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ed. C. Maguire

BACK TO BASICS RISK STATISTICS IN TRAVEL MEDICINE



Riding (on, not in) the train from Alausi in central Ecuador; not all risk in travel is related to disease

Introduction

Much of our work in Travel Medicine involves reducing risk – keeping the patient out of medical trouble while abroad. Some of this risk is addressed through vaccination, some by malaria prophylaxis and the rest by behaviour modification advice from us to the patient. But just how much risk are patients at from the many diseases and risk scenarios that we discuss with them? Is it sufficient to tell a patient that it's important to be vaccinated against a certain disease without being able to attempt to quantify the risk of that disease numerically? Having access to risk statistics for some of the major diseases improves the quality of the consultation; practitioners can speak with more certainty and patients can make better informed decisions regarding vaccination and the need for malaria prophylaxis.

In this, the third in a series of 'Back to Basics' articles aimed at addressing the foundation practice of Travel Medicine, Simon Collins examines the most recent data on the risk statistics underlying many of the diseases which are discussed with patients in the pre-travel consultation.

Risk calculation (diseases excluding malaria)

Much of the early work in this area was done by Robert Steffen, who produced a logarithmic risk scale as a graphic representation of relative disease risk. As risk statistics have changed with time, the Steffen scale has been updated¹.

Subsequent research articles were used in the compilation of much of the data produced here. In the journal articles reviewed, risk was presented in differing statistical formats. I wanted this data to be available to readers in a form which would be comparable between diseases (i.e. same unit of measurement) and which would be as understandable as possible for patients; for this reason, I have chosen 'risk per month of travel' as the unit of risk in the following table and used a numerical as opposed to a percentage measure of risk. Where necessary, I have recalculated statistics from the journal articles quoted in order to adapt to this uniform unit of measurement.

Risk accumulates with time; an animal bite risk of 1:250/ month can be explained to a patient as a risk of 1:500 per two week holiday or a risk of 1:125 per two month holiday.

The figures presented here:

- relate to travellers (as opposed to long-term expatriate residents or to indigenous local populations)
- are per month of travel
- represent average risk and will increase or decrease in an individual depending on their degree of risk behaviour (e.g. a person disregarding all food and water precautions will be at higher risk of Hepatitis A)

DISEASE OR EVENT:	R ISK PER MONTH OF TRAVEL:			
Travellers' Diarrhoea ²	1:2			
Influenza ³	1:100			
Dengue (symptomatic) ⁴	1:100 (this is a global figure; between 1997 and 2006, Dengue was imported most commonly from South-east Asia (51%), followed by South Central Asia (17%), Latin America (15%), the Caribbean (9%), parts of Africa (5%) and Oceania (2%)).			
Rabies (i.e. animal bite with risk) ⁵	1:250			
Typhoid ⁶	1:1,930 (South Asia) to 1:5,150 (Southern Africa) to 1:11,000 (South-East Asia) to 1:22,650 (Latin America)			
Yellow Fever ⁷	1:3,000 (West Africa) & 1:30,000 (South America)			
Hepatitis A ⁸	1:5,555 (Middle East) to 1:8,333 (North Africa) to 1:50,000 (East Asia)			
Hepatitis B ⁹	1:9,800			
Hepatitis C ¹⁰	1:33,300			
T.B. ¹¹	1:35,000 (average traveller) to 1:357 (long-term expatriate residents) to 1:126 (front-line healthcare workers in developing countries)			
Meningitis	>1:100,000 ¹² outside African 'meningitis belt' (although up to 1:1,000 persons during the duration of an epidemic, when epidemics occur in the African Meningitis $Belt^{13}$)			
Cholera ¹⁴	1:333,000 - 1:500,000			
Japanese Encephalitis ¹⁵	>1:1,000,000			

Risk calculation (malaria)

I have dealt with malaria as a separate subject because it did not prove possible to identify reliable, recent 'risk per month of travel' statistics for this disease. Among the papers that do exist, risk statistics for differing regions of the world vary wildly between papers. In addition, much of the data was generated more than ten years ago. What I am presenting instead are two measures of malaria risk. The first is adapted from the best of the journal articles I could identify. It measures risk per number of travellers to different regions of the world, though not as a function of a unit of time:

Table 2: malaria cases per number of travellers ¹⁶

Region:	Malaria cases per number of travellers (includes those taking and not taking prophylaxis, trip duration not specified):
Africa (Central)	1:280
Africa (West)	1:331
Africa (East)	1:417
India	1:1,666
South America	1:13,900
South-East Asia	1:18,520
Central America/Carribean	1:77,000

It should be remembered that table 2 fails to refer to the high malaria risk that also occurs in Papua New Guinea and the Solomon Islands (probably, around 1:280, like central Africa). The proportionality of risk shown in table 2 is complemented by a second way of displaying risk – the map below. The map is a graphical display of *P falciparum* transmission intensity globally. It was produced by the Malaria Atlas Project at Oxford University. It can be useful to show to patients during the consultation. It is available online. Risk is shown by areas of pink and red.



The spatial distribution of *P falciparum* malaria 2010; about 90% of global risk is found in Africa (Malaria Atlas Project). http://www.map.ox.ac.uk/browse-resources/endemicity/Pf_class/world/

Discussion

Tables of risk can lack context and be overwhelming. A few thoughts:

- The figures are being presented in order to provide average risk for an average traveller; risk will vary with individual patients depending on their age, type of travel and risk activities engaged in.
- Risk and consequence are very different things; the risk of a disease may be low but if its consequence is high, (Hepatitis A has 2% mortality in older people), then one will be more inclined to vaccinate. Risk tables do not solve the dilemma of weighing the risk of vaccinating or of prescribing malaria prophylaxis against the consequences of cost to the patient or of side-effects.
- We lack vaccines for many of the important travelrelated risks our patients are exposed to. Many of the vaccines that are available are targeting events which represent very small risks to our patients. Advice on food poisoning and Dengue Fever avoidance in the case of relevant destination countries should always be part of the Travel Medicine consultation.

References:

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¹⁵Hatz 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

¹⁶Askling HH, Nilsson J, Tegnell A, Janzon R, Ekdahl K: Malaria risk in travelers. Emerg Infect Dis 2005, 11:436–441 (data adapted from Table 4)

Dr. Simon Collins

Items for the newsletter can be forwarded to:

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The Travel Health Continuum *Protecting the Traveller from Departure to Return Faculty of Travel Medicine Annual Symposium & AGM*

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BURSARIES

Travel Medicine Society of Ireland announce the launch of two research bursaries available to members. Further information is available from the Secretary.

Applicants are required to submit a single A4 page attachment (size 12 font, Times New Roman, 1.5 spacing) in an email to our Honorary Secretary, Anne Redmond, at annehredmond@eircom.net, outlining the following: previous research experience, if any; research proposal - define the specific research question, outline the proposed study population, sampling method, study design (qualitative/quantitative), and how the bursary will be used (stipend for Research Assistant, administration costs, etc.); researcher name, work address and telephone number on a separate page; estimated period of data collection; commitment to submit an abstract to the NECTM conference.

Where a recipient of the TMSI research bursaries is successful in having his/her abstract accepted for poster/ oral presentation at NECTM, TMSI will undertake to cover the full conference registration fee for that delegate. Travel and accommodation costs will be the responsibility of the delegate.

WHERE DO YOU GO TO.....JOHN GIBBONS, PRESIDENT-ELECT OF TMSI?

When did you first catch the travel bug?

I was about 15 when I travelled to London; it was my first time on an aircraft. The sights and sounds in London amazed me. What really caught my imagination was London's cosmopolitan feel. It was a riot of different languages and ethnic dress, a heady jumble of traditional British mixed with the exotic flavours of the Orient and Africa. I had never eaten Asian food before. Ireland in comparison seemed so very much monocultural. That is gradually changing.

What do you most like about travel?

For me it's the contrast with my own culture; to experience traditions and practices which are different. I have always travelled to see "something" different and I have seen many famous places; however it is always the interaction with local people that lingers in my memory. It might be a smile, a shared joke, the creative hand signals when trying to communicate or a simple act of kindness from a stranger. These are the things, which I always remember.

How extensively have you travelled?

I've traveled reasonably extensively in Europe, Asia, North America, the Middle East and Africa. There are so many places I still want to visit.

Which country did you most enjoy visiting?

I can't limit it to one. I must say that spending time with the Bedouin in Saudi Arabia was an amazing experience. Their hospitality and kindness is extraordinary as is their ability to navigate what is a featureless and formidable terrain. I had an amazing experience travelling overland through the rainforest in Cameroon between Douala and Yaounde-to attend a conference on Malaria! I love Germany particularly Bavaria in the winter-it is Heaven. My family and I spent a couple of days exploring a traditional Hutong in Beijing, off the usual tourist itinerary. Spending time with a Chinese family in their home was more interesting than any famous landmark. I can't omit Italy. My good friend Raffaele lives in Bergamo. His mother is a Sicilian. She doesn't speak a word of English but language is rarely a barrier in Italy. I have spent many pleasant evenings sitting at her kitchen table with her extended family sharing stories, friendship and glorious pasta

What was your favourite city to visit?

It has to be New York. The noise, the sights, the mishmash of people, the style, the food, it's a magical mesmerizing place.

London is also a favourite. The most haunting mystical place has to be Medain Saleh, an abandoned city in

Saudi Arabia, built by the Nabateans—that really was unforgettable.

Are you an adventurous traveller?

I used to be reasonably adventurous before I was blessed with a child and responsibilities. I've spent time exploring the Rub Al Khali, (Empty Quarter) in Saudi Arabia, sometimes hundreds of kilometers from the nearest town. My work brought me to the Iraqi border processing refugees as war approached in the Gulf. I have travelled by canoe to remote villages in the Niger delta in Nigeria.

Are there any aspects of travel which you don't enjoy?

My travel has often been for work as well as pleasure and the destinations have sometimes been quite challenging. Security has sometimes been a real risk. I have lost friends and patients to accidents and acts of terrorism. I don't enjoy self important and unhelpful border guards. I hate packing; however my wife is a master and it makes travelling so much more enjoyable.

What can travel teach us about ourselves?

Travel knocks us out of our little comfort zones and makes us realize how lucky we are. It also teaches us how extraordinarily kind and gracious total strangers can be. My travels have taught me that no matter how alien a culture might seem, all humans share the same basic dreams and hopes.

Can you give us one useful travel tip?

Scan all travel documents including passport and vaccination records and email them to yourself—your documents are difficult to replace, but electronic copies are always accessible. NEVER EVER skimp on travel insurance, particularly repatriation cover—most travellers don't have a clue how expensive it is to be repatriated in an emergency. Be aware of local customs and expectations; understand the political climate in regions to which you travel. Smile a lot; most people will smile back and a smile can defuse an awkward situation.

Have you any interesting trips coming up?

A well-travelled and wise German colleague and I want to go to Mali, travelling up the Niger river by boat to Bamako and hopefully spend some time with the Dogon people and the Touareg, however that will have to stay on the backburner until it's a bit safer. For the immediate future, a trip to Bangalore with the family awaits. After that I would love to take the train from Beijing to Lhasa in Tibet. In the meantime I'm planning a weekend on Achill island; yes folks there are magical places even in our own backyard.

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DESTINATION ZAMBIA



My name is Hugh Maguire. I am a 5th year student at Gonzaga College SJ. I live in Dublin.

For the Easter Holidays 2013, I travelled to Zambia, along with 22 other students from my school and six teachers. Our plan in Zambia was to build four houses for the local people over the two weeks we're there. We travelled with Habitat for Humanity. Our school has done this over the past seven years, and this has been a huge success with students both past and present travelling. Habitat for Humanity is a worldwide nonprofit housing organisation that works in partnership with people in need of decent housing to build and renovate simple, affordable homes. Each year we have gone to a different village and supported the locals there. Once we're finished building the houses we leave a large donation to Habitat for Humanity to use appropriately for them. When we're over there we buy all our resources locally, i.e. food, water, building materials etc. This has a huge positive impact on the local economy for which they are very grateful.

Our first challenge was to raise money, which will go towards the materials for the houses, food, water and the donation at the end, to support for the local economy. We gave ourselves a combined target of \notin 82,000 as group fundraising. Six months of intense effort through, activities such as tennis and cycling marathons, car boot sales, coffee mornings, pub quizzes, race nights, bag packing, carol singing and a full formal concert eventually got us there. We learned that every little bit of money helps a great deal and we are very grateful for the support received.

The Tropical Medical Bureau in Dun Laoghaire gave us all our shots and advised us on what to do to stay healthy. We were also told by Habit for Humanity workers what to bring, what to wear, what to expect and how to behave.

Finally the day came to board our flight. At the start, it was good banter, slagging the teachers and singing songs. After six hours, the plane journey was awful. I got bored of movies and couldn't sleep cause it was so uncomfortable. Once we landed in Lusaka, I noticed the air was thicker, not sure how to describe it. I didn't really hit me that I was in Africa til later on. There were lots of western brands on billboards and for sale at traffic lights. After breakfast we drove through fields, tracks, between houses on a very pot holly road and that's when it hit me. There was a serious amount of poverty.

Palm Sunday is amazing here! We gathered in front of the courthouse and processed to the church led by a brass band. We took up the whole road, which was shut down and sang all the way there. The church was packed to capacity with more spilling out the doors. We met the Irish ambassador to Zambia there. The singing and music was amazing.

After lunch, we hopped on the bus and drove the six hours from Lusaka to Ndola. The things you see on the road are remarkable: lots of huts, people walking and selling. The roads are all dead straight and you can see so far. Horizons left and right with the road parting it in the middle! We got off the bus at six in the evening and it was pitch black. The locals gave us a fantastic welcome. We unpacked in darkness. There were loads of stars out so we had a good long look. Sleep was hot and uncomfortable.

The first day building houses, I am pretty sure everyone got burnt, including me. Nobody is a big fan of the sun right now. Building was hot and not very interesting. Every time we go to, or come from the site, there are loads of children waiting. They just want to hold our hands. Some of them are so cool. One girl about 3 was so small and light, all she wants is to be lifted. I was so chuffed she remembered my name. After work, we played football with the locals. The pitch was very uneven, with patches with no grass and some the grass up to your waist. Showers were amazing. Just one bottle of water over your head is fantastic. You may not be clean but you feel much better. The beds were

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the worst, so hot, so uncomfortable. The rooster was doing it's thing really early for ages. Most days were the same, lots of tiring building, a hundred local kids and lots of cockroaches. We used a ridiculous amount of insect spray.

One night, I dreamt I left Zambia for a rugby match and tried to get back before supper. The Malarone must be getting to me! Behind each house, we built a latrine. A big hole in the ground covered by a small brick outhouse. That's where the biggest cockroaches were to be found. I gave up avoiding it during the second week. The work was hard and tiring and sometimes very inefficient but the company was good fun. If I ran it, I'd change a few things. The atmosphere is a million times better when everyone has a job. I noticed at dinner how much I value a chair.

Two guys went to the clinic because they were sick. They stayed the night because they've got gastroenteritis. They got nice beds and showers. They found it tough going back on the site because they hadn't worked in five days. The guys are still avoiding anything resembling shima, (the local dish of ground maize).

I went to a local school called Mubungo for a visit. It was nice. It's about the size of our Science block and has two thousand pupils. There are different shifts, morning, noon and afternoon. Classes had between 50 and 90 people with one teacher.

We visited a safari park and got very close to some elephants. Apparently they eat 150 kgs a day and 100 kgs comes out again! We also visited a market in Lusaka, where they sell carved figurines and spoons and shirts. You are supposed to haggle to get the price down. Some tactics were developed like walking away or handling the amount of money you wanted to pay. I bought loads of stuff for my family back home. One guy wanted to trade my socks! He didn't mind that I'd been wearing them for three days. We all bought Zambia football team jerseys and wore them at the next game in Ndola.

The house is finally done! We put in the windows and did some small jobs touching up. Then we had a handing over ceremony. We all got up to dance but it gets very hot in the sun so we got cold fantas and cakes. We played with the kids for a while and played our last game of football. Then we had dinner with the builders and the homeowners. It was amazing! I can't believe it's done but I am ready to go home. On the last morning we made a donation bag. I left my steel-toed boots T-Shirts, jacket, hand sanitizers and torch. They will be distributed by Habitat. We didn't have as much in our bags going back.

It was nice being back home but I miss it already. I told the whole story for a long time after. I am sure I'll be telling it again. I was proud to do it.

Hugh Maguire

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PREPARATION OF THE HAJJ PILGRIM



Hajj: pilgrims at Al-Masjid al-Haram mosque in Mecca

In September this year, it is possible you will encounter patients seeking the Meningitis ACYW-135 vaccine as part of their visa requirements for travelling to the Hajj. What is the Hajj all about? Should you be addressing other Travel Health issues with the patient?

All observant Muslims are expected to perform the Hajj at least once in their lifetime. The Hajj is a pilgrimage to the city of Mecca in Saudi Arabia. The event occurs at a fixed point in the Islamic calendar. This calendar is a lunar one and differs from our Gregorian (Western) one. In 2013, Hajj will occur from 13th – 18th October. Over 3 million pilgrims will descend on Mecca from all over the world. In Mecca, they converge on the world's largest mosque (the Masjid al-Haram), walk seven times around the large black cube at the mosque's centre, then travel seven times between the hills of Safa and Marwah (400 metres apart). A trip to Mina, 4km away, is followed by a day of antonement at Mt. Arafat, a further 7kms away. On the way back to Mecca, pilgrims collect stones at Muzdalifah which are thrown at symbolic walls at the 'stoning the devil' ceremony at Jamarat. Pilgrims return to the Masjid al-Haram to circle the Ka'ba seven more times. Finally, their heads are shaved.

The process of Hajj is spiritually transcendant and a lifetime event for pilgrims. It does however occur in difficult conditions of heat, crowding and exertion. Communicable disease risks are present also, particularly when the multiple countries of origin and congestion of the pilgrims is taken into account.

Pilgrims coming from Ireland are obligated only to have the Meningitis ACYW-135 vaccine in order to obtain a Hajj visa from the Saudi embassy. The vaccine must have been given at least 10 days pre-arrival in Saudi and not more than 3 years ago. Supplementry vaccines which the Travel Medicine practitioner should consider:

- 1. Influenza (recommended by the Saudi authorities but not mandatory)
- 2. Pertussis (available in the vaccines 'Boostrix' or 'Boostrix-IPV')
- 3. MMR in young (born after 1978) non-immune pilgrims
- 4. Hepatitis A (risk via food)
- 5. Hepatitis B (risk via head-shavings performed by unlicenced barbers).

General travel health advice which the pilgrim should be given:

- Avoidance of heat-exhaustion (rest/plenty of sunscreen/hydration maintenance)
- Food/water precautions to avoid diarrhoeal illness
- Facemask use may be helpful in reducing respiratory illnesses risk.

An excellent 14-minute film of the Hajj experience covertly made by a Canadian-Pakistani pilgrim can be viewed online at:

http://www.youtube.com/watch?v=q7q_LcqbvKI

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Dr. Simon Collins.

THE DIABETIC TRAVELLER: A CHECKLIST FOR SAFE TRAVEL

"The world is a book and those who do not travel, read only one page". Saint Augustine of Hippo.

There are many obvious benefits to travel including relaxation, the pursuit of sunshine and experiencing new and different climates, landscapes, and cultures. However there are also potential hazards to travelling abroad, in particular, exposure to infection with tropical or other travel associated diseases. This applies increasingly to people with pre - existing medical conditions including Diabetes.

As health care professionals we have an opportunity to reduce the risk of travel associated diseases by giving appropriate pre-travel advice to our patients. This is especially important in the case of patients with Diabetes. Simple pre-travel advice can maximise their glycaemic control.

MEDICAL PREPARATION.

- Comprehensive travel insurance is essential for all travellers. A full declaration of medical conditions should be made to the insurers. All equipment and planned activities should be covered.
- Wear identification bracelet, available from Medic Alert Foundation.
- Travel with a friend who knows the medical history and what to do in an emergency.
- Give copy of prescriptions, GP letter, with full history, should they require medical attention.
- They may need to show a GP letter at customs as they could encounter problems with glucometer and insulin syringes, and pumps going through the scanner.
- Ensure they are fully aware of the symptoms of hypoglycaemia, hyperglycaemia, and keto-acidosis. Give written instructions on how to treat.
- Always bring an extra supply of all medications and glucometers.
- Bring small sharps box for disposal of needles.
- Diabetic Traveller on Insulin should discuss dosage adjustments with their Endocrinologist or Diabetic Nurse Specialist a few weeks before departure.
- Illness in a traveller with Diabetes can lead to hypo or hyper-glycaemia. Travellers should be advised, and receive written instructions, on the use of medication for self treatment of minor illness, and know when and how to seek medical advice.
- Obtaining insulin overseas should be discouraged; names, brands, strengths, and qualities of insulin vary considerably worldwide.

JOURNEY RISKS.

- The Diabetic traveller should be advised to take medication on time. If necessary wear two watches, one set to local time and one set to home time to follow dose schedules.
- Adjust insulin schedules by two hour changes to compensate for time-zones.
- Do not take sedatives or alcohol as they might oversleep and become hypoglycaemic.
- Place all diabetic supplies in carry-on luggage. Insulin stored in the aircraft may freeze and efficacy may then be reduced.
- Keep medication and snacks beside seat, should they become hypoglycaemic, easy access to hand luggage is essential.
- Change in activity levels, stress, dehydration, and jet lag can affect glucose levels. Frequent monitoring of blood glucose levels is essential.
- Contact the airline in advance to organise diabetic meals. Meals on aircrafts tend contain very little carbohydrates; it is advisable to carry snacks in case of delays and on long haul flights.
- Reduce risks of deep venous thrombosis by wearing loose clothing, approved flight stockings, doing flight exercises, and regular walking in the aircraft.
- Carry sea sickness medication on cruise ships.
- Ensure very regular hand washing to prevent the Norovirus.
- Have local currency to buy extra meals and deal with emergencies.

ENVIRONMENTAL RISKS.

- Insulin should be stored away from direct sunlight and protected from temperature variations by use of a thermal insulated bag or flask.
- Some airlines request diabetics to put spare insulin in baggage in the aircraft's hold.
- Travelling at high altitudes may cause the insulin to freeze in aircrafts hold. Wrap insulin in bubble wrap, then in a towel, place in middle of suitcase.
- On arrival examine insulin for crystals. Discard insulin if crystals are found. If the insulin appears normal, blood sugar readings should be done more frequently and if they appear abnormal, the insulin should be discarded, as it may be damaged and have reduced efficacy. Insulin is absorbed faster in warmer temperatures. If the traveller

gets very warm, the increased blood flow to the skin will absorb insulin faster and cause hypoglycaemia.

- Insulin absorbs slower in cold temperatures. Blood glucose levels should be monitored frequently and insulin dosing adjusted as needed.
- The performance of glucometers, and test strips and insulin delivery devices can be affected by temperature. humidity, and altitude. Urine dipstick tests may provide a more reliable method of basic monitoring whilst at altitude.
- Dehydration can affect blood glucose levels and adequate hydration should be maintained.
- If the diabetic traveller is on insulin, ensure they have a glucagon emergency kit and a companion able to administer it.
- If going to high altitude, almost everyone develops nausea, headache, and loss of appetite, dizziness, fatigue, and sleep disturbance. These symptoms are very similar to hypoglycaemia. If experiencing symptoms they should never be left unattended in case symptoms worsen. If no improvement or symptoms worsen, an immediate descent of at least 300m should be made. Ensure they maintain good food intake and remain well hydrated. Diamox can be used for the treatment of altitude illness, but the onset of its effect can be delayed. A trial dose of 125mgs bd for 2 days should be taken prior to travel. Assuming there is no adverse events it should then be commenced 1-2 days prior to ascent to 3,000m and above and continued for at least 2 days after reaching the highest altitude. It is contraindicated in those with an allergy to sulphonamides.

FOOD AND WATER-BORNE RISKS.

- Availability of suitable food and drink including unsweetened drinks varies.
- Simple carbohydrates sources, such as glucose tablets and sweets should be carried to relieve symptoms of hypoglycaemia. Complex carbohydrate sources, such as cereal bars and biscuits, should also be carried to supplement/replace a meal.
- Be hygiene aware, eat sensibly. Gastrointestinal illness can cause dehydration and quickly affect blood glucose levels. Blood glucose levels should be monitored frequently during illness. Use self-treatment plan, adjust insulin as per glucose readings.
- Avoid uncooked seafood.

SKIN HEALTH.

- Travellers with diabetes, especially those with peripheral neuropathy should avoid injury to their feet.
- Make an appointment to see chiropodist prior to departure.
- Daily examination of feet for injury, and shoes for foreign bodies.
- Wear comfortable, wide fitting shoes.
- Avoid barefoot walking.
- Toe nails should be well trimmed, and broken skin covered with a sterile dressing.
- Insect bite avoidance is important. Ensure regular use of insect repellent.

SEXUAL HEALTH AND BLOOD-BORNE VIRAL RISKS.

- Female travellers with diabetes are at increased risk of urinary tract infections.
- The risk of vaginal candidiasis is also increased, particularly if taking an antibiotic, such as doxycycline for malaria prevention.
- Travellers should be advised of self-treatment options and know when to seek medical advice.

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- Make an appointment to see ophthalmologist prior to departure.
- Wear sunglasses, with good UV protection, particularly those people who have diabetic retinopathy.

ADDITIONAL VACCINATIONS.

- Influenza.
- Pneumococcal.

CONCLUSION.

Diabetics present increased challenges to Health Care Professionals. They should be strongly encouraged to see their GP or Nurse with a special interest in diabetes, well in advance of their holiday. Pre-travel advice can maximise their glycaemic control.

These basic measures will allow diabetic patients to enjoy their holiday.

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"The Busy Practitioners Guide to TROPICAL MEDICINE"

Available to order from: Dr. Dom Colbert, Eleta, Lower Taylors Hill, Galway

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All profit from the sale of the booklet will go to the Medical Missionaries of Mary.

DUKORAL : A VACCINE TO PREVENT TRAVELLER'S DIARRHOEA?

Siobhan Grehan, Practice Nurse, Tropical Medical Bureau



Dukoral is an oral vaccine against Cholera and traveller's diarrhoea. The vaccine offers protection against cholera for 2 years. Thankfully there are relatively few areas in the world where travellers are at significant risk of Cholera exposure. It is recommended for travellers to areas where a outbreaks occur and Cholera risk exists, for example travellers doing volunteer work in Haiti.

However, more and more within my practice, we offer Dukoral because of its role in preventing travellers' diarrhoea. Once the primary course has been completed the patient can expect four months of partial protection from traveller's diarrhoea caused by at least one strain of *E.coli* (ETEC). If the patient remains at risk beyond this period, one booster dose is recommended. As always it is the responsibility of the person prescribing the vaccine to advise how the disease is transmitted and provide information the patient can use to protect their health and avoid exposure to the disease; (faecal contaminated water or contaminated shellfish would be the two most common causes of Cholera).

I set out to answer three questions:

- Does it work?
- Is it worth it?
- How much protection does it offer?

Traveller's diarrhoea is caused by many different organisms including bacteria, such as *E. coli*, Salmonella, parasites such as Giardia and viruses such as norovirus. All these organisms are spread through the faecal/oral route, (eating or drinking contaminated food or water or contact between the mouth and dirty hands, cups, plates etc). Remember loose motions can also result from a change in diet including, for example, spicy or oily foods. Dukoral only offers protection from diarrhoea caused by *E. coli*, (ETEC) and in the articles I have read the general opinion is that completing a course of Dukoral offers approximately a 25% reduction in cases of traveller's diarrhoea.

Prevention of traveller's diarrhoea

This depends upon taking effective measures including, food and water precautions, water purification and only drinking bottled water with the seal intact. Personal hygiene when eating and drinking is very important. This includes hand washing or use of hand sanitizer prior to eating and using clean plates, cups and utensils.

Every traveller should know the importance of rehydration which is always the first goal of treatment. The priority in treatment is preventing dehydration especially in young children. Clear fluids such as diluted fruit juices or oral rehydrating solutions such as Dioralyte, if available, should be drunk liberally but slowly. All rehydrating drinks must be prepared using clean water and in the absence of oral rehydration salts, a litre of clean water, a handful of sugar and a pinch of salt will work just as well.

Antidiarrhoeal Agents

These are reserved for mild/moderate diarrhoea and only when access to toilets is limited for a short period, such as travelling on a bus. Overuse can cause rebound constipation. Do not use antidiarrhoeal medication if there is blood or mucus in stool or high fever or severe abdominal pain. These symptoms suggest invasive diarrhoea such as dysentery. Antidiarrhoeal agents increase the risk of complications such as septicaemia. Marked vomiting, fever, pain, bleeding or dehydration requires hospital referral so that intravenous fluids can be administered. Medical attention must be sought!

Antibiotic - Self Treatment

The majority of cases of travellers' diarrhoea will resolve within 3 to 5 days with rehydration only. Antibiotic treatment is unnecessary in most cases. However, if diarrhoea is severe or associated with blood and mucus in the stool, antibiotic self-treatment may be used. Antibiotics are effective against some bacteria, which cause most, but not all cases of travellers' diarrhoea. They will not improve diarrhoea due to non-bacterial causes.

Travellers suitable for self-treatment may include:

- Travellers to remote rural areas of the developing world who are distant from medical help.
- Travellers with pre-existing bowel problems such as inflammatory bowel disease where infection may trigger a relapse.
- Travellers with pre-existing medical conditions which may be worsened by severe infection or dehydration, i.e. poorly controlled diabetes, renal impairment.
- Travellers with a tendency to severe travellers' diarrhoea (on the basis of previous travel experience).

All of the above patients may benefit from taking Dukoral and in my experience are happy to take it when it is offered. Antibiotics used for self-treatment include: Ciprofloxacin, Azithromycin and Rifaximin.

Ideally the patient should contact their travel health centre, where they received advice, vaccinations and prescriptions prior to travel, for advice prior to taking antibiotics. The prescriber should be satisfied that doses and when to use is understood. Antibiotics should not be used if symptoms of invasive diarrhoea are present such as blood or mucus in the stool.

All antibiotics have side effects and may interact with other medications taken at the same time. Always read the patient information leaflet that accompanies the antibiotic and inform your doctor or nurse if you are taking any other medication.

If symptoms persist without improvement after 72 hours medical help should be sought. Most cases of travellers' diarrhoea are mild and will settle after a few days with simple measures such as rehydration. In certain situations additional measures may be considered to reduce the likelihood of diarrhoea developing. This is not a substitute

to practicing good food and water hygiene. These measures include:

- Tablets to prevent diarrhoea (chemoprophylaxis) and prophylactic antibiotics.
- Vaccination. Dukoral, (the oral cholera vaccine), may give some protection against diarrhoea caused by one strain of *E. coli* (ETEC) but not other bacterial, parasitic or viral causes.

So in answer to the questions does it work? In my experience patients give very positive feedback and they feel it has worked. This could be partly due to the fact that they take are more risk-aware, having discussed food and water precautions in detail as part of their consultation.

Is it worth it? A course of two doses of Dukoral adds just fifty euro to the cost of vaccination currently in my practice and in my experience most patients feel it is worth it. Some think it is priceless and has improved their travelling experience enormously.

How much protection does it offer? From the studies I have read a figure of an overall reduction of approximately 25% in traveller's diarrhoea in the four months following When to take Dukoral f

a course of Dukoral seems to be about the agreed figure. In my experience patients who return for a future trip who have previously taken Dukoral are happy to take it again and give a very positive feedback as to it's use. One group in particular stands out for me: a group of teachers and financial workers who travel every year to India to do voluntary work had been plagued with traveller's diarrhoea and always travelled with antibiotics for self-treatment. They were offered Dukoral when it became available in Ireland and now provide it every year for all of their volunteers as a matter of routine vaccinations. My own daughter and her friend took a course of Dukoral prior to joining the masses of twenty year old students travelling around Thailand last summer and they both felt they benefited from taking it, and stated they would do so again.

On return from travel, it is important to make patients aware that any change in bowel habit could be associated with something picked up abroad. A stool sample for ova and parasites is so important if a patient presents with abnormal bowel habits and a history of travel. We have detected parasites in patients 20 years after travel! Some have laboured for years with a diagnosis of Irritable Bowel Syndrome.

When to take Dukoral for traveller's Diarrhoea:

It is important that you take DUKORAL at the right time.

You should take two doses of DUKORAL 1 week apart. Protection starts 1 week after the second dose and lasts for 3 months. Make sure that you take the last dose of vaccine at least 1 week before leaving on your trip.



When to take DUKORAL® for Cholera

It is important that you take DUKORAL at the right time.

Adults and children 6 years and older should take two doses of DUKORAL® one week apart. Children 2 to 6 years should take three doses of DUKORAL® each one week apart given 3 weeks prior to exposure. Protection starts 1 week after the second dose and lasts for 2 years in adults and children 6 years and older, and for 6 months in children who are 2 to 6 years old. Make sure that you take the last dose of vaccine at least 1 week before leaving on your trip.



Cholera Notifications, WHO 2011:



WHAT'S IN THE PAPERS? – A REVIEW OF THE RECENT LITERATURE IN TRAVEL MEDICINE

Travel-related leptospirosis: a series of 15 imported cases

Van de Werve C, Perignon A, Jauréguiberry S, et al.

Journal of Travel Medicine 2013 Jul;20(4):228-31.

This Belgian group retrospectively studied consecutive cases of travel-related leptospirosis in their Travel Clinic between January 2008 and September 2011. Eligible patients had to have a clinical presentation consistent with the infection within 21 days of returning from their trip, IgM antibodies (or thermoresistant antigen), ELISA \geq 1/400, and a positive microagglutination test \geq 1/100. Fifteen cases of leptospirosis were recorded, with exposure occurring in Asia in 47%, Africa in 20%, the Caribbean in 20%, and the Indian Ocean in 13%. Fourteen of the patients had been infected while engaging in water-related activities, such as bathing, canoeing, kayaking, and white-water rafting. The most common presenting symptoms were fever (100%), headache (80%), and gastrointestinal symptoms (67%). Liver function tests were impaired in all cases, with lymphocytopaenia in 80%, thrombocytopenia in 67%, and raised C-reactive protein in 67% of cases. Cure was achieved in 7 patients with amoxicillin, in 4 patients with doxycycline, in two patients with ceftriaxone, in one patient with a 3-drug combination. Nine different serovars of the organism were detected. The authors conclude that any traveller returning with fever and a history of potential exposure should be investigated for leptospirosis.

Don't forget to ask travellers about intended adventure sports, including recreational water activities, educate them about the risk of exposure to leptospirosis from water splashes, and advise them to seek immediate medical assistance should they develop a fever abroad or upon their return.

The global availability of rabies immune globulin and rabies vaccine in clinics providing direct care to travelers

Jentes ES, Blanton JD, Johnson KJ, et al.

Journal of Travel Medicine 2013 May-Jun;20(3):148-58.

This group from the Centers for Disease Control and Prevention in Atlanta, Georgia assessed the global availability of rabies vaccine and rabies immune globulin (RIG) in an effort to improve recommendations for travellers. They distributed a 20-question online survey by email to travel medicine providers and other clinicians worldwide from February 1 to March 30, 2011. Of the 190 respondents who provided post-exposure rabies treatment to travellers, the majority of responses came from North America (38%), Western Europe (19%), Australia and South and West Pacific Islands (11%), East and Southeast Asia (8%), and Southern Africa (6%). One third of respondents reported that patients presenting with wounds from animal exposure were seldom or never adequately cleansed. RIG was either often or always available for 100% (n=5) of providers in the Middle East and North Africa; 94% (n=17) in Australia and Pacific Islands; 20% (n=1) in South America; and 56% (n=5) in Eastern Europe and Northern Asia. Ninety-one percent (n=158) of respondents reported that rabies vaccine was often or always accessible. Over a third (n=58) of respondents felt that the cost of RIG was too high and over a quarter felt that rabies vaccine was too expensive. The authors conclude that all travellers to rabies-endemic countries should be informed that RIG and rabies vaccine might not be readily available at their destination and that travel health and medical evacuation insurance should be obtained for their trip.

Don't forget to give clear verbal and written advice about how to manage animal bites, licks, and scratches by cleaning them with soap and water, and stress the importance of seeking immediate medical care in this setting.

The potential for pneumococcal vaccination in Hajj pilgrims: Expert opinion

Rashid H, Abdul Muttalif AR, Mohamed Dahlan ZB, et al.

Travel Med Infect Dis 2013 Jun 27. Pii: S1477-(13)00094-X. Doi: 10.1016/j.tmaid.2013.06.001. [Epub ahead of print]

The annual Hajj pilgrimage to Mecca in the Kingdom of Saudi Arabia is one of the largest mass gatherings in the world. Close contact between pilgrims, shared accommodation, and air pollution serve to increase the risk of respiratory tract infections in Hajj pilgrims. The authors argue that, in addition to the vaccines required*

or currently recommended for Hajj pilgrims, they should also be offered pneumococcal vaccines, particularly for those aged >65 years, many of whom have pre-existing illnesses. The authors acknowledge that gaps exist in our understanding of the burden of pneumococcal infection in Hajj pilgrims and the potential effectiveness of pneumococcal vaccination in this group. An assumption is made that the existing pneumococcal vaccines include coverage against the majority of pneumococcal serotypes circulating during the pilgrimage.

*Don't forget that Hajj visas cannot be issued to adults or children aged >2 years without proof of vaccination with a single dose of quadrivalent AlClYlW-135 meningococcal vaccine on a valid International Certificate of Vaccination or Prophylaxis. The vaccine must have been administered ≥ 10 days and ≤ 3 years before arrival in the Kingdom of Saudi Arabia.

Eye problems on expeditions

Morris DS, Mella S, Depla D

Travel Med Infect Dis. 2013 My-Jun; 11(3):152-8.

Loss of vision in a wilderness setting can be catastrophic. Many physicians have a poor knowledge of the basic skills that could be usefully applied in remote ophthalmological emergencies. The authors, who work at the Cardiff Eye Unit in Wales, present a very useful practical guide to the treatment and prevention of eye problems on expeditions. Eye problems unique to high altitude settings, such as high altitude retinopathy, are discussed, as well as conditions which might beset the wilderness traveller in any setting, including ocular trauma, dry eyes and contact lens-related complications. The authors stress that pre-existing ocular conditions should be enquired about in the pre-travel medical preparation of travellers on expeditions and any travelling medic should ensure that appropriate drugs and equipment are packed in expedition first aid kits. They conclude that cautious evacuation is always advised in the event of a visual problem occurring on an expedition.

Don't forget to remind travellers who wear contact lenses that the low relative humidity in pressurised aircraft cabins and at high altitude may cause significant discomfort. Have you ever seen how quickly a soft contact lens shrivels up when exposed to the dry aircraft cabin air? Make sure they always carry back up spectacles and advise them to wear them during the flight.

Methanol poisoning among travellers to Indonesia

Giovanetti F

Travel Med Infect Dis. 2013 My-Jun; 11(3):190-3.

Our last issue of Taisteal featured a commentary on a case of methanol poisoning occurring in a traveller to Bali in Indonesia. The aim of the current paper was to increase awareness on this topic by summarising reports from bibliographic databases and Internet sources. The author retrieved case reports and studies on methanol poisoning in Indonesia through PubMed, Embase and Google Scholar searches, dating from January 1 2009 to March 3 2013. Three case reports of methanol poisoning involving 4 travellers to Indonesia were obtained from the databases, with a further 14 articles published by media sources online, describing 22 cases of methanol poisoning among travellers who drank local alcoholic beverages. There were 18 fatal cases. A large number of cases among the local population have been reported by some sources. The author highlights the serious nature of this emerging public health problem in Indonesia and offers some approaches to preventing or minimising harm among travellers.

Don't forget that methanol is highly toxic in humans and is similar in appearance and odour to ethanol, so it may be impossible to casually differentiate between the two. If as little as 10 ml of pure methanol is ingested, it is metabolised to formic acid, which can cause permanent blindness by destruction of the optic nerve; the median lethal dose is typically 100 ml (i.e. 1–2 mllkg body weight) of pure methanol. Toxic effects take hours to start, and effective antidotes (e.g. ethanol) can often prevent permanent damage.

Dr. Gerard Flaherty

TMSI held a successful regional educational seminar in Athlone on 22nd June. Topics covered and speakers were:-*Tick-borne infections in travellers - Dr. Dom Colbert, Pertussis in travellers - Dr Tom Donnelly, Cruise-ship travel -Nr. Patricia Brady, Management of anaphylaxis - Dr. John Gibbons, Malaria prophylaxis in pregnant women and chidren - Dr Graham Fry, Social media and travel medicine- Dr. Conor Maguire, Preparation of the Hajj pilgrim - Dr. Simon Collins, Cardiovascular disease and travel - Dr. Gerard Flaherty*





Pictured above are OSKE (Objective Structured Knowledge Exchange) sessions in progress. This interactive small group teaching format was pioneered by the TMSI for NECTM4 held in Dublin in June 2012 and has proved very popular with our delegates at these seminars.

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TRAVEL SNAPSHOTS - TREKKING IN TOUBKAL





I travelled to Morocco in June to trek on Mount Toubkal, a mountain peak in southwestern Morocco, located at 4,167m above sea level, and the highest mountain in North Africa. We approached the mountain from the charming road-end village of Imlil. Mules conveyed our gear and food supplies to the Refuge du Toubkal at 3,207m, where we stayed in tents before making a summit attempt the following morning.

While the absolute altitude achieved is tolerable with an estimated oxygen saturation of approximately 87% in a normal subject at the summit, the rapid rate of ascent means that there is little time for acclimatisation unless one has spent several nights sleeping at an intermediate altitude. The Refuge is deliberately located at an altitude which puts one at the flat part of the oxyhaemoglobin dissociation curve, but summit day exposes the trekker to a sharp, although relatively brief, drop in arterial oxygen saturation.



It was interesting to see a 70 year old German couple outperform a 15 year old student from London who had to turn back because of symptoms of acute mountain sickness but high altitude illness has a very idiosyncratic element in that fitness does not confer protection. The take home messages are that you should always consider the rate of ascent and the acclimatisation schedule when advising your traveller to altitude; a mountain which would be dwarfed by some of the Himalayan peaks can cause significant high altitude illness because the typical ascent schedule or terrain restrictions do not allow sufficient time for the normal physiological process of altitude acclimatisation to occur. Technical Himalayan elite mountaineers, on the other hand, tend to be very well acclimatised.

The views are literally breathtaking on Toubkal and I would strongly encourage you to trek there sometime. For more information on high altitude acclimatisation please visit my website at www.highaltitudemedicine.ie.





Dr. Gerard Flaherty

PHARMACEUTICAL NEWS

Shortage of all typhoid vaccines seems to be a worldwide phenomenon this year. All suppliers are experiencing problems in maintaining supplies. Two vaccines are licensed in Ireland, Typherix and Typhim Vi as well as two Hepatitis A and Typhoid combination vaccines, Hepatyrix and Viatim. All four vaccines were unavailable for long periods last year. There was a product recall due to potency concerns with Typhim Vi. Both vaccines have thankfully returned to the market, albeit with limits on quantities supplied with each delivery. North America, having experienced the same shortage seems to have switched to the oral vaccine Vivotif, according to comments on the expert messaging service of the International Society of Travel Medicine. Vivotif is available in Ireland without a full licence, which might reflect a decline in sales in Ireland following it's initial successful launch some years ago. I unfortunately had to send one or two travellers away without typhoid prophylaxis. It remains to be seen if imported cases will be notified in Irish returned travellers.

Malarone is re-launched: GSK have reissued their excellent leaflet on Malaria the Facts. Times are forever changing and we now see a switch from leaflets to Apps. Not to be left behind, GSK have a free App called B4iTravel. I have it on my iPad and have received favourable feedback from clients.

Lariam, new contraindications. A precautionary warning has been re-issued concerning taking Lariam in patients suffering from depression, psychotic illness and epilepsy. The leaflet now includes past major psychiatric disease as an absolute contraindication. Of interest: the manufacturer has included "Black Water Fever" as a contra-indication. This is renal impairment in severe malaria and is a term I have not heard used in the scientific press before. The term is not indexed in any travel medicine book in my library and I have a lot! It is not clear whether severe malaria in the past or renal impairment from any cause is a relative precaution or an absolute contraindication. I look forward to further information.

Dr. Conor Maguire

Department of Foreign Affairs: a useful website on our doorstep



The department of foreign affairs website is a valuable resource for providing travel information to Irish people planning a trip overseas. It is accessed on www.dfa.ie. This resource provides information on what to do before you go, passport and visa advice, travel insurance covering medical costs, emergency treatment and repatriation. The front page has the usual press releases but you can easily navigate to political, consular or health matters. There is a user friendly map as well as a list of destinations by region. By clicking your destination of travel on the website it covers:

- Safety and security to the country and region of travel,
- local laws and customs
- natural disasters and climate with additional information on
- disease risks and the importance of a medical consultation
- What to do in an emergency in the event of a becoming the victim of crime,

loss of passport, or requiring

emergency medical treatment abroad and much more.

The information is very detailed and up to date. It is based on reports from Irish embassies and consular missions abroad as well as shared information from other countries including member states of the European Community

A novel facility is the ability for those travelling to remote areas or at risk areas to register their contact details on the web site. This provides details of nearest embassy or consulate mission to their destination. The information is vital in the event of requiring assistance for any unforeseen crisis, or family emergency. It also allows the traveller to be contacted by phone or email if conditions on the ground warrant an advisory caution from Foreign Affairs.

The DFA provide a 24 hour service and is open 365 days a year.

According to a press release by Minister Eamon Gilmore TD, in 2012, 1,500 persons who got in to difficulty while abroad were assisted by the DFA through the website www.dfa.ie

This website is a valuable resource to travellers and to professionals in the pre travel consultation. It not only covers health issues but also political, environmental and social risks. Well worth a look.

Helen Byrne

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Yellow Fever Vaccine: One shot for life?

On the 17th May last, the World Health Organisation stated that boosters for Yellow Fever vaccine may not be required. The Organisation's Strategic Advisory Group of Experts on immunisation (SAGE) concluded that one single dose of vaccine is sufficient to confer lifelong immunity. Their conclusion was based on a retrospective review of over 600 million doses given since mass immunisation began in the 1930's. The vaccine has proven to be highly efficacious. Only 12 people are known to have been infected with Yellow Fever post vaccination. All of these were within five years or less of vaccination and are therefore categorised as vaccine failures. There is no evidence that vaccine immunity diminishes over time.

Over 200,000 people fall ill with yellow fever worldwide every year. 15% become seriously ill and half of those will die. Most of these are children living in Sub Sahara Africa. Vaccination is the single most effective protection and can be given from the age of 9 months.

The Conference of the International Society of Travel Medicine in Maastricht devoted much time to this topic last May. Delegates were reminded that Yellow Fever vaccination is still governed by international health regulations and is a requirement for travel to and from endemic areas. There are 44 endemic countries in the world and each can impose their own interpretation of regulations based on their local experience of the disease and their commitment to control it. A certificate of vaccination has an expiry date, just like a passport or driving licence, and no travel is permitted beyond that date. We now know that travel is almost certainly safe after that expiry date. This has huge benefits for the over 60's, and travellers with ongoing medical problems. An increasing number of our patients are taking immune modulating medications for the treatment of arthritis, multiple sclerosis and inflammatory bowel disease. Yellow fever vaccine is dangerous in these individuals, with increased viscerotrophic and neurotrophic reactions, which could lead to serious illness and possibly death. We now know that the vaccine they got ten or more years ago is still working and does not need to be boosted. Travel health advisors would now be justified in issuing a certificate of exemption. Care and advice is required with these waivers, which must weigh all risks, be for a limited time only, and have an expiry date. More research is required on safety of revaccination. Most serious reactions are theoretically less likely.

This is all great news for travellers and those living in endemic zones: we have an efficient, cheap and long lasting vaccine. The SAGE group has asked the WHO to revise their recommendations for vaccination expiry date and member states will no doubt adopt these in due course. In the mean time, the legal obligation for certificates remains unchanged. Travel health advisors must continue to advise ten yearly boosters for Yellow Fever, where it is safe, until such time as the regulations change which, may take a few more years.

References:

- 17 May 2013, vol. 88, 20 (pp. 201–216) Meeting of the Strategic Advisory Group of Experts on immunization, April 2013 – conclusions and recommendations, http://www.who.int/wer/2013/en/index.html
- 2. CISTM13 conference of the ISTM, Maastricht. www.istm.org

Dr. Conor Maguire



Screen shot of tmsi.ie

We are currently in the process of working with our IT Consultant in setting up a secure online payment system (using PayPal) to facilitate membership renewal of the TMSI. This will obviate the necessity to send cheques each April and will be more acceptable, we hope, to our members. Members will still have the option of adding the optional Travax subscription on the same e-application. Additionally, we are providing, as a new Membership benefit, the opportunity to have your clinic listed on the TMSI website for the general public or other healthcare professionals to contact. This clinic listing will be provided at no extra cost to the member and we believe it will enhance our website and assist the traveller in quickly locating their nearest travel medicine provider. We will list clinics under the relevant county. Clinic listings should include the name of the physician TMSI member who provides travel medicine services, the clinic address, telephone number and email if preferred. We hope that this service will help you to feel part of the wider travel medicine community in Ireland and allow travellers to access your professional services more readily. Clinics listed on www.tmsi.ie will not be endorsed or inspected by the Society, but their listing will confirm that the clinicians are members, in good standing, of this professional group which provides relevant continuing medical education in travel medicine.

Dr. Gerard Flaherty, TMSI President

Dengue Fever:	JE FEVER:Philippines. Dengue fever has been reported from Metro Manila in the Philippines. A 2013, 4042 cases including 10 deaths have been recorded. Areas most affected: Quezo cases, Manila City 642 cases, Caloocan City 477 cases.			
	Thailand . Dengue fever is an ongoing problem in Thailand. As of 24 May 2013, dengue fever, including 73 deaths have been recorded nationwide. Areas most affect of mid-June 2013 more than 4000 cases, Northeast 5406 cases with 5 deaths.	73 000 cases of cted: Bangkok as Source: ProMED		
	Guatemala. Dengue fever has been reported from Guatemala, as of 1 Jul 2013, 30 including 6 deaths have been recorded.	591 cases Source: ProMED		
	Laos: Dengue fever is ongoing in Laos and as of 16 July 2013, 23 470 cases have b 69 deaths as a result. New cases are said to be increasing.	een reported with Source: ProMED		
	Ecuador: As of 19 July 2013, Ecuador has reported 10 016 cases of dengue fever reprovinces most affected include; Guayas 2355 cases, Manabi 1904, Los Rios 1413, Horellana 958 cases.	nationwide. The El Oro 1095 and <i>Source: ProMED</i>		
Typhoid Fever:	Nepal: The media has reported on an outbreak of typhoid fever in Rukum district area in Rapti zone, Mid-Western region, located 280km from Kathmandu. Most co occurred in Bhalakcha, Saakha, Chaukhabang, Bafikot and Syalapakha. Contam drinking water sources due to the monsoon rains and change in the weather patter blamed for the spread of the disease. Source: he	t, a mountainous cases have ination of rn have been <i>ttp://ekantipur.com</i>		
Rabies:	Malawi, 01 Aug 2013. Two human cases of rabies virus infection have been reported in Mzin district in the Northern Region of Malawi. Both cases died in hospital in Mzuzu. The first case was a 45-year-old male from Ziyalera village, the second was an 8-year-old boy in Mfumula village. Both cases had been bitten by a rabid dog and were transferred from Mpher Health Centre to Mzuzu Central Hospital where rabies vaccine was available. Mpherembe He Centre has since been supplied with rabies vaccine. Medical staff at Mpherembe Health Centre are concerned about the growing number of dog is reported in the area. Normally only 0-1 dog bites are reported in a two week period, however, the last two weeks, 3-4 bites have been reported each week. This appears to be related to the increasing number of stray dogs around. Veterinary officials are currently in Mpherembe conducting a vaccination campaign and capt			
	stray dogs, particularly those with signs of disease. Malawi is a high risk destination for rabies among the animal population. Travelle avoid all animal contact and report any bites immediately for medical assessment. exposure vaccine should be considered for those at risk.	ers should always Rabies pre- <i>urce: allAfrica.com</i>		
	Taiwan: Travellers should be aware that Taiwan is no longer considered a 'no risk' country for rabies but now a 'low risk'. Animal contact should be avoided and any bites sustained, should be reported for medical assessment. Pre-exposure rabies vaccine should be considered for particular risk groups based on an individual risk assessment. <i>Source: ProMED</i>			
Japanese Encephalitis:	Hong Kong: The Department of Health for Hong Kong has reported two locally acquired cases of Japanese encephalitis in July 2013. The cases occurred in Yuen Long District in the northwestern New Territories; a rural farming area rarely visited by travellers. One local case was reported in 2012, in the same geographic area.			
	India: The district health department of Assam state in northeast India has increat following the report of Japanese encephalitis (JE) cases in Kokrajhar. An awarene also been implemented as pigs, the reservoir of infection, are reared in most of the t The most recent case is an 11 year-old girl from the Gassaigaon area where another reported. In June 2013, two other cases of JE were reported in the district. In 2012, 13 individuals were diagnosed with acute encephalitis syndrome (AES). Of the found to be positive for JE virus. June and July are peak months for the transmission of	used surveillance ss campaign has ribal households. er case of JE was ne 13 cases, 7 were of JE in the area. <i>Source: ProMED</i>		

Travel Medicine Conference Calendar

TRAVEL MEDICINE SOCIETY OF IRELAND

Location: Rochestown Park Hotel, Cork Time: 9:00 am – 1:00 pm Contact: Anne Redmond, Tel: 045 890 127, E-mail: annehredmond@eircom.net

TRAVEL MEDICINE SOCIETY OF IRELAND

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

THE FACULTY OF TRAVEL MEDICINE (FTM)

OF THE ROYAL COLLEGE OF PHYSICIANS AND SURGEONS OF GLASGOW (RCPSG)

Annual Symposium "The Travel Health Continuum: Protecting the Traveller from Departure to Return" *Location:* RCPSG Glasgow Scotland *Date:* 10 October 2013 The Annual Symposium in Travel Medicine is aimed at practitioners in Travel Medicine, providing good quality high impact education and debate on current day leading issues in the field. Although aimed at people with training and previous experience in travel medicine, it nevertheless welcomes anyone interested in the discipline and should prove a fascinating educational event. This year's symposium entitled, "The Travel Health Continuum: Protecting the Traveller from Departure to Return", will hopefully appeal to a broad range of health care professionals undertaking the provision of Travel Health advice. The AGM of the Faculty of Travel Medicine is held during the proceedings. The programme – http://rcp.sg/3ufo3 To book online – http://rcp.sg/92ikf.

TRAVEL MEDICINE SOCIETY OF IRELAND

Location: Ardilaun Hotel, Taylor's Hill, Galway Time: 9:00 am – 1:00 pm Contact: Anne Redmond, Tel: 045 890 127, E-mail: annehredmond@eircom.net

TANZANIA - 6TH TROPICAL MEDICINE EXCURSION - February 02 – 14, 2014 In collaboration with various teaching hospitals in Tanzania and Kay Schaefer (MD, PhD, MSc, DTM&H), Cologne, Germany. Two-week round-trip training course (800 km by road and 580 km by air) for healthcare professionals on clinical tropical medicine and travellers' health. 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. Official language: English. Phone: +49-(0)-221-3404905 contact@tropmedex.com

UGANDA - 19TH TROPICAL MEDICINE EXCURSION - March 02 – 14, 2014 In collaboration with various teaching hospitals in Uganda and Kay Schaefer (MD, PhD, MSc, DTM&H), Cologne, Germany. Two-week round-trip training course (1400 km by road) for healthcare professionals on clinical tropical medicine and travellers'health. 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. Official language: English. Phone: +49-(0)-221-3404905 contact@tropmedex.com

5th Northern European Conference of Travel Medicine

Location: Bergen, Norway It is our great pleasure to invite you to attend the 5th Northern European Conference on Travel Medicine, to be held on June 5 - 8, 2014 in Bergen, Norway. We are sure this conference will provide a valuable opportunity to engage with experts as they present the latest information in the field of Travel Medicine. The target audience includes travel medicine practitioners, primary care physicians, infectious disease and tropical medicine specialists, researchers, nurses, pharmacists and students involved in this field. The conference will also meet the needs of the travel media and industry including manufacturers of travel health-related products, drugs and vaccines. Visit nectm.com for more information. More details in future newsletters.

Date: 2nd November 2013

Date: 1st February 2014

Date: 5th - 8th June 2014

Date: 7th September 2013