TAISTEAL

Travel Medicine Society of Ireland

Volume 17 | Issue 2

Summer 2017

NEWSLETTER

ed. S. Collins

HIGHLIGHTS OF THE 15TH CONFERENCE OF THE INTERNATIONAL SOCIETY OF TRAVEL MEDICINE

Barcelona - a Mediterranean masterpiece

Barcelona served as a stunning backdrop for the CISTM15 conference, which attracted a record attendance of over 1500 delegates from all over the world. The ISTM celebrated its silver jubilee in style, with a spectacular opening ceremony during which the ISTM Founders were honoured and the second class of Fellows were recognised. The gala ball was a spectacular affair and provided an open air gastronomic tour of Spain and its culinary delights.

Going Dutch – Our ISTM Presidents in full flight at the Opening Ceremony

Happy birthday to the ISTM – open-air gala dinner at the Poble Espanyol

The late great Alan Magill, whose ground-breaking work on malaria eradication in Africa has left a lasting legacy in travel medicine and beyond, was remembered with the inaugural Alan Magill memorial lecture, which was eloquently delivered by Sir Richard Feacham. It focused on global efforts to eradicate malaria and pointed to several success stories including Sri Lanka, which was recently declared malaria free.

The much loved and respected Alan Magill (1953-2015)

At the ISTM Members Assembly, the baton of presidency of the ISTM passed from the dynamic Annelies Wilder-Smith to Leo Visser, also from the Netherlands. Leo pledged to maintain the emphasis on closing the gap in travel medicine practice in non-western countries which Annelies had championed, and also to develop the use of digital technology in travel medicine and advance the cause of migrant healthcare.

CISTM15 offered a wealth of learning, with 12 plenary speakers, 39 symposium presentations, 38 workshop facilitators, 3 'Meet the History' speakers, 3 'Cases of the Day', 8 panel discussion participants, 48 free communications presentations and 187 scientific posters in 19 categories! The outstanding efforts of the scientific committees, the ISTM central administrative team and the local organising committee in producing a conference of this scale were applauded throughout the meeting.

A safe place to take a selfie!

Plenary sessions focused on migration, public health emergencies and global security, antimicrobial resistance and Zika virus infection. A lively panel discussion on the use of antibiotics for the treatment of travellers' diarrhoea followed the launch of the new guidelines for the treatment and prevention of travellers' diarrhoea, which are available as a free text article in the current issue of Journal of Travel Medicine. This conference placed a great emphasis on antimicrobial resistance with presentations dedicated to the role of travellers as vectors of resistant bacteria and to the international responses to this threat.

Symposia included presentations on special travellers such as students, sports participants, female travellers, long-term travellers, and sex tourists. Jay Keystone's memorable reflections on the latter group drew an appreciative response from the curious audience! Immunosuppressed travellers' issues were also discussed and new tropical medicine guidelines in relation to leishmaniasis and Chagas disease were presented. A symposium entitled 'Our Dangerous World' reminded us of the triple threats of climate change, air pollution and extreme events such as earthquakes and tsunamis. An interesting symposium devoted to extreme travel addressed high altitude illness prevention and management, and introduced the travel medicine community to the emerging realities of commercial space travel.

Well attended workshops included ones devoted to specific destinations such as India and Southeast Europe, the variation in travel medicine practice across continents, rabies prevention and psychosocial aspects of travel. Eric Caumes, Editor-in-Chief of Journal of Travel Medicine, presented an excellent round up of the most influential recent publications in travel medicine.

At the closing ceremony it was announced that the 16th CISTM conference will be held in Washington DC in June 2019. I hope that the entire global travel medicine community will enjoy the freedom to travel to this great city, to rekindle friendships and to update their knowledge in the fast-moving and exciting field of travel medicine.

Prof. Gerard Flaherty

TRAVEL MEDICINE SOCIETY OF IRELAND
Executive Committee and Officers

President:	Conor Maguire
President-Elect:	Simon Collins
Hon. Secretary / Hon.Treasurer:	Anne Redmond
Newsletter Editor:	Simon Collins
N.E.C.T.M. Scientific Committee	Gerard Flaherty
Officers:	Gerard Flaherty
	John Gibbons
	Siobhan Grehan
	Astrid Weidenhammer
	Patricia Brady
	Joseph Sim
Recording Sec.:	Anne Redmond

Foundation and Diploma Courses in **Travel Medicine**

ROYAL COLLEGE OF PHYSICIANS AND SURGEONS OF GLASGOW
TRAVEL MEDICINE

Foundation Course in Travel Medicine

The Foundation Course in Travel Medicine is a **six month e-learning course** suitable for those working in the field of Travel Medicine.
The course includes:

- Introductory educational training session in Glasgow (*two days, attendance required)*
- Four e-learning units with assignments

Topics covered include:

Pre-travel risk assessment
Infections and epidemiology of infection
Immunisation theory, practice and available vaccines
Malaria

Diploma in Travel Medicine (DipTravMed)

The Diploma Course is suitable for healthcare practitioners working in the field of Travel Medicine. It is delivered through a blended e-learning approach over one full calendar year.

The course includes:

- An introductory residential week in Glasgow
- Module 1: ten e-learning units with assignments
- A mid-session residential week in Glasgow including an objective structured clinical examination (OSCE)
- Module 2: ten e-learning units of self study with practical exercises
- Module 3: a project chosen by the student
- A final written examination in Glasgow.
  Overseas students can opt to sit this examination in their own country by arrangement.

Student support (applicable to both courses):
All students are allocated a personal advisor and access to the course website, TRAVAX and e-Library. Online staff/student communication is also provided.

The UK's only multidisciplinary Royal College

For more information and applications, please contact:
Applications and administration: Lesley Haldane
+44 (0)141 241 6217 | lesley.haldane@rcpsg.ac.uk

Course content and curriculum: Ann McDonald or Clare Henderson
ann.mcdonald@rcpsg.ac.uk | clare.henderson@rcpsg.ac.uk
+44 (0)141 227 3239

Travel Medicine Courses, Faculty of Travel Medicine
Royal College of Physicians and Surgeons of Glasgow
232-242 St Vincent Street, Glasgow, G2 5RJ, UK
www.rcpsg.ac.uk/travel-medicine

TEST YOUR KNOWLEDGE – MULTIPLE CHOICES QUESTIONS IN TRAVEL MEDICINE:

1. African Trypanosomiasis:

A. Is transmitted by the bite of an infected Tsetse fly found in rural Africa.

B. Should be considered in febrile travellers who recently visited game parks in East or Southern Africa.

C. Is also known as Chagas Disease.

D. Both Gambiense & Rhodesiense forms will eventually affect the central nervous system and result in coma and death if not treated.

2. Leptospirosis:

A. Is a bacterial disease acquired from water or moist vegetation contaminated with the urine of infected animals such as rats, reptiles, frogs & cattle.

B. Treatment: supportive and with Rifampicin

C. Majority of infected people have severe disease which is frequently fatal.

D. Can affect travellers and is also an occupational disease.

3. Sun & the travellers:

A. One needs to take sun precaution on bright hazy days as the sun's ultraviolet radiation (UVR) can penetrate cloud.

B. Sun screen's Sun Protection Factor (SPF) in theory increases the amount of time that can be spent in the sun by the factor quoted.

C. Intensity of sunlight increases near the equator, at higher altitude & in polar regions.

D. Solar skin damage increases the risk of malignant melanoma and squamous cell carcinoma but not basal cell carcinoma.

4. 4. Immunisation:

A. Travel vaccinations offer safe, reliable protection against a limited number of important diseases.

B. Immunity can only be acquired through active vaccination.

C. Incomplete or interrupted vaccine schedule always require restarting the entire vaccine courses.

D. The only mandatory vaccine requirement for travel (officially sanctioned by WHO) relates to yellow fever although pilgrims to Saudi Arabia may be required to show proof of vaccination against Meningitis ACWY.

5. 5. Tetanus:

A. Naturally occurring immunity does not occur but effective protection is achieved in 90-95% of people post vaccination.

B. For vaccinated people who had received 5 doses of tetanus vaccines, booster doses may be considered every 10 years.

C. Trivial or mild injuries do not cause tetanus.

D. Unimmunised people with tetanus prone wounds will not require Tetanus Immunoglobulin if given Tetanus vaccine immediately post injury.

6. What country is this?: Hints:

- The highest risk of Lyme's Disease in Europe is found in central Europe, with Slovenia and this country having the highest rates of infection.
- The oldest zoological garden in the world, founded in 1752, is located in the capital city of this country.
- This country has 13 peaks above 3000m and Europe's tallest waterfall is located in this country.

Questions set by Dr. Joseph Sim. **Answers on page14**

DR. DOM COLBERT UNDERGRADUATE PRIZE IN TRAVEL MEDICINE

Ian James Long receives the 2017 Dr. Dom Colbert Undergraduate Prize in Travel Medicine.

Pictured, from left to right, are Dr. Joseph Sim, Dr. Astrid Weidenhammer, Dr. John Gibbons, Dr. Hakha Nikookam, Prof. Gerard Flaherty, Dr. Conor Maguire (TMSI President), Ian James Long, Dr. Dom Colbert, Dr. Simon Collins (TMSI President-elect), and Ms. Patricia Brady. (Missing from photo are the photographer, Ms. Siobhán Grehan, and our busy Honorary Secretary-Treasurer, Mrs. Anne Redmond)

The winner of the 2017 Dr. Dom Colbert Undergraduate Prize in Travel Medicine was presented with a specially engraved gold medal by Dr. Colbert in a special ceremony at the recent TMSI educational seminar in Dublin. Ian James Long is a third year medical student studying at the National University of Ireland Galway.

Ian, who hails from Singapore, was introduced by Prof. Gerard Flaherty, who praised the high quality of essay entries received from several Irish medical schools. Each submission was independently assessed in blinded fashion by the executive committee.

The comprehensive, well researched, and very well written nature of Ian's essay attracted high praise from the judges. Prof. Flaherty paid special tribute to the Dr. Dom Colbert, whose contribution to the TMSI and to travel medicine education and scholarship internationally have been exemplary.

Ian was invited to read his essay to the assembled audience before receiving his medal from Dr. Colbert.
Ian has kindly agreed to allow his essay to be reproduced in full (with minor edits by GF) for our members.
Congratulations to Ian!

Prof. Gerard Flaherty

TRAUMATIC TRAVELS – HOW CAN WE REDUCE THE BURDEN OF ACCIDENTAL DEATH IN OVERSEAS TRAVELLERS?

WINNING ESSAY BY IAN JAMES LONG

"Hot air balloon crash in South Africa kills British tourist ". ... The Inquisitr[1]

This is one of many macabre global headlines documenting tourism related deaths which, in most cases, can be avoided by adopting common sense, awareness and appropriate caution. With the seismic growth of globalised travel, forecasted to be over 1.8 billion arrivals by 2030, such headlines are becoming more frequent and it is timely that travellers should be made more aware of their actions, their environment, the associated trumatic risk(s) and the possible intervention strategies.[2] The purpose of this essay is to outline the underlying causes for these traumatic injuries by examining the relevant data. This may provide a basis for drafting suitable interventions to avert such injuries. To set the context behind this essay, the first paragraph will evaluate overall mortality data. It will then consider the causes of accidental death in overseas travellers. Although there is a vast range of causes of travel-related deaths, this essay will focus on several key causes: road traffic accidents (RTAs), adventure sports, wildlife attacks, and homicides. Articles indexed on Scopus and PubMed databases were retrieved using the search terms 'accidental death' combined with 'international travel' and 'travel'. Additional publications were obtained from the reference lists of articles. Moreover, published media reports of travel-related traumatic deaths were also examined.

Mortality Data

This section will analyse the data on the top causes of death in 2010, to provide the context of discussion in the following paragraphs. Firstly, in 2010, out of 52.8 million deaths globally, 65% was attributable to non-communicable diseases and approximately half of these were due to cardiovascular diseases. The next most common causes of death were common infectious diseases and injuries.[3] Notably, this pattern of prevalence also appears to be similar among overseas travellers, where cardiovascular disease accounts for the most deaths, followed by injuries.[4-7] On further inspection of data on overseas travellers, it is evident that death by RTAs is the most prevalent cause of injury (25-60%) resulting in travellers' fatalities.[8-12] Other causes of injuries include falls, human stampedes, animal attacks, injuries sustained while engaging in adventure sports, aviation crashes, natural disasters, and homicide. Although the probability of any of these events occurring is lower than RTAs, they make a notable contribution to a higher mortality count.

Road Traffic Accidents (RTAs)

As presented above, road traffic accidents are the leading cause of death in overseas travellers, exacerbated by the fact that travellers are at a greater risk of being involved in a RTA than their local counterparts. This is evident in a US study, where the figure for US citizens' injury abroad due to vehicular crashes was 13% higher than that for local citizens. The same study drew similar conclusions in seven out of the ten regions studied.[4] Additionally, in Bermuda, road trauma involving motorcycle usage among tourists was six times greater than the rate for the local population.[10] These examples show that travellers are more susceptible to RTAs than local citizens. Therefore, this section aims to outline several key factors contributing to this cause of death, namely tourists' disorientation in a new environment, travellers' alcohol consumption, the socio-economic circumstances of the destination country and the level of enforcement of safety regulations.

One of the significant factors contributing to RTAs is tourists' disorientation when entering a foreign environment. This is compounded by jet lag and travel fatigue, unfamiliarity with a hired vehicle, local road rules, weather, terrain, distracting scenery and driving on the wrong side of the road; the last factor accounting for the highest percentage of road crash-related injuries.[9-11] Alcohol consumption among travellers is a significant contributor to RTAs. One study demonstrated that alcohol consumption was the primary cause of RTAs among travellers in Greece, particularly among those of Eastern European nationality.[13] In addition, studies have shown that tourists are less likely to observe local drinking and driving laws, and thereby compounding the problem.[11]

As presented above, road traffic accidents are the leading cause of death in overseas travellers, exacerbated The financial status of a country is also a key factor when considering the prevalence of RTAs; a study conducted by the World Health Organization showed that RTAs are most prevalent in low- and middle-income countries (Figure 1).[14] This is primarily due to poorly financed and managed national transportation and medical infrastructure, which manifests in ill-maintained roads that lack basic safety infrastructure such as street lighting, guard rails and road shoulders.[8,10] The problem is made worse by poorly qualified drivers, and badly maintained vehicles. In severe vehicular accidents, most victims do not have access to pre-hospital emergency care services and rely on other road users for assistance. It has been reported that up to 80% of patients die before reaching a medical facility. Furthermore, in many medical facilities in poorer areas in Africa and Southeast Asia, over 45% of emergency healthcare providers lack specific trauma care training. This leads to reduced capacity to effectively treat the injured, leading to increased mortality, for an otherwise treatable injury. In contrast, 7% of the world's population, mainly in high income countries, have access to sufficient funding and an adequate safety framework. This translated to as few as 21% of accident victims dying before reaching a medical facility.[8] This provides strong evidence that there is a correlation between a host country's economic status and the prevalence of deaths by RTAs.

The level of enforcement and safety regulations is also a key consideration for the prevalence of RTAs. For example, the lack of rigorous enforcement of laws against drunk driving and the non-use of helmets may increase the risk of RTAs. It has been noted that laws against drunk driving are not established to protect over a third of the world's population. This is supported by a study which reported that in places such as Ghana, 21% of randomly selected drivers displayed blood alcohol concentrations above 80mg/dL, while only 0.4% of their Danish counterparts tested for such high alcohol concentrations.[8] The consequence of this is then reflected by Ghana having a total of 26.6 road traffic deaths per hundred thousand of their population as opposed to Denmark's more acceptable (but still too high) figure of 3.5.[15] Therefore, it can be shown that lack of enforcement of safety regulations may result in a higher rate of RTAs. It has also been noted that only 33% of countries adequately enforced motorcyclist and cyclist helmet use. This is despite helmets being proven to reduce the death rates among motorcyclists by 42% in geographical areas with well-established health care systems.[8] In summary, tourists' disorientation in a new environment, traveller's alcohol consumption, the socio-economic circumstances of the country and the level of enforcement of safety regulations are key factors contributing to the prevalence of RTAs.

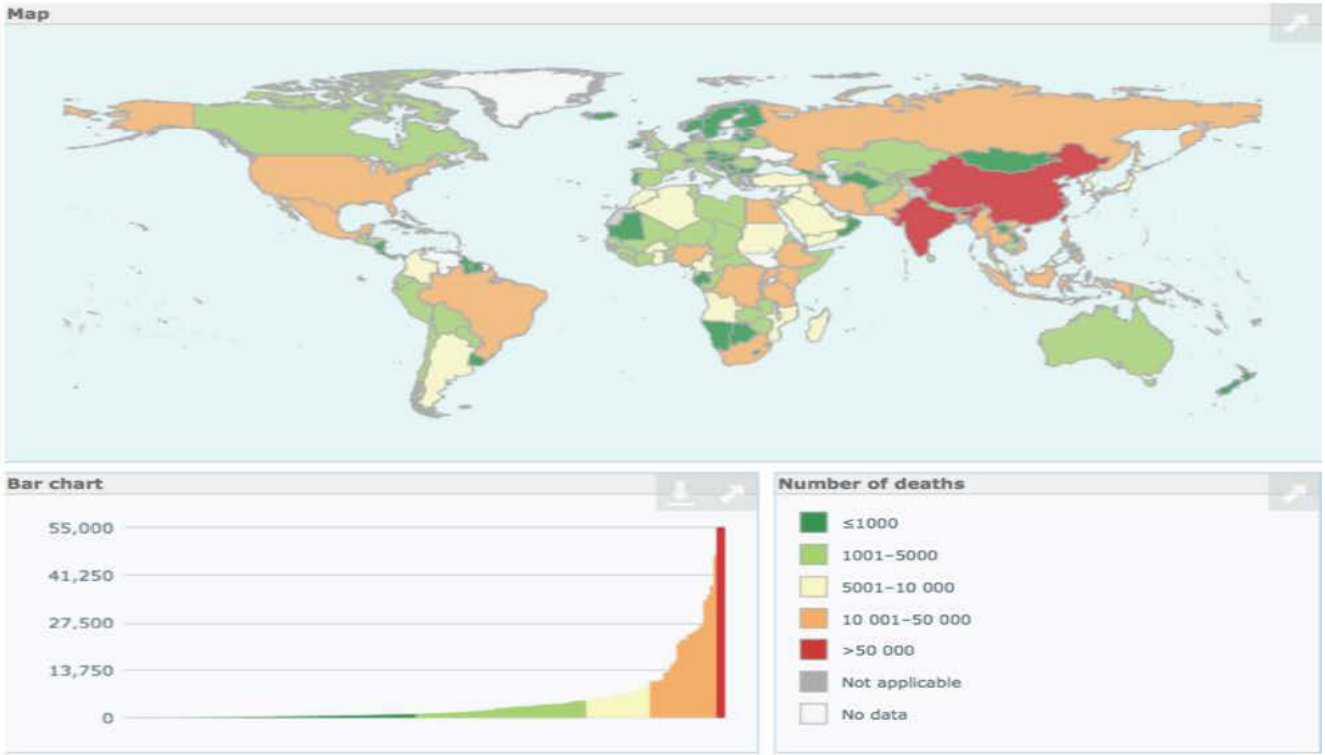


Figure 1. Estimated number of road traffic deaths worldwide, 2013.
Source: WHO, Global Health Observatory (GHO), available at http://gamapserver.who.int/gho/interactive_charts/road_safety/road_traffic_deaths/atlas.html.

Adventure Sports

Besides RTAs, adventure sports also constitute a significant proportion of death in travellers. This section will consider two main types of adventure sports: watersports, and mountaineering and trekking and how they may result in fatalities.

Water sports

Watersports-related accidents constitute a significant proportion of deaths from adventure sports. In one study, drowning was suspected to be responsible for up to 20% of traumatic deaths in travellers, depending on the location. Further analysis has elucidated that apart from the risks associated with lack of knowledge, experience and negligence of safety precautions, travellers participating in these activities are especially susceptible to dangers in the sea, such as envenomation or traumatic wounds sustained from marine creatures or corals. All of these could potentially result in death by drowning.[9,16] In particular, studies have shown that travellers who died whilst snorkeling, either by drowning, cardiac events or hypoxia, were found to lack experience, physical or mental fitness, and proper equipment. Moreover, those who participated in scuba-diving tended to disregard pre-established plans; many died from barotrauma, air emboli and decompression illness.[9] Watersports can also include the use of motorised vehicles which carry an inherent risk of injury. For instance, a passenger ferryboat, which was sailing in an area restricted to parasailers, collided with a speedboat that was towing a parasailer. In another instance, two travellers riding on separate jet skis accidentally collided, resulting in the death of one traveller. This anecdotal evidence shows that the use of motorised vehicles in water can also be a cause of fatality.[17]

Mountaineering and trekking

Adventure sports such as mountaineering and trekking are also a significant cause of death in travellers. A study conducted in the Himalayas found that the death rate among mountaineers on peaks of above 8000m was 1.63%. More disturbingly, a similar study conducted on Mount Blanc found that the death rate of mountaineers scaling the mountain was 12%. It was noted that these deaths were often due to equipment failure, panic, poor judgment, overconfidence and the threat of avalanches. However, the biggest cause of casualties was as a result of falls; many victims lacked the adequate level of fitness which led to the falls. On the other hand, fatalities from trekking were frequently attributable to trauma, illness and acute mountain sickness. Additionally, deaths during trekking activities may be exacerbated by absence of medical support staff on expeditions.[10,18] In summary, adventure sports' accidents often involve the lack of proper equipment, experience, preparation or safety protocols; these factors expose the traveller to the risk of traumatic injuries.

Wildlife Attacks

Another notable cause of death among travellers is large mammal attacks, worsened by the growing popularity of safaris and other tourist attractions. Being in close proximity to wildlife comes with inherent risks, which primarily stem from the ignorance of how to safely interact with wild animals. This is evident in a study where seven tourists were killed in encounters with wild animals in South Africa; lions, hippopotami and an elephant were responsible for four, two and one of these deaths, respectively. Three of the deaths by lions were due to the failure of the tourists to take heed of warnings to stay within the safety of their vehicles. The remaining death had resulted from the lack of adequate security and warning notifications by the nature reserve's management. The deaths caused by the hippopotami were due to a tourist's breach of the fenced safety area and another tourist who dangerously approached a hippo. The last death was caused by a distressed elephant, which attacked a vehicle and gored the victim to death. These tragic cases illustrate the need to raise further awareness of safety precautions when interacting with these animals, and for the current management to bolster safety protocols to ensure the safety of their visitors.[19,20]

Homicides

Besides RTAs, adventure sport-related accidents and wildlife attacks, homicides are another significant cause of death. Arguably, homicide is dissimilar from the above causes of death as it is not purely accidental. Several studies have shown that homicides may account for 16% of traveller deaths, although this figure varies between regions. Africa accounted for the highest number of homicides, followed by Asia and Latin America. The lowest rates were recorded in Eastern Europe. Such deaths can be attributed to the use of firearms, knives, cutting or drilling equipment, battery, suffocation or blast. The use of firearms, which had the highest incidence of mortality, accounted for 34% of those deaths.[10-12,21] Upon further analysis, homicide victims are often first subject to other crimes such as robbery and sexual assault.[12] Homicides also tend to occur around hotels, bars and nightclubs, and also occur more frequently in the evening. Studies have shown that these crimes are typically caused by being in unfamiliar surroundings, being inattentive, showcasing jewelry and money, and a general lack of understanding of local criminal methods.[10] In essence, homicides can be attributable to a variety of factors, and are a significant cause of fatality among international travellers.

Travel health recommendations

Travellers should be educated on the traumatic risks of their intended travel activities and encouraged to plan prudently in advance of their travels as nearly 66% of injuries sustained among travellers are preventable.[8] In particular, travellers are advised to attend pre-travel consultations at travel health clinics. To supplement such consultations, travellers visiting travel agencies, GPs and travel clinics should be given a comprehensive travel brochure outlining travel-associated risks and the appropriate precautions they should take (Table 1). Future studies should investigate the efficacy of preventive approaches in reducing the burden of traumatic death in travellers.

References

1. Inquisitr. Susan Astle: Hot air balloon crashes in South Africa kills British tourist, leaves others injured. 2016. Available at: http://www.inquisitr.com/3653569/susan-astle-hot-air-balloon-crash-south-africa-british-tourist/#LSf1Lg8q12S9i73l.99 (30th January 2017, date last accessed).
2. UNWTO. UNWTO Tourism Highlights 2016 edition. 2016. Available at: http://www.e-unwto.org/doi/pdf/10.18111/9789284418145 (30th January 2017, date last accessed).
3. Lozano R, Naghavi M, Foreman K, et al. Global and regional mortality from 235 causes of death for 20 age groups in 1990 and 2010: a systematic analysis for the Global Burden of Disease Study 2010. Lancet 2012; 380:2095-128.
4. Tonellato DJ, Hargarten SW. Injury death of US citizens abroad: New data source, old travel problem. J Travel Med 2009; 16:304-310.
5. Hargarten SW, Baker TD, Guptill K. Overseas fatalities of United States citizen travellers: An analysis of deaths related to international travel. Ann Emerg Med 1991; 20:622-626.
6. Paixao MLTD, Dewar RD, Cossar JH, et al. What do Scots die of when abroad. Scot Med J 1991; 36:114-116.
7. Prociv P. Deaths of Australian travellers overseas. Med J Aust 1995; 163:27-30.
8. Stewart BT, Yankson IK, Afukaar F, et al. Road traffic and other unintentional injuries among travellers to developing countries. Med Clin N Am 2016; 100:331-343.
9. Leggat PA, Fischer PR. Accidents and repatriation. Travel Med Infect Dis 2006; 4:135-146.
10. Spira AM. Preventive guidance for travel: Trauma avoidance and medical evacuation. Dis Mon 2006; 52:261-288.
11. McInnes RJ, Williamson LM, Morrison A. Unintentional injury during foreign travel: A review. J Travel Med 2002; 9:297-307.
12. MacPherson DW, Guérillot F, Streiner DL, et al. Death and dying abroad: The Canadian Experience. J Travel Med 2000; 7:227-233.
13. Petridou E, Askitopoulou H, Vourvahakis D, et al. Epidermiology of road traffic accidents during pleasure travelling: The evidence from the island of Crete. Accid Anal and Prev 1997; 29:687-693.
14. World Health Organization. Road safety: Estimated number of road traffic deaths, 2013. 2016. Available at: http://gamapserver.who.int/gho/interactive_charts/road_safety/road_traffic_deaths/atlas.html (30th January 2017, date last accessed).
15. World Health Organization. Road safety: Estimated road traffic death rate (per 100,000 population) 2013. 2016. Available at: http://gamapserver.who.int/gho/interactive_charts/road_safety/road_traffic_deaths2/atlas.html (30th January 2017, date last accessed).
16. Guptill KS, Hargarten SW, Baker TD. American travel deaths in Mexico. Causes and prevention strategies. West J Med 1991; 152:169-171.
17. Leggat PA, Leggat FW. Reported fatal and non-fatal incidents involving tourist in Thailand, July 1997-June 1999. Travel Med Infect Dis 2003; 1:107-113.
18. Burtscher M. Climbing the Himalayas more safely. BMJ 2012; 344:e3778.
19. Leggat PA, Dürrheim DN, Braack L. Traveling in wildlife reserves in South Africa. J Travel Med 2001; 8:41-45.
20. Leggat PA, Dürrheim DN. Risk to tourist posed by wild mammals in South Africa. J Travel Med 1999; 6:172-179.
21. Uzun I, Celbis O, Baydar CL, et al. Foreigners dying in Istanbul. J Forensic Sci 2009; 54:1101-1104.
22. Flaherty GT, Choi J. The 'selfie' phenomenon: reducing the risk of harm while using smartphones during international travel. J Travel Med 2016; 23:tav026.

TABLE 1. Travel health precautions to reduce the risk of traumatic injury

Travel Scenario	Precautionary Measure
General	Carry a mobile phone and keep a list of numbers and addresses of relevant authorities and bodies (police, hospitals, travel insurance, embassy).
	Contact the embassy for comprehensive local information.
	Opt for licenced programmed package tours.[9]
	Use official transport services.[9]
	Stay in reputable accommodation and in safe areas.[9]
	Refrain from excessive alcohol consumption.
	Receive training on basic first aid.
	Refrain from taking 'selfies' or using selfie sticks in dangerous situations, dangerous locations, while holding a weapon or while in motion.[22]
RTAs	***Vehicle users***
	Consider hiring a professional driver rather than driving a rental car.
	Obtain an international driving license.[9]
	Observe local speed limits.[9]
	Do not drink or take any drugs which may impair driving.[9]
	Do not drive or react aggressively on the road.[8]
	Be aware of the local driving culture and laws.[9]
	Do not use mobile phones while driving, even if it is not illegal in the destination country.
	Learn local road signs in the destination country.[8]
	Be aware of the seasonal hazards and local holidays where road crash rates are higher.
	Pay particular attention when travelling in countries which drive on the opposite side of the road.[10]
	When travelling over long distances, have intermittent rest stops or multiple drivers to limit driving fatigue.
	Avoid travelling on motorbikes, scooters and mopeds.
	If you are travelling on a motorbike, wear approved safety helmets and safety gear.[9]
	If you are travelling on a motorbike, use reflective gear or brightly coloured outfits to stay visible.
	If you are travelling on a motorbike, use roads which have lighter traffic and preferably use those with a bicycle lane.
	Use seat belts when the vehicle is moving.[9]
	If travelling with children, bring a child safety seat or booster seat.[8]
	Ride as a backseat passenger if possible.[8]
	Rent vehicles from reputable rental companies.[9]
	When renting a vehicle ensure that it is road worthy and that it has passed all the relevant safety tests.[9]
	Before setting off familiarise yourself with the vehicle controls.
	Find out the appropriate body to call if the vehicle ever breaks down.
	As a traveller on an unfamiliar route, fill the vehicle with fuel regularly to avoid running out of fuel.
	As much as possible, use major routes, unless when travelling with reliable guides.[9]
	Check the weather forecast before embarking on a journey and plan for a route around inclement weather.
	Refrain from driving alone, at night, in the fog, in the rain, in the snow or on mountainous terrain in unfamiliar countries.[8,9]
	Use a satellite navigated map to guide you to your destination. Bring a detailed map as a back up alternative.

	Avoid public transport which is often dangerously overcrowded or overweight.[8] Avoid public transport being driven by drivers who appear to be intoxicated or reckless.[10] ***Pedestrians*** Beware of local traffic patterns, and learn pedestrian rules and conventions. Assess local pedestrian safety and determine if pedestrian rights are generally obeyed. Do not presume vehicles will stop for pedestrians crossing the road.[9] Be alert at intersections in countries where the traffic pattern differs from yours. Look both ways before crossing and use crosswalks if available.[8,9] Avoid walking along roadsides, especially on busy roads or when there is limited visibility.[8] If a sidewalk is absent, walk on the side of the road facing oncoming traffic. Use reflective clothing or brightly coloured outfits to stay visible.
Other vehicular accidents	Travel on scheduled flights, ferry or train services.[8] Avoid travelling in bad weather. Avoid small vessels, especially at night or during bad weather.[8] Identify locations of personal flotation devices and fire extinguishers before departing.[8] Avoid dangerously overcrowded or overweight vessels.[8] Ensure the vessel has completely stopped before entering or exiting. Avoid walking close to or on train tracks. Avoid crossing train tracks unnecessarily
Adventure sports	Seek advice from the relevant bodies regarding the presence of dangerous animals within the area of intended travel. Climb on low-risk mountains.[18] Use modern equipment which meets international standards. Be familiar with the equipment. Check all equipment before participating in the activity. Consider using mobility aids such as hiking poles.[8] Acclimatise gradually to high altitude. Seek relevant pre-medical check-ups to ensure an adequate level of health for the intended activity. Select reputable companies to guide the intended activity. Opt for a company which has a medical professional available throughout the duration of the activity. Participants of water-related sports should be aware of the designated area for their activity and ensure that they do not venture out of this safe area. Participants of water-related sports should wear a personal flotation device.[8] Scuba divers should use a diver-down flag and a buddy system.[8] Skiers and jet ski riders should refrain from speeding, especially in crowded areas.
Wildlife attacks	When staying in African wildlife reserves, beware of armed bandits. Seek advice from travel agents and foreign affairs officials regarding the safety of specific nature reserves.[19] Remain in the safety of the vehicle during tours.[20] Avoid trespassing into the natural habitats of territorial animals.[20] Maintain a safe distance from the animals. Do not approach or provoke an animal, especially those which appear ill, malnourished, aggressive or have young offspring within the vicinity.[19,20] Be familiar with the aggressive characteristic behaviour of different animals and the relevant evasive action to be taken.[20] Avoid animals displaying aggressive or alarming behaviour.[20] Have an experienced and licensed armed ranger when venturing in unfenced areas, preferably a guide with a minimum grading of 3.[20]

	Check with game reserve management regarding safety measures in walking areas before walking.[20] Do not walk, swim or row near bodies of water known to be inhabited by hippos or Nile crocodiles. Seek advice from official authorities regarding safe locations for these activities.[19,20] Be cautious when driving at night in areas where hippos graze. This is due to the hippos nocturnal grazing behaviour.[20] While driving within the wildlife reserve do not exceed the speed limit which is usually 50km/hr.[19] Secure all doors, windows, and zip all tents at night in African game reserves to prevent leopards from entering.[20] Avoid shaded areas or tall grass, as many animals may be camouflaged in these areas.[20] Do not approach a zebra from behind.[20]
Violence	Travel with a partner or in groups.[10] Refrain from hitchhiking. Stay in well-lit and busy areas and avoid walking in the dark.[10] Keep valuables in a security box in the hotel room. If not, carry valuables in a pouch which can be worn under the shirt or use a hidden money belt.[9] Refrain from using flashy or branded goods.[9] Avoid underdressing and dress appropriately according to the socially accepted levels of the destination country's culture/customs.[9] Refrain from displaying maps and travel guides publicly and learn to navigate before embarking on journeys.[9] Carry bags/backpacks in front, against the chest, instead of behind. Refrain from accepting food and drinks from strangers.[9] Refrain from inviting newfound friends into the hotel room.[9] Do not open hotel room doors for unannounced strangers or hotel staff before checking with the reception desk.[9] When renting a vehicle, avoid features that distinguish it as a rental vehicle (colour, specialised license plate, advertisement sticker), especially because rental vehicles are particularly at risk of robbery, attacks and car-jackings.[9] Keep all doors locked and windows closed, especially when stopped at traffic lights.[9] Lock all valuables in the trunk of glove compartment and stow all luggage in the trunk.

Ian James Long

ANSWERS TO TEST YOUR KNOWLEDGE QUIZ FROM PAGE 6

Question	A	B	C	D
1. African Trypanosomiasis:	True	True	False	True
2. Leptospirosis:	True	False	False	True
3. Sun & the travellers:	True	True	True	False
4. Immunisation:	True	False	False	True
5. Tetanus:	True	True	False	False
6. Country:	Austria			

MISCONCEPTIONS IN CLINICAL REASONING LEADING TO DIAGNOSTIC ERROR: A CASE OF SKIN RASH AND JOINTS PAIN AFTER TRIP TO THE U.K.

Lyme disease is a focally endemic tick-transmitted zoonosis. Misconceptions surround this condition, leading to frequent misdiagnosis and inappropriate treatment. This case scenario discusses some of these misconceptions.

The Case:

A previously healthy 50-year-old man was referred to the internal medicine and travel clinic for evaluation of being unwell, with a 2 month history of fatigue, arthralgia without arthritis, elevated ESR (54 mm/hr; normal 0 - 10 mm/hr) and elevated CRP (35 mg/L; normal 0 – 10 mg/L). Auto-immune serology was negative and CCP (Cyclic Citrullinated Peptide) was also negative. His Vitamin D (25 hydroxycholecalciferol) was low at 12 ng/ml (normal 30-100 ng). Past medical history, family and social history were unremarkable. He denied a history of animal or insect bites but 3 months previously had travelled to a forest in the UK on summer holiday and two weeks later noticed redness on his arm. This was treated as an allergic reaction. His doctor believed that his fatigue and arthralgia were due to vitamin D deficiency and had treated the patient with NSAIDs and vitamin D replacement therapy. Physical examination was normal. Serologic testing showed a serum Lyme titer (Borrelia IgG spec. Abs) of 18+ AU/ml (ref < 10) and Borrelia IgM spec. Absof 24+ AU/ml (ref < 18) with OspC and p41 positive IgG bands. The patient was treated with Doxycycline 100 mg orally twice a day for four weeks. When seen at follow-up 1 month later he still had joint pain. Treatment with hydroxychloroquine was commenced, with follow-up several months later.

Discussion:

This patient had no other stigmata suggestive of another rheumatic disease, was seronegative for rheumatoid factor and had Lyme IgG titre confirmed with western blot.

Lyme disease results from an infection with the spirochaete Borrelia burgdorferi. The disease occurs in humans following a bite from a tick Ixodes ricinus which has been infected with this organism and has an incidence of 0.3 and 0.6 per 100,000 in the UK and Ireland, respectively. Due to its low incidence it is a diagnosis that is often poorly recognised.[1] It can be prevented by measures such as using insect repellent (DEET), wearing long trousers/tops when in endemic areas and removal of the tick once it is noticed.[2]

If untreated, Lyme disease can have long term implications including neurological complications[3], and arthritis.[4] Before the use of antibiotic therapy for treatment of the disease, about 60% of untreated patients developed Lyme arthritis, a late disease manifestation.[5] Erythema migrans (EM; see figure) is the most common sign and the classic skin manifestation of Lyme disease. It is noted in approximately 90% of patients, usually within one month of the tick bite.[6, 7]

Figure: *Erythema migrans rash of Lyme disease. A: Typical macular lesion on left shoulder. B: Bull's eye lesion on lateral thigh with central punctum. C: Multiple lesions on back. D: Lesion with vesicular centre on posterior thigh.*[8]

The diagnosis of Lyme disease should be considered in patients who present with nonspecific illnesses in endemic areas during the late spring and summer, even if a rash is initially not reported.[9] Differential diagnosis includes cellulitis, hypersensitivity (allergic reaction) and tinea. Patients often recall no tick bite. The tick must be attached for at least 24 hours in order to transmit the spirochaete. The absence of a reported tick bite should not deter the clinician from considering Lyme as a diagnosis[10] The diagnosis of Lyme disease relies on three principal findings: epidemiologic exposure, appropriate clinical manifestations and serology. Both the Infectious Diseases Society of America and Centers for Disease Control and Prevention recommend a two-test approach using a sensitive ELISA or immunofluorescent assay (IFA) followed by a confirmatory Western blot test. If the ELISA or IFA is negative, the guidelines state that a Western blot should not be performed.[11, 12] Antibiotic treatment of early disease is usually curative;[13] early recognition and treatment results in a reduction in cases of early disseminated disease or progression to Lyme arthritis and shortens the number and duration of arthritic episodes.[14] A small percentage of patients who develop Lyme arthritis do not respond to repeated courses of oral or intravenous antibiotics (treatment-resistant arthritis). It is believed that persistent arthritis in these patients results from immunologic abnormalities. Patients with this condition have a higher incidence of HLA-DR alleles (similar to the alleles associated with rheumatoid arthritis) and antibody reactivity with Outer-Surface Protein A (OspA).[15,16] Many medical errors have been identified.[17] Errors in diagnostic reasoning are often attributed to biases.[18] Many biases are nothing more than practical diagnostic shortcuts and in most cases, actually lead to correct decision making. At times however, diagnostic pearls can become pitfalls, leading to erroneous conclusions, as in this case scenario.

Key Points:

1 - Awareness of travel-related diseases is necessary and important.

2 - Tick-borne infections are easily confused with other illnesses.

3 - Diagnoses are presumptive and based on patients' clinical findings and epidemiologic histories. Travel to areas endemic for Borrelia Burgdorferi should lead to a high index of suspicion for Lyme disease.

4 - Therapy should not be delayed as the sequelae of Lyme disease are more amenable to reversal if treatment is initiated early.

5 - Where doubt exists, expert advice should be obtained.

References:

1- Lindgren E, Jaenson T, editors. Lyme borreliosis in Europe: Influences of climate change: epidemiology, ecology and adaptation measures. Copenhagen: World Health Organization Regional Office for Europe; 2006

2- G Strle F:Lyme disease: European perspective". Infect. Dis. Clin. North Am.2008 22: 327–39.

3- Auwaerter PG, Aucott J, Dumler JS : Lyme borreliosis (Lyme disease): molecular and cellular pathobiology and prospects for prevention, diagnosis and treatment. Expert Rev Mol Med 2004 6: 1–22.

4- Puius YA, Kalish R:. Lyme arthritis: pathogenesis, clinical presentation, and management. Infect. Dis. Clin. North Am. 2008 22 (2): 289–300

5- Steere AC, Schoen RT, Taylor E. The clinical evolution of Lyme arthritis. Ann Intern Med 1987;107(5):725–31

6- Linden Hu, MD. Lyme arthritis. Infect Dis Clin N Am 2005;19: 947–61.

7- Stanek G, Wormser GP, Gray J, Strle F. Lyme borreliosis. Lancet 2012;379:461-473

8- Ref: Gary S. Firestein, Ralph C. Budd, Sherine E Gabriel, Iain B McInnes, James R O'Dell-Kelley and Firestein's Textbook of Rheumatology-Elsevier (2017) Tenth Edition P 2159

9- Nadelman RB, Wormser GP. Erythema migrans and early Lyme disease. Am J Med 1995;98(4A):15S–23S

10- Lo Re V III, Occi JL, MacGregor RR. Identifying the vector of Lyme disease. Am Fam Physician. 2004;69(8):1935-1937.

11- Wormser GP. et al. Clin Infect Dis 2006; 43:1089- 134.

12- CDC. MMWR 1995;44: 590-1

13- Wormser, G. P. et al. The clinical assessment, treatment, and prevention of Lyme disease, human granulocytic anaplasmosis, and babesiosis: clinical practice guidelines by the Infectious Disease Society of America. Clin. Infect. Dis. 43, 1089–1134 (2006).

14- Steere, A. C. & Angelis, S. M. Therapy for Lyme arthritis: strategies for the treatment of antibiotic-refractory arthritis. Arthritis Rheum. 54, 3079–3086 (2006).

15- Steere AC, Dwyer E, Winchester R: Association of chronic Lyme arthritis with HLADR4 and HLA-DR2 alleles [published erratum appears in N Engl J Med 1991 Jan 10; 324(2):129]. N Engl J Med 323:219–223, 1990

16- Steere AC. Medical progress. NEJM 2001;345 (2): July 12.

17- Neily J, Mills PD, Young-Xu Y, et al. Association between implementation of a medical team training program and surgical mortality. JAMA. 2010; 304(15): 1693-1700.

18- Norman GR, Eva KW. Diagnostic error and clinical reasoning. Med Educ. 2010; 44(1): 94-100.

Dr. Abdolilah Baxarawi MFTM RCPS (Glasg)

❋❋❋❋❋❋❋❋❋❋❋❋❋❋❋❋❋❋

Dr Baxarawi resides in Ireland, but since 2002 has worked in a number of hospitals and Medical Centres in the Gulf Region. In 2011 he was in charge of the Travel Clinic at Al-Ahli Hospital, the largest private hospital in Qatar. This role included managing the hospital's immunisation programme.

Completing his Masters degree in Medicine in 2002, Dr Baxarawi went on to achieve a Diploma in Tropical Medicine (2008, RCPI), a Certificate of Travel Medicine (2010, TMSI), and the Certificate in Travel Health (2014, International Society of Travel Medicine).

He was admitted as a Member of the College in 2016, following the completion of the Diploma Course in Travel Medicine in 2015

Items for the newsletter can be forwarded to:

simon.collins@travelhealth.ie
or
annehredmond@eircom.net

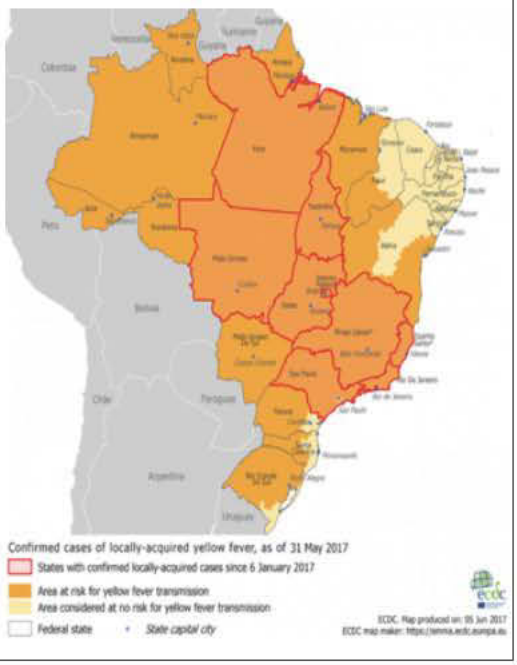
EXPANSION OF RISK AREAS FOR TWO IMPORTANT ARBOVIRUSES DURING 2017: YELLOW FEVER IN BRAZIL AND ZIKA WORLDWIDE.

YELLOW FEVER IN BRAZIL

Prior to 2017, vaccination for Yellow Fever (YF) was not required to protect visitors to Rio or to areas around Sao Paolo. In 2017, the disease has continued to spread from the interior to the Atlantic coast and vaccination is now recommended for visitors to Rio and surrounding areas. The previous risk area is shown in the most recent WHO risk map (2013); those wanting to determine the most up-to-date risk area for Brazil should now use the most recent European Centres for Disease Control Map (ECDC) shown below.

<u>What this means for you in day-to-day practice:</u>

- ➢ When patients are visiting coastal Brazil, vaccination for YF may well be required for protection reasons, where it was not previously. Check the latest online recommendations (e.g. by consulting Travax) at the time of consultation.

Yellow Fever risk in South America, including Brazil, up to late 2016:	Revised Yellow Fever risk areas for Brazil, as of 5th June 2017 (ECDC; risk = dark yellow, no risk = pale yellow) – note the extension of risk to the coast:
	

References:

World Health Organisation: http://www.who.int/ith/updates/20170404/en/
European Centre for Disease Control: https://ecdc.europa.eu/en/publications-data/cases-yellow-fever-brazil-9-june-2017

ZIKA IN SOUTH-EAST ASIA, INDIA AND AFRICA (INCLUDING UGANDA)

Zika is not confined to Latin America and the Carribean; during 2017 it has appeared or re-reappeared in South-East Asia, Uganda, a number of other Africa countries and as of mid-May, India.

What this means for you in day-to-day practice:

- ➢ You need to be aware of the latest prevalence of the disease so that you can alert patients that it may be a risk in their destination country

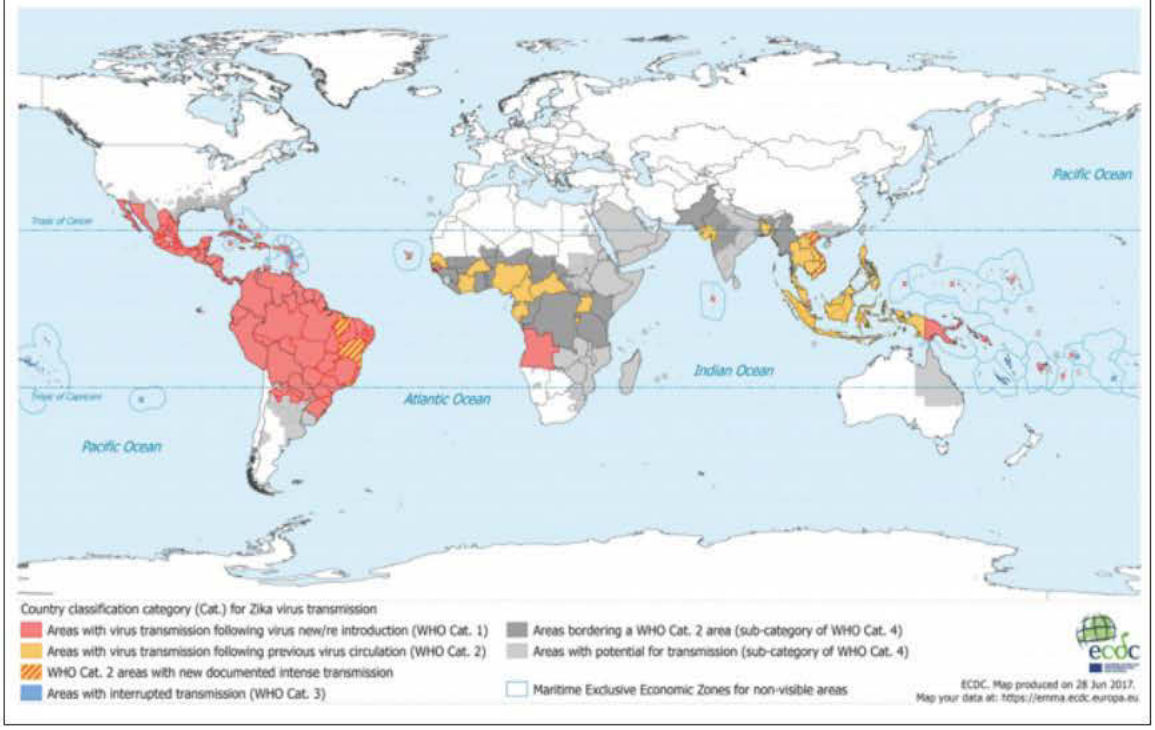
- ➢ Patients need to be made aware that males are being advised to use barrier contraception during their time in Zika regions and for six months after leaving the Zika region, even if they have had no symptoms of illness. This may come as a surprise, for example to honeymoon couples travelling to South-East Asia!

The following two sites will provide you with authoritative information, to which you can also direct patients:

1. Current Zika risk areas (ECDC), including the map shown below: https://ecdc.europa.eu/en/zika-virus-infection/threats-and-outbreaks/zika-transmission

2. HSE (HPSC) advice to travellers: http://www.hpsc.ie/a-z/vectorborne/zika/

Zika transmission as of 28th June 2017 (ECDC; risk areas = red and yellow):



Simon Collins FFTM RCPS (Glasg)

NECTM7

Northern European Conference on Travel Medicine
Stockholm May 2-4 2018

Welcome to the 7th Northern European Conference on Travel Medicine, NECTM7!

Dates: May 2nd – 4th, 2018
Place: Clarion Hotel Stockholm, Sweden

We will offer you a diversified scientific program as well as a place for a networking and an interesting sponsor exhibition. The scientific committee is planning for two parallel sessions including a regional theme of tickborne diseases. The conference will reflect the multi-disciplinary nature of travel health from the basic knowledge to the latest research and including both nurses, clinicians, academics and students.

See you in beautiful Stockholm!

NECTM/ Local Organising Committee

Registration
Opens:
October 3rd, 2017
Deadline for "early bird":
February 28th, 2018

Abstract submissio
Opens:
October 3rd
Deadline
January 15th, 2018

CHALLENGING CASES IN TRAVEL MEDICINE: THE IMMUNOSUPPRESSED TRAVELLER

Many Travel Medicine (TM) consultations are straightforward and involve young, well patients on short trips to low-risk holiday resort environments. A subset of consultations are, however, very challenging, can involve 'no right answer' choices really stretch the knowledge of the practitioner. In the first of an occasional series of such articles, Simon Collins describes a recent consultation and uses it to share some teaching points.

Angkor Wat, Cambodia. The patient would arrive in the country the day following consultation

Humira (adalimumab) – an immunosuppressat; the patient had been receiving it monthly for the previous 18 months as a treatment for Psoriasis.

The case:

Peter, a 30 year-old Engineer, presented one day prior to a 3-week holiday to Cambodia, seeking vaccination. He planned to go to Ankgor Wat, Siem Reap, Sihanoukville and Phnom Penh. He gave a history of being on Humira, initiated 18 months previously by a Dermatologist to treat Peter's Psoriasis. He recalled no vaccines having been given to him in his life, apart from a primary course of Tetanus/Diphtheria/Pertussis/Polio, with reinforcing shots of the same vaccine at age 5 years and age 11 years.

Problems for the TM practitioner:

Peter may have no MMR protection. There is no time to verify his immune status serologically and even if it was, if it transpired he lacked immunity, it is not possible to administer the live MMR vaccine while he is on immunosuppressive therapy

Hepatitis A vaccine is safe to administer but will provide limited protection (possibly as low as 29%) because of the retardant effect on his immune system of Humira.

The intramuscular Typhoid vaccine is an inactivated one and can be safely given but in an immunocompetent patient would require two weeks to work; in this case it's unlikely to work in time.

(The (inactivated) Tetanus/Diphtheria-containing vaccine is safe to give and will work reasonably well because pre-existing immune memory exists in his system for this vaccine; he received three doses in his first year of life and like most children, a booster dose early in primary school and again early in secondary school.)

[1](Patient name and destination only have been changed to preserve patient anonymity; all other aspects of the story are true)

How this case was managed:

Peter was given vaccination for Tetanus/Diphtheria and Hepatitis A and advised that Typhoid vaccination would provide such limited protection that it should on balance be omitted, given how soon his was travelling, the duration of his trip and the retarding effect Humira would have on the protection conferred by the Typhoid vaccine[2]. Hep A vaccine, which effectively works immediately in the immunocompetent patient, would provide better-than-nothing, limited protection.

A prescription for malaria prophylaxis was issued, along with one for a 'standby' antibiotic for use in the event of pronounced travellers diarrhoea.

Peter was advised that following the trip, he should have MMR immunity testing performed, PCV & PPV23 vaccination done via his Consultant and annual influenza vaccination done every autumn.

Learning points:

- Live vaccines (e.g. MMR, Yellow Fever) cannot be given to immunosuppressed patients. Ideally, younger patients who may travel while on a planned, future long-term immunosuppressant should first have pre-therapy MMR immunity verification through blood testing, followed by booster MMR doses if necessary. In addition, if they plan to travel to South America or relevant parts of Africa, consideration should be given to their being immunised with Yellow Fever vaccine before initiation of therapy, as failure to do this means they will be unable to visit large parts of South America and Africa once on therapy
- Inactivated vaccines can be given, but will usually work poorly. Hep A vaccine provides much better protection if at least two doses, six months apart, can

be given prior to the initiation of immunosuppressive therapy

- Patients on biologics (such as Humira) should, before or at the initiation of therapy, have be given the Pneumococcal PCV vaccine, followed by the Pneumococcal PPV23 vaccine and in addition, should be receiving annual influenza vaccination.
- Pre-travel Rabies vaccination in immunosuppressed should only be delivered by the intramuscular method (as opposed to the intradermal method), in order to maximise pre-travel antibody production
- For those readers using the NHS Scotland Travax malaria risk maps, it should be remembered that the 'hatched' intermediate risk areas shown on the maps equate to malaria risk for patients on immunosuppressive therapy. Travax would regard only Siem Reap and Phnom Penh in the map shown below as the only areas of the country potentially not requiring malaria prophylaxis for this patient

[2]In immunocompetent patients, Typhoid vaccine takes at least two weeks to work. In Peter's case, where he had never had the vaccine previously (i.e. no immune memory), the only things the vaccine was likely to do for him was (a) cost him money and (b) possibly make him slightly unwell during the following day, while travelling to Asia.

Malaria risk assessment for Cambodia, current as of July 2017 (Travax/NHS Scotland)

- The negative effects of a food poisoning episode in an immunosuppressed patient can be expected to be potentially worse. As a result, consideration should be given to issuing a prescription to such patients for a 'standby treatment antibiotic' for dealing with unexpected, pronounced diarrhoea (e.g. Azithromycin 500mg daily for 3 days in the case of S.E. Asia), so that the patient can purchase the antibiotic pre-travel and carry it in their bag.

Commentary:

I have written about the topic of vaccinating the immunocompromised previously. One class of immunosuppressive drugs in particular (biologics) are suddenly being used in large numbers of patients by Dermatologists (for psoriasis), Rheumatologists (rheumatoid arthritis) and Gastroneterologists (Crohn's and Ulcerative Colitis). If the correct pre-treatment work-up, using Immunisation Guidelines for Ireland advice was being followed by all these colleagues, then I would not expect to repeatedly find these patients telling me they have received no vaccines before, at or since the initiation of therapy. This is really worrying and is also causing problems for patient (such as in the case described) at the time of travel.

GP's and Practice Nurses are ideally-placed to intervene early in the cases of patients who are being considered for immunosuppressive therapy, when 'regular' treatment of their chronic conditions has not been working. Such patients, who are often young and may plan to travel in their late 20's or early 30's, should be offered Hep A vaccine on two occasions, at least six months apart, prior to the initiation of immunosuppressive therapy. In addition, live vaccines can be done before therapy is begun. Other vaccines like Typhoid and Tetanus and even Hepatitis B and Rabies are better given if at all possible before immunosuppressive therapy is commenced, as the immune response of the patient post-initiation of therapy will inevitably be reduced.

References / further reading:

Irish national guidelines regarding vaccination and the immunosuppressed patient: http://www.hse.ie/eng/health/immunisation/hcpinfo/guidelines/chapter3.pdf

U.S. guidance (CDC 'Yellow Book') on vaccination for travel and the immunosuppressed patient: https://wwwnc.cdc.gov/travel/yellowbook/2018/advising-travelers-with-specific-needs/immunocompromised-travelers

Askling H, Dalm V. The medically immunocompromised adult traveller and pre-travel counselling: Status quo 2014 Travel Med Infect Dis 2014; 12: 219 – 228.

Collins S, Travel vaccines and the patient who is immunocompromised due to steroids or biologics Taisteal Winter 2016, 6 – 8.

Simon Collins FFTM RCPS (Glasg).

Dates for the Diary

Travel Medicine Society of Ireland - half-day meeting Date: 23 September 2017
Location: Castletroy Park Hotel, Castletroy, Limerick
Time: 9:00am - 1:00pm. Places limited
For further information, please contact Anne at 045 890 127 or annehredmond@eircom.net

Migration Health, Palermo, Italy Date: 1-4 October 2017
This Migration Medicine course is organised by the European Society of Clinical Microbiology and Infectious Diseases (ESCMID). The main objective is to create a forum for discussion about the various and multi-faceted aspects of migration health including but not limited to diagnosis and prevention of infectious diseases. Topic overview:
• Migrants, refugees, asylum seekers: the international and European context • Migration-related infections • Migration and non-communicable diseases • Determinants of migration • Impact on origin and destination countries • Transcultural approach • Economics of migration • Ethics of migration health See: www.escmid.pulselinks.com/event/12657

Faculty of Travel Medicine Annual Symposium: Enabling Travellers - The Hidden Challenges
Location: Glasgow, Scotland Date: 5 October 2017
This year's Faculty of Travel Medicine's Annual Symposium will focus on enabling travel for those individuals with hidden challenges and additional requirements. See: www.rcpsg.ac.uk/travel-medicine/education

Travel Medicine Society of Ireland - Full-day Masterclass Date: 11 November 2017
Location: Clarion Hotel, Liffey Valley, Lucan, Dublin Time: 9:00am - 5:00pm
Fee: Members €50.00, Non-members €65.00. Places limited. Includes mid-morning and afternoon tea/coffee, and lunch.
For further information, please contact Anne at 045 890 127 or annehredmond@eircom.net

5th Tropical Medicine Excursion to Ghana, West Africa Date: 29 November – 9 December, 2017
In collaboration with various teaching hospitals in Ghana and Dr. Kay Schaefer, Cologne, Germany. 11 days round-trip excursion (1400 km by road) for healthcare professionals on clinical tropical medicine and travellers' health to the endemic areas of Ghana. Includes individual on-site bedside teaching, laboratory manuals (hands-on microscopy on parasites in the blood, stool, urine and skin), field excursions and lectures. Accreditation: 60 CME contact hours by the Medical Association, Düsseldorf, Germany. Official language: English. See: www.tropmedex.com

Liverpool School of Tropical Medicine – Online Travel Vaccinations: Principles & Practice course
This new online course aims to equip new and experienced practitioners in the development of their vaccination knowledge and skills within a travel health setting. It will provide a platform of confident practice, reflection and continuing professional development (CPD) through interactive learning with subject specialists and peers – **IN YOUR OWN TIME** (within the 5 weeks, approx. 4-5 learning hours per week). Delivered by experienced clinical professionals from LSTM who have wide experience of advising global travellers and teaching health professionals about travel health. Course curriculum includes: Vaccine preventable diseases of importance to the travel health practitioner, Accessing reliable evidence based country specific vaccine information, The immune system and the interplay with vaccines, Types of vaccines, Practical aspects of administering multiple vaccines and vaccine scheduling, Application of knowledge using travel scenarios for vaccine administration, Factors that affect vaccine delivery including cold chain and traveller specific issues such as existing health problems.
See: www.lstmed.ac.uk/study/courses/travel-vaccinations-principles-and-practice

Travel Medicine Society of Ireland - half-day meeting Date: February 2018
Location: Venue & date to be arranged. Time: 9:00am - 1:00pm. Places limited
For further information, please contact Anne at 045 890 127 or annehredmond@eircom.net

Travel Medicine Society of Ireland - A.G.M. & Lecture and workshop Date: 21 April 2018
Location: Talbot Hotel, Stillorgan Road, Stillorgan, Co. Dublin. Time: 9:00am - 1:00pm.
A.G.M. Members only. Lecture and workshop open to non-members.
Places limited. For further information, please contact Anne at 045 890 127 or annehredmond@eircom.net

12th Conference of the Asia Pacific Travel Health Society (APTHS) Date: 21 - 24 March, 2018
Location: Bangkok, Thailand. 12th Conference of the Asia Pacific Travel Health Society is organised biennially. In 2018 more than 400 professionals will come together in Bangkok, Thailand for APTHC 2018. See: www.apths.org/

7th Northern European Conference on Travel Medicine, NECTM7 Date: 2-4 May, 2018
Location: Stockholm, Sweden (Clarion Hotel Stockholm) See: www.mkon.nu/nectm_7

South African Society of Travel Medicine (SASTM): Pan African Travel Medicine Congress: Focus on Reality 2018
Cape Town, South Africa. 12 September, 2018 (dates to be confirmed) See: www.sastm.org.za/

Prof. Gerard Flaherty