

Staying Healthy Without the Healthcare Infrastructure

Let's get the disclaimer out of the way first: I am NOT a medical professional. Do NOT attempt any of the suggestions here until you have either/or/and consulted someone who is a medical professional or have researched the subject in detail and understand the risks of layperson and alternative medical care.



Health care in a SHTF world is a critical subject and a controversial one to boot! However, one sad fact remains: **In ANY major crisis we will be without our usual infrastructures, including healthcare and most likely will be on our own for a minimum of 3 days.**

The greater majority of us have absolutely no health care education, training or experience. The best we can do is take some Red Cross First Aid and CPR courses or maybe even a wilderness backpacker first aid course. Beyond that we are all neophytes.



So how do we prepare for a situation where the normal infrastructures of public safety, including emergency health care are unavailable?

With much research and thought that's how! Plus we have to remember some key concepts too:

- Prevention is key. Stay as fit and healthy as you can NOW. Keep all vaccinations, etc. current.
- Reality is very different from perception, someone in your household is bound to get sick or injured.
- You can't believe *everything* on the internet or from any other source.
- You have to be able to quantify any report and or study (for example just seeing a picture of a footprint and being told it is over 24 inches in length is pointless unless there is a ruler next to the footprint in the photo).
- You have to be very honest with yourself, your household and or group, of just what you know and don't know, and what you can do and cannot do.

And most importantly: We must be able to balance science and education's truths and fallacies *before* making a healthcare decision.



Any mainstream medical professional, site, book, report, etc will stress science and education to a fault. They are just about trained to do this from the time they start their education and or research. They tend to downplay or discredit *any* traditional form of treatment. *The reverse is also true:* many of the 'alternative' medical 'experts' will also do the same against mainstream medicine. Reality is that somewhere in between these two extremes is the truth.



Keep in mind that mainstream medicine also tends to discount spiritual aid too. We should *never, ever* overlook the sheer power of true faith on the patient!

If any 'medical expert' is bad mouthing another form of medicine, *without exception* – don't trust them! Anyone who is 'all inclusive' in their likes or dislikes on various methods of medicine (or anything else for that matter) is close minded and that can be deadly when comes to some injuries and illnesses.



So we have to be able to quantify what any of these so called experts say with true scientific research and studies that we have read ourselves.

This means the study or research must have *all* the parts to a scientific experiment or research project. Which will include how often each result was duplicated; what controls were used; what variables occurred, etc. Think in terms of a result along the lines of "once per 100,000" or similar.

Let's take medication stability or shelf life as an example:

- What format is the medication? Pill, powder, liquid, gel, cream
- What fillers and binders are used?

- What active ingredients are there?
- What was the manufacture process?
- What is the packaging and shipping process?
- What environments were all the individual ingredients shipped and stored in prior to and after manufacture? (Including our own homes)

Each of these questions *will affect the stability or shelf-life of that particular medication*; ie: its potency and safety.

Now if we don't have any mainstream, traditional or alternative medical experts available when we are injured or sick, we have to be able to rely on our own accumulated knowledge and resources that we have on hand **at that time**. This is where most of us will fall short.

Not only will most of us be unable to distinguish various symptoms with their corresponding illnesses, we haven't the foggiest idea how to go about treating these illnesses. Yet alone how or have the equipment to test blood, etc to be sure this is indeed the illness we are thinking we need to treat.

Case in point: A severe sinus infection. These can be caused by bacteria or a virus. Without a culture or test, we cannot be sure which the root cause of the infection is. So if our infection is viral, treating with an antibiotic will not work and will in the process give what bacteria that may be present, a resistance factor to the antibiotic we take.

So, we may know that antibiotics will work against a bacterial infection and not a viral infection. However we lack the knowledge and training to know *which* antibiotic in what dosage will best treat the infection.

We may also know that most antibiotics need to be taken for 10 full days (240 hours) to eradicate most bacterial infections, but we don't have the testing equipment to validate the duration or dose of the treatment to be sure we have indeed killed the infection and not created a bacteria that will become resistant to the antibiotic we used.

This poses a major dilemma for those of us that have some kind of major, long duration crisis that we are preparing for. I cannot stress enough this particular fact!!

Obviously the best way to prepare for this situation is prevention and secondly, to learn as much as we can on the various common infections, illnesses and injuries that may occur.

- At the very least we should take a Basic First Aid and CPR course. I would also recommend taking an Advanced First Aid or EMT course.
- Another thing we can do is to accumulate hard copy books on tried and true home treatments for colds, flu, infections and injuries – then reading them and even practicing the treatments.
- Keep a healthy house, yard and lifestyle - NOW

Best 'Bang for the Buck' layperson Medical Books:

- Some of the best medical/dental books on the market can be purchased (or downloaded after a small donation) from Hesperian, which provides healthcare training to third world countries. There are 20 titles

to the Hesperian Health Guides library, spanning women's health, children, disabilities, dentistry, health education, HIV, and environmental health. <http://hesperian.org/books-and-resources/> Two that everyone should get are: *Where There Is No Doctor* and *Where There Is No Dentist*.

- *The Survival Medicine Handbook: A Guide for When Help is Not on the Way* by Joseph Alton and Amy Alton (Dr. Bones and Nurse Amy) is a great book for your hardcopy library. It covers tons of important stuff for the lay person. See an outline @ <http://www.doomandbloom.net/the-survival-medicine-handbook-second-edition-is-out/>
- *The Complete Guide To Herbal Medicines: A Comprehensive herbal guide* by clinical pharmacists. Details what happens when herbs interact with drugs.
- *Back To Eden* First written by Jethro Kloss (the father of health food stores) in 1939 and revised in 2000 so there is now a cross reference between the names of illnesses then, with now.
- *Wilderness Medicine 4th edition: Beyond First Aid* William W. Forgey, M.D.
- *Backcountry First Aid And Extended Care*, 2nd Edition Buck Tilton
- *Basic Essentials Of First Aid For The Outdoors* William W. Forgey, M.D.
- *First Aid For Youths* by Buck Tilton M.S. & Steve Griffin
- *Medicine For The Backcountry*, 2nd Edition by Buck Tilton, M.S. & Frank Hubbell, D.O.
- *Wilderness Medical Society Practice Guidelines* edited by William W. Forgey M.D.
- *The Travelers' Medical Resource* by William W. Forgey, M.D.
- *The Travelers' Self Care Manual* by William W. Forgey, M.D.

Note: You will notice that I have avoided listing the numerous military Special Forces medical and dental field books, manuals and books. This is because we every day citizens DO NOT receive the training that these people do, nor are we supplied with all the equipment, supplies and medications that these military personnel are supplied with. It certainly won't hurt to have the Army Combat Field Manual, however I do not consider it as vital.



Prevention

In today's world *prevention is the key* to just about anything and staying healthy is no exception. In a potential SHTF world this is even more so; just take a look at history. In our own colonial times more people died from infections from simple things like a scratch while clearing a field, than died from food poisoning. The so called common cold and flu killed thousands more.

This means we have to be as physically fit as possible and we need to stay as current as possible with all our immunizations too. Think of this quote from Dr. Bones (at the Doom and Bloom Nation and co-author with Nurse Amy of The Doom and Bloom Survival Medicine Handbook), that this is one area of survival prepping that tends to fall to the bottom of the priority list ...

“Think about it. You might have six months of food, six months of water, a sustainable food garden, a fully stocked first aid kit, and tools, supplies and generators that would allow you to live off the grid if the SHTF. But what if you had to flee? What if you had to grab your boots, bags and backpacks and really get the heck out of dodge? Could you make it? How far could you walk in dangerous weather conditions or uncertain terrain? And the stress. Could you cope?”

Look, I understand that staying physically fit is time consuming and to me rather boring, however there are some cheap and easy ways to accomplish this and the payoffs are priceless.

- ✓ Instead of sitting down after a meal take a walk around your block or office building.
- ✓ Do calisthenics if aerobic exercise is outside your capability. This will at least keep your muscles in shape.
- ✓ Take the stairs instead of the elevator, at least for a floor or two.
- ✓ Park away from the entrance to the store, theater or mall, so you have to walk.
- ✓ Use ankle and wrist weights when you clean house, do yard work or when walking.

There is a great online article on staying fit that I suggest you print and try to do called *Putting a Priority on Health and Medical Preparedness* @ <http://www.backdoorsurvival.com/health-and-medical-preparedness/> as well as an open letter called *An Open Letter to Preppers and their Families and Friends* @ <http://dl.dropboxusercontent.com/u/33663466/Medical%20Preparedness%20An%20Open%20Letter%20to%20Preppers%20and%20their%20Families%20and%20Friends.pdf>. Of course there are all kinds of ‘get fit’ books and web sites out there too. Whatever method you choose, it will be worth it.

Besides physical fitness, we Preppers need to step things up a bit when comes to living a healthy life and utilizing health wise practices. This will include common sense house and yard practices as well as keeping our immunizations current. Such as:

- *Keep your hands clean!* Washing your hands regularly is the most powerful thing you can do to prevent infection. Make sure you always remember to wash after going to the bathroom, before you eat, or after taking out the trash. Since it can sometimes be hard to get to a sink, keep an alcohol-based hand sanitizer in your car or bag. If you don’t wash your hands often, you pick up germs from other sources and infect yourself when you touch your eyes, nose, or mouth. You can also spread germs to others, or to surfaces that others touch.
 - Proper hand washing technique: Wet hands first with warm water. Apply soap and rub hands together for 20 seconds. Make sure you clean between fingers and under fingernails. Rinse hands well with warm water and dry.
 - Before, during, and after you prepare food.
 - Before you eat and after you use the bathroom.
 - After handling animals or animal waste.
 - When your hands are dirty.
 - Wash more often when someone in your home is sick.
- *Cover your mouth and nose if you cough or sneeze.* Use your elbow instead of your hand. Use a tissue or even the bend in your elbow to prevent spreading germs to others. Make sure to wash your hands afterwards.
- *Take care of cuts, scratches and wounds.* Your skin is your armor against harmful bacteria. Keep all cuts, scratches and wounds clean and protected with a clean, dry bandage. Use an antibiotic ointment, such as Neosporin. Don't "let it breathe" unless your doctor directs you differently. If cuts are not healing, see a doctor. Diaper rash ointment that contains zinc, like Blamex, is also helpful but not as good as a straight antibiotic ointment.
- *Keep your skin healthy.* If it starts getting dry or cracking, apply moisturizing cream to keep skin soft.

- *If you are sick*, avoid close contact with others. When you are sick, you should stay home from work or school, and avoid public transportation and other places where there are crowds. Also, don't shake hands or touch others. By doing these things other people won't get sick, and you'll get better faster.
- *Practice good hygiene at the gym*. Make sure to always clean weights, exercise mats and aerobic equipment with antibacterial wipes before and after you use them. Wear flip flops in the shower and steam room to prevent athlete's foot or other infections. Shower after you work out and make sure you always use a clean towel to dry yourself.
- *Keep exercise equipment clean*. If you or someone in your family plays ice hockey, football or any other sport that requires personal protective equipment, be sure that they wipe down this equipment with antibacterial wipes after every use. It's important not to share personal equipment.
- *Clean and Disinfect!* Using household disinfectants, such as a one part bleach, 10 parts water solution, kills additional germs on surfaces and provides extra protection. Kitchens and bathrooms are the most likely breeding grounds for bacteria.
 - Kitchen: Bacteria live on raw or undercooked food.
 - Clean and disinfect counters and other surfaces before, during, and after food preparation, especially when preparing meat and poultry.
 - Follow directions on product labels. Some products need to sit on the surface for a few minutes before wiping off.
 - Wipe surfaces with paper towels or cloths that can be washed after use.
 - Bathroom: Routine cleaning and disinfecting reduces odours and may help prevent the spread of germs. This is important if someone in the house has diarrhea or an infectious illness.
- *Handle Food Safely*. Most food-borne illness is caused by bacteria. Food contaminated by bacteria may look, smell, and taste normal even when it's not safe.
 - Grocery Shopping:
 - Avoid cross contamination by separating raw meat, poultry, fish, and seafood from other foods in your grocery cart to keep harmful bacteria from spreading to ready-to-eat food.
 - Buy refrigerator and frozen food last when shopping. If you have to run errands, buy groceries last, and refrigerate or freeze food promptly to make sure they're kept at the right temperature.
 - Check food for expiry and best before dates, and make sure to buy pasteurized dairy products only.
 - If using reusable grocery bags or bins, pack raw meat, poultry, and fish separate from other food items purchased. If raw juices have leaked into the bag or bin, make sure to wash them thoroughly before using them again.
 - Refrigeration:
 - Put meat, seafood, poultry, and eggs on the bottom shelf of the refrigerator.
 - Don't allow juices from perishable foods to drip on other foods.
 - Use tightly sealed containers to prevent cross-contamination.
 - Don't leave foods that can spoil out of the refrigerator for more than two hours.
 - Preparing Food:
 - Wash hands and disinfect surfaces before, during, and after handling, cooking, and serving food.
 - Wash raw fruits and vegetables.
 - Defrost food on a plate in the refrigerator, or in a microwave, but not on the counter.
 - Cook food immediately after defrosting.
 - Use different dishes and utensils for raw foods than you use for cooked foods.
 - Cooking Food:
 - Assume that all raw foods of animal origin are contaminated with harmful bacteria. High temperatures kill bacteria that cause food-borne illness. Cooking temperatures vary for meats, poultry, fish and seafood.
 - Don't rely on the colour to measure if food is thoroughly cooked. It's recommended that a clean probe thermometer be used to verify internal food temperatures. Insert the probe thermometer in the thickest part of the food and wait at least 15 seconds for the reading to steady to check the internal food temperature.

- Whole poultry (turkeys) to 82°C or 180°F.
 - Young children, the elderly, pregnant women and people with weak immune systems should avoid eating undercooked eggs (over easy), since they are at a high risk of food borne illness. Cook eggs thoroughly to at least 74°C (165°F).
- Storing Leftovers:
 - Throw away cooked food that has been at room temperature longer than two hours.
 - Place leftovers in a clean food-grade container, or in a leak-proof plastic bag.
 - Refrigerate food at a temperature of 4°C (40°F) or lower or freeze at -18°C (0°F) or lower.
 - Eat refrigerated leftovers within two to three days or freeze them for later.
 - Clean and sanitize the refrigerators and freezers regularly.
- **Get Immunized!** Now understand that I personally have some doubts about the need and effectiveness of some immunizations. Follow your gut on this one and get what you feel is appropriate to your needs and preparedness plan.
 - Keep a record of immunizations for the whole family (the who, what, when, where).
 - Ask your healthcare provider about programs that provide free shots for at-risk groups.
 - Adults need a tetanus/diphtheria booster every 10 years and a one-time Tdap pertussis booster. This was one of the biggest killers in colonial times (before antibiotics).
 - Find out about additional shots that are needed when travelling to other countries.
 - Vaccinations and Travel Outside the U.S. @ http://www.pharmacy.ca.gov/publications/vaccinations_and_travel.pdf
 - Resources
 - Recommended Immunizations for Children (Birth through 6 years) @ <http://www.cdc.gov/vaccines/parents/downloads/parent-ver-sch-0-6yrs.pdf>
 - Recommended Immunizations for Preteens and Teens (7-18 years) @ <http://www.cdc.gov/vaccines/who/teens/downloads/parent-version-schedule-7-18yrs.pdf>
 - Recommended Immunization Schedule for Age 0-18 @ <http://www.cdc.gov/vaccines/schedules/downloads/child/0-18yrs-trifold-schedule.pdf>
 - Recommended Immunization for Adults (those 19 years and older) @ (color) <http://www.cdc.gov/vaccines/schedules/downloads/adult/adult-schedule-easy-read.pdf> or <http://www.cdc.gov/vaccines/schedules/downloads/adult/adult-schedule-easy-read-bw.pdf>
 - Update on the National Vaccine Advisory Committee Standards for Adult Immunization Practice @ <http://www.hhs.gov/nvpo/nvac/reports/nvacstandards.pdf>
- **Don't over-use antibiotics!**
 - Antibiotics don't kill viruses like colds and the flu. They only kill bacteria that cause illnesses like strep throat.
 - If you take an antibiotic improperly, or when you don't need it, you increase the chance of developing drug resistant bacteria. Antibiotics can't fight drug-resistant bacteria. As a result, many diseases that once responded well to antibiotics are now becoming almost impossible to treat.
 - Complete all doses of the antibiotic even if you feel better
 - Don't share with others or use someone else's medication.
- **Keep Pets Healthy.** Pets can pass bacteria to people through their feces and parasites.
 - Keep your pet under a veterinarian's care and make sure your pet gets scheduled shots and treatment for worms.
 - Give your pet a balanced diet and don't allow it to eat raw food or drink out of the toilet.
 - Clean your pet's living area at least once a week. Place feces in a plastic bag and put it in the trash.
 - Don't let children play where pets go to the bathroom.
 - To prevent infectious diseases that may cause birth defects, pregnant women shouldn't change cat litter boxes.
 - Cover sandboxes when not in use.
 - Everyone should wash hands with soap and warm water after digging in the dirt, or petting or cleaning up after an animal, especially reptiles.

- *Stay Away From Wild Animals!* Wild and stray animals can carry diseases that are harmful to you and your pets. Wild animals are attracted to your surroundings when you leave food and garbage around your home.
 - Keep your yard clean and free of nesting sites. Seal cracks and holes on the inside and outside of your home to keep wild animals away.
 - Rodent feces can transmit Hantavirus.
 - Ticks can live on animals and can transmit Rocky Mountain Spotted Fever and Lyme disease to humans.
 - Mammals such as raccoons, skunks, bats, and foxes can transmit rabies.
- *Keep the Home Dry.* By maintaining the roof, gutters, drainage, and interior sources of moisture, most homes can be kept dry.
 - Excess moisture in homes creates conditions that can affect health including an increase of asthma symptoms and upper respiratory tract infections.
 - Moisture in the home comes from inside sources (cooking, bathing, breathing, and washing) and outside sources (rain, groundwater, plumbing leaks, damp crawlspaces).
 - Excess moisture in the home should be prevented through good construction and plumbing systems, temperature control, ventilation and home maintenance.
 - Excess moisture and leaks in the home may lead to mold growth, pest infestations, and poor indoor air quality.
 - Make sure windows and siding stay in good repair and are covered with intact paint.
 - Keep gutters and downspouts clear and intact and make sure that rainwater drains away from the structure at the foundation.
 - Most plumbing leaks occur at fixtures.
 - Seals at toilets, P-traps under sinks, and shower surrounds and pans need to be inspected and maintained to prevent leakage.
 - Cooking and bathing generate moisture and require adequate ventilation to prevent excess moisture from building up. All exhaust fans in kitchens and bathrooms and clothes dryers should be vented to the exterior of the building, not in an attic or crawl space.
 - EPA A Brief Guide to Mold, Moisture, and Your Home @ [http://www.achhd.org/documents/EPA A brief Guide to Mold and Moisture.pdf](http://www.achhd.org/documents/EPA_A_brief_Guide_to_Mold_and_Moisture.pdf)
- *Keep the Home Clean.* Through regular cleaning, reducing dust brought into the home, and eliminating clutter, homes can be kept clean.
 - Pesticides, allergens, and general chemicals in the home can cause allergic reactions, asthma and asthma exacerbation, and toxic exposure effects.
 - Potential sources of allergens and contaminants in the home come from outdoor and indoor sources.
 - Keeping a home clean includes controlling the source of dirt and other contaminants, creating smooth and cleanable surfaces, reducing clutter, and using effective cleaning methods.
- *Keep the Home Pest-Free.* By sealing entry holes, eliminating water sources, and keeping food in sealed containers, most pests can be eliminated.
 - Pests can create allergens and be vectors of disease.
 - Control of pests through pesticides can lead to poisonings and other neurological problems.
 - Some pesticides found in homes have been banned. Use materials that are less toxic to humans such as diatomaceous earth and boric acid to kill drive away insect pests.
 - Integrated Pest Management is the recommended strategy.
 - There are materials which are toxic to pests and not very toxic to humans.
 - The house should be made less hospitable for pests by preventing entry into the home by sealing holes, denying pests food, water, and places for shelter.
 - For more information, call your local pest vector control agency.
- *Keep the Home Ventilated.* Homes can be kept well ventilated by using exhaust fans in kitchens and bathrooms and opening windows.
 - Ventilation plays an important role in maintaining health.
 - Ventilation is necessary to add heat, remove heat, add or remove humidity, and dilute or remove contaminants.

- Local exhaust ventilation (like kitchen and bathroom fans) removes contaminants from a point source, while whole house ventilation (by opening windows) uses fresh air to dilute contaminants.
- **Keep the Home Safe.**
 - Maintain the home safety equipment such as smoke and carbon monoxide detectors.
 - Place smoke detectors in hallways, bedrooms and living rooms and change the batteries at least yearly; a good time to do this is when the change to Daylight Savings Time occurs.
 - An injury is NOT the same as an accident. Most injuries are preventable. There are many simple and inexpensive ways to prevent home injuries.
 - Children and older adults are more at risk for injuries in the home.
 - Falls, poisoning, and fires or burns are the most common causes of injuries and deaths.
 - Keep clutter to a minimum to avoid tripping hazards in your home.
 - Outdoor porches, stairs and decks should be inspected regularly to ensure that they are structurally sound.
 - If a structural hazard is suspected, do not use the component until repairs are made.
 - Outdated and overloaded systems and makeshift modifications are the most common causes of electrical hazards.
 - Outlets near water sources or outdoors should have Ground Fault Circuit Interrupter (GFCI) protection.
 - Overloaded circuits and faulty fixtures can overheat and cause fires. Bare wires can be an electrocution hazard.
 - Keep flammable materials in a cool, well-ventilated space.
 - Buy a fire extinguisher and mount it on the wall of the kitchen and read the directions so you'll know how to use it.
 - In case of fire, leave the building and call 911.
 - If you can, retrofit your home for any natural hazard common in your area (earthquake, flood, tornado, hurricane, etc).
 - If in a wildfire area, utilize the FireWise fire free zones and landscaping techniques to minimize your danger and damage.
 - The basics of defensible space and the "home ignition zone" @ <http://firewise.org/wildfire-preparedness/be-firewise/home-and-landscape/defensible-space.aspx?sso=0>
 - Firewise Landscape/Construction Guide @ <http://www.firewise.org/~media/Firewise/Files/Pdfs/Guides/landscaping.pdf>
 - How to have a Firewise home @ <http://www.firewise.org/~media/Firewise/Files/Pdfs/Booklets%20and%20Brochures/HaveAFirewiseHome.pdf>
 - Preparing a Home for Wildfire Season @ <http://firewise.org/wildfire-preparedness/teaching-tools/interactive-modules-and-quizzes/preparing-a-home.aspx>
- **Keep the Home Contaminant-Free.** Homes can be kept contaminant free by using safe household products and keeping painted surfaces in good condition. It is easier to prevent exposure to contaminants than it is to remove them and treat their effects.
 - Should contamination occur: control, contain, and clean-up.
 - Contaminants are not always detectable by our senses (think Radon).
 - Older homes (built before 1978) may have lead in the paint. Keep all painted surfaces in good condition.
 - For more information, call your local lead poisoning prevention program
 - Keep all materials that are toxic (cleaners, paints, solvents, and medicines) out of the reach of children and in locked cabinets.
 - Never mix cleaners together.
 - To dispose of household chemicals, contact your local waste management company. Keep the Home Maintained
- **Internal and external home systems should be inspected regularly** to ensure they are functioning properly. Some maintenance activities require the use of trained professionals.
- **Dental/Oral Hygiene**
 - Brush your teeth twice a day

- Replace your toothbrush every three or four months, or sooner if the bristles are frayed. It is a good idea to change the toothbrush after you have gotten over a cold or flu, since the bristles can collect germs that can lead to reinfection.
- Clean between teeth daily with floss or an interdental cleaner.
- Eat a balanced diet, and limit soft drinks and between-meal snacks.
- Visit your dentist regularly for professional cleanings and oral exams.
 - (I personally am not sold on the following.)
 - Using dental products that contain fluoride, including toothpaste
 - Rinsing with a fluoride mouth rinse if your dentist tells you to
 - Making sure that your children under 12 drink fluoridated water or take a fluoride supplement if they live in a non-fluoridated area.
- **Physical Fitness & Health**
 - *Children and adolescents (6 to 17 years of age)* should do 60 minutes (1 hour) or more of physical activity each day. Include: Aerobic, Muscle Strengthening and Bone Strengthening activities.
 - *Adults (18 to 64 years of age)* need at least: 2 hours and 30 minutes (150 minutes) of moderate-intensity aerobic activity (i.e., brisk walking) every week; muscle-strengthening activities on 2 or more days a week that work all major muscle groups (legs, hips, back, abdomen, chest, shoulders, and arms). OR 1 hour and 15 minutes (75 minutes) of vigorous-intensity aerobic activity (i.e., jogging or running) every week; muscle-strengthening activities on 2 or more days a week that work all major muscle groups (legs, hips, back, abdomen, chest, shoulders, and arms). OR An equivalent mix of moderate- and vigorous-intensity aerobic activity; muscle-strengthening activities on 2 or more days a week that work all major muscle groups (legs, hips, back, abdomen, chest, shoulders, and arms). 150 minutes each week sounds like a lot of time, but it's not. That's 2 hours and 30 minutes. You can spread your activity out during the week, about 10-15 minutes at a time. Of course exercising more, reaps greater rewards and fitness.
 - *Older Adults (65 years of age or older)* need at least: 2 hours and 30 minutes (150 minutes) of moderate-intensity aerobic activity (i.e., brisk walking) every week; muscle-strengthening activities on 2 or more days a week that work all major muscle groups (legs, hips, back, abdomen, chest, shoulders, and arms). OR 1 hour and 15 minutes (75 minutes) of vigorous-intensity aerobic activity (i.e., jogging or running) every week; muscle-strengthening activities on 2 or more days a week that work all major muscle groups (legs, hips, back, abdomen, chest, shoulders, and arms). OR An equivalent mix of moderate- and vigorous-intensity aerobic activity; muscle-strengthening activities on 2 or more days a week that work all major muscle groups (legs, hips, back, abdomen, chest, shoulders, and arms). Do about 10 minutes at a time. Again, the more time invested, the more fit you become.
 - The 4 Core Exercise Groups
 - Cardiovascular Fitness & Endurance – Cardiovascular fitness (also known as cardiorespiratory fitness) is the ability of the heart, lungs and vascular system to deliver oxygen-rich blood to working muscles during sustained physical activity. (example: a cross-country runner or marathon runner) Cardiovascular Endurance can be measured by a stress test on a treadmill or stationary bike.
 - Muscular Endurance – Muscular strength is the amount of force a muscle or muscle group can exert against a heavy resistance; Using muscles repetitively without fatiguing (example: long-distance cycling or using a rowing machine) Muscular Endurance can be measured by a 60 second push-up test.
 - Muscular Strength – Muscular endurance is the ability of a muscle or muscle group to repeat a movement many times or to hold a particular position for an extended period of time; Produces force using muscles (example: performing a bench press or pull-up) Muscular Strength can be measured by performing a 1 rep max test on the bench press.
 - Flexibility – Flexibility is the ability of a joint to move through its full range of motion, from a flexed to an extended position; Moving joints through a wide range of motion (example: a gymnast doing a leg split) Flexibility can be measured by a sit-and-reach test.
 - Additional Exercise Groups
 - Agility – The ability to stop, start, and change directions quickly (example: a football player cutting across the field or a gymnast doing a floor routine)

- Balance – Controlling body positions while standing still or moving (example: a gymnast on a balance beam or a one leg deadlift)
- Body Composition – The ratio of muscle to fat in the body. Body Composition can be measured by skinfold calipers, bioelectric impedance, and hydrostatic weighing.
- Coordination – Making movements work together smoothly (example: performing a squat on a BOSU while doing a shoulder press)
- Power – The ability to use muscle strength quickly (example: plyometric or jumping exercises)
- Reaction Time – How quickly an individual responds to a stimulus (example: playing tennis/table tennis or a baseball player swinging at a pitch)
- Speed – Performing a movement of covering a distance in a short period of time (example: sprinting or speed skating) Speed can be measured by timing a 40 yard dash.

For the basics see the CDC's Physical Activity Guidelines @

<http://www.cdc.gov/physicalactivity/everyone/guidelines/>

- *How to care for a family member infected with MRSA/VRE or some other infectious ailment at home:*
 - Handwashing: Wash hands with soap and water before and after direct contact with the person with MRSA/VRE, and before leaving home.
 - Glove Use: Use gloves when providing care if body fluid contact is expected. ALWAYS WASH HANDS AFTER REMOVING GLOVES.
 - Linen: Linen such as towels should be used only once and placed with the laundry and washed on a routine basis.
 - Cleaning: The patient's environment (furniture, floors, bathrooms, etc.) should be cleaned routinely and when soiled with body fluids. Normal household cleaning products can be used.
 - Patient-Family Information on MRSA-VRE Infection Care @ <http://www.mountauburnhospital.org/workfiles/Quality%20and%20Safety/Pt%20Family%20Info%20Handout%20One%20Page.pdf>



Most of these 'prevention tips' are nothing but common sense and as Preppers we should be the kings and queens of common sense. The healthier and more fit we are, the healthier and more fit we will be in a SHTF world. **Don't underestimate a preventive approach to our existing lives in your preparedness plans.**



For those of us that are members of a preparedness group or large extended household, making sure that at least two people in your group have EMT, First Aid and CPR skills is a big plus. If one of these individuals is a former military medic, or current paramedic or EMT, you are ahead of the game.

Keep in mind that unless you are a physician and have a small 'field lab' for you to perform the various cultures and blood tests, you will *still be lacking vital information* to effectively and safely treat a number of common and of course the uncommon ailments that may strike your group or household.



This brings up the issue of **Medication Stockpiles**.

Like just about everything in life, including medications (both over the counter and prescription) have a shelf life or where medication is concerned stability life. And as with food, *the storage environment is critical to the longevity of the product*. For medications we need:

- a cool, even temperature (no more than a 10 degree change in a 20 hour period) between 45 & 70 degrees
- it needs to be dry
- should be low light (sunlight is very destructive to just anything you are storing)
- the area should be as insect and rodent proof/free as possible.

When electricity is not available, you can keep things cool by utilizing two storage vessels:

- The inner vessel should be porous, preferably terra cotta or unsealed ceramic.
- Place the smaller vessel inside the larger one
- Fill the space in between the two with sand or absorbent soil.
- Wet the soil.
- Place what you want to keep cool inside the smaller vessel.
- Cover/seal the inner vessel and then the outer one.
- Store the vessels in as shaded and cool place as you can find, like a root cellar.

This will work for food items as well as medications. To keep things cool, add water as needed to keep the insulating soil layer moist.

You will see Expire and Use By dates on most medical supplies. Again, as with food items, these dates don't exactly mean what we think they mean. And like most food items, how the item is manufactured, packaged, transported and stored plays a major role in how safe, stable and viable the medication still is.

Think of drug stability in terms of changing the oil in your car. The manufacturer of your car may recommend that you change the oil every 7,500 miles. But if you drive past 7,500 miles (the expiration date on the oil), and get to 7,501, it's not like the engine is going to fall out. Drugs are something like that. They're probably good for quite a while after the expiration date, but the longer you go, the better the chance that the drug, at minimum, has lost some potency.

The stability of drugs is something that has been studied a bit. In 1986, an inter-agency agreement was established between the US Department of Defense and the FDA, to address stockpiles of drugs that had been accumulated by the US military. Drugs cost the military a lot of money and no matter what you think about government expenditures, it would be a big waste to throw them all away. Anyway, the program is called SLEP (shelf-life extension program). The SLEP has studied the safety and efficacy of drugs past their labeled expiration dates, and they've found that 88 percent of 122 stockpiled drug products (stored in their unopened containers) could be extended by an average of 5 1/2 years.

In another study, on a drug called theophylline (used for treatment of people with respiratory problems) found that it had 90% of its potency 30 years past its expiration date. Finally, in 2012, a laboratory analysis of eight prescription drugs that expired between 28 and 40 years ago found that most have remained just as potent as they were on the day they were made.

Stability is a bit more of a concern for **liquid drugs** – they aren't as stable as solid dosage forms. Even so, one report looked at 4 outdated samples of atropine, a drug used to dilate the eye. One of the samples was from a World-War II era injector, but all of the samples were found to contain significant amounts of the drug.

Common sense will help here. **Drugs in solution** – the ones that usually get injected – that have become cloudy or discolored or have little things floating around in them (it's called precipitation) shouldn't be used. If you let your pastes, gels and creams get hot and they turn to liquid, probably best to get some more.

What about the stability of Herbal medicines?

Not much is really known about the stability of herbal products. Natural medicines often suffer physical instability due to things such as the presence of impurities, reactions with the container, or growth of microorganisms on the material. Furthermore, some of the products are volatile, which means that their potency decreases with storage. For example, according to detailed descriptions from historical texts, the potency of products such as foxglove (*digitalis*) deteriorated after a number of months even when the preparations were kept hermetically sealed. In addition, there are the ever present 'genetic variability' of the plant itself that can create all sorts of variability in the product. Light, enzymatic reactions, chemical reactions, temperature and moisture also degrade plants.

And as with all items, environmental conditions, manufacturing and shipping processes, as well as storage environment can degrade different products at different rates.

Expiration Date

Drug safety in the United States is the responsibility of the Food and Drug Administration (FDA). A law passed in 1979 required drug manufacturers to stamp expiration dates on the bottles of products that they sell (<http://www.fda.gov/ICECI/Inspections/InspectionGuides/InspectionTechnicalGuides/ucm072919.htm>).

The expiration date does not imply that just after the stated date, the drug is no longer viable, chemically stable or dangerous to use. *The expiration date is the date that the manufacturer guarantees full potency and safety of the drug when it is stored in the original sealed container under proper conditions.* The manufacturer is permitted to determine from stability testing what expiration date to label a drug product. Most commonly, expiration dates are 1 to 5 years past manufacture.

In an article in *Infectious Diseases in Children*, January 2014 by Edward A. Bell, PharmD, BCPS called "Advice for when parents ask about expired medicine" (<http://www.healio.com/pediatrics/news/print/infectious-diseases-in->

[children/%7B69985386-34a3-412f-ae02-9c2830c4b6ca%7D/advice-for-when-parents-ask-about-expired-medicine](https://www.fda.gov/oc/ohrt/children/%7B69985386-34a3-412f-ae02-9c2830c4b6ca%7D/advice-for-when-parents-ask-about-expired-medicine)) has some of the most accurate and in my book scientific, information on Expiration Dates on Medications. Consider the following from the article:

"... There are many data that demonstrate the potency of specific drug products beyond labeled expiration dates. When stored under ambient temperatures, four drug products (theophylline and captopril tablets, flucloxacillin capsules, cefoxitin injection) were found to have near full potency (>95%) for up to 14 years beyond the labeled expiration dates in one study. In another interesting report, eight drug products, containing 15 different specific drug compounds, were found in a retail pharmacy in their original, sealed containers. These products included Fiorinal with codeine (Watson Pharma) and Hycomine (hydrocodone, homatropine, chlorpheniramine, acetaminophen, caffeine; Endo Pharmaceuticals), among others. The products' labeled expiration dates were 28 to 40 years prior. Upon chemical analysis for potency, the researchers found that 12 of 14 of the drug compounds tested retained more than 90% of the labeled concentration. Two drug compounds — aspirin and amphetamine — analyzed in several of these products were found to be present in amounts much less than 90%, and three drug compounds were found to be present in amounts more than 110%. Pharmaceutical standards enforced by the FDA allow 90% to 110% of labeled drug amount to be contained in most drug products, with consideration of reasonable variability. ..."

"... The greatest amount of data describing evaluation of drug product use beyond original labeled expiration dating comes from the federal government and the Department of Defense. Established in 1986, the shelf-life extension program (SLEP) is a joint program of the DOD and the FDA that has sought to evaluate increasing drug product expiration dating for large drug stockpiles (drug products stored in original, sealed containers and proper storage conditions) maintained by the federal government for military and emergency use (eg, bioterrorism). Since its inception, the federal government has saved significant replacement funds by extending expiration dates of many stockpiled drug products. Through coordinated chemical testing with the FDA, many of the drug products were found to be potent beyond their original expiration date and were permitted to have extended expiration dating.

In a published report describing this program, data from an analysis of more than 3,000 lots of 122 drug products have indicated that 88% of these lots had expiration dates extended for longer than 12 months, with an average extension of 66 months. Examples of specific drug products that were given extended expiration dates include amoxicillin, ciprofloxacin, doxycycline, diphenhydramine and acetaminophen. Not all drug products tested, however, were given extended expiration dates, demonstrating variability in drug product stability and potency. Testing data obtained through the SLEP program allowed the FDA to authorize the use of certain lots of oseltamivir for oral suspension (Tamiflu, Genentech) beyond the labeled expiration date during the H1N1 influenza epidemic in 2009.

The use of tetracycline past its labeled expiration, and its potential for toxicity, may come to mind when health care professionals are asked about using expired drug products. This toxicity, described as Fanconi syndrome (renal tubule toxicity), was first described in 1963. However, it is reported that the formulation of tetracycline evaluated in this report is no longer available. Moreover, there are no reports of human toxicity from the use of a drug product after its labeled expiration date. ..."

The article went on to discuss the practical considerations for answering parents' questions about using expired medicine:

"... The data described above indicate that many drug products may retain their potency and stability for long past the labeled expiration date. However, these data come largely from analysis of drug products stored under good conditions and in original sealed containers. Our patients and families do not likely store most medicines in the original, unopened containers, and in good conditions. Storing drug products in a bathroom (with its high humidity) and quite possibly with the vial top off or only loosely placed, certainly cannot be considered good conditions. Humidity, temperature and light all can affect drug product stability and potency. Storing drug products in an underwear drawer is likely a more appropriate storage place than a bathroom.

There are several drug product characteristics that can be considered by a parent, to indicate that a product should probably not be used. These include tablet crumbling, strong odor or unusual discoloration. Liquids can be inspected for unusual discoloration, in addition to precipitate formation, cloudiness or presence of filming in the bottle. Creams and ointments can be inspected for hardening or cracking. The absence of these characteristics does not, however, imply full drug product potency.

The intended therapeutic use of a drug product is additionally an important consideration. Products such as insulin, nitroglycerin for adults or epinephrine auto injectors for allergic anaphylaxis should not be used beyond labeled expiration dates. For other products, such as acetaminophen for fever, use of a product beyond the labeled expiration date may be a consideration if it is not feasible to immediately obtain additional product. Ophthalmic products (eg, drops, ointments) have been discussed in the literature for consideration of not only active drug potency, but also additionally for potency of the product's antimicrobial preservatives.

Thus, our patients and families can be told to store their medicines properly — in the original container or vial, tightly sealed, and in a cool, dry place (eg, the underwear drawer, not the bathroom). Drug products with the intended use of immediately decreasing mortality should have the expiration date frequently inspected, and replaced as necessary. The occasional use of other drug products passed the labeled expiration date may be acceptable. ..."

Use By Date:

When a drug product is dispensed from a pharmacy, the vial or bottle label *specific for the patient will commonly list an expiration date of 1 year from the date of dispensing*, even if the original drug product bottle is stamped with an expiration date of more than 1 year. This 1-year date is referred to as the beyond-use date. A 1-year date is used even if the original drug product container has a longer expiration date because the storage conditions (ie, temperature, humidity, light) under which the patient will store the medicine cannot be guaranteed to be appropriate. For example, patients commonly store medicines in the medicine cabinet, which is located in a bathroom — a room with higher humidity and temperature. (Hence, the bathroom is just about the WORST place to store medications.)

RX Expiration & Use By Dates bottom line:

The date does *not* necessarily mean that the drug is unstable or ineffective after the expiration date; it just means that the product will, for sure, be stable and viable *until* the expiration date – provided it was transported and stored properly. Most drug products have an expiration date that's 1 – 5 years from the date of production. That said, *once you open the product up, all bets are off* - the expiration date no longer applies and a 1 year Use By date is applied.

For a report by NASA on Drug stability in Spaceflight see Consequences of Medication Shelf Life for Spaceflight (expiration dates) by NASA Mar 27 2012 @ <http://dsls.usraEDU-032012.pdf>

Medication Expiration Dates Cheat Consumers: The Lawsuit, October 30, 2012 @

<http://news.health.com/2012/10/30/prescription-drug-expiration-dates-cheat-consumers-lawsuit/>

DoD Shelf-Life Management Manual May 5 2003 DoD 4140.27-M DLA J-373 @ https://www.shelflife.hq.dla.mil/Policy_4140_27/DoD_4140_27-M-PUBLIC.doc

Dr. Jane Sadler: Time for fresh thinking on drug expiration dates 2012 @ <http://www.dallasnews.com/lifestyles/health-and-fitness/health/20121210-dr.-jane-sadler-time-for-fresh-thinking-on-drug-expiration-dates.ece>

The DoD Shelf Life Extension Program (SLEP) Program sidebar:

Basic facts found by NASA @ <http://dsls.usraEDU-032012.pdf> quicknotes: The DOD SLEP study

For purposes of national defense and preparation for epidemics or natural disasters, the US government has medication stockpiles.

By 1981 the DOD had more than \$1 billion of supplies had been stockpiled. And estimated that more than \$100 million would have to be spent yearly on replacements. The Air Force Surgeon General's office asked the FDA if it could possibly extend the shelf life of these drugs. The DOD SLEP study protocol Medications are stored unopened. Each year, bottles are pulled for testing by the FDA. FDA examines data (rate of degradation, impurities content) and decides if shelf life can safely be extended another year.

These steps repeat annually.

What's been learned from SLEP

Examined 3005 different lots of 122 medications

88% of lots were extended at least one year (average extension ~ 5 years)

Acetaminophen psuedoephedrine capsules– mean 24 month extension

Atropine pralidoxime– mean 31 month extension

Atropine sulfate injection solution– mean 101 month extension; some lot variability

Atropine sulfate autoinjector -mean 57 month extension; SOME LOTS FAIL Lyon et al., J Pharm Sci 95, 7, 2006

Stability depends on dosage form, manufacturer, formulation details or manufacturing plant.

Even lot to lot variability is high - some lots fail and others pass.

SLEP only includes a handful of medications of interest to NASA, mostly in dosage forms different from what NASA uses. Lyon et al., J Pharm Sci 95, 7, 2006

What NASA has learned

HRP Pilot - 33 medications over ~2.5 years

Sample size too small to draw conclusions, but in general, medications failed content analysis around the time of their expiration dates ISS environmental conditions were unremarkable - radiation exposure was about 100 mGy; temperature and humidity were within normal ranges Du et al., AAPS J, 13,2, 2011

SLEP Quick Fact Sheet @ <http://www.astho.org/Programs/Preparedness/Public-Health-Emergency-Law/Emergency-Use-Authorization-Toolkit/Federal-Shelf-Life-Extension-Program-Fact-Sheet/>

Extending the Shelf Life of Critical Chemical, Biological, Nuclear and Radiological (CBRN) Medical Material Using the FDA/DoD Shelf Life Extension Program @ https://www.shelflife.hq.dla.mil/fda_slep.aspx



Building Personal Medication Stores

The trick with any consumable in your preparedness stores is **to be sure you do *not* acquire the full amount you want on hand - all at the same time.** This is because just about everything has a shelf-life, so if you get all your medications at the same time, they will expire and become ineffective at the same time. We want to spread this out a bit to cover a longer timeframe.

It pays here to purchase items at intervals, in small quantities, to achieve the desired amount. So instead of purchasing that 500 count bottle of Ibuprofen at the warehouse store, purchase one or two of the smaller 20-50 count bottles every other week or so.

This will pay off in another way, in that you will have a smaller amount of the medication exposed to the outside world at any given time – meaning less chance of contamination.

The second trick is to be sure to **rotate the medications** so that you are always storing the most viable amount.

So in your non-SHTF life when you need Ibuprofen, open the oldest bottle in your preparedness stores for your everyday use and then add another bottle to your shopping list to replace it in your preparedness stores.

The next trick is of course your **storage environment** and in some ways this is even more important for medications than it is for food. This is so important and essential that I will repeat myself here:

- Cool even temperature (between 45-70 degrees, with no more than a 10 degree change in any 20 hours)
- Low light, as sunlight degrades just about everything.
- Low humidity and moisture
- As insect and rodent free/proof as possible

Most vitamins, food supplements, medications and antibiotics can be preserved by refrigeration, as long as they are kept dry and in an air tight container. Don't freeze them, though! That can permanently alter their chemical composition and they might not work anymore.

If possible it is best to keep the item in its original unopened container. (Another reason to acquire these in smaller quantities.)

If traveling through extreme temperatures, these medications, especially antibiotics, should be encased in Styrofoam containers, at best and efforts should be made to avoid heat or freezing cold.

The third trick is to **determine what you may need**. This sounds easy but I can assure you it is not.

- Consider what you have on hand in your home at any given time. You will want these items for sure.
- Consider what you have purchased in the last 5 years for those pesky 'once in a while' things.
- I highly recommend an 'expedition' type medical kit. You can find really good ones at very reasonable prices at campmor.com. These are things like a military medic kit. They are beyond a first aid kit in that they usually have sutures, splints, compresses and the like. (check out First Aid Kits-Lightweight & Basic Comprehensive Care by REI @ http://formerlynmurbanhomesteader.weebly.com/uploads/2/2/5/0/22509786/first_aid_kits- lightweight_rei_basic-comprehensive_care_new_site.pdf)
- Make a list of all prescription drugs used in the last 5 years and how often they were used. If you find you are utilizing some every few years or so, be sure to have that in your preparedness stores. If you use a prescription on a daily basis, well this is a given that you need this in your stores.
- Dental First Aid – get a dental first aid kit that contains emergency temporary fillings and caps or crowns. You may also want to get an Emergency Dental Treatment kit which will contain the tools needed for cleaning a cavity and pulling a tooth as well as a topical numbing agent. Again, campmor.com is a good place to find these.



Last but not least is **how to acquire medications that are not sold over the counter**, ie prescriptions.

Most prescriptions are sold in 30-90 day supplies with a limited amount of refills before you need to see your physician again.

Some HMO's will only allow a 30 day prescription before a new scrip is needed. To get around this you may have to purchase some at your own expense instead of utilizing the discounted HMO co-pay.

Talk to your physician. Tell him you are going to be traveling extensively (for your job or retirement, etc) and would like either a 90 day scrip; an extra 'emergency' scrip or some kind of script that can be filled any time in the next year. Als, tell him you want to avoid the usual 'travel diarrhea' and you want something like Tamiflu and Z-Packs for any potential viral infection you might acquire while traveling abroad.

Then be sure you travel to another state and fill the *script without using your insurance*. If the pharmacist asks for your insurance, just tell them that you have coverage where you pay up front and then send in the receipt for reimbursement and would like a second receipt so you have one for your records.

Not using your insurance and filling a script out of town or out of state, will throw off the federal digital tracking of your prescription. If you utilize the same chain pharmacy each time, your prescription will still be digitally tracked by the corporate pharmacy, even if you don't use your insurance. So when paying out of pocket, stay away from the chain pharmacies and utilize a smaller local one in the town or state you have traveled to.

Things are a bit sticky when purchasing prescription medications *without a prescription*. There are currently four ways to purchase medications without first obtaining a prescription:

- Drive to Mexico or (for some meds) Canada
- Buy them online (www.SurvivingHealthy.com is a great website where you can purchase antibiotics securely online without using a prescription.)
- Buy them in an ethnic market
- Buy them in a pet store or via a pet web site like PetMeds

Note: If you purchase medications online from a foreign country: Most pharmacies located in a foreign country are willing to sell drugs and ship them as long as the drugs are legal to sell in the foreign country. There are a few problems with buying drugs from a foreign county such as the quality of the antibiotics and counterfeit drugs.

CAUTION

I must stress caution in stockpiling your own prescription medications!

- The manufacture, packaging, transportation and storage procedures and environment *greatly* (I stress this) affect the stability (shelf) life of the medication.
- The format the medication is in (pill, powder, cream, gel, liquid) will affect the stability life of the medication.
- Each active ingredient has its own stability or shelf life that affects the overall stability of the medication as a whole.
- Each filler or binder ingredient has its own stability or shelf life that affects the overall stability of the medication as a whole.
- Some medications require refrigeration to stay viable for any length of time.
- Some medications like Tetracycline become dangerous as they break down or pass their stability life. *Never use these medications past their expiration date.*

CAUTION

Then there are the lay usage considerations of utilizing prescriptions *without* the guidance of a healthcare professional:

- The lay user or dispenser must be sure they are using the correct medication for the correct illness.
- The user or dispenser must know **all** the appropriate and proper uses and side effects of the medication.
- Some prescription medications can mask or hinder diagnoses if taken before you go to a healthcare professional.
- Many medications can cause allergic reactions, some may be life threatening.
- Many medications *cannot* be taken with certain foods, beverages or other drugs (even OTC) without causing potential hazardous side effects.

That being said, if you do plan on storing these medications, have a pharmaceutical or drug guide on hand to ensure that correct medicines and dosages are given. Used copies of the reference can be purchased at college book stores at a discounted price.

The FDA has an online guide for most pharmaceuticals @ <http://www.fda.gov/drugs/drugsafety/ucm085729.htm> and you can install a free copy of the *Physician's Desk Reference or PDR* guide @ <http://www.pdr.net/resources/pdr-ebook/> or search Amazon or eBay for a used copy. Another great online guide for us consumers is *PDR Consumer Drug Information* @ <http://www.drugs.com/pdr/>

However I prefer hardcopy and my favorites are:

The Pill Book, The Consumer Guide to Pills by Harold M. Silverman
The Dentist's Drug and Prescription Guide SBN: 978-0-470-96044-8
Complete Guide to Prescription and Nonprescription Drugs; Everything you need to know for safe drug use by James J. Rybacki (<http://www.amazon.com/Complete-Guide-Prescription-Nonprescription-Drugs/dp/0399537678>)
There are other books geared for the consumer/patient that are extremely helpful and full of easy to understand information on usage, interactions and common side effects by James J. Rybacki: *The Concise Essential Guide to Prescription Drugs* (The Harpercollins Home Health Library); *Medicines and Your Family* (The Mended Hearts Inc presents, National Treatment Guidelines); *Medicines and Your Family* (<https://www.amazon.com/author/jamesrybacki>)

Antibiotics

Antibiotics are a biggie where a long duration crisis takes out our current healthcare infrastructure, which is why Preppers often want some antibiotics in their medicine stores. Antibiotics are also one of the trickier and rather picky common prescription medications.

Typically, bacteria are classified either "Gram-positive" or "Gram-negative" due to their structure and staining characteristics, which reflect their susceptibility to certain antibiotics.

The Penicillin family of antibiotics has been effective against Gram-positive infections. Alternatively, the Tetracyclines have been used successfully to combat Gram-negative agents.

Side Note: Penicillin cannot be easily made from bread mold. It is the secretion of a particular kind of mold that is penicillin. In 1928 Scottish biologist Sir Alexander Fleming noticed a halo of inhibition of bacterial growth around a contaminant blue-green mold on a Staphylococcus plate culture. He concluded that the mold was releasing a substance that was inhibiting bacterial growth. He grew a pure culture of the mold and discovered that it was *Penicillium notatum*. With help from a chemist, he concentrated what he later named "penicillin". During the next twelve years, he grew and distributed the original mold, unsuccessfully trying to get help from any chemist that had enough skill to make a stable form of it, for mass production.

Certain antibiotics should not be mixed with other drugs, foods or alcohol. For instance, drinking grapefruit juice with erythromycins or taking erythromycin with theophylline (a drug used for respiratory ailments) can cause fatal heart arrhythmias. There are many other interactions that doctors know about that the layperson does not.

Keep in mind that when antibiotics are used to treat an infection, the "good" bacteria in the large intestine may also be destroyed as a result. Therefore, consider investing in some probiotics to help restore the microbial balance that is disrupted by antibiotics and infections. Probiotics are usually sold in the vitamin section of most pharmacies as well as in health food stores. They can be stored along with your vitamins in your reserve supplies.

CAUTION

Now understand that there are many dangers to purchasing and using antibiotics without a prescription prescribed by a medical professional. I have already stated the biggies at the beginning of this article but they are *soo* important that I will stress this again - *the unsupervised lay use of antibiotics is dangerous for the following reasons:*

- Antibiotics are not a cure-all, nor the first line of defense. They are only effective to against bacterial illnesses. They are not effective against viral illnesses.
- Antibiotics are designed to combat specific ailments. For instance, penicillins (a family of drugs with names ending in "-cillin" such as penicillin, amoxicillin, ampicillin) are effective against streptococcal infections, syphilis, and Lyme disease but for community-acquired pneumonia, bacterial diarrhea, mycoplasmal infections or gonorrhea you would be better off using a quinolone (a family of drugs with names ending in "-oxacin such as levofloxacin (Levaquin) or Ciprofloxacin (Cipro).
- Antibiotics are designed to be used at a specific dosage level for each individual bacterial infection AND for over a very specific timeframe, usually 10 days.
- Safe and effective antibiotic dosages depend on accurate weights and measurements.
- Some Antibiotics may cause potentially fatal reactions (e.g., allergy, asthma, and death) or other medical issues.

- Antibiotics can prompt greater growth, development, and spread of resistant pathogens such as fungi and Mycoplasma prompting more severe or alternative infections.
- The antibiotics may not work due to being past their expiration, from improper storage, from the wrong dosage administered or from your body building up an immunity.
- Antibiotics can also exacerbate an issue by destroying the good bacteria in the body. Investing in some probiotics can help restore the good stuff though.
- Antibiotic usage can make it more difficult for physicians to diagnose life-threatening infectious illnesses. Thus, self-medication is not advised under normal circumstances of medical personnel availability.
- A doctor is an expert in knowing which antibiotic to use for specific ailments. If an untrained person uses the wrong antibiotic his condition may get worse and he may wind up in the hospital and this person may inadvertently create a secondary infection that is now resistant to the antibiotic that was used in error.
- A pharmacist explains that it is a bad idea for people to take veterinary medicines but that chemically the drugs are the same as what you would be prescribed by a doctor and purchase in a pharmacy. Amoxicillin, ampicillin, tetracycline, cephalexin, metronidazole and erythromycin are all available online to purchase without a prescription if you buy them as "fish antibiotics". (A pharmacist visited numerous pet stores and located most of those antibiotics in the stores, although they were in liquid gel drops or powders. These antibiotics were available in pill form from the chain pet store's websites.)

Side Bar: Antibiotic Resistance

The headlines in both alternative and mainstream media are all ablaze on this subject. Understand that nature is full of "Humans are NOT in Control" exceptions to just about every rule. This means that it is highly likely for a bacteria to become resistant to certain antibiotics. We saw this during all the US military wars and confrontations with Penicillin resistant STD's.

Next keep in mind to very important facts:

- The timeframe it takes a bacterium to become resistant can be very quick, since their lifespans are quick.
- Bacteria travel from host to host very easily.

When you put these two things together you have a very good, if somewhat iffy, chance of spreading a bacteria that either is already resistant or is quickly becoming resistant. *This means that although you may not get horribly ill from the bacteria, your misuse of an antibiotic, is added onto the previous misuse of the antibiotic, so that the next person to get infected is at risk that one or more antibiotics will NOT work.*

That said, how you decide to use antibiotics is a personal choice, yet one that can affect everyone around you. How you gamble on this fact, is up to you.

Common Usages of Antibiotics

According to the Patriot Nurse, the five most popular types of antibiotics (including their generics) are:

- ✓ **Zithromax** – UTIs, URIs, Sepsis (used in an IV), STDs, and ear infections.
- ✓ **Ampicillin** – This a more broad spectrum antibiotic that treats skin infections, STDs, Sepsis and ear infections.

- ✓ **Cipro** – This antibiotic has a lot of toxicity issues and should be taken sparingly. Can be used for UTIs, infectious diarrhea, bone and joint infections.
- ✓ **Amoxicillin** – This is a very popular antibiotic used in upper respiratory, ear, nose and throat infections, and teeth abscesses.
- ✓ **Doxycycline** - An effective antibiotic used for malaria, and Rocky Mountain Spotted Fever.

She also suggests Clindamycin, Flagyl and Bactrim as some back-ups to the aforementioned.



Fish antibiotics are also becoming popular storage items amongst Preppers because no prescription is required to purchase them or to avoid the issues of purchasing drugs from foreign countries and counterfeits. So it *could* actually be safer to buy antibiotics that are designed for pets. Fish antibiotics are identical to those used to treat humans, and the dosages are *basically* the same for both humans and fish.

The number of pills per bottle range from 30 to 100 pills, and they tend to be a lot cheaper than the pills designed for human consumption. Even though some of them could be counterfeit, the chances are highly unlikely since drugs made for human use are far more profitable for the counterfeiters to sell.

Although it is true that many fish antibiotics contain the same active ingredients as those formulated for humans, there are few considerations to keep in mind, such as;

- Using the correct dosage so as to not over or under medicate yourself
- The differences in human metabolism vs. the metabolism rate of a fish.
- It doesn't contain any additional 'treatments' like say to make the scales shinny.

CAUTION

Anyone who is planning on storing up fish antibiotics to use needs to do proper research. Now it may or may not help to discuss your findings with a medical professional. Some medical professionals are Preppers themselves and are more willing to assist, others are just stuck on the 'mainstream' agenda.

There are several kinds of fish antibiotics that you could add to your preparedness medical stores. Those listed most often are covered in detail in an article on Survival Blog, (A Doctor's Thoughts on Antibiotics, Expiration Dates, and TEOTWAWKI @ <http://www.survivalblog.com/2010/07/a-doctors-thoughts-on-antibiot.html>) the contributing author, happens to be a doctor and was able to purchase the below fish antibiotics online without any demand for medical license or prescription. These are listed below:

Common Name	Fish Antibiotic	Bird Antibiotic	Dosage
Amoxicillin	Fish-Mox, Fish-Mox Forte, Aqua-Mox		250mg AND 500mg usually taken 3 times a day. Amoxicillin is the most popular antibiotic prescribed to children, usually in liquid form. More versatile and better absorbed than the older Pencillins,

Healthcare without the Infrastructure - continued

			<p>This will handle most of the same types of bacteria as Cephalexin. It's also safe for pregnant women and children and has very few side effects. However, some people are very allergic to it. In that case, you should try Erythromycin instead.</p> <p>Amoxicillin may be used for the following diseases:</p> <ul style="list-style-type: none"> • Anthrax (Prevention or treatment of Cutaneous transmission) • Chlamydia Infection (sexually transmitted) • Urinary Tract Infection (bladder/kidney infections) • Helicobacter pylori Infection (causes peptic ulcer) • Lyme Disease (transmitted by ticks) • Otitis Media (middle ear infection) • Pneumonia (lung infection) • Sinusitis • Skin or Soft Tissue Infection (cellulitis, boils) • Actinomycosis (causes abscesses in humans and livestock) • Bronchitis • Tonsillitis/Pharyngitis (Strep throat)
Ampicillin	Fish-Cillin		<p>250mg and 500mg</p> <p>Similar to penicillin, but more effective against things like anthrax and less likely to cause an allergic reaction. Also useful for respiratory tract infections, bacterial meningitis, urinary tract infections, gastrointestinal infections and many other things.</p>
Azithromycin	commonly sold for pets as: Clavamox, Baytril, Zeniquin, Cefpodoxime Proxetil, Simplicef, Cephalexin, Amoxicillin		<p>This one is similar to Cephalexin, Amoxicillin, Erythromycin and Doxycycline because it treats respiratory infections and all sorts of things like Chlamydia, Lyme Disease, PID, Syphilis, Typhoid, etc. Side effects include abdominal pain, nausea and diarrhea but that is rare. It's a great antibiotic to have because it treats so many different things. The problem is that it's hard to find and can be a bit expensive.</p>
Cephalexin	Fish Flex and Fish Flex Forte		<p>250mg</p> <p>Great for almost any type of respiratory infection (bronchitis, pneumonia, strep throat, etc.) and middle ear infections. It is safe for pregnant women and children and only has a few side effects.</p> <p>Cephalexin, although not in the same drug family, has been quoted as having a 10% cross-reactivity rate with Penicillin.</p>
Ciprofloxacin	Fish-Flox and Fish-Flox Forte		<p>250mg</p> <p>Best for things like urinary tract infections, prostate infections, respiratory tract infections (such as bronchitis or pneumonia), bacterial diarrhea, anthrax, and diverticulitis or infectious colitis (when combined with Metronidazole). It</p>

Healthcare without the Infrastructure - continued

			should never be used by children, pregnant women or nursing mothers.
doxycycline		Bird-Biotic	100mg Treats the same types of infections as Erythromycin. However, Erythromycin can be hard to find whereas this one is often sold as Bird Biotic. This is not labeled for human consumption. I'm just pointing it out. This one can also treat sinus infections, Typhus and Malaria. However, it should not be used by children, pregnant women or nursing mothers and there are some side effects including kidney impairment and sensitive skin. (Dixycycline is actually just a newer type of Tetracycline, also sold as "Fish Cycline")
Erythromycin			tablets and capsules in sizes ranging from 250 mg to 500 mg. Oral liquid suspension ranges in concentration from 25 mg/ml to 50 mg/ml Erythromycin is effective against a narrow range of bacteria in dogs and cats. It is effective against bacteria that infect the skin, respiratory tract and sinuses. Erythromycin is not effective against intestinal-origin coliform bacteria (E. coli, for example). Human formulations: Ery-Tab® (Abbott), E-Mycin® (Boots) and Robimycin® (Robins) Veterinary formulations: Erythro-100® (Rhône Merieux) Like the previous Amoxicillin and Cephalexin, this one can also treat most respiratory infections and middle ear infections. It's also good for Syphilis, Lyme Disease and Chlamydia. And it's safe for women and children. So why not just forget the other two and store this instead? Because it has several potential side effects including abdominal pain, nausea, vomiting and diarrhea.
Keflex	Fish-Flex and Fish-Flex Forte		250mg and 500mg Note: Some Fish-Flex is really Cephalexin.
Metronidazole	Fish-Zole		250mg Usually used for getting rid of anaerobic bacteria which is found in the intestine. It can treat diverticulitis or colitis if you take it with Ciprofloxacin. But it can also treat bacterial vaginitis, diabetic foot ulcer, joint or bone infections, lung or brain abscesses, meningitis, and a few other infections. This also shouldn't be taken by children, pregnant women or nursing mothers.
Penicillin	Fish-Pen and Fish-Pen Forte		250 mg, 500mg
SMZ-TMP (short for Sulfamethoxazole and Trimethoprim)		Bird-Sulfa	400mg/trimethoprim 80mg Together, these can treat most respiratory infections, but they're mainly used for urinary tract infections. But the best thing about SMZ-TMP is it can treat MRSA (Methicillin-resistant

			Staphylococcus aureus), also known as resistant staph. This is a strain of bacteria that spreads easily and is resistant to most antibiotics.
Tetracycline	Fish-Cycline		250mg ** Tetracycline, can become dangerous past the expiration date!

If you don't want to get every one of the above antibiotics, you should at least get Ciprofloxacin, Metronidazole and Cephalexin as they will cover 9 out of 10 infections you might get.

There are various others that you can choose, but the selections above will give you the opportunity to treat many illnesses and have enough variety so that even those with Penicillin or Sulfa allergies will have options.

If you decide to add these to your preparedness stores you should also add a book or two that will assist in diagnosing the problem, explain what the different drugs are for, their dosages, duration and what the side effects will likely be.



Everyone needs know what we can and can't eat while taking these medications to avoid dangerous interactions. And then, only when one is very certain that antibiotics will help, should anyone take them. Also remember to keep a close eye on the expiration dates since most lose their effectiveness with time and a few, such as **tetracycline, can become dangerous past the expiration date.**

Some references to consider are:

The Pill Book, The Consumer Guide to Pills by Harold M. Silverman
The Dentist's Drug and Prescription Guide SBN: 978-0-470-96044-8
Complete Guide to Prescription and Nonprescription Drugs; Everything you need to know for safe drug use by James J. Rybacki (<http://www.amazon.com/Complete-Guide-Prescription-Nonprescription-Drugs/dp/0399537678>) There are other books geared for the consumer/patient that are extremely helpfull and full of easy to understand information on usage, interactions and common side effects by James J. Rybacki: *The Concise Essential Guide to Prescription Drugs; Medicines and Your Family;* Medicines and Your Family (<https://www.amazon.com/author/jamesrybacki>)
The Complete Guide To Herbal Medicines: A Comprehensive herbal guide by clinical pharmacists. Details what happens when herbs interact with drugs.

Specific to Antibiotics:

A Simplified Guide to Antibiotics and Their Uses see A Practical Guide to Antibiotics and Their Usage for Survival @ http://www.tetrahedron.org/articles/apocalypse/bio_chem_guide.html
 For stockpiling common usage see How to Stockpile Antibiotics for Long Term Survival @ <http://www.backdoorsurvival.com/how-to-stockpile-antibiotics/>
 Herbal Alternatives to Antibiotics <http://www.motherearthliving.com/health-and-wellness/alternatives-to-antibiotics-zm0z12aszdeb.aspx#axzz2zwqCzT5z>
 Medicine-Making Antibiotics FEMA 1988-Medicine Making Antibiotics http://webpal.org/SAFE/aaarecovery/7_medicine/Medicine%20-%20antibiotics/Medicine%20Making%20Antibiotics.pdf
 PART 1: Sourcing antibiotics for storing in case the SHTF - antibiotics meant for fish @ <http://modernsurvivalonline.com/sourcing-antibiotics-for-storing-in-case-the-shtf/>
 PART 2: Sourcing antibiotics for storing in case the SHTF - a source to legally obtain antibiotics meant for human consumption @ <http://modernsurvivalonline.com/part-2-sourcing-antibiotics-for-storing-in-case-the-shtf/>
 PART 3: Sourcing antibiotics for storing in case the SHTF - Vet Antibiotics versus Human Antibiotics, Cost and more @ <http://modernsurvivalonline.com/part-3-vet-antibiotics-versus-human-antibiotics-cost-and-more/>

How to get antibiotics without seeing a doctor @ <http://www.examiner.com/article/prepper-tips-how-to-get-antibiotics-without-seeing-a-doctor>

10 Natural Antibiotic Alternatives @ <http://frugallysustainable.com/2013/08/food-and-herb-cures-10-natural-antibiotic-alternatives/>

30 Foods & Herbs with Natural Antibiotic Properties @ <http://www.care2.com/greenliving/common-foods-herbs-with-antibiotic-properties.html>

Top 12 natural antibacterial foods and herbs @ <http://voxxi.com/2013/08/08/natural-antibacterial-foods-herbs/>

Natural Antibiotics: a Healthy Alternative - List of Natural Antibiotics for Specific Health Conditions @ <http://naturalantibioticshut.com/>

Mother Nature's Natural Germ Fighters @ <http://instituteornaturalhealing.com/2012/03/mother-natures-natural-germ-fighters/>

Mother Nature's Natural Germ Fighters – Part 2 @ <http://instituteornaturalhealing.com/2012/03/mother-natures-natural-germ-fighters-2/>

Antibiotics for SHTF Planning @ http://readynutrition.com/resources/antibiotics-for-shtf-planning_30112011/

Top five antibiotics to keep in your travel first aid kit @ <http://www.gadling.com/2010/08/09/top-five-antibiotics-to-keep-in-your-travel-first-aid-kit/>

Fish antibiotics for human use. 02-24-2010 @ <http://forums.outdoorsdirectory.com/showthread.php/73927-Fish-antibiotics-for-human-use>

What Are Antibiotics? How Do Antibiotics Work? @ <http://www.medicalnewstoday.com/articles/10278.php>

Preserving Antibiotics, Rationally from the New England Journal of Medicine @ <http://www.nejm.org/doi/full/10.1056/NEJMp1311479>

Antibiotics: Antibacterial Agents @ <http://users.rcn.com/jkimball.ma.ultranet/BiologyPages/A/Antibiotics.html>

Topical antibiotics @ <http://www.drugs.com/drug-class/topical-antibiotics.html>

Antibiotics Without A Prescription? @ <http://www.coreynahman.com/antibiotics.html>

List of antibiotics @ https://en.wikipedia.org/wiki/List_of_antibiotics

Appropriate Antibiotic Use @ <http://health.howstuffworks.com/medicine/medication/appropriate-antibiotic-use.htm>

A Patient's Guide to Proper Antibiotic Usage @ <http://www.pharmacytimes.com/publications/issue/2004/2004-12/2004-12-4835>

Know the Proper Use of Antibiotics @ <https://www.southernnevadahealthdistrict.org/health-topics/antibiotic-proper-use.php>

Antibiotics: Misuse puts you and others at risk @ <http://www.mayoclinic.org/healthy-living/consumer-health/in-depth/antibiotics/art-20045720>

Proper Antibiotic Use (LA County Department of Public Health) http://www.publichealth.lacounty.gov/acd/antibiotic_resistance/AntiBioGenAud.pdf

Proper Use of Antibiotics-Do's & Don'ts (Texas A&M University) <http://fcs.tamu.edu/health/healthhints/2007nov/mrsa-proper-use.pdf>

General Background: When & How to take Antibiotics @ http://www.tufts.edu/med/apua/about_issue/when_how.shtml

General Background: About Bacteria & Antibiotics @ http://www.tufts.edu/med/apua/about_issue/about_bacteria.shtml

General Background: Antibiotic Agents @ http://www.tufts.edu/med/apua/about_issue/agents.shtml

General Background: Bioterrorism & Stockpiling Antibiotics @ http://www.tufts.edu/med/apua/about_issue/bioterrorism.shtml

Antibiotics: Questions and Answers @ http://www.mckinley.illinois.edu/handouts/antibiotics_qa.html

Specific to Antibiotics & ‘dumbed down’: See the following from the CDC:

Get Smart: Know When Antibiotics Work @ <http://www.cdc.gov/getsmart/>

Antibiotics Aren't Always the Answer Tri-fold Brochure <http://www.cdc.gov/getsmart/campaign-materials/print-materials/brochure-answer.pdf>

Cold or Flu-Antibiotics Don't Work For You Tri-fold Brochure (color) <http://www.cdc.gov/getsmart/campaign-materials/print-materials/Brochure-general-color.pdf>

Cold or Flu-Antibiotics Don't Work For You Tri-fold Brochure (B&W) <http://www.cdc.gov/getsmart/campaign-materials/print-materials/Brochure-general-bw.pdf>

Snort, Sniffle, Sneeze-No Antibiotics Please Tri-fold Brochure (color) <http://www.cdc.gov/getsmart/campaign-materials/print-materials/Brochure-Parent-color.pdf>

Snort, Sniffle, Sneeze-No Antibiotics Please Tri-fold Brochure (B&W) <http://www.cdc.gov/getsmart/campaign-materials/print-materials/Brochure-Parent-bw.pdf>

Be Smart-Antibiotics Will Not Help a cold or the Flu (color) <http://www.cdc.gov/getsmart/campaign-materials/print-materials/Brochure-NativeAmerican-color.pdf>

Be Smart-Antibiotics Will Not Help a cold or the Flu (B&W) <http://www.cdc.gov/getsmart/campaign-materials/print-materials/Brochure-NativeAmerican-bw.pdf>

Antibiotic-Treatment Guidelines for Upper Respiratory Tract Infections-Adult <http://www.cdc.gov/getsmart/campaign-materials/info-sheets/adult-approp-summary.pdf>

Antibiotic-Treatment Guidelines for Nonspecific Upper Respiratory Tract Infections-Adult <http://www.cdc.gov/getsmart/campaign-materials/info-sheets/adult-nurti.pdf>

Antibiotic-Treatment Guidelines for Acute Pharyngitis (Upper Respiratory) Infections-Adult <http://www.cdc.gov/getsmart/campaign-materials/info-sheets/adult-acute-pharyngitis.pdf>

Antibiotic-Treatment Guidelines for Acute Bacterial Rhinosinusitis (Upper Respiratory) Infections-Adult <http://www.cdc.gov/getsmart/campaign-materials/info-sheets/adult-acute-bact-rhino.pdf>

Antibiotic-Treatment Guidelines for Acute Cough Illness (Acute Bronchitis, Upper Respiratory) Infections-Adult <http://www.cdc.gov/getsmart/campaign-materials/info-sheets/adult-acute-cough-illness.pdf>

Antibiotic-Treatment Guidelines for Upper Respiratory Tract Infections-Pediatric Practice Tips <http://www.cdc.gov/getsmart/campaign-materials/info-sheets/child-practice-tips.pdf>

Antibiotic-Treatment Guidelines for Upper Respiratory Tract Infections-Pediatric Appropriate Treatment Summary <http://www.cdc.gov/getsmart/campaign-materials/info-sheets/child-approp-treatmt.pdf>

Antibiotic-Treatment Guidelines for Upper Respiratory Tract Infections-Pediatric Cough Illness, Bronchitis <http://www.cdc.gov/getsmart/campaign-materials/info-sheets/child-cough-illness.pdf>

Antibiotic-Treatment Guidelines for Upper Respiratory Tract Infections-Pediatric, Common Cold-Rhinitis Vs Sinusitis <http://www.cdc.gov/getsmart/campaign-materials/info-sheets/child-rhin-vs-sinus.pdf>

Antibiotic-Treatment Guidelines for Upper Respiratory Tract Infections-Pediatric Otitis Media <http://www.cdc.gov/getsmart/campaign-materials/info-sheets/child-otitismedia.pdf>

Antibiotic-Treatment Guidelines for Upper Respiratory Tract Infections-Pediatric Pharyngitis, Treat Only Proven GAS <http://www.cdc.gov/getsmart/campaign-materials/info-sheets/child-pharyngitis.pdf>

General First Aid and DIY Healthcare Reference Books:

Where There Is No Doctor (<http://hesperian.org/books-and-resources/>)

Where There Is No Dentist (<http://hesperian.org/books-and-resources/>)

The Survival Medicine Handbook: A Guide for When Help is Not on the Way by Joseph Alton and Amy Alton (aka Dr.

Bones and Nurse Amy) See an outline @ <http://www.doomandbloom.net/the-survival-medicine-handbook-second-edition-is-out/>

Back To Eden First written by Jethro (the father of health food stores) in 1939 and revised in 2000 so there is now a cross reference between the names of illnesses then, with now, along with how to treat them.

Wilderness Medicine 4th edition: Beyond First Aid William W. Forgey, M.D.

Backcountry First Aid And Extended Care, 2nd Edition Buck Tilton

Basic Essentials Of First Aid For The Outdoors William W. Forgey, M.D.

First Aid For Youths by Buck Tilton M.S. & Steve Griffin

Medicine For The Backcountry, 2nd Edition Buck Tilton, M.S. & Frank Hubbell, D.O.

Wilderness Medical Society Practice Guidelines edited by William W. Forgey M.D.

The Travelers' Medical Resource by William W. Forgey, M.D.

The Travelers' Self Care Manual by William W. Forgey, M.D.



What about other Medical Supplies?

I've already mentioned that we citizens don't have the knowledge or skills to *completely* address emergency healthcare. It would be nice if each and every one of us has the knowledge, and ways and means to have a good 3 bed field hospital, complete with a lab, however that is dreaming. So what considerations should we include in our preparedness plan beyond an extended first aid kit and some basic training?

Well the goods are almost unlimited, however to get a strong sense of what an extended 'first aid' medical kit can be, download and print *The Survival Doctor's Ultimate Emergency Medical Supplies List* @ <http://www.thesurvivaldoctor.com/wp-content/uploads/2013/05/tsd-emergency-supplies.pdf>.

For a comprehensive checklist on emergency first aid kits see *What is the Difference Between All the E-Kits and Bags & What Do I Need? and Preparedness Bags Checklist Compare*, the first aid tab (Excel format) @ http://formerlynurbanhomesteader.weebly.com/uploads/2/2/5/0/22509786/what_is_the_difference_between_all_the_e-kits_bags_and_what_do_i_need_new_site.pdf.



For an idea on professional EMT & Paramedic checklists consider the following:

EMT Basic Equipment List

https://public.health.oregon.gov/ProviderPartnerResources/EMSTraumaSystems/EMSTrainingCertification/Documents/College/2010/EMT_Basic_Practical_Exam_Equipment_List_042508.pdf

Non-Transport EMS Vehicle Supplies @ https://www.vdh.virginia.gov/OEMS/files_page/regulation/Non-TransportVehicleChecklist.pdf

EMT or AEMT Equipment Checklist http://health.utah.gov/ems/op/2013_emt_aemt.pdf

EMR, EMT & AEMT Designated Quick Response Equipment Checklist @ http://health.utah.gov/ems/op/2013_emr_qre.pdf

EMS Equipment List @ www.dshs.state.tx.us/emstraumasystems/EMSEquipmentListDraft1.pdf

Fireline Emergency Medical Technician (FEMT) Checklist ICS 223-10 Jul 12 2000 @ <http://www.firescope.org/ics-positions-manuals/ICS%20223-10.pdf>

Tactical First Responder Paramedic Equipment List <http://cchealth.org/ems/pdf/equipment-list-tactical.pdf>

WHO Generic Essential Emergency Equipment List (emergency surgical) @

<http://hhi.harvard.edu/sites/default/files/In%20Line%20Images/burden%20-%20WHO.pdf>

WHO (Europe) Hospital Emergency Response Checklist @

http://www.euro.who.int/data/assets/pdf_file/0020/148214/e95978.pdf



Definitely contact your local Red Cross and take their basic and advanced First Aid and CPR courses. If you can form a neighborhood C.E.R.T. group (<http://www.fema.gov/community-emergency-response-teams>), their first aid and Emergency Triage courses are a big plus.



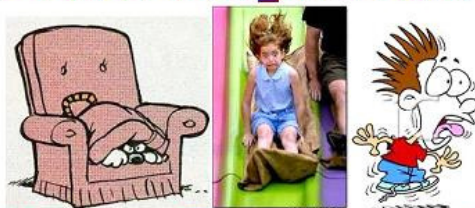
Otherwise, a strong reality check and plain old common sense will serve you for most things. Remember, even the most healthy of us can have an accident or befall some other personal health related emergency that may be more life threatening in a SHTF world than the here and now, and most of us will NOT be able to do a darn thing about it.

Case in point: Recently I experienced a quick onset, severe illness. I had pneumonia, without a fever or chest pains, mostly just a cough with a general tiredness that progressed to where I couldn't keep fluids or foods down. In a very short timeframe (under 48 hours) it went sepsis (blood poisoning) and then (probably due to my many allergies) went toxic shock. Basically if had not had extensive medical treatment when I did, I would have died in 24 hours. So I would have been SOL without equipped, knowledgeable, trained medical personnel and supplies.

Reality most often sucks, but it is just that – reality! Better to be as physically fit and healthy, with a firm understanding of SHTF limitations – NOW, than get blindsided by the consequences latter.

TNT

Be Prepared



Not Scared