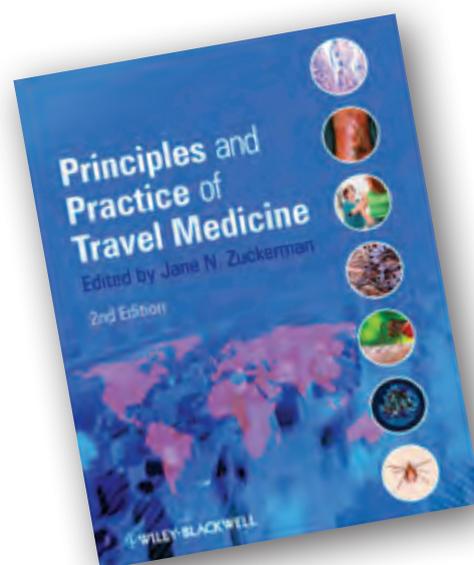
'I still can't believe everything I've achieved in my education. I always wanted to be a nurse, but the only course I could get onto when I was 16 was a degree course, so I got an excellent start. When I needed a 9-5 job I left A&E nursing to work in a travel clinic and found my true vocation. I needed credentials in travel health just as the very best specialist training came on stream. And now, I'm on the other side of the fence, helping others achieve the standards that safeguard our practice.'

**'I couldn't run an asthma clinic. I couldn't run a diabetes clinic. Why would a practice nurse without specialist training be expected to run a travel clinic?'**

# Principles and practice of travel medicine (2nd edition)

Edited by Jane N Zuckerman

Reviewed by Sandra Grieve FFTM RCPS(Glasg)



Dr Jane Zuckerman's CV is distinguished by any standard:

- Director of the WHO Collaborating Centre for Travel Medicine
- Director of the UCL Medical Student Occupational & Royal Free Travel Health Centre Academic Centre for Travel Medicine & Vaccines
- Sub-Dean Electives and Vice-President, Faculty of Pharmaceutical Medicine at University College London Medical School

And that's just her current roles!

Having reviewed the first edition in 2001, I welcome the opportunity to review this new one. The format is similar with the content delivered in six sections, but with more chapters in each and information expanded to include new developments and advances in the field. Expert contributors now number an impressive 80, lending a truly international perspective to the content. Travel to international sporting events and a favourite of mine – space tourism - are welcome and timely additions.

Although travel abroad for healthcare is not new, the global economic downturn has created a boom in so-called health tourism. The discussion on the reasons, benefits and pitfalls is well covered including the ethical perspective and dilemmas practitioners may face– with case studies to give food for thought.

In the preface, the editor asks: "Where have we been, where are we now and where are we going?" - a good indication of what we can expect to find in the book. The majority of people who travel are 'well' and the art of practising travel medicine lies mainly in keeping them that way.

However, it is becoming more complex for travel health advisers as increasingly those with pre-existing medical conditions are travelling to destinations which may pose a risk to their condition or where the lack of healthcare resources put them at risk if a medical problem arises and they need care. The management of these high risk travellers is covered in Chapter 27 and includes both general and disease-specific advice.

Good emphasis is given to the fact that there is no age limit for travelling and no one size fits all scenarios. Individuals deserve the best advice for their trip and the list of additional resources for specific reference is most useful. Once again case histories throughout the text help to illuminate the subjects.

Chapter Six looks at the epidemiology and surveillance of travel-related disease and emphasises the benefits of international collaboration in detecting infectious diseases and sharing the information to alert and protect other travellers.

Malaria prevention and treatment information is welcome. Chapter 11 ('The Interconnecting World') looks at transport, migrants, and emerging and re-emerging infectious diseases, and also considers the role of mobile populations

and mass gatherings in this. Numerous excellent tables relating to the importance of travel health support the information.

I loved the quote at the beginning, credited to Harvey Cushing: "A physician is obligated to consider more than a diseased organ, more even than the whole man – he must view the man in his world." Never was a truer word spoken.

I recommend this textbook as a valuable resource for study and reference, and it will be a welcome addition to any library supporting education in travel medicine.

## Principles and practice of travel medicine

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ISBN: 978-1-4051-9763-2

E-book 680 Pages £124.99.

ISBN: 978-1-118-39207-2

## Dates for your diary

### BGTHA Annual Scientific Meeting

British Global and Travel Health Association

**12 October 2013**

The MShed, Bristol

[www.bgtha.org/Conference2013.asp](http://www.bgtha.org/Conference2013.asp)

### MASTA Travel Medicine Study Day

**8 November 2013**

Royal College of Physicians, London

[www.masta.org/studyday](http://www.masta.org/studyday)

### 24th National Immunisation Conference for Health Care Workers UK

**6 December 2013**

Manchester

Conference Centre

Telephone: 0161 419 4684

Fax 0161 419 4686

### *Contacts that count* RCN Public Health Forum Conference and Exhibition

**21 March 2014**

University of Warwick, Coventry

<http://goo.gl/DT4sCI>

### 16th International Congress on Infectious Diseases

**2-5 April 2014**

Cape Town, South Africa

[www.isid.org/igid](http://www.isid.org/igid)

### 10th Asia Pacific Travel Health Conference

**7 - 10 May 2014**

Ho Chi Minh City, Vietnam

[www.apthc2014.org](http://www.apthc2014.org)

### NECTM5 - The Northern European Conference on Travel Medicine

**5-8 June 2014**

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Bergen, Norway

Online Registration opens 1

November 2013

<http://nectm.com/>

### ISTM 6th Regional Conference (RCISTM6) Wilderness Medical Society (WMS) Joint Conference

**3-7 August 2014**

Jackson Hole, Wyoming, USA

[www.ISTM.org](http://www.ISTM.org) and

[www.WMS.org](http://www.WMS.org)

### South African Society of Travel Medicine (SASTM)

Travel Health Africa – Quo vadis?

18-21 September 2014

Durban, South Africa

[www.sastm.org.za](http://www.sastm.org.za)

### CISTM14

24-28 May 2015

Québec City, Canada

[www.ISTM.org](http://www.ISTM.org)

## From the journals

Perlman, S and McCray, PB Jr (2013) **Person-to-Person spread of the MERS Coronavirus – An evolving picture**, *New England Journal of Medicine*, 369: pp.466-467. [www.nejm.org/doi/full/10.1056/NEJMe1308724?query=TOC](http://www.nejm.org/doi/full/10.1056/NEJMe1308724?query=TOC)

Murray, CJL and Lopez, AD (2013) **global health: measuring the global burden of disease**, *New England Journal of Medicine*, 369: pp. 448-457. [www.nejm.org/doi/full/10.1056/NEJMra1201534?query=TOC](http://www.nejm.org/doi/full/10.1056/NEJMra1201534?query=TOC)

Salathé, Met al. (2013) **influenza a (h7n9) and the importance of digital epidemiology**, *New England Journal of Medicine*, 369: pp. 401-404 [www.nejm.org/doi/full/10.1056/NEJMp1307752?query=TOC](http://www.nejm.org/doi/full/10.1056/NEJMp1307752?query=TOC)

Peterson, Drew C;Martin-Gill,Christian; Guyette, Francis Xet al. (2013) **Outcomes of medical emergencies on commercial airline flights**, *New England Journal of Medicine*,368: pp. 2075-2083. [www.nejm.org/doi/pdf/10.1056/NEJMoa1212052](http://www.nejm.org/doi/pdf/10.1056/NEJMoa1212052)

Desmond, NA et al. (2013) **Recognising and treatment seeking for acute bacterial meningitis in adults and children in resource-poor settings: a qualitative study**, *PLoS ONE*, 8(7):

e68163. doi:10.1371/journal.pone.0068163 [www.plosone.org/article/info:doi/10.1371/journal.pone.0068163?goback=%2Egde\\_5019504\\_member\\_264888310#sthash%2EEeb9ODzff%2Edpuf](http://www.plosone.org/article/info:doi/10.1371/journal.pone.0068163?goback=%2Egde_5019504_member_264888310#sthash%2EEeb9ODzff%2Edpuf)

Bauer, I;Hall, S and Sato, N (2013) **Providing travel health care—the nurses’ role: An international comparison**, *Travel Medicine and Infectious Disease*,11, 4 , pp. 214-224. [www.travelmedicinejournal.com/article/S1477-8939\(13\)00068-9/abstract](http://www.travelmedicinejournal.com/article/S1477-8939(13)00068-9/abstract)

Chen,C and Petrick,JF(2013) **Health and wellness benefits of travel experiences: A literature review**, *Journal of Travel Research*, 0047287513496477 <http://jtr.sagepub.com/content/early/2013/07/15/0047287513496477.abstract>

Godbole, G;Blaze, M;Smith, V;Whitty, C andChiodini, P(2013) **Requests for malaria prevention advice to Public Health England, Malaria Reference Laboratory: A retrospective observational study**, *Travel medicine and infectious disease*, 11,4 P205–209 [www.sciencedirect.com/science/article/pii/S1477893913000707](http://www.sciencedirect.com/science/article/pii/S1477893913000707)

LaRocque, R; Deshpande, B; Rao, S et al. and the Global TravEpiNet Consortium (2013) **Pre-travel health care of**

**immigrants returning home to visit friends and relatives**, *American Society of Tropical Medicine and Hygiene*, 88(2),pp. 376–380. [www.ncbi.nlm.nih.gov/pmc/articles/PMC3583333/](http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3583333/)

Wagner, KS;Lawrence, J;Anderson, L; Yin, Z; Delpech, V;Chiodini, P; Redman, C andJones, J(2013) **Migrant health and infectious diseases in the UK: findings from the last 10 years of surveillance**, *Journal of Public Health*,10.1093/pubmed/ftd021 <http://jpubhealth.oxfordjournals.org/content/early/2013/03/20/pubmed.ftd021.short>



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