CORPORATE MALARIA RISK MANAGEMENT
Towards an International Best Practice Guideline for Corporates

TRAVEL FOR WORK COUNCIL

INTRODUCTION

• MALARIA - THE BIGGEST INFECTIOUS DISEASE KILLER OF TRAVELLERS
• DELAYED DIAGNOSIS IS FATAL / DON'T MISS MALARIA
• THE MOST OVERDIAGNOSED DISEASE IN TRAVELLERS IN AFRICA - FATAL SO
• MALARIA - MIRED IN MYTHS AND CONJECTURE
• A CORPORATE CONUNDRUM

MALARIA THE BIGGEST INFECTIOUS DISEASE KILLER OF TRAVELLERS IN AFRICA

Summary: Malaria is the most frequently imported acute, life-threatening, tropical disease in international travelers. We did a literature review in PubMed using pre-defined search terms to identify possible risk factors for malaria deaths in travelers. After screening, a total of 34 papers were included in the study.
DELAYED MALARIA DIAGNOSIS IS FATAL / DON'T MISS MALARIA

• Mrs S.K 54 yo Safer
  • Lived in Lagos for 8 years. Spouse of retail employee, guesthouse owner / operator
  • Medevac previous year for pancreatic disorder – advised not to return. Stubborn
  • December 2017: Flu-like illness - refused to see a doctor, for 3 days. Confused, fell on head, taken to hospital.
  • Dx: “Malaria, septicaemia”
  • Medevac (took 2 days) - on admission: Cerebral malaria, ARF, deeply jaundiced, not ventilated
  • Died in MOF on ventilator 5 days later

• Mr UM, 41 yo Indian national
  • Kamsar, Guinea, sub-contractor - “own medical care, including doctor”
  • Ill for 3 days - seen at local hospital. Sent home on amoxycillin - own doctor not on site
  • Next day - same hospital - admission. Diagnosed malaria
  • Seen by medic on day 5 - in extremis. Comatose, acute respiratory failure. No ventilator.
  • Medevac advised. Placed on our ventilator overnight. Road ambulance (8 hours) to Conakry
  • Died 2 hours after arrival in best hospital in Conakry.

THE MOST OVER DIAGNOSED DISEASE IN TRAVELLERS IN AFRICA

• Mr JU, 42 yo Safer – engineer, Copper Belt, Zambia (21 March 2019)
  • C/o fever, headache and back ache
  • TWO independent NEGATIVE RA’s for Pfalciparum
  • Seen at local private clinic:
  • Dx: “Malaria” - put on oral therapy and sent back to camp.
  • Telephonic consult – wait and see
  • ?? ATBF
  • Next day - severe back ache - commercial flight home
  • Spinal abscess L4 - Staph aureus
  • Six weeks IV antibiotics - Unresolved to date

• Mr UK, 27 yo, British – volunteer elephant project, Vwaza marsh, Malawi (21 December 2018)
  • Presented 5 days prior to medevac with a “flu-like illness plus diarrhoea
  • NEGATIVE malaria screen
  • Given IV Artesunate
  • On arrival in Johannesburg “in extremis” and
  • Diagnosed with East African Sleeping Sickness
  • Died 7 days later

MALARIA – MIRED IN MYTHS AND CONJECTURE

A CORPORATE CONUNDRUM

• WHAT CAN BE DONE?
• WHAT SHOULD BE DONE?
• WHERE DOES CORPORATE RESPONSIBILITY BEGIN / END?
• WHAT CAN BE ADVISED?
• WHAT SHOULD BE ENFORCED?
• WHICH TOOLS DO WE HAVE – WHAT WORKS?
• WHAT IS “INTERNATIONAL BEST PRACTICE”?

LET THE GAMES BEGIN!
Survey Demographics

- 26 responses (13 from TFW)
- All over 40
- 56% female
- 50% members of TFW
- 73% Physician
- 83% travel med, 42% OM, 25% Primary care/family med
- Majority in specialist travel clinic

Policy Questions – lessons from a pilot study

Asked: Does your company have a malaria policy/guideline?

Did not differentiate between Clinical Policy/Guidelines for clinicians providing travel advice for multiple employers/leisure travel/other vs Employer Policy for company employees

Interesting Findings Despite Limitations

- Almost 30% “mandate” the use of chemoprophylaxis (4/14)
- 5/14 includes SBET and RAT / RDT as part of policy
- 3 from Australia/NZ travel med clinics
- 1 from US Oil & Gas
- 1 from South Africa
- 2/5 without instructions to call in the event of intended use
Which of the following is paid for by the employer?

- Mosquito proof accommodation
- Mosquito nets
- Insect repellents
- Malaria
- Emergency SBET with a malaria chemoprophylaxis
- Treatment (SBET) rapid antigen test
- Other (please specify)

Responses N=13

30.00% 20.00% 10.00% 0.00% 40.00% 60.00% 50.00% 70.00% 80.00% 90.00%

What should be included in a malaria policy?

The main reasons for non-compliance with malaria chemoprophylaxis for the employees you advise (check top 3)

- Concerns about long term effects: 36.00% 9
- Don’t “like” taking medications: 75.00% 18
- Advice of other travellers: 50.00% 12
- Believe that the risk of getting malaria is extremely low: 68.00% 13
- Preference to have treatment if unwell: 60.00% 15
- Believe that they are immune: 58.00% 9
- Do not remember to take medication: 56.00% 9
- Belief that malaria is not serious: 46.00% 9
- Preference to use bite prevention measures: 34.00% 7
- Belief that chemoprophylaxis is not effective: 20.00% 5
- Other: please specify: 3.00% 1

What would improve compliance?

Lessons Learned from Pilot

- Enabled us to get a "small sample" of what is out there
- Learned what we need to do to improve the survey
- Differentiate between employer based policies and clinical policies
- Unambiguous choices +/- definitions
- Increase number of participants

Next Steps

- The TFW council will improve the survey and ensure it reaches the greatest number of ISTM members (especially TFW members)
- After this workshop:
  - digest what you have learned
  - take a deep dive into your employer malaria policies
  - read any evidence based medicine/expert opinion (and share)
  - Participate in the new TFW malaria survey when available
DISCLAIMER: Any opinion that any of the above might have been photo shopped remains the onion of the viewer only…

WHERE WE OPERATE

• Operations in all but 5 SSA countries
• Over > 20 years

WORKFORCE DEMOGRAPHICS

• Consulting role plus on-site medical staffing
• Expatriate staff ±10% / 90% local hire
• Rotations 4 – 8 weeks on / off (Our medics 6 on / 6 off).
• Local hires – full-time with annual leave. Live on, off site.
• Contractor’s care expectation vary from client to client.
• Is malaria considered in the medical clearance or fitness to work assessment? Yes - application is variable
• Originate mainly USA, Canada, EU, Australia, NZ, (South) Africa
• Philippines, India, Ghana becoming more (Cheaper)
• Fitness for work assessments done by external providers in our network

MEDICAL DEPARTMENT
• Johannesburg Case Management & on-site ALS paramedics, RN’s (Doctor)
• HQ doctor driven, occupational & travel health qualified
• On-site Trauma, Travel and sometimes Occupational health qualified (Client dependent)
• HSE is client function - often contract holder
• We provide a support function
• We provide on-site medical support, patient base is a mix of client and client contractor employees. Latter sometimes excluded from medical care...
• NB: Malaria managed according to strict INHEMACO protocols based on:
  • History, examination, R.A.T’s and DOTS for confirmed malaria
  • ALL suspected (PUO’s) and actual malaria immediately reported to HQ
**MALARIA GUIDANCE DOCUMENTS / POLICY**

- INHEMACO Malaria Risk Management Policy & Protocol Template
  - Available to client
  - Seldom consulted...
- Induction
  - Part of motivation for this workshop; INHEMACO Malaria Policy
  - NO compulsory prophylaxis advised
  - NO compulsory prophylaxis testing
  - Client dependent...

**Induction Program Malaria Content**

- All expats, frequent travellers subject to Pre-deployment Medical Screening
  - If they are deployed: Malaria briefing, pamphlet, prophylaxis and DEET provided
- Induction medical for all new arrivals on site:
  - Medical overview PLUS Malaria induction plus brochure
  - Is any certification of completion required? No - sign off on induction
  - Is RAT/SBET supplied at site or expected to be provided by travel health provider?
  - NO - Malaria Management Protocol plus RAT exclusively used in Dx & Mx of malaria
  - RAT/SBET kit supplied to expats returning home on rotation PLUS
    - Strict instruction to PHONE SITE / HQ support line in the event of suspected malaria / need to use the kit

**MALARIA BROCHURES & WALLET CARD**

- Available to client
  - Seldom consulted...
WHO WE ARE

• KLM Health Services – Occupational Health Unit KLM
• 1995 – KLM subsidiary – more clients:
  • Oil companies
  • Governmental organizations
  • Non governmental organizations
  • Construction companies
  • Etcetera
• Today:
  • International Health and Travel Services
  • Health Management Services
  • Airport Medical Services

WHERE WE OPERATE

• KLM high risk destinations
  • Ghana (Accra)
  • Tanzania (Dar-es-Salaam)
  • Nigeria (Lagos)
  • Uganda (Entebbe)
  • Rwanda (Kigali)
  • Angola (Luanda)
• KLM medium risk
  • Delhi, Mumbai, Nairobi
• KLM low risk
  • Paramaribo, Guayaquil, Panama, Johannesburg, Windhoek

AIRLINE - EUROPE

MALARIA CASES

WORKFORCE DEMOGRAPHICS

• KLM airline crew members:
  • Cabin attendants
  • Pilots
• KLM expatriates:
  • Asia 22, Africa 18, India 6, South America 9 (total ~200)
• KLM duty travellers (engineers, support staff)
  • Employees with higher risk profile for malaria (e.g. pregnant airline crew) get destination restrictions
  • Majority of employees staying in the city/crew hotel.
  • Local business travel common for expats (cities).
  • Fitness for work assessment for expats and airline crew are done in house
  • Vaccination and malaria prophylaxis advice through KLM Travel Clinics.
MEDICAL DEPARTMENT

- KLM Health Services / IMA / International Medical Advice (IMA).
- Partnership with Air France Medical Department.
- International network of contracted local doctors at worldwide KLM/Air France destinations. Selection and screening of KLM doctors done by IMA doctors. Network management done by IMA staff.
- Audits of local doctors, hospitals and hotels done by IMA doctors. High risk malaria destinations: every 2 years.
- Collaboration with KLM Integrated Safety and Security Organization (ISSO) and KLM Security Services concerning work-related health risks (e.g. air pollution for crew). Contact with International HR to determine expat policies concerning health risks.
- Close contact with Crew Service Hub, Inflight Services, Flight Operations, Operations and Control Centre and Airport Medical Services.
- Working together with local and national public health authorities and compliance with international travel medicine guidelines.

MALARIA GUIDANCE DOCUMENTS / POLICY

- KLM policy developed by IMA according to International Malaria Advisory Committee (IMAC) and International Malaria Advisory Training (IMAT) guidelines, World Health Organisation (WHO), International Air Transport Association (IATA), Royal Dutch Society for Tropical Medicine (RIVM).
- Collaboration with Air France Medical Department regional due to differences in national regional guidelines. European guidelines for expatriates considered due to similar risk profile.
- Malaria policy for airline crew/lucy travellers.
- • Responsible for malaria prescription during transcontinental flights, same reason.
- • Information published on Crew Destination Information (CDI) sheet.
- • Message at reporting for duty for high risk destinations: collect insecticide, use malaria prophylaxis.
- • Possibility of ordering malaria prophylaxis with home delivery.
- • Malaria risk and policy discussed by senior purser at pre-flight briefing.
- • Duty travellers:
- - Malaria information published on KLM intranet (HR Department)
- - Information provided by KLM Travel Clinic
- - All KLM staff: malaria policy and advice published on KLM intranet. No e-learning program.

Other

- Unique options for KLM staff:
  - In house pharmacy at Schiphol Airport with 24/7 supply of malaria prophylaxis
  - Possibility of ordering malaria prophylaxis online
  - Just before flight issuing of malaria prophylaxis*
  - Crew Service Hub with support desk and insecticide to take away
  - Airport Medical Services at Schiphol with 24/7 availability to see or advice airline staff
  - Contact with local doctors for monitoring of malaria risk
  - RAT’s are sent to all local crew doctors
  - All staff carries a card stating that if they are found incapacitated, malaria has to be considered as a diagnosis
  - New being developed: personalized information portal for airline staff with the possibility of targeting advice to a given destination
  - Start of prophylaxis at day of departure has been discussed and approved with experts in tropical medicine

Induction Program Malaria Content

- Expatriates:
  - Medical screening/health check-up before posting.
  - Doctor and travel nurse discuss malaria risk and preventative measures.
  - Malaria prophylaxis prescription provided by KLM Travel Clinic. Recurrent prescriptions provided by IMA and KLM Travel Clinic.
- Airline crew:
  - Malaria risk and prevention incorporated in KLM training
  - Information published on Crew Destination Information (CDI) sheet
  - Message at reporting for duty for high risk destinations: collect insecticide, use malaria prophylaxis
  - Possibility of ordering malaria prophylaxis with home delivery
  - Malaria risk and policy discussed by senior purser at pre-flight briefing
- Duty travellers:
  - Malaria information published on KLM intranet (HR Department)
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AIRLINE - USA
WHO WE ARE

• Our Corporate Flight Plan focuses on
• Our people
• Our customers
• Our owners
• Our partners and communities

• Origins – 1928 crop-dusting company launched its first regional passenger flight in 1929.
• Delta provides service to 325 cities worldwide, in 56 countries, across 6 continents.
• Delta strives to become a truly global airline by working with alliance partners and demonstrating that no one better connects the world.
• 80,000 employees worldwide; 3,000 based internationally. Mainline fleet of 870 aircraft. 180M passengers annually.

MEDICAL SUPPORT

• ID-tropical medicine physician consultant expertise to our malaria mitigation program refined by case experience.
• Global medical assistance for screening, referral and fit-to-fly clearance when traveling internationally.
• In the U.S. Delta 24/7 malaria hotline triage, referral to consider *P. falciparum* as differential diagnosis & follow-up monitoring until symptoms clear / alternate diagnosis made. ER may have Ebola-like concern and/or discharge an employee without making the malaria diagnosis.
• On-the-job injury worker’s compensation management with occupational health partnership.
• Malaria wallet card: prevention, symptoms, global medical assistance and Delta Malaria Hotline phone numbers, information for the ED doc.

WHERE WE OPERATE – Malaria endemic

• Delta launched service to the African content in December 2006.
  1. Lagos, Nigeria (discontinued service to Abuja)
  2. Dakar, Senegal
  3. Accra, Ghana
  4. (Discontinued service to Monrovia, Liberia in 2016)
  5. Also flying to
     • Johannesburg, SA - excursions to Kruger Park
     • Port au Prince, Haiti
     • Punta Cana, Dominican Republic - low risk

MALARIA GUIDANCE DOCUMENTS / POLICY

• Tool kit items for crew lounge
  • Web-based
  1. Malaria poster
  2. Malarone poster
  3. Malaria lunchbox
• Tool kit items for crew lounge
  • Business-unit managed
  1. Periodic communications
  2. New hire and recurrent training
  3. Pilot and flight attendant videos
  4. Challenge all BU leaders to keep malaria wallet cards

WORKFORCE DEMOGRAPHICS

• Employees:
  • Pilot assignments are fleet/aircraft specific
  • Flight attendant trips largely Atlanta and NYC/JFK-based
  • Chemoprophylaxis use, etc. is strongly recommended: “Malarone”/at-pro or doxycycline
  • FAA prohibits “Lariam”/mefloquine for pilots
  • Scant number of expats and other business travelers

• Local business partners:
  • Local resident’s self-management compared to that of a U.S. corporate strategy

• Challenges:
  • Inconsistent adherence to personal protection strategies, including chemoprophylaxis

• Encouraging: Improved symptom recognition and response.

MALARIA STATISTICS

• December 2006 to present:
  • Crew: 84 cases, 13 ICU severity, including 1 death
  • EQS 1
  • Non-cruise business traveler 1
  • Past 5 years:
    • Crew: 2 cases, 0 ICU severity
    • 2020 – 8 cases
    • 2011 – 8 cases

> Delta

> Delta

> Delta

> Delta

> Delta

A Global Energy company with operations across the globe...

MALARIA EXPOSURE

- Most malaria cases in 2017 were in the WHO African Region (200 million or 92%), followed by the WHO South-East Asia Region with 5% of the cases and the WHO Eastern Mediterranean Region with 2%.
- Fifteen countries in sub-Saharan Africa and India carried almost 80% of the global malaria burden. Five countries accounted for nearly half of all malaria cases worldwide: Nigeria (25%), Democratic Republic of the Congo (11%), Mozambique (5%), India (4%) and Uganda (4%).
- Nearly 80% of global malaria deaths in 2017 were concentrated in 17 countries in the WHO African Region and India; 7 of these countries accounted for 53% of all global malaria deaths: Nigeria (19%).

WORKFORCE DEMOGRAPHICS

- Nationals
- Expatriates
- Dependents
- Rotators
Chevron Global Health and Medical

- Americas
  - Occupational Health
  - Occupational health physicians
  - Nurse Practitioners, Nurses
  - EAP
  - Public Health
- EEAME (Europe, Eurasia, Africa, Middle East)
  - Hospitals
  - Clinics
  - Able to see Nationals & Expatriates
  - Onsite Hospitals

- Asia Pacific
  - Hospitals
  - Clinics
  - Able to see Nationals & Expatriates
  - Onsite Hospitals

Chevron Guidelines for travelers

- Visit / call a Chevron clinic 2 weeks before traveling to a malaria area
- Complete mosquito-borne illness training before departure & every 2 years
- Begin taking anti-malaria medications before the trip
- Anti-malaria drugs that currently are in use are:
  - Malarone®, Doxycycline and Mefloquine
- Continue taking anti-malaria medications after leave the area

Malaria testing kit

Chevron Malaria Hotline

- Fever
- Headache
- Sweats and chills
- Pain in the back and joints
- Cough
- Diarrhea
- Nausea
- Vomiting

If you have visited a malarious area within the last six months and are experiencing any of these symptoms, go to a hospital or doctor immediately to be tested for malaria.

Malick Diara, MD, MBA, MPH
Public Health Manager, Medicine and Occupational Health

“Global organization / Integrated business
- Six continents and nearly every country
- Revenue: Company #10 - Country # 30 – 45
- Company Structure:
  - Upstream: Oil & Gas, Integrated Solutions, Business Development, Projects
  - Downstream: Refining & Supply; Fuels & Lubes; Research & Engineering
  - Chemical: Manufacturing, Marketing and Research
- Corporate: Safety, Security, Health & Environment, HR, P&GA, Law, etc.

WHO WE ARE

Chevron

human energy
WHERE WE OPERATE

- Global operations, many in high risk malaria areas
- Sub-Saharan Africa
- Papua New Guinea

WORKFORCE DEMOGRAPHICS

- Approx. 71,000 employees (Annual report 2018), approx. 50,000 contractors
- Est. one third US-based
- Non-US sites: Majority local hire/some expatriate staff (approx. 3000)
- Workforce highly mobile, cycles variable
  - >30,000 Business travelers per year
  - Rotators 28 day cycle on/off, Expats
  - Many remain in risk area during off cycle
- Workforce highly mobile
- Contractors meet same guidelines
- Malaria is considered important part of Fitness For Work decision

MEDICINE & OCCUPATIONAL HEALTH (MOH)

INFECTIOUS DISEASE CONTROL PROGRAM APPROACH

- Threat
- Interventions
- Program measures
- Prevention
- Response

Organizational Structure For Workplace IDC Programs

- Design & disseminate plans / tasks
- Track & program implementation
- Report & outlook program data
- Monitor & evaluate programs
- Endorse programs and initiatives
- Strategic direction on IDC & SSHE
- Exec. sponsorship
- Specific program development
- Maintain control programs
- Provide feedback and support
- Program reviews & service

ExxonMobil Workplace Malaria Control Program Results
CIVIL SERVICE

WHO WE ARE

• The Federal government department responsible for advancing Australia’s interests in the international arena.
• The department provides foreign, trade and development policy advice to the government.
• Manages more than 100 overseas posts across 5 continents.

MEDICAL DEPARTMENT

• HQ in Canberra.
• Five primary care clinics staffed by Australian GP including Honiara and Port Moresby.
• CMO has Occupational Medicine Specialist training.
• No environmental health officers and vector control poorly managed.
• No remote sites but work related travel to remote areas

WORKFORCE DEMOGRAPHICS

• Expatriate Australian staff and families – 2 200
  • 40% officers, 28% adult partners, 32% children.
• Locally engaged staff – 2 400.
• Three year posting
• Contractors – minimal
  • Independent but this is an issue.
• Ability to safely take anti-malarial medication is considered in the medical clearance or fitness to work assessment.
• Pre-deployment medical assessments completed by an external provider
  • Final sign off provided by in-house medical staff.

MALARIA GUIDANCE DOCUMENTS / POLICY

• Company policy based on Australian travel medicine practice.
• Australia does not have overarching guidance documents
  • use is guided more by UK than US style prescribing.
• Local knowledge utilised.
Induction Program Malaria Content

- Malaria is discussed at pre-posting medical.
- Probably not done as well as it should be.
- Information available on intranet or via personal consultation.
- SBET rarely used due to locations and accessibility to doctor
  - Bougainville an exception.

Other

- Lots of children, especially in Honiara.
- Women becoming pregnant a common occurrence.
- Compliance is poor and difficult to manage.

WORKFORCE DEMOGRAPHICS

- Expatriate staff/local hire 700+ / 85,000 / contractors
- Most expats 3 years with family
- Short term contracts, internships traineeships etc. ± 6 months. Often cross postings.
- Contactor workforce size: not really known or well registered.
- Local - any kind of work,
  - International concerns construction, IT, etc. Biggest concern - construction in developing countries: (Cowboys). Malaria & vaccination guideline - same as for expats.
  - Control stricter for construction sites in developing countries.
- Malaria risk discussed with all expats. Measures adapted to individuals, e.g. young children & pregnant women. Specific risk factor could be a reason for not posting - has never happened.
- Sites & accommodation: Usually cities.
- Fitness for work assessments by external providers based on our standards.
  - The focus is cardiovascular risk.
Medical Department
• International HQ Amsterdam
  • 3 doctors & travel clinic
  • 5 brewery clinics
  • Developing countries
  • Medical doctors, nurses
  • Bar&club outsourced DR
  • MD separate
  • Construction projects in developing countries outsourced
  • HEINEKEN supervision

MALARIA GUIDANCE DOCUMENTS / POLICY
• Use Dutch national guidelines LCR
• Linked to yellow fever registration
• Based on WHO with some variations for common Dutch travel destinations
• High risk locations: High Pf transmission rates
  • Expats take prophylaxis at least three months - may then stop
  • Short term, interns, contractors, business travellers - full duration
  • Emphasize access to fast diagnosis and treatment: own clinic, audited external locations
  • SBET c RDT:
    • Expats who travel a lot & Frequent travellers not taking prophylaxis*
    • Stricter for contractors: mandated through contract, checked if they have available
• Medium risk locations
• No prophylaxis no SBET*
  *not according to national guidelines

CASE STUDIES

CASE #1: Fit for Assignment?
• A 37 yo male mining project supervisor
  • Past medical history
    • "cerebral malaria" 1 year ago
  • 2-month project, Burkina Faso
  • No prophylaxis:
    • "It only hides the symptoms, psychological S/E, locals don't take medications"
  • Medevac to Zurich
  • 3 nights ICU - acute renal failure
  • No sequelae

CASE #1: Fit for Assignment?
• New project, rural Liberia. 3 months.
  • NO on-site project medical support
  • Despite your best efforts:
    • Refusing prophylaxis:
      • "...will stick with insect repellent & bedtime gin and tonic."
  • NO company policy for Malaria Management
  • Company pays for prophylaxis.
  • Apart from mosquito bite prevention you would:
CASE #1: Fit for Assignment?
A) He is not “fit for travel”
B) It is his choice - he can go
C) “Fit for travel” & provide Standby Emergency Treatment (SBET)
D) “Fit for travel” and provide Rapid Antigen Test kit (RAT kit) & SBET
E) “Fit for travel” and provide Rapid Antigen Test kit (RAT kit) & SBET PLUS telephonic support

• 6 oil rig workers, fit and well.
• Commencing 2 year contract
• Equatorial Guinea, 20km off-shore
• First rotation in 1 month
• Rotation 28 days on, 28 days off
• Mid-morning arrival in Malabo
• Commercial flight in, helicopter flight out
• Mid-afternoon departure from Malabo
• Helicopter in, commercial flight out

• Employer:
  • "...malaria mosquitoes only bite at night,
  • not present on the rig, no risk..."

Case #2: Oil Rig Workers

Would your advice change if employee is going on only two rotations?
A. Yes
B. No

Case #3 Kinshasa Expats

• Employee, wife, 2 and 3 year old.
• 4 year assignment
• LSD trip:
  • Centre Privé d’Urgence:
    • Small emergency clinic, some ICU, French doctors
  • Centre Medicaile de Kinshasa
    • Limited capabilities
• Will live close to company clinic:
  • Can diagnose & treat malaria.
  • They realise high risk of malaria,
  • very reluctant to take malaria prophylaxis.

You advise:
A) Provide mefloquine or at/pro or doxycycline - actively check compliance
B) Provide mefloquine or at/pro or doxy - after 3 months reconsider based on their risk assessment
C) The children take prophylaxis for the duration, parents minimum 3 months, if they don’t agree, they cannot go
D) Prophylaxis plus RAT kit & SBET - teach them how to use it
E) No prophylaxis / SBET - stress optimal personal and environmental protection

Case #2: Oil Rig Workers

A) Mosquito bite precautions only
B) Mosquito bite precautions as well as chemoprophylaxis for the entire 2 year contract
C) Bite precautions plus standby prophylaxis - atovaquone / proguanil (at/pro) or doxycycline
  - only commence in the event of unscheduled overnight stay in Malabo, complete course
D) RAT kit plus SBET plus telephonic back-up
E) Report to Rig medic with ‘flu-like illness, call you with any ‘flu-like illness on home leave for effective referral.
Case #3 Kinshasa Expat

If his job entails travelling around the country, how would that change the advice?

A) Risk is the same, keep protocol the same
B) Risk is higher but keep protocol the same to improve compliance
C) Prophylaxis for excursions - risk is higher
D) RAT kit & SBET for excursions - care less accessible
E) Prophylaxis, RAT kit & SBET for excursions

Case #4 Malaria in Russia

You explain:
• Risk may well be, gets infected in e.g. Sierra Leone, ‘flu-like illness in Russia:
  • Difficult access to health care
  • May not know malaria

You advise:

A) Give prophylaxis - check whether he takes it
B) Give prophylaxis – own responsibility to take
C) Give RAT kit & SBET only
D) Advise mosquito bite prevention only
E) No prophylaxis, no travel

Case #4 Malaria in Russia

• 54 year old healthy business traveller
• Frequent Traveller to Africa & Eastern Europe.
• Few days, several times a month.
• Reluctant to take prophylaxis:
  • "Continuous prophylaxis can't be good for you"  
  • "Anyway I forget it"
  • "I stay in big hotels & cover up at night"
  • "Nobody I know actually takes it"

You advise:

A) Give prophylaxis - check whether he takes it
B) Give prophylaxis – own responsibility to take
C) Give RAT kit & SBET only
D) Advise mosquito bite prevention only
E) No prophylaxis, no travel

Case #5 Infant to Lagos

• UK based NGO
• 36 year old British engineer
• Based Lagos, Nigeria:
  • In the UK for birth of first child – full term, healthy.
  • One week old
  • Indonesia wife – no UK support
  • He must return to Lagos
• Wants wife and baby to join him.

At what age can Baby travel to Lagos?
Case #5 Infant to Lagos

- A. Any age - NGO is not responsible for the baby
- B. Any age provided parents adhere to mosquito prevention measures
- C. When the baby is at least 6 weeks old
- D. When the baby is at least 3 months old
- E. When the baby is at least 6 months old

What “they say”

- Lee Baker (MAG RSA)
  - Bite prevention only
- David Hamer (CDC)
  - Bite prevention only

https://apps.who.int/iris/bitstream/handle/10665/275867/9789241565653-eng.pdf?ua=1

You would:

A) Provide insect repellent to all
B) Insect repellent as well as malaria prophylaxis
C) (B) as well as SBET
D) Allow a 10/40 pregnant spouse to go – no prophylaxis
E) Allow a 10/40 pregnant spouse to go – on Mefloquine
Questions for the panel:
1. What are the main drivers of your malaria policy?
2. Can a company enforce taking of anti-malarials by employees?
3. Is there a low level of malaria risk at which you would not recommend anti-malarials, or does your company feel that if there is any risk, anti-malarials should be taken?
4. Do you recommend anti-malarials to be taken for long term, sometimes for years, or should employees change to other measures even though they may be less effective?
5. Do your employees have access to good emergency care (for malaria) and does that influence your policy on anti-malarial use?
6. Do pre-existing conditions justify not posting employees to certain high-risk malaria areas?
4. Do you recommend anti-malarials to be taken for long term, sometimes for years, or should employees change to other measures even though they may be less effective?

5. Do your employees have access to good emergency care (for malaria) and does that influence your policy on anti-malarial use?

6. Do pre-existing conditions justify not posting employees to certain high-risk malaria areas?

1 a. Does an employer have a duty to ensure employees are protected against malaria in high risk conditions?

1a. Duty of Care?

A) Yes - an absolute duty to protect at all costs
B) Yes - a duty to do what is reasonably, practically, possible to prevent malaria
C) Yes - weighing the employer’s responsibility and employee’s responsibility and personal beliefs and preferences
D) No - it’s the employee’s responsibility
1b. Can an employee be excluded if (s)he refuses to take prophylaxis when advised?

A) Yes
B) No
C) Yes - if the person is at increased risk (Pre-existing medical condition)
D) Yes - if there is no reliable / good medical care available

2. What is a "high risk location"?

A) Any location with *P. falciparum* malaria
B) Any location in Sub-Saharan Africa
C) Any location mentioned as high risk in internationally accepted guidelines (e.g. CDC / WHO)
D) Any location with a high number of cases / high parasitemia index in the local population
E) Any location from which corporate travellers return with malaria

3. What can an employee expect from an employer in terms of malaria risk mitigation?

A) Provide repellents and long sleeve / trousers clothing
B) Provide mosquito proof working and living areas - impregnated bed nets, indoor residual spraying and larval control
C) Malaria prophylaxis if needed
D) Ensure access to adequate medical care (including SBET & RAT if no medical care available)

1b. Employee exclusion?

A) Yes
B) No
C) Yes - if the person is at increased risk (Pre-existing medical condition)
D) Yes - if there is no reliable / good medical care available

2. What constitutes a high risk location for an employee?

3. Employee expectations?
4. What does an employer need to do to assure access to adequate medical care?

5. High risk employee management?

A) They may not go
B) They can go with optimal preventive measures,
C) They can go if they know the risks at their own risk
D) They can go if they have clearance from their personal doctor
E) They can go if they know the risks at their own risk provided they sign an indemnity

5. What to do with an employee with an increased risk for severe malaria going to a high-risk location (e.g., pregnancy or splenectomy)?

A) They may not go
B) They can go with optimal preventive measures,
C) They can go if they know the risks at their own risk
D) They can go if they have clearance from their personal doctor
E) They can go if they know the risks at their own risk provided they sign an indemnity

NEW COUNCIL MEMBERS

Dr. Jennifer Sisson | Chief Medical Officer
Travel Doctor – TMVC Perth

Dr. Ian Cheng | Occupational Health Physician
Royal North Shore Hospital
Aviation & Travel Health Services

FINAL REMARKS

1. Way Forward
2. New Council and Chairperson
3. Open TFW meeting Thursday June 6, 2019, 19:00 - 20:00 Jefferson Room
Thank you