What's New in Travel Medicine? MASTA Annual Study Day Royal College of Physicians London 13 November 2015

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Thank you for having me.....

What's New in Travel Medicine? A snapshot...

- Information
- Resources
- Websites
- Guidelines
- Reports
- Strategies
- Diseases
- Conferences
- A few facts from 1984/85

- 1985 Emirates 1st
 Flight
 - EK600 Dubai–Karachi
 - Capacity 131

- 2015 Emirates
 - Airbus A380
 - capacity total 853

1984-

- MASTA 1984
- TRAVAX 1985
- 1st CISTM 1988 500 delegates
 - CISTM2 1991 Society formed >900 delegates
 - CISTM14 2015 1400 delegates
 - membership = 3,200 in 90 countries
- RCN Travel Health Special Interest Group 1993
- BGTHA 1996-7
- NaTHNaC 2002

Office for National Statistics (ONS) Air travel

Air traffic UK Airports - 1991-2013

 Air passenger numbers were almost 4 times greater in 1980 compared to 2013

- 2013 passenger numbers =
 - Heathrow 72 Mil
 - Gatwick 35 Mil.

Resources air travel

- Civil Aviation Authority (CAA) Guidance for HCPs
- http://www.caa.co.uk/default.aspx?catid=2497&pagetype=90
- Equality and Human Rights Commission
 - Your Rights to Fly Step by Step Guide
 - Your Passport to a smooth journey
- http://www.equalityhumanrights.com/your-rights-fly-step-step-guide

FCO Mental health: travelling abroad

- cases involving British Nationals increased 50% in last 5 yrs
- guidance on travelling abroad and mental health
- how the FCO can assist British nationals with mental health needs abroad
- details on the type of assistance available in the destination
- explains differences between English law and practice and that of other countries

Disabled & less mobile travellers - ABTA Air travel & pregnancy PIL – RCOG Disabled travellers - FCO

ABTA checklist for disabled and less mobile travellers

FCO Leaflet for Disabled Travellers

RCOG - Air Travel & Pregnancy

UK Office for National Statistics Travel Trends 2014-2015 ABTA Holiday Habits Report 2015

(Post Tunisia - pre recent Egypt incident)

- 60.1 million trips abroad 2014
- 63.7 million 12mths to Aug 2015
 - 7% increase
 - contributes = £28.3billion to GDP
- ABTA Holiday Habits Report 2015
- positive signs of growth
- driven by more affluent consumers
- average no. holidays per person increasing
- threat of terrorism UK & abroad remains
 - doesn't appear to deter Brits from taking holidays

What we do and who we do it with?

Top 10 holiday types in last 12 months

- City Break = 54%
- Beach Holiday = 50%
- All inclusive = 18%
- Lakes and Mountains = 11%
- Cruise = 10%
- Renting a home = 8%
- Activity = 8%
- Coach trip = 7%
- Music event = 7%
- Major Sports event = 5%

Who do we go with?

- Partner = 52%
- Immediate family = 38%
- Extended family = 20%
- Adult only group of friends = 24%
- Group of friends + children = 5%
- Alone = 15%

Office for National Statistics (ONS) Sea travel & International Migration

- Cruising 30 year period:
 - -1983 = 124,000
 - -2013 = 1,906,000
- >15 times more passengers to/from UK
- See links below for statistics

International Passenger Survey (IPS) estimates of long-term immigration to the UK (future VFRs)

Bulgarian and Romanian citizens, year ending June 2007 to March 2015

- Bulgarian & Romanian immigrants
- 53,000 up from 28,000 (2014)
- = 9% of total immigration to UK

Overall statistics UK 2014

- 1 in 8 (13.0%) born abroad
 - 1 in 11 (8.9%) 2004
- non-British national population increased by 7.2%:
 - 4,987,000 to 5,344,000
- most common:
 - non-UK country of birth = India
 - non-British nationality = Polish

"Refugees at risk of measles and post traumatic stress disorder"

- European health services are gearing up to treat refugees
 - a range of chronic, non-communicable conditions can affect them
- Many have complex physical and psychological problems
- A UN High Commissioner for Refugees study (2013) found that Syrians arriving at camps outside their country's borders had high rates of diabetes and high blood pressure
- Respiratory infections, diarrhoea and gastrointestinal problems are common
 - Collapsed healthcare systems = children may not be up to date with vaccines against common childhood diseases like measles
- Long packed journeys take their toll on the musculoskeletal system

Aging Population – ONS & Age UK

Old age comprises "the later part of life; the period of life after youth and middle age . . . , usually with reference to deterioration

- In Britain the Friendly Societies Act 1875, enacted the definition of old age as, "any age after 50"
- by 2037 number of people in UK
 - >80yrs expected to double
 - >90yrs expected to triple
- centenarians expected to increase sevenfold
 - 14,450 mid 2014
 - 111,000 mid 2037
- older people are more satisfied with life generally

WHO Report on Ageing and Health

People living on average 20 years more than 50 years ago

See Links below

WHO World Sanitation Report – MDG Assessment 2015 for Sustainable Development Goals (SDGs)

- Around the world:
 - 946 million people still go to the toilet outside
 - ≥2.4 billion people still lack improved sanitation
 - primarily Asia, sub-Saharan Africa, Latin America & the Caribbean
- A UN Call to Action on Sanitation launched 2013
- Aims to eliminate open defecation by 2025
- 9 in10 practising open defecation, live in rural areas
- Eritrea tops the list, 77% still practise open defecation
- Ethiopia has achieved the largest decrease
 - from 92% in 1990 to 29% in 2015
- Open defecation is one of the clearest manifestations of extreme poverty

Progress on sanitation and drinking water – MDG assessment 2015

World Health Organization. UNICEF

 Many health care centres (HCC) lack basic water, sanitation, handwashing facilities

- Primary HCCs are:
 - 1st point of care, especially in rural areas
 - critical for response to disease outbreaks
 - less likely to provide access to hygienic services than hospitals

- Compromises health care workers ability to:
 - carry out infection prevention & control
 - demonstrate safe practices to communities

International Lesbian, Gay, Bisexual, Trans and Intersex Association (IGLA) PHE Action Plan for MSM group



International SOS, map show which countries have the worst emergency healthcare

International SOS health Risk Map

- High—risk = poor healthcare
 - North Korea, Iraq, Afghanistan, Syria
 - limited medical facilities = higher risk of serious infectious diseases
- Medium-risk = average healthcare
 - Mexico, Turkey, Morocco, Thailand
- Best treatment in
 - UK, USA, Greece, Iceland, Japan, Australia
- Emergency healthcare improved in parts of Africa
 - likely due to foreign investment

PHE Ebola Epidemiological Update No. 60: 6 November 2015

- 28,607 cases
 - 15,246 lab confirmed
 - 11,314 deaths
- 1 new confirmed case in Guinea in the last week
 - newborn child of EVD case reported previous week
- no new cases in Sierra Leone for 7 weeks
 - country declared transmission free on 7 Nov
- incidence remained at 5 or lower for 14 consecutive weeks, transmission confined to small geographical areas
- UK EVD survivor treated for late EVD-related complications in the Royal Free Hospital in London discharged from hospital London to hospital Glasgow on 11 November
- Updates now monthly

Progress on Ebola - WHO & CDC

WHO – Ebola Virus Outbreak

WHO – Ebola Response in Action

CDC – The Road to Zero

See Links below

Middle East Respiratory Syndrome- CoronaVirus (MERS-CoV)

- Total of MERS cases reported to WHO (correct 28 Oct):
 - 1,595 cases, 571 deaths globally
 - all cases in/returned from Middle East, or
 - directly linked to case infected in the Middle East
- Republic of Korea:
 - 186 cases, 36 deaths (25 Oct)
- WHO statement on 10th meeting IHR Emergency Committee on MERS Sept 2015
 - conditions for a PHEIC have not been met
 - screening at points of entry unnecessary
 - no need for restriction of travel or trade
 - a need to raise awareness
- PHE published risk assessment & Posters
- Be aware of ill returning travellers

The Intergovernmental Panel on Climate Change (IPCC) 2014
Effect of climate change on vector-borne disease risk in the UK
New review 2015

 Review assessed potential effects of climate change on vector-borne disease, as related to UK public health

- Building on findings of Health Effects of Climate Change in the UK, authors predict:
 - climate change will make the UK a more hospitable environment for disease-carrying mosquitoes and ticks
 - leading to an outbreak of conditions normally seen in more tropical climates
 - an effect mirrored across Europe

Chikungunya (CHIKV)

PHE Chikungunya annual data for 2014 show a 12-fold increase England, Wales and Northern Ireland (pub March 2015)

- 24 cases in 2013
- 295 cases in 2014
- 88% acquired in the Caribbean & South America
- outbreak, started (Dec 2013) in the French Caribbean territory of St Martin
- now affects 33 countries & territories in the Caribbean and Americas
- In the USA, ~3000 cases reported 2013–2015
 - most were imported
 - 11 autochthonous cases confirmed in Florida
- ~ 1.7 million identified cases reported
 - 252 died (at Aug 2015)

Other mosquito-borne diseases on the rise WHO - Zika virus (ZIKV) outbreaks in the Americas

- Zika virus emerging mosquito-borne Flavivirus
 - transmitted by Aedes spp. Mosquitos
 - related to dengue, yellow fever, Japanese encephalitis, and West Nile viruses
- Brazil confirmed autochthonous ZIKV transmission in north-east Brazil (May 2015)
 - 1st documented outbreak in Brazil and the Americas
 - Oct 2015, 14 states have now confirmed autochthonous transmission
- Colombia reported the 1st autochthonous case of ZIKV infection in Bolivar (Oct 2015)
 - Spreading to other areas total 239 cases (3 Nov2015)
- Given the worldwide spread of chikungunya and dengue there is a potential risk of urban ZIKV infection outbreaks anywhere in the world where the mosquito vector is present or becomes established in future

From CISTM14 Quebec May 2015 Dengue - personal notes

- Brazil has seen >200% increase in cases
- Barbados 5,000% increase (2012-13)
- Live attenuated tetravalent vaccine in development findings published*
- Single dose
- Effective against all 4 strains
 - >3,600 enrolled in trial
 - 3259 received 1 dose
- Vaccine on the horizon not quite there yet

Japanese encephalitis immunisation - Ixiaro®

Green book chapter 20 – (2013) - SPC update Aug 2015

- IXIARO® licensed for adults & children from 2mths day 0, day 28 (2 dose schedule)
- NEW: Rapid schedule Adults aged18-65 years:
 - Day 0, 2nd dose 7 days after 1st
 - Complete all courses 7 days before exposure
- WHO position paper on Japanese encephalitis (JE) vaccines update replaces 2006 edition
- data supports:
 - 2nd dose given up to 11 months after 1st results in high seroconversion rates
- Adults:
 - who had a previous course of any JE vaccine can receive single dose booster with IXIARO®
 - at continued risk boost at 12-24 months (expats, long term travellers)
- Still insufficient evidence for further booster e.g. children <18yrs
- Ixiaro® unavailable in many Asian countries
 - complete course pre-departure

See Timeline

"I've been dealing with epidemic outbreaks since the mid-1990s, and seen them become more and more complex, and they appear to be occurring more frequently. Today it is hard to foresee a period when they will stop occurring." (WHO experts)

World Malaria Report 2014 & the MDGs latest WHO estimates (Sept 2015) Published 6 Nov 2015

- The Millennium Development Goals (MDGs) recognised in 2015
 - health now features in the Sustainable Development Goals (SDGs)
- ongoing malaria transmission in 97 countries
 - risk to 3.3 billion people
 - 214 million cases in 2015
 - 438, 000 deaths
- 2000-2015:
 - incidence fell by 37%
 - mortality decreased by 60%
- 89% of cases and 91% of deaths occurred in sub-Saharan Africa (s-SA)
- s-SA & 15 countries, (mainly s-SA) account for 80% of cases and 78% deaths globally
- Since 2000, the decline in malaria incidence in these countries (32%) has lagged behind that of other countries globally (54%)

UK Imported Malaria Report June 2014

- 1,586 cases of malaria
 - 5.7% higher than 2013
 - 1475 in England
- majority (73.7%) caused by Plasmodium falciparum
 - 11.9% Vivax
- 3 deaths
 - P. falciparum from Nigeria
 - 7 deaths in 2013



Malaria Guidelines 2015

Chiodini PL, Patel D, Whitty CJM and Lalloo DG. Guidelines for malaria prevention in travellers from the United Kingdom, 2015. London: Public Health England; September 2015

Some key changes - see the full document for information

- Pages numbered and linked
- updated guidance on the use of:
 - insect repellent and sun protection
 - anticoagulants with antimalarials
 - doxycycline in epilepsy
- Clarification on:
 - the use of hydroxychloroguine
 - advice for travellers moving through areas where different antimalarials are recommended
- clarification and changes to country recommendations
- additional notes at the beginning of country recommendations table including information about vulnerable travellers
- new malaria maps for India and South Africa have been provided by NaTHNaC
- See other links below

Malaria Guidelines 2015

Chiodini PL, Patel D, Whitty CJM and Lalloo DG. Guidelines for malaria prevention in travellers from the United Kingdom, 2015. London: Public Health England; September 2015

When both sunscreen and DEET are required,
 DEET should be applied after the sunscreen

 30-50 SPF sunscreen should be applied to compensate for DEET-induced reduction in SPF

International Spread of Wild Polio Virus

WHO Global Polio Eradication Initiative

- In 2014 WHO declared the international spread of wild poliovirus (WPV) a Public Health Emergency of International Concern (PHEIC)
- States currently exporting wild poliovirus:
 - Pakistan (Oct 2014) & Afghanistan (June 2015)
- Polio infected countries but not exporting WPV
 - None Nigeria & Somalia removed Sept 2015
- States no longer infected with WPV but remain vulnerable to international spread
 - Cameroon, Ethiopia, Equatorial Guinea, Iraq, Israel, Nigeria, Somalia, Syria

Polio – 6th meeting WHO IHR Emergency Committee on international spread of wild polio virus (wpv)

Statement published 17 August 2015

- Strong progress in interrupting transmission since temporary recommendations came into force
- No cases reported in Africa in past year
- Pakistan reported <third of the cases reported in the same period 2014
 - but had 85% of all global wild polio virus cases in 2015 exportation risk continues
- Afghanistan concern that TRs for international travellers not being fully implemented
 - no exit screening/restriction of unvaccinated travellers at international airports
 - ongoing suspension of mass vaccination campaigns in Kandahar province a major concern
- Situation remains a PHEIC TRs as revised continue for a further 3 months
- Critical stage in polio eradication, loss of momentum could reverse/prevent achieving the goal

Famine in Ethiopia – 1984 and 2015

- Famine in Ethiopia on TV News 1984
 - ≥ 8 million victims >1 million died
- Live Aid Concerts raised \$50mil for famine relief
 - US pop industry united to sing "We Are The World"
- Famine in Ethiopia on TV News 10 Nov 2015
- The UN has warned that >15 million people in Ethiopia will be in need of food aid by the beginning of 2016 because of severe drought

Meningococcal meningitis - MenW

HPR Volume 9 (7): 27 February 2015

- The UK and ROI have the highest incidence of IMD in Europe
 - Groups B, W and Y responsible for most infections across all age groups
- A steady increase across all regions due to capsular group W (MenW)
 - cases = 22 in 2009 to 117 in 2014
- Disease levels consistent with outbreak situation, cases/deaths in all age ranges
 - hyper-virulent strain
 - constituting a public health emergency
- Infection associated with severe disease/high fatality rates in teenagers & adolescents
 - higher than MenB
- Cases not associated with travel, indicating MenW is endemic in England
- JCVI advised that MenW immunisation should be routinely offered to 14-18 yr-olds
- DH implemented a combined Men ACWY immunisation programme

Changes to the British National Immunisation Schedule (announced + Green Book Chapter (22) updated July 2015)

Two new vaccination programmes introduced to the UK National Schedule 2015

- 1) Quadrivalent meningococcal vaccine (Men ACWY) added from:
 - 1st August in Scotland
 - 1st September in England, Wales and Northern Ireland



 Vaccine replaces MenC vaccine used in S3 (age 14) and 1st time university entrants <25 years not vaccinated in school

- 2) Meningococcal group B (Men B) vaccine added to the childhood programme from 1st September
- Babies born on or after 1st July to be offered MenB vaccine (Bexsero®) along with existing vaccinations at 2, 4 and 12-13 months

Immunisation documents updated

- The Complete Routine National Immunisation Schedule from Summer 2015
- Vaccination of individuals with uncertain or incomplete immunisation status - updated September 2015
- Immunisation documents
- Yellow Card app

Measles

Resources in PHE

- In Europe, of the 3,760 cases reported from surveillance in 30 countries (March 2014-Feb 2015) 73% were unvaccinated
- Several European countries continue to report cases
- Large outbreaks in travel destinations outside Europe including:
 - Serbia, Russia, Kyrgyzstan, Mongolia, Brazil, Guinea, Liberia, Republic of the Congo & Sudan (2015)
- Travel is an important factor in the international spread of measles
 - NaTHNaC & TRAVAX reinforced importance of MMR immunisation for travellers
 - MMR vaccine can be given to individuals any age
- Major public health efforts still needed to eliminate measles in European Region

Yellow Fever

"In the 13 months since a 6 year old boy died unnoticed in the jungles of Guinea, West Africa, another 8,980 people followed him to an untimely death caused by Ebola. 20,000 people had to face up to this terrifying disease.

In the same period, 200,000 fell ill from another viral haemorrhagic fever and 30,000 died in Africa and South America.

They suffered and died from Yellow Fever."

Updated: Risk areas and recommendation for vaccination - 2015

- "The WHO World Health Assembly in May 2014 adopted an amendment to Annex 7 of the International Health Regulations (2005) (IHR), which stipulates that the period of protection afforded by yellow fever vaccination, and the term of validity of the certificate will change from 10 years to the duration of the life of the person vaccinated
 - This will enter into force legally IN JUNE 2016
- Individual country requirements for ICVP usually updated annually
- Country requirements are published in WHO ITH
- Revised requirements are provided by some countries for 2015; others remain unchanged & some countries haven't stated their requirement
- Yellow Fever Vaccination Recommendations in:
 - Africa 2015 map revised
 - the Americas, 2013 map remains current
- Risk areas revised for some countries
 - check WHO for specific information

PHE revised recommendations for the administration of more than one live vaccine (Sept 2014)

JCVI recommends:

- 4-week interval between:
 - MMR & yellow fever vaccines
 - MMR & either; varicella or shingles vaccines, if not administered on the same day (rare)
- See Mantoux test MMR advice
- Any interval acceptable for other combinations of live vaccines
 - e.g. BCG, rotavirus, nasal flu, oral typhoid, shingles, varicella, MMR

Global TB Report 2015

- WHO considers TB and HIV joint top killers
 - 9.6 million ill with TB (2014)
 - 1.2 million living with HIV
 - 1.5 million people died from TB
 - among them 400,000 were HIV+
- ≥3 in 100 new TB cases couldn't be treated with 1st choice antibiotics
 - most new cases are in China, India, Indonesia, Nigeria or Pakistan
- From 2016, goal shifts from controlling TB to ending the global epidemic
- End TB Strategy serves as a blueprint for countries to reduce:
 - TB incidence by 80%
 - TB deaths by 90%
 - eliminate catastrophic costs for TB-affected households by 2030

Tuberculosis in England 2015 Report London Assembly TB Report 2015

- 6,520 cases of TB notified in England in 2014 = 12.0 per 100,000
 - 2,572 in London
- Parts of London have higher rates of TB than Rwanda or Iraq
- A third of London's boroughs have high rates of TB,
 - >40 per 100,000
- Brent, Ealing, Harrow, Hounslow and Newham have rates:
 - >150 per 100,000
- Although BCG is recommended for all newborn babies in London, 8 (of 24) boroughs don't offer it

WHO NTD Report 2015 - Rabies

- Elimination at source feasible through investment in mass vaccination of domestic dogs
- Country collaboration, engage locals
- Bangladesh cut human rabies deaths by 50% (2010-2013) through Govt. funding of mass dog vaccination
- No of cases in India uncertain, thought to be tens of thousands

Rabies post-exposure treatment (PET) PHE Guidelines (NEW)



- Practical guide to risk assessment of potential rabies exposures
- Correct use of Post Exposure Treatment (PET)
- Undertake risk assessment as soon as possible, so that PET can be initiated if required
- Although treatment should be started promptly, initiating rabies
 PET is not a medical emergency can often wait until next day
- For head and neck bites, treatment should ideally be started within 12 hours of reporting

New publications

- WHO calls for worldwide use of safety syringes
- 1st policy paper on pain mitigation at the time of vaccination
- Guidelines for the prevention care and treatment of persons with chronic hepatitis B
- CDC Health Information for international travel 2016 (sample App available)
- Textbook: Essential Travel Medicine. Zuckerman et al. Wiley Blackwell (also on Kindle)

FGM

- From 31 October 2015, healthcare professionals must report to the police any cases of female genital mutilation (FGM) in girls under 18 that they come across in their work
- For Guidance and education resources see Links below

Social Media - everyone has gone digital + Apps and Solo Women Travellers

- Social Media Usage:
- 2005-2015 USA among those 65 and older
 - 2005 = 2% of seniors used social media
 - -2015 = it's 35%
- Watch out for silver surfers!

- CDC Apps & solo women travellers
 - See links

"The most crucial item that migrants and refugees carry is a smartphone"

- Humanitarian organizations have noticed how important phones are for refugees
- International Rescue Committee distributed thousands of solar-powered chargers in Lebanon, Iraq and Syria
- UN refugee agency gave out 33,000 SIM cards to refugees in Jordan
- Civil Society & Technology Project sent Wi-Fi beacons into refugee crowds
- By texting /messaging friends/family who'd already taken the journey, refugees know what to do & where to go on arrival at destination
- Journalist followed a Syrian by messaging with him on WhatsApp through Greece, Macedonia, Serbia, Hungary, Austria

Mayo Clinic Social Media How to use social media responsibly (NMC)

A 12-Word Social Media Policy

- Don't Lie
- Don't Pry
- Don't Cheat
- Can't Delete
- Don't Steal
- Don't Reveal

- Be informed
- Think before you post
- Protect your professionalism and reputation
- Sharing confidential information online can have the potential to be more damaging than sharing it verbally due to the speed at which it can be shared and the size of the potential audience
- "Use all forms of spoken, written and digital communication (including social media and networking sites) responsibly."
 - The Code, paragraph 20.10

CISTM14 - some of my take-home messages On travellers

CISTM14 Quebec – 21-24 May 2015 - 1400 Delegates

- By 2050 global populations of >60's will reach 2 billion
- 5-1/2 trillion kilometres were travelled in 2014
 - equivalent 18,000 trips around the sun
- 25% of all global travel is from 3 countries
 - USA 14.7%
 - UK -6.6%
 - China 4.5%
- Unprecedented growth in air travel

CISTM14 - my take-home messages -contd....

On Ebola:

- Fuelled by poverty
- World responded too slowly
- Mobility increasing globally, leading to faster spread of infections
- War torn countries don't trust governments
- 3 vaccine candidates in clinical trials

On Rabies

- More cost-effective to vaccinate dogs than to give PEP to humans
- In Latin America 3 cases of bat rabies in 13 years
 - 1 case per 27 million per year
 - mostly in Brazil
- Millions of doses of rabies vaccine to prevent 1 case
- Cost –effective or not?

CISTM14 - some of my take-home messages - contd....

On Meningitis

- Now little Men C
- More Men B
- Increasing Y & W
- Easier for smokers to carry the virus

On TD

- Western & African populations have different microbiota
- Faecal transplantation being used to treat C diff by restoring microbiota
 - bacterial therapies being developed for the future
- Probiotics:
 - notion they restore "good bacteria" is meaningless
 - anyone can produce and sell 79% did not contain ingredients on label
 - lactose intolerance does not exist!?

CISTM some of my take-home messages - contd....

Vaccines Pipeline

- India & China manufacturing more products
- Shortages are inevitable
- Cost still too high
- New vaccines will completely change medicine again
- Arab Proverb:
 - "don't count your children until measles has passed"

Malaria

- Malaria resurgence guaranteed
- Only choice is to eliminate it
- Resistance to drugs & insecticides a challenge
 - some drugs are of such poor quality it should be viewed as criminal manslaughter & criminal negligence
- Research now focussing on dry season – not wet season
 - fewer and weaker mozzies
 - easier to get around

On Cruising

- Don't take very young babies (<3 mths)
 - lack of facilities to treat
- No cruising beyond 24 wks pregnant
 - seen as late abortion
 - not equipped to handle prems
- Emergencies that happen on land also likely to happen at sea
- Alcohol-based sanitizers useless against Norovirus
- Flu vax voluntary for staff uptake = 85%
- Do not:
 - Shake hands "cruise bump"
 - take antibiotics for TD
 - take copy YFC original only
- Seasickness
 - eat pineapple it tastes the same coming up as it did going down!

- YF exemption Cert usually OK
 - few vessels carry YF vax
 - few docs approved as YFVC
- Still require 10 year booster
- Malaria low risk most ships at sea duskdawn
 - Chemo not usually necessary PPMs in port
- Transdermal scopolomine not popular with medics – side effects
 - if prescribed give instruction not to touch patch – wash hands frequently
- Take enough medication for trip in hand luggage and summaries in English
- Know Blood type/donor card/insurance

CISTM14 – personal notes – on vaccines At least 13 new travel vaccines on the horizon - among them......

- Ebola 3 vaccine candidates in clinical trials
- Dengue live attenuated tetravalent single dose vaccine in development
- Norovirus bivalent candidate injectable vaccine in development (18 other candidates)
- Hexavalent vaccine protecting against 6 infectious diseases (DTaP-IPV-Hib-HepB) Phase 111
- ETEC/Shigella attenuated Shigella vax in development for 40 yrs
 - being evaluated in children hope for new products

New Diploma Courses for 2016

- Travel Medicine Foundation and Diploma courses postponed until September 2016
- Contact Lesley Haldane for information
 - Lesley.Haldane@rcpsg.ac.uk

For information on Conferences see links below

International travel and health, and mass gatherings (WHO)

- Mass Gathering:
- "An event where the number of people attending is sufficient to strain the planning and response resources of the community, state or nation hosting the event" 1,000-25,000 attendees
- Glastonbury Festival 22-26 June 2016
- Olympic/Paralympic Games Rio de Janeiro Brazil 2016
 - 5-21 Aug & 7-18 September

The **World Happiness Report**Want to be Happy – go to Switzerland!

- measure of happiness developed for the UN Sustainable Development Solutions Network
- Looks at issues relating to happiness,
 - mental illness
 - benefits of happiness
 - importance of ethics
 - policy implications
- Switzerland = No 1
- UK ranks 22nd