NEWSLETTER

Travel Medicine Society of Ireland

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UPDATE ON OUTBREAK OF EBOLA VIRUS DISEASE IN WEST AFRICA

An outbreak of Ebola virus disease (EVD) with onset in December 2013 is continuing to spread in the three intense-transmission countries Guinea, Liberia and Sierra Leone. The overall situation in these countries remains critical. Ebola virus disease is a rare but serious viral infection due to a filovirus, which is transmitted by direct contact with the blood, bodily fluids (saliva, urine, stool, breast milk) and organs of an infected person. The incubation period ranges from 2-21 days and the virus can only be transmitted by symptomatic persons.

Current epidemiology of the outbreak

On 8 August 2014, WHO declared the Ebola outbreak in West Africa a public health emergency of international concern. This is the largest ever documented epidemic of EVD in terms of numbers and geographical spread. WHO has reported 18,152 confirmed, probable and suspected cases of Ebola virus disease, with 6,548 deaths in five affected countries (Guinea, Liberia, Mali, Sierra Leone and the USA) and three previously affected countries (Nigeria, Senegal and Spain) up to 7 December 2014. Reported case incidence is slightly increasing in Guinea characterised by extension in number of districts affected, declining in Liberia, and is still increasing in Sierra Leone. The case fatality rate across the three most-affected countries in all reported cases with a recorded definitive outcome is 76%; in hospitalized patients the case fatality rate is 61%. The increasing number of healthcare workers that have been infected by the Ebola virus is a major cause for concern.

Response measures

Response activities in intense-transmission countries have focused on case finding, safe burials, laboratory diagnosis, provision of isolation facilities and social mobilization. An increased effort is now being implemented on systematic surveillance/contact tracing and ensuring that all control activities increase in quality, intensity and reach. This requires a greater focus on integrated control measures at district level. International response activities are being coordinated by the UN Mission for Ebola Emergency Response (UNMEER) in support of the governments of affected countries and local authorities. Many UN organizations, governments, and international NGOs are providing vital services across the key pillars of the response.

Risk assessment for Ireland

There have been no cases in Ireland to date and the risk of Ebola virus disease arriving in the country is very low. While the Department of Foreign Affairs advises against any non-essential travel to countries with community transmission, the ongoing transmission of EVD in affected countries increases the likelihood that Irish residents, aid workers or travellers to the EVD-affected countries will be exposed to infected or ill

persons. The risk of infection for Irish residents and travellers in the affected countries through exposure in the community is considered low if they adhere to the recommended precautions. Residents and travellers to the affected areas run a risk of exposure to EVD in healthcare facilities. The level of this risk is related to how well infection control measures are being implemented in these settings and the nature of the care provided.

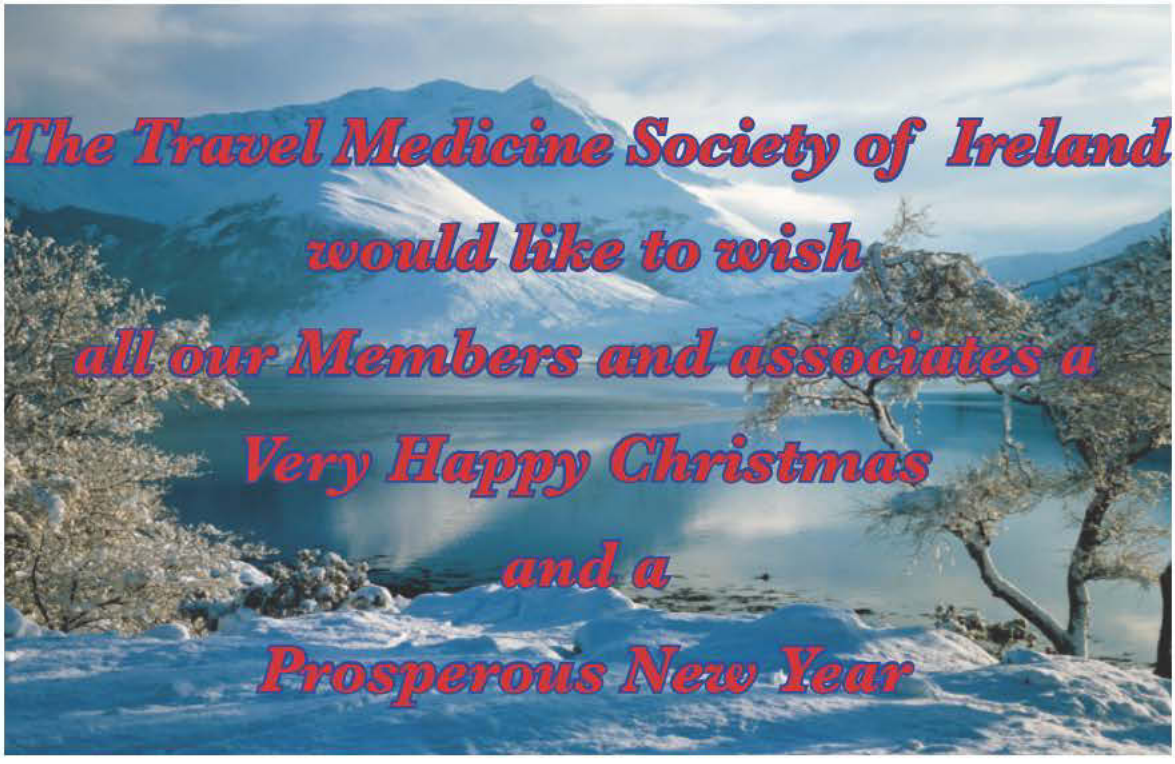
The risk of Ebola virus spreading from an EVD patient who arrives in Ireland as result of a planned medical evacuation is considered to be low when appropriate measures are strictly implemented. Twenty-four individuals have been evacuated or repatriated from the EVD-affected countries since the outbreak began. As of 11 December, there have been 12 medical evacuations of confirmed EVD-infected patients to Europe (three to Germany, three to Spain, two to France, one to the UK, one to Norway, one to Italy and one to the Netherlands). Two persons exposed to Ebola have been repatriated to the Netherlands and tested negative. In the event of a symptomatic case of EVD presenting in Ireland, secondary transmission to caregivers in the family and in healthcare facilities cannot be excluded. The highest risk is at an early stage of the disease, before the risk of EVD has been recognised, and at the late stage of the disease when patients have very high viral loads.

Summary

While the outbreak continues to spread in West Africa, ongoing vigilance for potential EVD cases is important at points of entry to health care services in Ireland. With increased international support to the outbreak and greater availability of human and material resources on the ground, it is hoped that this human tradegy will be brought to an end and affected communities can rebuild their lives. In the meantime, preparedness measures need to remain in place in all countries to ensure potential imported cases are managed effectively. It is also important that travel medicine practitioners have access to real-time up-to-date guidance particularly for those intending to travel to affected or neighbouring countries.

Websites: www.hpsc.ie; www.ecdc.europa.eu; www.who.int

Professor Máire Connolly
Adjunct Professor of International Health
School of Medicine, NUIG



RESEARCH IN TRAVEL MEDICINE – HOW TO GET STARTED

Travel medicine is a young discipline and indeed it is not much older than myself. There is already a substantial evidence base for the practice of travel medicine and both the Faculty of Travel Medicine[1] and the Royal College of Nursing[2] in the UK have published their recommendations for travel medicine practice based on reviews of the relevant literature and expert consensus opinion. The Faculty of Travel Medicine endorses the journal Travel Medicine and Infectious Disease which has a healthy 2013 journal impact factor of 1.538. The International Society of Travel Medicine is affiliated with the Journal of Travel Medicine (journal impact factor 1.525). Other travel medicine-related journals include Tropical Medicine and International Health (journal impact factor 2.302) and the International Journal of Travel Medicine and Global Health (impact factor pending). Of course, many mainstream journals in general internal medicine, general practice, occupational medicine, public health medicine, infectious diseases, and nursing will also publish travel medicine articles relevant to their audience.

Original research articles are often, but not always, presented as oral or poster presentations at international scientific meetings such as the Northern European Conference on Travel Medicine (NECTM) or the Conference of the International Society of Travel Medicine (CISTM), before they are published online or in the printed journal. The gold standard research study design is randomised controlled clinical trials and this may be used to evaluate the efficacy of travel vaccines, for example. Other study designs include cohort surveys (e.g. what are the health problems of a large cohort of Irish aid workers travelling to west Africa?), serological surveys (e.g. what is the rate of dengue infection in backpackers from Ireland travelling to South East Asia for prolonged periods?), and cross-sectional surveys (e.g. what are travellers' knowledge, attitudes and practices in relation to road traffic accident prevention: results from an airport survey).

Cross-sectional questionnaire-based studies are subject to selection and reporting bias and have several limitations, but are a very feasible type of research project for the novice travel medicine researcher. Case studies or series of illnesses in returned travellers are also very relevant but often more difficult to get published. Where a TMSI member has demonstrable expertise in a given subject area within travel medicine, there may be scope for writing a narrative literature review which critically appraises the most recent evidence available in the literature. The ISTM has published a list of research questions which reflect the research priorities of the ISTM Research committee.[3] This list highlights some of the gaps in our existing knowledge that could reasonably be addressed with further research. I have extracted and edited some of these priority research questions in Table 1 for the benefit of TMSI members. These research questions could well be addressed by multiple members of TMSI collaborating on carefully designed research projects.

Table 1. Selected Research Priorities in Travel Medicine

Pre-travel	Safety during travel	Post-travel
What are the best ways to access travellers who do not seek pre-travel health advice?	What are the barriers to implementing best-practice preventive measures among health-care workers in developing countries?	How effective are algorithms in the management of post-travel syndromes such as fever in returned travellers?
What pre-travel counselling leads to fewer road traffic accidents, animal bites, and safer sexual behaviours?	How should novel anticoagulants be incorporated into guidelines for travellers?	What is the awareness amongst travellers and health-care professionals of post-infectious irritable bowel syndrome?
For whom should we prescribe gastrointestinal protozoal self-treatment medications, e.g. metronidazole?	Do long-term travellers behave differently to short-term travellers?	How cost effective is screening for schistosomiasis and intestinal parasites in asymptomatic returned travellers?
How common is medical tourism from Ireland, and how should we best prepare these tourists?	Do travellers who develop high altitude illness respond appropriately to their symptoms in a wilderness environment?	What is the role of travellers in the spread of emerging infections such as Chikungunya fever?

TMSI is keen to promote research activity amongst its members and will fund selected projects where there is a strong proposal, including a detailed methodology which takes account of ethical considerations, and which could be translated into improvements in clinical practice. If you would like to develop a research question, I would be happy to work with TMSI members who are motivated to present and publish their research findings. I will guide feasible projects at all stages, including refining the research question, reviewing the literature, elaborating a study design, ethics committee application, statistical support, writing of a research abstract, and helping to write the final paper for submission to a peer-reviewed journal. Where funding is required to complete the project and where the lead investigator has costed the project, applications for limited funding from TMSI will be reviewed by the TMSI Executive committee. Additional support will be provided if any output is accepted for presentation at an international conference such as NECTM or CISTM. I hope that our nearly 400 members who are travel medicine practitioners will consider whether they would like to develop a project to answer a burning research question they may have. If you have a research idea you would like to explore please email our Honorary Secretary, Anne Redmond, at annehredmond@eircom.net with a brief 100 word summary of your proposal. If a research question cannot be condensed into 100 words, then it probably is not focused enough! I look forward to helping our members conduct original research in travel medicine and to present and publish their work, thereby contributing to the growing evidence base in our dynamic discipline and raising the profile of travel medicine in Ireland and beyond.

References:

1. Chiodini JH, Anderson E, Driver C, Field VK, Flaherty GT, Grieve AM, et al. (2012). Recommendations for the practice of travel medicine. Travel Medicine and Infectious Disease 10(3):109-128.
2. Royal College of Nursing (2012). Travel health nursing: career and competence development. RCN guidance. London: RCN.
3. Talbot EA, Chen LH, Sanford C, McCarthy A, Leder K (2010). Travel medicine research priorities: establishing an evidence base. Journal of Travel Medicine 17(6):410-415.

Dr. Gerard Flaherty

TRAVEL MEDICINE AND INFECTIOUS DISEASE

Dr. Gerard Flaherty, Immediate Past President of TMSI, was invited by the journal Travel Medicine and Infectious Disease to write an editorial on portable hyperbaric chambers. Also an article on Stem cell tourism. This followed from his "Speaker's Corner" presentation on high altitude pulmonary oedema at NECTM5 in Bergen. The articles, published recently in the Journal, are entitled:

Under pressure: Facilitating the emergency use of portable hyperbaric chambers at altitude
Flaherty, Gerard T.
Travel Medicine and Infectious Disease , Volume 12 , Issue 5 , 420 - 421

Stem cell tourism – A web-based analysis of clinical services available to international travellers
Connolly, Ruairi, O'Brien, Timothy, Flaherty, Gerard.
Travel Medicine and Infectious Disease , Volume 12 , Issue 6 , 695 - 701

Items for the newsletter can be forwarded to:

drconormaguire@gmail.com

or

annehredmond@eircom.net

THE TRAVEL HEALTH CONSULTATION FOR PATIENTS TRAVELLING TO EBOLA-AFFECTED COUNTRIES

The current Ebola outbreak affecting West Africa will continue for some time and TMSI members may encounter patients travelling to the affected countries. Most will be aid agency staff but nationals of the affected countries also live in Ireland and may return to West Africa to visit family members.

Patients need to understand that the nature of Ebola disease and the effect that it has had on healthcare availability in affected countries means that:

(a) Fever avoidance is unusually important. The patient must to do everything possible before and during their trip to avoid developing a fever (e.g. influenza, malaria). In the event of a fever, the patient is likely to be dealt with as a possible Ebola case. They will experience significant stress that they have contracted Ebola. In addition, they may find themselves quarantined with other suspect cases, (some of whom will be positive) while the result of Ebola testing on them is awaited.

(b) Food poisoning avoidance is unusually important: vomiting/diarrhoea are key Ebola symptoms and a moderate case of enteritis could see the patient being mistaken for a possible Ebola case.

(c) Other healthcare problems must be avoided if possible. These include insect bite-induced cellulitis and road traffic-related trauma. Most private clinics in the affected countries have ceased to function.

Knowledge of the points already outlined explains the reasoning behind for the following suggested checklist, designed to act as an aide-memoir in the event that you are asked for pre-travel advice to Ebola-affected countries:

1. Influenza vaccination is strongly recommended in addition to the usual vaccines you would consider for a West Africa trip (to minimise fever risk).

2. Cholera vaccination should be considered (risk is low but outbreaks have occurred in as recently as 2013 in Sierra Leone).

3. Rabies vaccination is more important than usual, as it will be more difficult than usual for unvaccinated bite victims to exit the country to obtain post-bite Immune Globulin (fewer international air links – fewer seats available at short notice).

4. Malaria prophylaxis is crucial, with rigid adherence, including after return to Ireland (post-trip fever due to incomplete prophylaxis will be dealt with initially in Ireland as possible Ebola, causing great stress to the patient, their GP and many others!).

5. A compact but fairly detailed first aid kit should be carried from Ireland, with all medicines having been sourced in Ireland. It should include:

   (i) Broad spectrum antibiotic for enteritis self-treatment (e.g. Ciprofloxacin 750mg stat dose)
   (ii) Oral anti-emetic (e.g. Prochlorperazine 5mg)
   (iii) Oral loperamide
   (iv) Oral Flucloxacillin (treatment of cellulitis)
   (v) Oral co-amoxiclav or equivalent antibiotic to deal with sinusitis/RTI/UTI
   (vi) Malaria standby-emergency treatment, to be used in the event of an unexplained fever.
   (vii) Thermometer (digital oral sublingual type).

Patients should also be provided with the following information which is targeted at workers going to the affected countries and which will cover remaining aspects around prevention, self-monitoring and maintaining contact with Irish Public Health upon return:

HPSC Ireland - Interim advice for aid and other healthcare workers (updated as of 28th November 2014):
http://www.hpsc.ie/A-Z/Vectorborne/ViralHaemorrhagicFever/Assessingapossiblecase/File,14820,en.pdf

A pre-departure consultation to Ebola-affected countries is potentially difficult but is manageable if approached in a structured manner.

Dr. Simon Collins FFTM RCPS (Glasg)

Simon Collins returned from Sierra Leone in November.

2014, GOOD YEAR OR BAD YEAR?

New Viruses on the way up

Ebola tops the list. Came completely unexpectedly. The WHO first declared the disease to have reached epidemic proportions in March 2014 and by year end, 18,000 cases were confirmed in eight countries. Over 6,000 deaths occurred including at least 300 healthcare workers.

Dengue and Chikungunya continue to spread across Europe, South East Asia and the USA.
Middle East Respiratory Syndrome Corona Virus, (MERS-CoV) claimed more victims in Saudi Arabia.
The first case of West Nile Virus was confirmed in Brazil. It is now endemic in Eastern Canada and the USA.

Viruses on the way out:

Eighty percent of the world's population now live in Polio free areas. Wild polio still circulates in Nigeria, Afghanistan and Pakistan. Eradication is within our grasp. A Rabies outbreak was controlled in Bali, but Rabies is still a major global problem. No less than four new drugs were approved for the treatment of viral Hepatitis C, which can now be cured with twelve weeks of oral tablets! (medscape.com).

The World has lost:

Several of the world's leading HIV researchers died on July 17th when a Malaysian airline passenger jet was shot down over Ukraine. Among the dead were former president of the International AIDS Society Joep Lange, his wife and collaborator Jacqueline van Tongeren and several other HIV/AIDS activists.

What has come back?

Plague reappeared in Madagascar in September and 199 confirmed cases with 40 deaths soon followed. Avian Influenza A (H7N9) is still present in poultry flocks in China. It can be deadly but appears that person to person transmission is not happening. Mumps reports spiked in Ireland this year.

Villain of the Year:

Aedes aldopictus, the "Tiger Mosquito" for spreading Dengue to Italy, Croatia, Florida and many other parts of South-East Asia and South America.

Here to Stay:

Norovirus is now the leading cause of gastro-enteritis in the world, second only to Rotavirus. The virus can be shed for up to two months, even when the patient is asymptomatic. Ireland seems to have escaped the global epidemic, with reported cases here down on 2013 according to the HPSC.

What we learned in 2014:
A prophylactic course of atorvaquone-proguanil may be just as effective in preventing Malaria if discontinued one day after exposure ends, instead of continuing for seven days as is currently recommended.

Yellow Fever vaccine associated viscerotrophic disease is more common than we thought. The 17D vaccine is being more closely monitored. Any non specific symptoms within ten days of vaccination need immediate investigation. Reactions are still very rare and confined to first time recipients, age and thymus disease confer greatest risk.

New Vaccines:
Bexsero is a new Meningococcal type B, now available for close contacts of the disease and immunosupressed individuals. It is not covered by any of the free medical schemes and must be obtained privately in every instance. We still wait to see if it will be incorporated in the national childhood immunisation programme.

Vaccines to look forward to:
Ebola vaccine is expected to be available early in 2015. Probably the fastest vaccine ever to be brought to market. Expect to see a large programme starting next summer in Guinea and Sierra Leone and surrounding areas. Vaccines against Malaria and Dengue remain tantalisingly close but still elusive.

What's new in the Immunisation Guidelines for Ireland?
Meningitis ACWY vaccine can be substituted for the MenC vaccine in children travelling to endemic areas. If the child is under 12 months, give it instead of the MenC. If MenC has already been given, two more doses of MenACWY can be given. If pneumococcal vaccine is given after the age of 65 years, it does not need to be repeated.

Down's Syndrome is now included in the list of immunocompromised individuals and should receive additional vaccines such as flu, PCV, Men B.

Changes in International Health Regulations:
The WHO amended the regulations for Yellow Fever vaccination in 2014. Certificates remain on a ten year expiry until June 2016, after which, the certificate will be lifelong. The vaccine is now known to be life-long. We can probably expect to see Ebola vaccine being included in future regulations and a certificate required for travel to endemic areas.

Mass Gatherings to look forward to:
The Rugby World Cup next September will attract international travellers to the UK. Get your flu shots early! The Winter Olympics and the FIFA World cup in Brazil seem to have been healthy, but due to political rows, we are not sure where or when the next football world cup will be held. The Saudi Health Services continue to fight the spread of disease during the Haji, which now seems to be a much safer trip than it was in the past.

Travel Medicine Conferences:
The Northern European Conference on Travel medicine was held in Bergen, Norway. Many Irish members travelled there to present research and speak at the meeting. The next NECTM will be in London in 2016. We hope to see a lot of TMSI members there. It's only 18 months away, so let's have some Irish research presented there! The Conference of the International Society of Travel Medicine will be in the city of Quebec next May 24th to 28th. No doubt Ebola will dominate the proceedings and exciting new developments will be presented.

What's happening in Health Politics?
The Ebola outbreak brought a swift international response: richer nations can now see the benefits of helping poorer nations.

The World Health Organisation has called for Universal Health Coverage for all. This was echoed by the Irish College of GPs, Irish politicians and even the president of the United States. Will 2015 see some movement in that direction?

Dr. Conor Maguire
Have a happy, healthy and safe New Year.

Foundation and Diploma Courses in **Travel Medicine**

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Topics covered include:

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Infections and epidemiology of infection
Immunisation theory, practice and available vaccines
Malaria

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- A mid-session residential week in Glasgow including an objective structured clinical examination (OSCE)
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- Module 3: a project chosen by the student
- A final written examination in Glasgow.
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For more information and applications, please contact:
Applications and administration: Lesley Haldane
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Course content and curriculum: Ann McDonald or Clare Henderson
ann.mcdonald@rcpsg.ac.uk | clare.henderson@rcpsg.ac.uk
+44 (0)141 227 3239

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232-242 St Vincent Street, Glasgow, G2 5RJ, UK
www.rcpsg.ac.uk/travel-medicine

TMSI - FUNDED SUMMER RESEARCH ABSTRACTS

On behalf of the School of Medicine at the National University of Ireland, Galway, I should like to express my grateful thanks to the Travel Medicine Society of Ireland for supporting two of my summer research students, Calvin Teo Jia Han and Max Javaherian, who completed two projects under my supervision during the summer. Both will present their findings at the Undergraduate Research Day at NUI Galway in October, and we aim to submit both abstracts to the Conference of the International Society of Travel Medicine, to be held in Quebec City, Canada, in May 2015.

Dr. Gerard Flaherty

Profile of Travellers with Pre-existing Medical Conditions Attending a Specialised Travel Medicine Clinic

Teo, C.J.H., Flaherty, G.

School of Medicine, National University of Ireland, Galway; International Medical University, Kuala Lumpur, Malaysia

Introduction and Aims:
Patients with complex medical co-morbidities travel for protracted periods to remote destinations, often with limited access to medical care. Few descriptions are available of their health burden. This study aimed to characterise pre-existing medical conditions and medications of travellers seeking pre-travel health advice.

Methods:
Records of travellers attending the Galway Tropical Medical Bureau clinic between 2008 and 2014 were examined and information relating to past medical history was entered into a database. Data were recorded only where the traveller had a documented medical history and/or was taking medications.

Results:
Of the 4817 records available, 56% had a documented medical history and 24% listed medications. The majority of travellers with pre-existing conditions were female. The mean age of the cohort was 31.68 years. The mean period remaining before the planned trip was 40 days. South-East Asia was the most popular single destination. Seventeen percent of travellers with medical conditions were travelling alone. The most frequently reported conditions were allergies (20%), insect bite sensitivity (15%), asthma (11%), psychiatric conditions (4%), and hypertension (3%). Of the 30 diabetic travellers, 14 required insulin. 4.5% were taking immunosuppressant drugs, including corticosteroids. Half of the female travellers were taking the oral contraceptive pill while 11 travellers were pregnant at the time of their consultation.

Conclusions:
This study provides an insight into the medical profile of travellers attending a travel health clinic. The diverse range of diseases reported highlights the importance of educating physicians about the specific travel health risks associated with particular conditions.

Analysis of the Quality of Web-based Pre-travel Health Advice for Prospective Travellers to High Altitude

Javaherian, M.[1], *Flaherty, G.*[1,2]

[1]School of Medicine, National University of Ireland, Galway; [2]International Medical University, Kuala Lumpur, Malaysia

Introduction and Aims:
Travel to altitude carries health risks, including the development of potentially fatal high altitude illness. There is a responsibility on expedition providers to educate trekkers on their health risks. Little is published about the quality of advice provided. This study aimed to evaluate the health advice given to travellers on websites advertising altitude treks.

Methods:
Active websites advertising high altitude treks were identified. Each website was interrogated to extract information relating to the specific advice provided about altitude illness and its prevention. Websites were also examined to determine if prospective trekkers would have access to a portable hyperbaric chamber.

Results:
Of 74 eligible websites analysed, 81% referred to altitude travel risks. Seventy percent mentioned acute mountain sickness while 30% discussed high altitude cerebral or pulmonary oedema. Sixty-two percent advised gradual acclimatisation to altitude. Over a third discussed the use of a portable hyperbaric chamber while a quarter of sites provided information about drugs used to manage altitude illness. Forty-two percent invited clients to share their medical history, while 39% stated that an expedition doctor would accompany the trekkers. The overall mean score of the websites (maximum 20) was 9.01, based on an aggregate of the 20 variables examined.

Conclusions:
This study yields valuable information about the extent of pre-travel health advice provided by trekking companies to prospective clients. Deficiencies are revealed regarding severe high altitude illness, and access to an expedition doctor and hyperbaric chamber. Companies should make every effort to inform and protect these vulnerable travellers.

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IE/VAC/0009(a)/12(1) Date of preparation: June 2014

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ASIAN CLINICAL TROPICAL MEDICINE COURSE IN THAILAND COURSE REPORT

I attended the Asian Clinical Tropical Medicine course in Thailand from June 30th to July 10th 2014. This course, run by the University of Ottawa, George Regents University of Georgia, and Mahidol University, was delivered mostly at the Faculty of Tropical Medicine on the Mahidol campus in Bangkok. Instructors are drawn from the local and visiting Faculty staff. Dr. Anne McCarthy, an Infectious Disease Consultant in Ottawa with strong Irish links, was a particularly impressive teacher but there was also some excellent teaching from the Thai experts. The participants were mostly either Infectious Disease Fellows in the USA and Canada, or travel medicine physicians and nurses working in various aspects of travel health worldwide. A particular strength of the course was the opportunity it provided to discuss clinical cases in tropical medicine. No time was wasted in order to achieve the ambitious CEM credits offered by the course, and that meant that we even had case presentations on the bus to and from the university daily! The days were long as we set out from the hotel at 8am and rarely returned back before 6pm. Bangkok traffic is sluggish at the best of times but always an experience!

On day 1, we had lectures on diagnosis and management of malaria, both severe and uncomplicated. We were treated to an acupuncture demonstration at a local hospital, devoted to this and other complementary therapies. One member of our group, a good-humoured Resident from the US, submitted consensually to a cupping procedure on his back and sported multiple “therapeutic” ecchymoses for the rest of the course! This was followed by malaria case presentations at the bedside in the adjacent teaching hospital and a practical laboratory session devoted to diagnosis of malaria and other protozoa, including toxoplasmosis, cryptosporidiosis, amoebiasis, and giardiasis.

On day two, we had a very inspirational lecture from Dr. Ted Kuhn from the Georgia faculty. Dr. Kuhn has spent many years working in the tropics and gave a true global perspective on disease. He also gave a session on using ultrasound scanning effectively in resource poor settings. Local faculty educated us on melioidosis (reasonably common in north-west Thailand and a definite travel health risk), gnathostomiasis, and travel recommendations for visitors to Thailand. The latter was given by Dr. Watcharapong Piyaphanee from the Thai Society of Travel Medicine, who is very prominent in the travel medicine community in Asia and who has succeeded in gaining specialty recognition for travel medicine in his country. We had further laboratory sessions where we prepared smears and made microscopic diagnoses of various types of malaria and helminthic infections.

Day 3 was a lot of fun as we travelled by bus to the Thai Red Cross facility for an excellent session on rabies and venomous snakes, including a live demonstration of milking snake venom to produce anti-venom. I learned that I have a lot to learn about snakes! The day ended with case presentations and ward rounds at the Queen Sirikit National Institute of Child Health which has particular expertise in the management of Dengue infection.

Our weekend was spent in Ratchaburi province near the Thai-Myanmar border where we witnessed the work of the local malaria research station and visited a local school-based malaria education project. Didactic lectures were delivered on the Thai healthcare system and travellers’ malaria. Each participant had to give a 15 minute slide presentation on a relevant topic of their choosing. I spoke about travelling to altitude with pre-existing medical conditions. This was based on my invited lecture on behalf of TMSI at the Triennial Conference at the Royal College of Physicians and Surgeons of Glasgow in June. I learned a lot from listening to the other participants, many of whom had worked in the tropics in some very challenging situations. One lady was an Epidemiologist with the CDC in the USA and provided interesting insights into their role. Before we left Ratchaburi we visited a community primary health care station. The less I say about the group karaoke session the night before, the better!

We had only one day off on the first Sunday, so I visited Bangkok Zoo and explored the city. To say that it is buzzing with life and energetic activity would be an understatement. The overwhelming kindness and warm nature of the Thai people will stay with me forever.

Day 7 focused on tropical infections in immunosuppressed hosts and we had teaching at the Siriraj Hospital and the Bamrajnaradura Institute in Bangkok, where we met patients with HIV-AIDS and discussed the management of opportunistic infections. Day 8 included clinical case discussions and a lecture on helminthiasis, as well we laboratory sessions which focused on the diagnosis of melioidosis, leptospirosis, crytococcal infection, and Dengue.

Our penultimate day involved a visit to an anonymous HIV clinic at the Thai Red Cross in Bangkok, followed by ward rounds at a local hospital and a useful lecture on Chikungunya infection. We all had to 'undergo' a traditional Thai massage at a health clinic having been educated first on its therapeutic role in the Thai healthcare system. Some of my closest friends and I chose the foot reflexology option and it was so relaxing that we nearly missed the bus back to the hotel! Our final night was spent at the famous Siam Niramit complex where we enjoyed a lovely meal and live show, and we all received our Certificates of Completion. Day 10 was fascinating as we visited the Bangkok Metropolitan Administrative Health Center and met a wonderful elderly physician, Prof. Pongdej Wichainprasat (Figure 1), who still runs a very successful Tuberculosis DOTS Control programme while in his 80s. The course ended with a very comprehensive lecture on leprosy from a local expert.

Overall, I would strongly recommend this excellent course in tropical medicine. You will learn a lot and meet some fascinating people. I have kept in touch with several of them and we plan a reunion at CISTM in Canada in 2015, or NECTM in London in 2016. If you would like further information about the course, please visit http://www.med.uottawa.ca/globalhealth/eng/actmc.html.

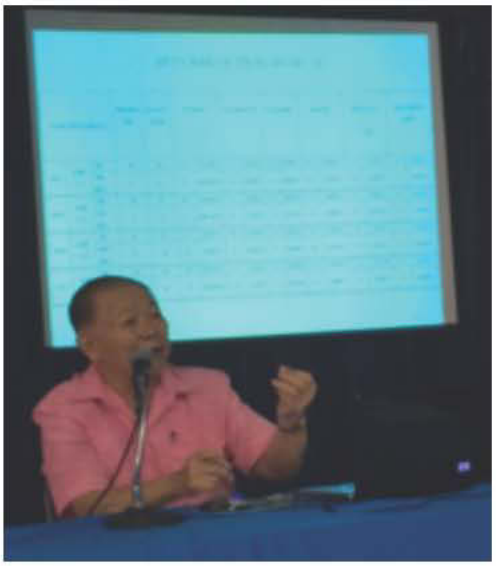
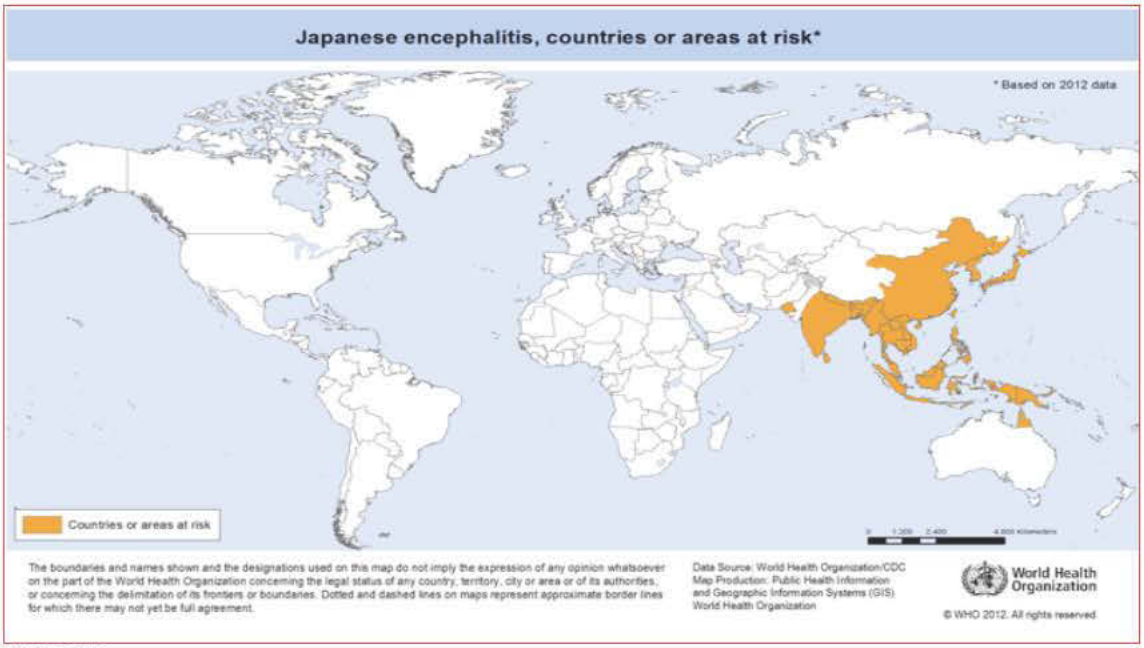


Fig. 1 Prof. Pongdej Wichainprasat, an inspirational physician, lecturing on TB.

Dr. Gerard Flaherty

JAPANESE ENCEPHALITIS (JE) – FAST FACTS



THE DISEASE

- Flavivirus Infection, transmitted by Culex-species mosquito, endemic in Asia (map)
- Transmission in two patterns:
  - Northern temperate areas: April-November
  - Tropical areas: specific to monsoon and bird migration, sometimes with two peaks (1)
- Mostly a disease in rural rice farming areas, with pigs and birds serving as reservoirs
- Incubation period 5-15 days, illness 10-14 days
- Most often asymptomatic. Neuro-invasive disease occurs in <1:250 of infected, risk is higher in children and >50 of age. CFR of symptomatic cases 5-30%, 60% of survivors have permanent neurological sequelae, half of them severe (2)
- >75% of children present with seizures; adults more commonly with headache and meningism (3)

STATISTICAL RISK OF JE

- < 1: 1,000,000 (4)
- For long-term travellers, expatriates, soldiers 1:200 000 (3)
- Increased risk during monsoon season

VACCINES

- IXIARO - Inactivated cell-culture vaccine (Novartis) – 0.5ml prefilled syringe, vaccine contains Aluminium!
- Green Cross JE Vaccine – unlicensed in UK therefore use not recommended (5)– (Information below only for IXIARO)

WHEN IS THE VACCINE INDICATED

- Those with prolonged (>1 month) or repeated stay in a JE endemic area
- Those with travel itineraries covering rural areas, in particular spending a period of time in rice fields or close to pig farms
- Travellers to an area with an on going outbreak
- Any travellers requesting maximum protection

HOW IS THE VACCINE GIVEN

- 2 doses at 0 and 28 days, given intramuscularly, to be completed 1 week before exposure
- Accelerated schedule not recommended as markedly reduced efficacy
- Dosage: 2-36 months of age : 2 doses of 0.25ml,
  >36 months of age : 2 doses of 0.5 ml
- Booster dose after 12-24 months for people at continuous risk, no recommendations regarding further booster doses available
- Patients who received full 3-dose course of mouse brain vaccine (eg JE-VAX) only require one booster dose (6)
- Vaccine can be co-administered with other travel vaccines

CONTRAINDICATIONS

- Severe allergic reaction after previous vaccine dose or to a vaccine component
- Moderate or severe acute illness with or without fever

SIDE EFFECTS

- Common in adults: injection site pain, headache, flu like illness
- Common in children: fever, diarrhoea, flu like illness, irritability, rash.

EFFECTIVENESS OF IXIARO IN PROTECTING AGAINST JE

- Sercoversion rate 98% following primary immunization series (3)

References:
(1)Campbell Gl et al.:Estimated global incidence of Japanese Encphalitis: a systematic review. Bull World Health Organ 2011 Oct 1;89(10):766-74E
(2)Solomon T et al. Japanese Encephalitis. J Neurol Neurosurg Psychiatry 2000:68:405-15
(3)Keystone J et al. Travel Medicine; Third Edition: 2013:111-113
(4)Hatz C. Japanese Encephalitis: Defining Risk Incidence for Travelers to Endemic Countries and Vaccine Prescribing From the UK and Switzerland. J Travel Med 2009; 16:200-203
(5)www.travax.nhs.uk/diseases/vaccine-preventable/Japanese-encephalitis.aspx
(6) Erra E et al.:A single dose of Vero cell-derived Japanese Encephalitis vaccine (Ixiaro) effectively boosts immunity in travellers primed with mouse brain-derived JE vaccine.

Dr. Astrid Weidenhammer

GLOBAL ROUND-UP

POLIO: Afghanistan. 19 Dec. 2014. One new case of wild poliovirus type 1 (WPV1) was reported in the past week from Garmser district of Helmand province, which has not previously reported any cases in 2014. The case had onset of paralysis on 17 November. The total number of WPV1 cases for 2014 in Afghanistan is now 25 in comparison to 11 cases at this time last year. *Source: WHO*

Pakistan. 19 Dec. Seven new wild poliovirus type 1 (WPV1) cases have been reported in the past week. Four cases were reported from the Federally Administered Tribal Areas and three from Khyber Pakhtunkhwa province. The most recent WPV1 case had onset of paralysis on 25 November, from Peshawar. The total number of WPV1 cases in Pakistan for 2014 is now 283, compared to 75 cases at this time last year.

Source: WHO

EBOLA: Dec. 2014. Worldwide, 17 145 cases of Ebola virus disease (EVD), including 6070 deaths have been reported. The incidence of new cases is increasing (slightly) in Guinea, stable or declining in Liberia and, possibly increasing in Sierra Leone. As of 30 November 2014, a total of 17 111 cases and 6055 deaths have been reported to WHO. The distribution of the cases in West Africa is listed below, case numbers include confirmed, probable and suspected:

Guinea - 2164 cases and 1327 deaths, cases in last 21 days 306.
Liberia - 7635 cases and 3145 deaths, cases in last 21 days 278.
Sierra Leone - 7312 cases and 1583 deaths, cases in last 21 days1455.

Source: WHO

ROCKY MOUNTAIN SPOTTED FEVER: The Secretariat of Health of Campinas confirmed last Friday (12 Dec 2014) there has been 5 deaths from Rocky Mountain spotted fever (RMSF) in Sao Paulo this year. This represents an increase in the number of RMSF deaths in previous years; 3 deaths in 2013 and 3 deaths in 2012.

RMSF is caused by a bacterium, Rickettsia rickettsii which is transmitted by Dermacentor ticks found on rodents and dogs. It is usually a mild disease but is occasionally life threatening. Risk is greatest for those undertaking outdoor activities in forest or grassland areas, such as walking and camping.

Source: ProMED

MEASLES: The measles outbreak in the Philippines is ongoing. According to World Health Organisation's Measles-Rubella Bulletin there has been 53,810 suspected cases of measles, including 17,893 confirmed cases and 102 measles deaths reported in the Philippines between January through to October 2014.

Source: Who

An outbreak of measles has been reported in four refugee camps in Mabin County, South Sudan. The outbreak was first identified on 31 October 2014, and more than 20 measles cases have been reported from the camps: Yusuf Batil, Kaya, Gendrassa and Doro. Cases have also been reported among the community of the surrounding area.Vaccine has been supplied for an immunisation campaign that has been implemented in an effort to contain the outbreak. The campaign will target around 19 000 susceptible children in ten days. In the first three days, more than 8000 children have been vaccinated.

Source: ProMED

An outbreak of measles has been ongoing in Bosnia over the last 17 weeks. A total of 511 cases have been reported and new cases are increasing dramatically in some areas. The outbreak is also spreading to other areas of the country. Fifty four percent of the cases have been identified in those either unimmunised or not fully immunised.

Source: ProMED

CHOLERA: A media report has warned of a new wave of cholera in Ghana. The report states that this latest outbreak has affected 11 districts in five regions including Greater Accra, Brong-Ahafo, Northern, Eastern and Central regions.

Source: http://cajnewsafrica.com

Travel Medicine Conference Calendar

7th Tropical Medicine Excursion to Tanzania, East Africa. 1 - 13 February 2015
In collaboration with various teaching hospitals in Tanzania and Kay Schaefer (MD, PhD, MSc, DTM&H), Cologne, Germany. 13 days round-trip excursion (800 km by road and 600 km by air) for healthcare professionals on clinical tropical medicine and travellers'health to the endemic areas of Tanzania. 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. www.tropmedex.com.

Travel Medicine Society of Ireland 21 February 2015
Location: Sheraton Athlone Hotel, Gleeson Street, Athlone, Co. Westmeath.
Time: 9:00 am – 1:00 pm
Contact: Anne Redmond, Tel: 045 890 127, E-mail: annehredmond@eircom.net

20th Tropical Medicine Excursion to Uganda, East Africa. 22 March - 3 April 2015
In collaboration with various teaching hospitals in Uganda and Kay Schaefer (MD, PhD, MSc, DTM&H), Cologne, Germany. 13 days round-trip excursion (1400 km by road) for healthcare professionals on clinical tropical medicine and travellers'health to the endemic areas of Uganda. 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. www.tropmedex.com.

Travel Medicine Society of Ireland, Annual General Meeting & Lecture 25 April 2015
Location: Stillorgan Park Hotel, Stillorgan, Co. Dublin
Time: 9:15 am – 10:30 am A.G.M. Lecture & Q's & A's 11:00 am - 1:00 pm
Guest Speaker: Dr. Alex Grieve
Contact: Anne Redmond, Tel: 045 890 127, E-mail: annehredmond@eircom.net

The 14th Conference of the International Society of Travel Medicine 24-28 May 2015
Québec City, Canada
Early registration: 31 December 2014. Abstract submission: 15 January 2015
Further information: www.istm.org

Travel Medicine Society of Ireland, Full-day meeting/workshop 12 September 2015
Location: Ardilaun Hotel, Taylors Hill, Galway
Time: 9:00 am – 5:00 pm
Guest Spearker: Dr. Patricia Schlagenhauf, Switzerland, Dr. Dom Colbert, Ireland, Nr. Anne McDonald, Scotland.
Fees: Members €45.00, Non-Members €60.00 (includes morning & afternoon teas/coffees, lunch)
Contact: Anne Redmond, Tel: 045 890 127, E-mail: annehredmond@eircom.net

Travel Medicine Society of Ireland 7 November 2015
Location: Clarion Hotel, Liffey Valley, Lucan, Co. Dublin
Time: 9:00 am – 1:00 pm
Contact: Anne Redmond, Tel: 045 890 127, E-mail: annehredmond@eircom.net

3rd Tropical Medicine Excursion to Ghana, West Africa. 25 November - 5 December 2015
In collaboration with various teaching hospitals in Ghana and Kay Schaefer (MD, PhD, MSc, DTM&H), 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. www.tropmedex.com.