

# STEVE'S ESSENTIAL STUFF FOR GLOBAL HEALTH VOLUNTEERISM

## 1. Further Preparation

- “A Taste of Tropical Medicine” – an annual one and ½ day short preparatory course at Mayo Clinic Rochester taught by U. of MN and Mayo faculty. Simply excellent!
- Certificate or Diploma in Tropical Medicine and Hygiene (CTropMed or DTM&H) – Recommended if you are preparing for long term global health work. These are 4-12 week courses that qualify you to sit for the Certification Exam in Clinical Tropical Medicine and Traveler’s Health. U of MN’s flexible, excellent Global Health Course is 2 weeks in person and 7 weeks on-line (c.f. <http://www.globalhealth.umn.edu/>). Also offered at Baylor College of Med. and International Ped. AIDS Inst., Bernhard Nocht Inst., Case Western Res. U., Gorgas Mem. Inst./ U. of Alabama, Humboldt U., Johns Hopkins U., Liverpool Sch. of Trop. Med., London Sch. of Hygiene and Trop. Med., Mahidol U., , Prince Leopold Inst. of Trop. Med., Tulane U., Uniformed Serv. U., U. of MN/CDC (!), U. of TX Galveston, U of VA, W. VA U.

## 2. Questions and Criteria to Conduct Global Health Volunteerism

- **Why = Catalyst** – Examine what is motivating your short term global health volunteerism to help avoid harm (*primum non nocere*). Perhaps you should support long-term development that’s being done well with the same money.
- **How = Compassion** – It’s about serving them and their community (beneficence), not you, and humbly meeting their needs, not yours. And, **Communication** – learn their language.
- **Where = Connectivity** – go to where your friend, church or health system is working; connect to the local system and resource it, not harm it by “flooding the market”. Go back regularly to the same place until development is achieved.
- **What = “Capacity Building”** - Principled GH work demonstrates care for communities through promoting development (via resourced autonomy) rather than dependence (*please* google “capacity building wiki” and read about in Wikipedia).
- **When = Continuity** – Assist a long term medical care provider (community health worker, nurse, NP/PA, physician) who is there year round. “Hit and Run” missions with no on-going care for the underserved is unethical. If there is no on-going care, make it your mission to establish it (justice).
- Before you go, learn about
  - What are the needs of the country?
    - [www.gapminder.org](http://www.gapminder.org)
    - [www.statcompiler.com](http://www.statcompiler.com)
    - [www.cia.gov/library/publications/the-world-factbook](http://www.cia.gov/library/publications/the-world-factbook)
  - What are the assets?

3. **Recommended Resources** (including old, bound, paper products that still work when you don't have internet access):
- Tropical Medicine Handbooks
    - \*Oxford Handbook of Tropical Medicine, Eddleston et al. For your pocket if you have a big one or lab coat. If you can only bring one little book with you, this is the one.
    - \*Lecture Notes on Tropical Medicine, Gill and Beeching (originally Dion Bell's work). Buy, eat, digest prior to your trip. Read it cover to cover, underline liberally, and then reread. A primer on TM. If you can only read one book, read this one. Can buy at [talcuk.org](http://talcuk.org) – see below\*.
    - The Sanford Guide to Antimicrobial Therapy, Gilbert et al. The Mayo Clinic Antimicrobial Therapy Guide is a good alternative (especially if you work at Mayo). This little puppy is nice and pocket friendly and is packed with infectious tropical disease pearls. Ignore the US-centric malaria treatment recs.
    - Pocket Book of Hospital Care for Children: Guidelines for the management of common illnesses with limited resources, WHO. PDF to carry around in your PDA. Download free from: [http://www.who.int/child\\_adolescent\\_health/documents/9241546700](http://www.who.int/child_adolescent_health/documents/9241546700)
    - Handbook of Medicine in Developing Countries, 3<sup>rd</sup> Edition, Palmer and Wolf. A spiral bound handbook after the style of the old Little, Brown series; brief and to the point. This new edition is absolutely excellent. Available through CMDA at [www.cmda.org](http://www.cmda.org).
    - The Travel and Tropical Medicine Manual, Jong and Sanford. Includes travel and wilderness medicine topics. If doing more of that and not just working in the tropics, this one's for you.
  - Tropical Medicine Textbook
    - \*Manson's – the original. More exhaustive and exhausting. A Harrison's for tropical medicine. Email your in-country preceptor and get a list of the top 10 tropical disease diagnoses they see and then check this out of your local medical library read on them. Twice. Visualize the patient presenting with those symptoms and the differential. Purchase if your biceps need rehab.
    - \*Principles of Medicine in Africa, Parry, Godfrey, Mabey and Gill. A Harrison's for medicine in Africa. Well referenced from studies out of Africa to suggest or support treatment algorithms, rather than exported US ideas about (cost-ineffective) care.
    - Global Health E-Learning Center. A source of well done on-line tutorials to learn international public health theory and methods. [www.globalhealthlearning.org](http://www.globalhealthlearning.org).
  - Tropical Medicine Pitcher Books
    - \*Atlas of Tropical Medicine and Parasitology, Peters and Pasvol. Comes with CD-ROM nowadays. The best atlas with parasite microscopy and derm pictures and a whole lot more.
    - Tropical Dermatology, Tyring, Lupi, and Hengge. Heavy and not essential but very useful for longer term work.

- Tropical Surgery References
  - \*Primary Surgery – Non-Trauma (Vol. 1) and Trauma (Vol. 2) by Maurice King, 1993. Excellent. Find at <http://www.primary-surgery.org> – (a service of the German Society for Tropical Surgery). A dot-to-dot method for tropical surgery in resource limited settings for primary care docs or even experienced surgeons. Sometimes you won't get to see one before you have to do one or teach one. Edited by a British GP (who ever only did one surgery and that patient died – true story; told me himself). Buy a copy of both volumes at [talcuk.org](http://talcuk.org) – see below\*.
  - Surgical Care at the District Hospital – WHO manual. Download this PDF file to take with you on your iPhone or PDA at [http://www.who.int/surgery/publications/scdh\\_manual/en/](http://www.who.int/surgery/publications/scdh_manual/en/) Very basic, but well-written and illustrated. And free.
- Other Handbooks
  - Little Brown spiral series (remember, there may be no internet access and you might be doing things you aren't familiar with. Yes, Virginia, if you don't deliver babies here in the US *maybe* you shouldn't do it there; but you're still far more skillful in a resource limited setting than the grandma “traditional birth attendant” that took the first crack at it)
    - Obstetrics
    - Washington Manual of Medical Therapeutics.
    - Pediatric Therapeutics.
- \*Buy Here:
  - TALC (Teaching Aids at Low Cost) [www.talcuk.org](http://www.talcuk.org) Professor David Morley's (London School Hygiene and Trop Med) brain child to supply low cost texts and teaching materials to the developing world and you who work there. Absolutely brilliant! Save money, serve better.

#### 4. Travel Tips

- Ensure liability insurance is either not needed or you are covered.
- Carry 1 copy of your passport/visa in your wallet and 1 in your backpack/suitcase and leave 1 copy at home.
- Bring a backpack. Better than suitcase, more pockets, and when the war happens, you can hike out with one of these...or, down the road to the taxi stand.
- Call your cellular provider to unlock for international use or confirm coverage (and pay the price to lower the cost of international calling).
- Call your credit card company to let them know you will be using your card in the destination country and set a lower credit limit in case it is stolen. You can always increase the limit with another phone call if needed.
- Flight delays in the developing world are normal. If they tell you it has been delayed for three hours, stay there and wait. They might decide to leave early... without you.

#### 5. Personal Protection

- Permanone and other brands Permethrin solution or spray. Kills and repels mosquitoes (and ticks) that transmit malaria and a host of other arbovirus

(arthropod borne virus) evil humours (i.e. Yellow fever, Dengue, various encephalitides). Use for:

- Permethrin treated clothing: spray or dip and air dry two changes of long sleeved shirts and long pants, loose fitting, cotton or nylon and hat to wear at dawn and dusk when that killer Anopheles is blood thirsty.
- Mosquito bednet. Spray/soak and dry or buy pre-treated. Makes for reduced air movement, though, so you'll need a fan in your room (in case there's some electricity that night).
- Comfy travel clothing is essential. Resources for travel clothing and supplies: [www.magellans.com](http://www.magellans.com) and [www.travelsmith.com](http://www.travelsmith.com)
- Underwear. Briefly, bring enough. Often not available in comfortable styles or sizes elsewhere.
- Anti-embolism knee high stockings to prevent long-haul DVT. Wear on plane.
- Deet. Higher numbers last longer.
- Water filter; cleanable. I had a nice, little, non-cleanable Katadyn that plugged up a week into a semester teaching at a medical school in rural Uganda and spent the next 4 months boiling 2 gallons every night before bedtime. Ya.
- Back up water sterilization – Iodine tabs.
- Bednet – treat with Permethrin or Deltamethrin (need the latter in some places in more developed Africa and Asia where the Anopheles have become Permethrin resistant).
- Sunscreen. Hard to find in Africa. Sunglasses.
- A really good flashlight – LED with high lumens. Batteries are ubiquitous.
- A sewing kit – one of those freebies from a classy hotel.
- Hand sanitizer. A way to wash before eating street food. Get it hot off the grill or peel it or don't eat it. Remember, hold the grilled chicken on a stick with your left hand and eat it with your right. Don't switch. Same when peeling. And don't eat with your left hand in most world cultures; it's used for other things.
- Duct tape. Not a replacement for the undies. 101 not 102 uses.

## 6. Electronics

- Cell phone. They work in some of the most unexpected places. Make sure you call your cell provider to unlock your phone so you can buy a card in country (and of course make sure your phone will work there).
- Smartphone – Really useful; load with medical references like Epocrates, medical calculators, language translator/dictionary, database to keep a tally of the diagnoses and/or surgical cases. Use camera to capture interesting cases with patients' consent.
- Flash Drive. Especially if you aren't bringing your own computer.

## 7. Meds

- Know that pharmacies in the developing world are often well stocked with a broad range of medications (though potencies may be suboptimal); available without a prescription.
- Malaria prophylaxis

- Travelers Diarrhea medicine – Imodium and Cipro (or Azithromycin in SE Asia).
- Stand-by Emergency Treatment for Malaria (Malarone if not on it or buy combo Artesunate/Lumefantrine (brands - Riamet or Co-Artem) when in country).
- HIV post-exposure prophylaxis – one month’s worth if you’re going to be cutting, especially if doing ortho. Check with your host hospital – they may well stock it for their surgeons, but some don’t.
- Your prescriptions in original bottles.
- If children traveling with you, consider carrying Azithromycin (good for early treatment of fever – works partially on malaria and typhoid and a host of other things) though can usually find in pharmacies overseas without a prescription.
- First aid kit. Antibiotic ointment, bandages, skin glue (superglue sold everywhere works ok but is brittle). I always carry a syringe/needle, local anesthetic, and suture. I’ve needed it about a dozen times to suture lacerations while traveling and away from a hospital (twice on one of my toddler sons in Africa within the same year). Swiss army knife with mini-pliers (needle driver) and tweezers (pick-ups) and scissors (scissors) (don’t put in carry on:). Meds in my kit: Aleve, Aspirin (for the old guy with Levine’s sign and for sunburn), Augmentin, Azithromycin, Ambien, Claritin, Clotrimazole cream, Decongestant, Epi vial, Imodium, Nitro spray (I sometimes travel with old guys and envision myself a hero someday), Prilosec, Triamcinolone cream, Tums, and Tylenol.

## **Happy Travels!**

Stephen P. Merry, MD, MPH, DTM&H  
 Course Director, “A Taste of Tropical Medicine”  
 Chair, Mayo International Health Program  
 Assistant Professor, Mayo Medical School  
 Mayo Clinic  
 Rochester, MN 55905  
[merry.stephen@mayo.edu](mailto:merry.stephen@mayo.edu)  
 (507) 202-3452