Some Hazards to consider on medical electives
(From good elective practice adapted from the University of Oxford electives guidance)

Hazards of the Medical Elective

The following issues need to be considered when planning your elective period

Health
- Immunisations (*Contact University Occupational Health well in advance*)
- Travellers’ diarrhoea (*see information sheet*)
- Malaria (*see information sheet*)
- Others
  - Ensure you have a good supply of your own medication (e.g. inhalers)

Accidents
- Road traffic accidents (*the most common problem for travellers*)
- Assault
- Needlesticks (*see information sheet*)

Bureaucracy

- Passport (*keep photocopies*)
- Visa (*arrange well in advance*)
- Vaccination certificate (*only required for yellow fever*)
- Insurance (*make sure this covers medical evacuation*)
- Driving license
- Arrest (*contact the British High Commission*)

Travel insurance for your elective

You must ensure that you have adequate insurance cover for the whole period when you are on elective.

Other tips:
- Make sure you keep the receipts for everything, so that it is easier to back up your claims.
- Claims must be made within 30 days of your return.
- Be as explicit and specific as you can in order to ensure that your travel insurance covers you for whatever you need. Be prepared to pay additional premium for activities which constitute extra risk. If in doubt, check with the Insurance department/company as early as possible, so that there is time to clarify all this before you travel.
- Leave a copy of your documents and insurance details with somebody obvious in the UK, e.g. your parents.
Needlestick Accidents

Working abroad during your elective does not necessarily increase the risk of a needlestick accident occurring but the needlestick may have a higher risk associated with it compared to a similar event in Leicester. Although a variety of infections, including malaria, may be transmitted by needlestick, the most important are bloodborne viruses:

Hepatitis B
A needlestick from an ‘e’ antigen positive carrier of hepatitis B carries about a 30% risk of infection to the recipient. Fortunately, you should be immune from previous vaccination. You should ensure you are immune before leaving on your elective. You may require a booster if it is 5 or more years since you were initially immunised.

Hepatitis C
The risk from a hollow needlestick: 3% (3 in 100) from RNA positive donor; ie a viraemic individual. Only about 20% of people clear the virus spontaneously but treatment within the first year of acquisition may clear the virus in most people.

HIV
The risk from hollow needle: 0.3% (3 in 1000)
Solid needle: 0.1%
Splash onto mucous membrane: < 0.1%
These figures will be lower if the ‘donor’ is on HIV therapy.

Prevention of Needlesticks

- Know how you will dispose of the ‘sharp’ before you use it
- Do not re-sheath needles
- Be aware of others around you using sharp objects
- Dispose of carefully in sharps box
- Strongly consider double gloving!!

What to do if you have a needlestick

- Wash under running water (if possible) and make the wound bleed
- Inform the person in charge of you locally
- Follow local procedures
- Seek consent to test the index patient (donor) for hepatitis C and HIV, if testing available
- Regardless of the local procedures, contact Leicester promptly
- There is a dedicated GUM consultant contactable 24 hours per day for PEP related queries at UHL trust, so do not delay obtaining advice!!
- You will need to report the event to medical school and will need to be followed up by Occupational Health upon your return

Postexposure prophylaxis (PEP)

Hepatitis B
- Normally not necessary if you are vaccinated
- Otherwise, receive booster dose of hepatitis B vaccine +/- immunoglobulin

Hepatitis C
- No post-exposure prophylaxis available
- Contact Occup Health on return as good treatments now exist that clear the virus in most cases
HIV

• Some evidence that PEP with antiretrovirals will reduce risk of infection

• Advantages of PEP for HIV exposure:
  ▪ It may work
  ▪ It may help you to do something positive after the incident

• Disadvantages of PEP
  ▪ All the drugs have potential side effects, although the regime we offer tends to be well tolerated
  ▪ Possible drug interactions
  ▪ There may be some psychological morbidity as the PEP highlights risk, causing anxiety

Practical issues following HIV exposure:

• PEP is expensive and potentially hazardous, therefore:
  o Not supplied by the Medical School for every student
  o Too expensive for every student to take their own supply

• If the issue of PEP arises we will:
  o Talk through the issues with you

Malaria

Introduction

There are four species of malaria parasite that infect humans:

• *Plasmodium falciparum*
• *P. vivax*
• *P. ovale*
• *P. malariae*

The parasites are transmitted by bites of the female *Anopheles* mosquito. The mosquito bites at dusk and dawn and during the night (not during the day) It usually takes at least 7 – 10 days from bite to onset of symptoms.

Risk varies geographically: The following regions go from highest risk (top) to lowest:
  West Africa
  East Africa
  Central Africa
  Southern Africa
  South Asia (India, Pakistan, Sri Lanka, Bangladesh etc)
  Southeast Asia
  Caribbean South America
  Inland South America
  Central America

Prevention of malaria – the ABCD list

A – awareness of risk
B – bite avoidance
C – chemoprophylaxis
D – diagnose promptly if symptoms develop
Bite avoidance:

- Dress appropriately in the evenings: long sleeves, long skirts or trousers etc
- Ensure doors and windows with screens are closed properly
- Use a DEET-based insect repellent
- Use a bed net to sleep under (ideally one impregnated with permethrin)

Chemoprophylaxis

There are several choices of antimalarial tablet (depending on risk area):
- Chloroquine alone
- Chloroquine plus proguanil
- Mefloquine
- Doxycycline
- Malarone (a combination of atovaquone and proguanil)

Follow advice you have obtained from your GP.
- Drugs need to be started before departure
- Drugs need to be taken for duration of exposure
- Drugs need to be taken for some time after return
  **Do not** accept advice from fellow travellers!

Symptoms of malaria

Symptoms are usually non-specific:
- Fever
- Headache
- Joint pains
- Vomiting
- Diarrhoea

Diagnosis and Treatment of Malaria

Malaria is diagnosed by finding parasites on a thick or thin blood smear
Molecular and dipstick methods are also possible but less readily available
If symptomatic: seek diagnosis from reputable local clinic / hospital ASAP

Treatment should normally consist of an artemisinin combination eg co-artemether
Quinine is an acceptable alternative.

Standby treatment may be appropriate if you going to very remote regions: discuss with GP before departure.
**Travellers Diarrhoea**

**Introduction**

Traveller’s diarrhoea is common and may affect up to 50% of travellers to the tropics at some stage of their journey. Most cases are mild and self-limiting, lasting about 2 – 3 days. The common causes are:

- ETEC – enteroxygenic E. coli
- Campylobacter
- Non-typhoidal salmonellae
- Cryptosporidium
- Giardia
- Rotavirus

**Prevention**

“Boil it, peel it or forget it” are words of advice that should be remembered before ingesting food or drink. Tap water is risky in many places; ideally boil and/or filter the water before use. Advice for prevention includes:

- boil or filter water
- use water sterilising tablets (chlorine or iodine based)
- avoid use of ice cubes
- beware of raw meat and raw vegetables
- avoid street vendors unless food clearly cooked in your presence
- be wary of dairy produce (e.g. ice cream!) as may not be pasteurised

**Treatment**

Most cases do not need specific treatment and are self-limited

- Drink plenty of fluids
- Consider using oral rehydration salt sachets
- Stick to a bland diet
- Avoid too much dairy produce (may have secondary lactose intolerance)
- Seek medical help if febrile or if you have bloody diarrhoea