Above all, Do No Harm.

Please be aware that this handout is for educational purposes only, does not substitute for medical care and is not meant to diagnose, prescribe, or treat any disease. If you have or think you have a medical condition which requires qualified medical care you should promptly call 911 or go to your nearest hospital.

Introduction

Herbal first aid has the advantage of using materials that are widely available, like kitchen spices, weeds, and wild plants. Most of the remedies described below can be purchased inexpensively at your local herb store, grown or made at home. Herbal First Aid medicines can also be very low cost or even free if you harvest herbs from your garden or ethically wildcraft in non-polluted areas.

It is best if you can create a first aid kit before an emergency occurs, and make sure that it is always easily accessible, well labeled, and well stocked. Teach your family where to find it and how to use it safely. Always clearly label any tincture or product that is potentially toxic in higher doses.

When administering first aid of any kind, it's essential to introduce yourself to the patient and that they confirm permission to treat. *Never work beyond your skill level or level of training*. If you don't understand a plant's actions and contraindications, *don't use it for first aid*. You may be comfortable with knowledge of up to 300 plants or remedies, but keep around six in your first aid kit or pockets. These plants/formulas should be the ones you know and trust the most and also can resolve a wide variety of complaints. Even better if they are locally abundant or their habitat is widespread. Be able to positively identify common weeds that have naturalized around you, grow as many as you can, and spread some seeds in vacant lots, fields or edges that you know to be clean, so the medicine will be handy in case of emergency.

If working a remote location, record local emergency phone numbers, note time to nearest hospital, and also trauma center. Note location of nearest radio or telephone, and research a good regional dentist. Figure out a fire or emergency evacuation plan for the site.

Good Samaritan Laws are state laws also known as "volunteer protection laws." They are enacted to protect healthcare providers and other rescue personnel from being sued as a result of providing help to a victim during an emergency situation. Essentially they provide legal immunity if a person chooses to help. Vermont's Good Samaritan Law is unique in the USA and actually orders citizens to help fellow humans in need!

Red Flag Signs and Safety Concerns

Some conditions cannot be treated solely by herbal treatments – if you observe any of the following signs or symptoms, call 911 and/or safely evacuate to definitive care – and note, this list is not exhaustive:

- o Bleeding that does not stop
- Chest pain
- Sudden loss of sensation anywhere in the body
- o Spinal pain, especially after a fall or impact greater than 15 feet
- Loss of consciousness or responsiveness
- Suspected bone fractures (pain won't abate after 20-30 minutes)
- o Partial or full thickness burns
- Snake or mammal bites
- o Asthma attacks that are unresponsive to treatment or medications
- Suspected stroke or heart attack
- o First time seizures or seizures of unknown origin
- Severe allergic reactions
- o Persistent, localized, or severe abdominal pain.
- Testicular pain of unknown origin
- o Fevers associated with severe headache or stiff neck
- Sudden and severe headaches
- Diarrhea or vomit with blood, or that persists despite treatment, or if person is unable to hydrate.
- Other signs or symptoms of serious injury

Trust the plants but call 9-1-1 or transport to ED when needed or if you're not positive of what to do! Always defer to another responder with more credentials or training than you, be ready to assist as needed. Breathe deeply and hold the space for your patient. Don't panic and become a victim yourself. These suggestions are meant to provide an improved knowledge of the uses of common weeds and kitchen herbs and relatively easy to obtain or grow herbal medicines, and not to take the place of definitive medical care.

SCENE SAFETY

~Don't become a patient yourself~

Wash your hands frequently! Protect yourself; use gloves and eye protection when possible. If you can't locate water for washing your hands, use lavender essential oil or "Four Thieves" essential oil blend (rosemary, eucalyptus, lemon, cinnamon, thyme, etc).

If working an event, do research ahead of time & record local emergency phone numbers, note closest radio or telephone, note time to nearest hospital, nearest trauma center. Also helpful is to find a good regional dentist for referrals as well.

Plant ID

There are many useful plants in wild places, back yards, and vacant lots that can be used for first aid. We are blessed to have a myriad of books to help us learn which plants are which. Please refrain from taking samples of plants that you don't see many of or are known to be rare or endangered, threatened or experiencing shrinking population, or important winter food for pollinators.

Only use plants which are positively identified – *guessing will not work here*. Plants must be unequivocally identified, especially with plants in the Apiaceae family (carrot family), which contains the two most poisonous plants in North America, poison hemlock (Conium maculatum) and water hemlock (Cicuta douglasii). Learning specific botanical language will empower you to use field guides and the <u>Jepson Manual</u> with confidence, and learning plant families will drastically shorten your investigations for the name of each plant. If you want to learn more, take a class!

The Shock of Trauma and Strategies for First Aid

Steps in Helping:

Helping someone be present with their injury is the first step in successful treatment. Any injury is simply a disturbance to the energetic flow. If the only thing you do is encourage proper or deeper breathing and thus restore their energetic flow, the nerve impulses will immediately calm. This is how you can help someone move beyond the "freak-out" and connect with their body. Then they can actually step away from the pain they are expressing with their mind to allow the body to focus on healing. When the energetic body is brought toward balance, healing will occur much more rapidly; blood will flow less copiously, pain will diminish more rapidly. We call this "holding space."

By acknowledging the intrusion and damage done, and seeking center, not sinking into fear, we can help avoid the inevitable freak out. Breathing with the patient is possibly the most helpful thing you can do to encourage this awareness. Breathing into the bottom of the lungs supports oxygen exchange at the alveolar membrane. Disconnection creates blockage, stoppage of the energetic flow which is essential for healing to occur. Awareness creates freedom of movement.

- 1. Scene Safety
- 2. Assessment
- 3. Breathing
- 4. Treatment

ABC's of First Aid: Airway, Breathing, Circulation ABC's of Herbal First Aid: Awareness, Breathing, Compassion!

~Prevention is always the best cure~

Herbal First Aid Treatment of Common Ailments

Primary conditions often seen:

- Pain, Headaches
- Skin/Soft tissue injuries: Cuts, burns, scrapes, punctures, sprains, strains, contusions, splinters.
 - o subcategory: Insect bites, rashes, dermatitis, sunburn
- Immune system issues/challenges, Asthma, Anaphylaxis
- Gastro-Intestinal (diarrhea, constipation, viral gastroenteritis, parasites)
- Reproductive (cramps, flooding, pregnancy, mastitis, menopause, prostatitis)
- Eye (injuries, chemical weapons, styes)
- Dental (teething, abscess, crack or loss)
- Heat and Cold injuries (dehydration and frostbite)
- Urinary; Kidney, Bladder
- Emotional/Psychiatric (anxiety, panic attacks, organizer-overwhelm)
- Circulatory

Pain

General strategies: Analgesics, or pain-relieving herbs, often contain salicylate, the compound from which Aspirin was derived. We use herbs to quell inflammation, and interrupt the brain's signals. Give the patient a round object to hold, such as a wool ball stuffed with lavender. For children, bubbles work well as a bit of a distraction. Rub soles of feet with coconut oil, ghee, or sesame oil.

- Rescue Remedy, or Five Flower Remedy: 4 drops, in a cup of water
- White Willow Bark (*Salix alba*) may be oldest herb known to treat pain & inflammation. A relative, Red Osier Dogwood Inner bark is original source of aspirin. Soak in vinegar, lengthy decoction, add tsp. baking soda for tasty, dark tea. Cut bitter with orange slice, or sassafras, tonic water. (*thanks to Glenn Nagle for spending a year figuring out this tasty recipe!*)
- White Oak Bark (Quercus) powerful astringent, use for acute diarrhea & bleeding, mm
- **Jamaican Dogwood** (*Piscidia piscipula*) analgesic sedative for nerve pain, fear. Wide range of pain treatment. Imported. "White Willow/aspirin-X-10"
- California Poppy (*Eschscholzia*) calming, anti-inflammatory; muscle pain, non-addictive
- **Red Osier Dogwood** *Cornus sericea* fresh red bark can be chewed off twigs.
- Birch Bark Betula alba muscle pain, osteoarthritis. Similar to Wintergreen
- Aspen or Cottonwood buds Populus Balm of Gilead, a topical pain reliever
- Corydalis Corydalis yanhuso- 1% analgesic strength of that of opium
- Chamomile 4 tea-bag tea for sleeplessness due to pain
- Black Cohosh (Actea racemosa) joints, especially Sacroiliac Joint pain
- Rosemary, Kava, Catnip, Wood Betony, Skullcap, Papaver, Cannabis

Muscle spasm/Nerve Pain: Magnesium topically, Blue Vervain, Lobelia or Pedicularis tincture applied topically can be very helpful, along with 2-5 drops of Lobelia or 1-3 dropperfuls of Pedicularis internally. Aconite tincture is highly effective topically for extremely stiff neck

pain or torticollis. Mahanarayan (Ayurvedic Pain Oil), Hypericum or Poplar bud oil or any of the analgesic essential oils, Moxibustion, cupping. Urtification.

Topical Pain Liniment: Piscidea, Petasites, Hypericum, Spirea, Salix, Rosemary, Papaver, Yarrow, Prickly Ash, Cannabis, Yarrow, Melilotus. Add a few drops of Sweet Birch EO. **Synovial Arthritis**: Birch and Ginger EO with 1 oz sesame oil. Mahanarayan Oil.

Headache, Fever, Excess heat

- EO's: Blue Yarrow, Blue Chamomile, Vetivert, Peppermint
- Shotgun formula: Feverfew, Meadowsweet, Corydalis, Piscidea, Cal Poppy, Butterbur
- Neem oil, cool foot bath
- Acupressure points on inside of ankles (demonstration)
- Altitude sickness: red clover & nettles tea, "ChlorOxygen" 4 drops: 1qt H2O
- Lavender hydrosol
- Magnesium citrate to bowel tolerance

Migraine Headache (Liver Wind Rising/Pitta condition): There are several kinds of migraine headaches; most are liver-based, basic cause is instability/wind, common cause is food allergy, especially artificial additives. Gradual onset, paresthesias, sensitivity to light & sound, difficulty concentrating, nausea & vomiting, vertigo, diarrhea common, visuals black & white.

Common food triggers include:

Aged cheeses, bananas, figs, raisins, beer, wine, hard liquor, red wine, dairy products (ice cream/milk/yogurt, cheese, Sour cream), fermented and pickled products, citrus fruits, papaya, passion fruit, red plums, seasoned salt, soy sauce, MSG, avocadoes, chocolate, lentils, nuts, peanuts and peanut butter, onions, pea pods, lima bean pods, nitrite containing meats and processed meats, saccharin/aspartame (diet sodas), sulfites in shrimp and processed potatoes, yeast containing products (donuts, breads).

Handy herbs: Viburnum opulus, Tanacetum, Lemon Balm Considerations: Stress, Vit B deficiency, Mg deficiency

Prevention:

- Feverfew leaf (Tanacetum parthenium), Calamus root, Butterbur (Petasites) root and leaf, Ginger root, 2T dried powder: glass of water, or 2-4 oz fresh juice to abort episode before it starts. Nettle concentrate, Bone Broth. Vetiver EO, Nasya Oil
- Myers Cocktail (Yale study) Mg, Cal, B Complex micronutrient complex, ~7tsp of nutrient solution in slow IV push ~ 20min.
- Vit D, Lithium, Magnesium (bowel tolerance dose ~1200mg)
- Valerian paste on forehead, coconut or sesame oil on soles of feet.
- Treat the liver, pacify liver wind rising, eat real food

Chologogues to enhance bile secretion:

- Gentian
- Barberry
- Bupleurum

- Fringetree
- Boldo
- Milk Thistle

Gall Bladder meridian: temples to corner of eyes, outside of leg

Immune System

Cold, flu, sore throat, lung congestion

Lung herbs: (some drying, some moistening)

- Balsam Root, Elecampagne, Grindelia, Yerba Santa, Aralia, Lungwort, Usnea, Thuja, Osha, Pleurisy Root
- Garlic, garlic, garlic. Fresh.

Sore Throat

Handy herbs: Slippery Elm, Propolis,

- First "warning bell" sign, take all precautions immediately to rest, restore, rejuvenate. Boost immune system with garlic and echinacea, move lymph, sauna, do "circulatory whip" with brief cold plunges.
- Sitopaladi in Honey, Licorice, Yerba Mansa gargle, Propolis.

 Slippery Elm, Marshmallow, Licorice, any demulcent herb.

Asthma and Anaphylaxis

Average ventilation rates: Adults=12-20/m (1 breath every 5-6 sec.)

Children + infants= 1 breath every 3-5 sec

Asthma: Lobelia topically on chest, also low dose internally. Acupressure points on back.

- Aesclepius tuberosa (Butterfly weed, Pleurisy root)
- Wasabi
- Moringa
- Aralia californica
- Osha

Anaphylaxis: similar herbs as for asthma, heavier dose of Osha, add Ephedra, Grindelia, Goldenrod, Nettle extract, possibly Lobelia as needed. ChlorO2; concentrated nettle extract.

Circulatory

Arrythmia, Atrial fibrillation- Cystisis scoparius (Scotch Broom) flowering spring tips, 1:5 tincture, 40 drops

Hawthorn syrup, Bone Broth syrup. Motherwort.

Emotional Emergencies

Psychiatric Crisis, Anger, Fear, Trauma, Anxiety, Panic Attacks

General strategies: Nervines, Nutritives

- Assess for physical wounds
- Get them to a safer space
- Calm them down
- Get them back in their body
- Feed and water them
- Rest
- Encourage debriefing

Considerations: trauma history, drug ingestion or overdose, stress intensity

Handy Herbs: Drop dose Anenome. Passiflora, Oats, Lavender, Self-Heal, Gotu Kola, Lion's Mane, Pink Yarrow, Redwood, Rhodiola, Mugwort, Sage, Poplar Bud, Hawthorn, Blackberry, Mullein, Lemon Balm, Pedicularis, Blue Vervain

Use the Doctrine of Signatures to come up with herbs from your bioregion that will lend strength. In the Pacific North and Mountain West we frequently align with:

- Oplopanax
- Aralia californica
- Yarrow

Anxiety EO blend: Orange, Lavender, Clary Sage, Rose Geranium, Chamomile, Vetiver

Herbs for **adrenal exhaustion**: Eleutherococcus, Pedicularis, Skullcap, Blue Vervain, Licorice, Hawthorn, Rhodiola, Codonopsis, Panax quinquifolium, Schizandra, Shiitake, Poria, Trimetes, Reishi, Hericeum, Ashwaganda.

Grief, Shock, Rape and Crime victims:

Hawthorn, Motherwort, Lemon Balm

PTSD Flower Essence: Green Gentian, Bleeding Heart, Fireweed, Echinacea, Arnica, Five Flower Formula

Flower Essences:

- **Five-Flower/Rescue Remedy-** 4 drops under tongue for extreme trauma, 4 drops in 1 cup water for trauma with strong emotional component. Contains: Cherry Plum, Clematis, Impatiens, Rock Rose, Star of Bethlehem
- Elm- "psychological smelling salts," temporary conditions. Gives strength to the strong in moments of weakness
- **Aspen** best remedy for developing courage. (timid cats, fear-based vertigo)
- **Borage** for Courage. For the heavy-hearted.

- **Pink Yarrow** breakups, earth upheaval, climate crisis/apocalypse fears. Supports the open, protected heart.
- Olive- no reserves left, deep inner tiredness, physical & mental fatigue.

Endocrine Emergencies

Handy herbs: Catnip, Gotu Kola, celery

Considerations: clear excitatory estrogen from body: oregano, thyme rosemary, turmeric, sage

Epileptic seizures

Endocrine emergencies: messaging system is responding incorrectly to changes in the body. Hormone regulation is key. Estrogen is excitatory with more electrical discharge, Progesterone is inhibitory hormone that calms brain cells. Risk of seizure is higher when body is making more estrogen than progesterone.

Clinical features: abrupt onset, episodes last minutes, consciousness is clouded, visuals are colored, spherical, sensory is burning, throbbing, nausea uncommon, aura variable, aphasia, olafactory acuity.

- Catnip essential oil, 10 drops transdermal in bellybutton
- Rauwolfia serpentina- bitter sedative, hypotensive. Generally indicated in mental disorders. Very sedating, 1-2 gm powder for epilepsy and autism.
- Lobelia- classic for preventing and treating seizures. Exceptionally successful at curing seizures with daily preventative doses over a few months. Can cause nausea. Dry herb tincture, Acidified fresh herb tincture, Acidified seed tincture, tea or capsules.
- Peony (Bai Shao) sedative and anti-spasmodic, softens and comforts the liver, increases circulation. 6-15g/day, tea or capsules.
- 3 Chinese bugs: scorpion, centipede, stiff silkworm (whole insect larva)
- High CBD Cannabis
- Nasya Oil
- herbal snuffs

Skin, Soft-tissue, and Muscular-Skeletal Injuries

Handy herbs: Calendula, lavender, poplar bud, rosemary, Arnica Considerations: patient compliance, comfortable resting spot.

Sprains & Strains, Bumps, Bruises, Contusions

- Moxibustion, cupping, Gua-Sha, massage.
- R.I.C.E.: Rest, Ice, Compression, Elevation = outdated myth.
- Arnica: 4 tablets 200ck homeopathic for severe sprains with pain, then give every 20 minutes for 2 hours, then every 2 hours for 1 day, then every 4 hours for 1 day, should be able to walk by 2nd day. Do not use Arnica oil topically if skin is broken use Hypericum oil instead. Wrap ankle in Hypericum oil soaked muslin and elevate above heart over a basin, keep pouring oil over muslin or wrap with plastic wrap and cover with wool sock.
- Trauma Oil: Comfrey root/leaf, populous, calendula, arnica, cannabis, rosemary,

lavender, helichrysum EO

- Turmeric and salt poultice
- Yarrow, Comfrey, Rosemary

Infections

Handy herbs: Larrea, Lavender, Calendula, Anemopsis, Oregon Grape, Coptis, White Oak Bark,

Goldenseal, Echinacea, Licorice

Considerations: access to hot water for repeated bathing or submersion, hydrotherapy.

Antiseptic Wound Powder: Usnea, Goldenseal, Oregon Grape, Echinacea, Lavender, Larrea. This will keep about a decade in a small glass vial or jar in your emergency kit. Add sage, mugwort, tobacco, plantain as needed.

Wound Wash: Same ingredients as above, add more Larrea, Gigartina as needed. Heat packs.

Topical Disinfectant Spray or Wash:

Powerful bactericide for spraying on sinks, door handles, toilet seats, mattress (bed bugs), toe fungus, etc:

Essential oils of (or raw fresh or dried plant material):

- Lavender 2 parts (10 drops)
- Thyme 4 parts (20 drops)
- Eucalyptus 1 part (5 drops)
- Oregano 1 part (5 drops)

8 drops in a bowl of water for washing or 15 drops to a spray bottle

Eye Care

Handy herbs: Black tea bag, chamomile tea, rosewater, Eyebright, Bilberry, Blueberry, Thyme Considerations: mechanism of injury, infection isolation

Eyewash:

- Rosewater & Black Pepper EO: 4oz plastic squirt bottle
- Black Tea bag, Chamomile Tea bag, squish gently and let sit 10-15 min.
- Eyebright (pinkeye, conjunctivitis)

Inflamed or Itchy Eyes: Rose hydrosol or chamomile tea bag applied to the affected eye. For pink eye or styes, Berberine-containing herbs such as Oregon Grape Root or Coptis tea applied topically and taken internally can help address the infection.

Ear Care

Handy Herbs: Mullein, Anemopsis, Onion

Painful or infected ears: Mullein and garlic infused olive oil, 2-3 drops of the warmed oil applied in canal. Thyme or Oregano EO behind ear.

Clogged Ears: Hydrogen peroxide, 1-4 drops EtOH or vodka can break up wax plugs.

Appalachian remedy: Bake ½ onion 20-30 min., hold to ear for half hour. Mongolian: take out inner filet/sprout of onion, wrap with ghee, insert into ear canal.

Apply essential oils just behind and around ears for middle ear problems (thyme, oregano). Gua-sha the lymph nodes in and around neck.

Bleeding

Handy herbs:Cayenne powder, Mullein, Shepherd's Purse, Yarrow, Slippery Elm , Licorice powder

Yunnan Bai Yao: internal & external for bleeding; no more than ½ tsp in water at once. Slows bleeding, stay alive til ambulance comes Spider's web (VitK)

Put patient in resting position, apply pressure, and calm them down. Bleeding should stop in 5-10 minutes, 20 minutes for bigger wounds. The more calm and centered you can encourage them to be, in general the faster the bleeding will stop.

Burns

Never use salve/oils on a burn, it will accelerate the remodeling process. Use lavender EO or hydrosol, and raw honey!

- **RAW Honey** apply carefully to a non-stick bandage or sheet of plastic, then wrap with wool, muslin, Coban or Ace bandage.
- Lavender Essential Oil (the one I would choose to take to the desert island)
- **Yarrow** (Blue Yarrow EO; Azuline=amazing wound healing property)
- Helichrysum EO unparalleled cell regenerating power
- Wild Carrot Seed EO for scar reduction
- Calendula CO2 extract
- Prickly Pear cactus inner filet, plantain
- Colloidal silver, aloe vera and coconut oil
- Larrea, seaweed wash

Sunburn

Lavender hydrosol topically is superior. Neem leaf in sesame oil or Larrea wash or strong oil is helpful too. Plantain, seaweeds. Apply aloe gel topically and drink 2-4 oz aloe juice (inner filet only, not whole leaf) internally.

Bites

Spider bites, Snake Bites, Marine toxins, Wasp & Mosquito Bites

- Activated charcoal poultice, replace every 20 minutes
- Lavender EO, neat
- Ledum homeopathic, 5-6 X/day
- Honey, Clay, Chickweed, Plantain
- Baking soda paste for wasp stings
- Drawing & Anti-Bacterial Poultice (see recipes)
- Plantain and Echinacea for Brown Recluse Spider bites (spreading, bulls-eye, necrotizing flesh)
- Chamomile compress relieves itching immediately

Bee stings

After using fine tweezers to remove any residual stinger, Echinacea tincture and/or lavender EO can be applied directly to the sting, then covered with a soaked clay or plantain poultice. Brush stinger off, apply ice to reduce inflammation, apply honey or clay. Give Apis homeopathic. Those with serious bee allergies will find it most prudent to carry their own Epi-Pen along with Benadryl, and teach themselves and those who they spend time with how and when to use it. Most people can train and modify their response after an initial strong reaction. Adrenaline is a rush!

Lice, Scabies and Other Bothersome Parasites

Scabies

A burrowing parasite that generally needs skin contact for transmission but also loves couches and travellers. Initial signs are usually itching between base of fingers, then elbows. Red "tracks" develop, from female diving beneath skin to lay eggs and popping up again about ¼ inch later. Extreme household-wide hygiene is required to remediate. Disrobe while standing on a garbage bag so clothes can be immediately washed and dried on HOT cycle. Apply Neem seed oil mixed into sesame oil with Lavender essential oil added head to toe twice or thrice daily. Take a hot Borax bath nightly (2 c Borax: bathtub), diligently scrub infected areas HARD with veggie scrub brush to dredge up the eggs beneath skin, isolate & wash bed linens daily, dry on HOT, isolate couches and put all fabric items in plastic garbage bags for 2 weeks, use gloves while handling all this. Similar protocol for crabs, body lice but maybe not as extreme. Balsam of Peru.

Lice

Thyme Rinse:

- 1 oz. Thyme herb
- 1 qt. water

To make a strong infusion, place the thyme in a canning jar or ceramic teapot with good fitting lid, pour just-boiled water over the herb and let steep for 3 hours.

After the three hours have passed, add:

- 2 cups Apple Cider Vinegar
- 1 Tablespoon Thyme essential oil

Steep again for 3 hours; shake very well before each application.

Use as a hair & scalp rinse 7 nights in a row. Stop for 6 days. Repeat for 3 days. Stop for one week. Repeat 1-3 days if needed. Apply neem seed oil (diluted in sesame) to nape of neck twice daily as preventative.

Tick bites

Identify the species using a magnifying glass to determine if the tick could be a Lyme's carrier and to determine if the tick has begun to engorge with its blood meal. Dog ticks are brown with a white collar and are size of a pencil eraser. "Deer ticks" or "Western Black Legged Tick", (Ioxedes pacificus or scapularis) are brown with black legs. "Deer ticks" can transmit Borrelia burgdorferi, the bacterium responsible for causing Lyme's disease, "Dog ticks" do not. AVOID squishing the tick and forcing it's gut contents back into the body. Use a Q-tip and massage around the tick for several minutes, if this doesn't work, tape a moist soapy cottonball over the tick. The tick will release it's mouth parts and begin backing out, making removal much easier after about a 15 minute wait. Then use a tick removal tool and turn counterclockwise as you gently tug. Be sure to carefully check that you have removed all mouthparts and if the tick has been embedded for longer than 24 hours, it has begun it's blood meal it's prudent to send in to a lab with the moist cottonball in a sealed container for testing and advise the patient on signs and symptoms, and an internal formula for prevention. We use IGeneX, Inc for the Western Blot Test, but ispotlyme.com is claiming 95% accuracy; ~\$600 though.

• Ledum homeopathic for the bite

Potential herbs for a Lyme's Formula or pulsing rotation:

Spilanthes, Anemopsis, Echinacea, Teasel, Bidens, Isatis, Baptisia, Sambucus, Tulsi,
 Corydalis, Andrographis, Astragalus, Uncaria, Allium, Coptis, Polygonatum, Corydalis,
 Hypericum, Berberine, Bursera, Anemopsis, Ceanothus

Associated Brain Fog: Gotu Kola, Gingko, Rosemary

Thuja EO, 3 drops topically pulls juices out of bite area is still red after tick removal. Then mix Blue Chamomile with Bentonite clay and patch on topically.

Punctures, Splinters, Non-healing wounds, Staph infections

All-Purpose Poultice Powder or Drawing Poultice:

- o Mugwort
- Nicotiana
- o Calendula
- o Plantain
- Lavender
- Bentonite Clay or Activated Charcoal
- o Usnea
- o Sage
- o Larrea
- Licorice
- o Any Berberine-containing herb
- o Myrrh gum powder or any anti-biotic resin
- Hops resin/hash
- Figwort (*Stachys*) specific for cutaneous eruptions, abscesses, wounds, burns, gangrene

Moisten ground herbs with hot water, fold into cloth or gauze or pre-make in press-on tea bags. Apply to injured area and add hot water by spoonfuls on top of cloth, or tape on in case of splinter or puncture, cover with hot water bottle, and leave on overnight.

Itching & Allergic Reactions

Internally treat the underlying inflammatory response with anti-histaminic herbs like Turmeric, White Oak, Grindelia, Goldenrod, Nettles, Fireweed, Chickweed, Plantain, strong Nettles extract. Fresh young Coconut water.

Topically: Bentonite Clay poultice, baking soda, plantain.

Poison Oak

- White ash is preventative and curative. Gather in am after logs have burned all night. Dust on skin.
- Fels Naptha laundry bar soap, Dr. Bronner's Sal Suds, Marie's Poison Oak soap, Charcoal soap, super hot frequent showers.
- Witch Hazel, Apple Cider Vinegar, Manzanita leaves, Grindelia, Oregon Grape Root, green Acorns, Yerba Santa, Sassafrass, etc. Steep 2 weeks, strain and put in spray bottle.
- Internally: Nettles-Grindelia-Goldenrod, White Oak, Turmeric, Chlor 02

Allergy Shotgun Formula (choose 5-6)

Base formula:

- Nettles (freeze-dried caps or CO2 extract)
- Goldenrod
- Grindelia
- Chickweed

Additions depending on presenting symptoms:

- Ambrosia
- Filipendula (Meadowsweet)
- Willow or Oak bark
- Turmeric glycerite
- Wasabi
- Euphrasia (Eyebright) *cultivated only

Urinary, Kidney, Bladder

General UTI: Agropyron (couch grass/orchard grass root), Althea (marshmallow) cold infusion root tea, Cannabis, KavaKava, Zea mays (dried cornsilk tea), Uva Ursi, Chimaphila (Pipsissewa), Vaccinium (blueberry)

Nephritis, deep-seated kidney pain: Agropyron, Hydrangea, Solidago (Goldenrod). High doses of Anemopsis. Althea, Uva Ursi, Juniper. Wear a harimake.

Gastro-Intestinal Issues

Handy herbs: Blackberry root, fennel, clove, activated charcoal, mint Considerations: handwashing and dishwashing stations, communal toilets, kitchen protocols, water purity, identifying stomach flu early on.

Viral Gastroenteritis: Coptis powder, Anemopsis, Chapparo armagosa, Echinacea angustifolia

Neutralizing Cordial: an Eclectic Physician formula from the '30s. "Herbal Tums". Broad spectrum belly medicine, tasty and highly effective for wide variety of stomach issues from sulphur burps to mild indigestion. 1-2 Tablespoonful doses, safe for children in slightly lesser amounts:.

- Turkey Rhubarb
- Goldenseal
- Cinnamon Bark
- Peppermint spirit
- Simple Syrup
- Potassium bicarbonate

Diarrhea:

- Blackberry root tea or tincture
- Salmonella: 1 qt. Apple Cider Vinegar & 6 cloves garlic. Take 1 tbs/day for 2 weeks.
- *Coptis chinensis* rhizome for all manner of gut bugs & as preventative while travelling, eating street food. (Huang Lian Fen). Available in handy tablet rolls in Chinatown.
- Activated charcoal capsules or liquid suspension for poisoning. Burned toast in a pinch.

lacksquare

Dysentery:

Ailanthus

Constipation:

• Magnesium citrate is our go-to reliable stool softener.

There are three main factors that can contribute to constipation: insufficient fiber, insufficient moisture, and insufficient peristalsis.

Drinking 8 oz of marshmallow/ginger infusion with two dropperfulls Cascara sagrada tincture will help address the moisture and peristalsis factors.

½ to 1 tsp of psyllium husk powder dissolved in 8 oz of water can help address the fiber aspect.

Staying relaxed and actually taking the time for a bowel movement will also help.

- 1 drop of Peppermint essential oil on tongue sometimes helps certain individuals, or 10 drops Peppermint spirits if child, elderly, or cool/deficient.
- Triphala, 2 Tablespoons in warm water is good for most and normalizes both diarrhea and constipation.
- 1:16 strength Ginger root honey syrup with dry and fresh root can be outstanding for some.

Sulphur Burps, Indigestion:

Strong Peppermint tea Neutralizing Cordial Green papaya salad Papaya enzymes, Triphala

Dry heaves, dry mouth: paste of a whole lemon & sea salt, tiny fingerfull in mouth

Amoebas, Giardiasis:

- "Parasites Be Gone": Neem, Kutaja, Vidanga, Juglans. (UCSC control study with livestock for parasites), works for pinworms in children too.
- Huang Lian Fen (Chinese yellow coptis) super high in Berberine. Can buy as yellow tablets in handy rolls for travel in Chinatown. Excellent preventative for Montezuma's Revenge. Oregon Grape Root a milder substitute.
- Chapparro, Anemopsis, Juglans, Wormwood, Sweet Annie, Silk Tassel, Cloves, Oregano, Thyme, Ailanthus, Pennyroyal
- Bitters, Papaya seeds, lime, ginger

Bleeding Ulcers: Capsella, Cinnamonum, Erigeron, Quercus

Duodenal with pain shooting to navel: Piper menthyisticum (Kava)

Vomiting: Anemopsis, Caffea, Dioscorea, Mentha piperita (peppermint), Nepeta (catnip) For large events, put up ½-1 gallon of cold infusion of Althea root (marshmallow)

Appendicitis:

 Ocotillo, Ceanothus. Moxibustion, localized massage. Hayden's Viburnum Compound, topical essential oils

Dental First Aid

- Clove Bud-3 drops of the essential oil mixed into Myrrh gum powder on Q-tip cotton or wrapped in gauze, or clove bud between cheek & gum.
- Spilanthes "toothache plant"
- Barberry, Coptis, Oregon Grape Root all high in Berberine
- Neem ("the Village Herbalist" in India; the sticks are used as toothbrushes)
- Triphala "Three Fruits"
- Hydrogen Peroxide (H2O2) diluted to 10% with water, rinse, can add 5 d peppermint oil.
- TMJ (Temporal Mandibular Joint) massage.
- Witch Hazel, White Oak, Echinacea, Myrica, Commiphora, Propolis, Anemopsis
- Oil pulling; ½ cup sesame oil held in mouth ~5 min before bed.
- transport a knocked-out tooth in saline solution

Reproductive

Menstrual flooding: Capsella, Erigeron-Cinnamon compound. Canadian fleabane.

Hayden's Viburnum Compound: "the Queen of Cramp Remedies"

Viburnum opulus, Viburnum prunefolium, Gossypium root bark, Wild Yam, Skullcap, Cloves, Cinnamon bark, Orange Peel, simple syrup

Environmental Exposure

Considerations: Length of time of exposure, shock symptoms, hydration, glucose levels, comfort, fear, distance & time to transport to better care

Cold Exposure harimake, mugwort heat packs, deep warming herbs. Heat slowly.

Chills Try a foot bath in a warming herbal infusion: oregano, rosemary, and thyme can be nice and is generally easily available.

Heat exhaustion: This can quickly progress into a dangerous condition, so attend carefully to anyone showing any symptoms of heat exhaustion and evacuate anyone showing signs of heat stroke. Electrolyte and Vit C- rich rehydration blends can be very helpful for preventing heat injuries. Also try lemon, hibiscus, and rosehip tea, which also can be effective to help prevent overheating.

Lavender hydrosol is amazingly effective at cooling the whole body, and prevents sunburn & heat rash.

Lemonade berry (Rhus integrifolia), is a great refrigerant. Peppermint EO, one drop on top of head.

Recipes

Hydrotherapy - classic German method: **9 revolutions of hot and cold, 20 minutes total.** Highly effective for reducing swellings due to sprains and strains, overuse and will speed healing time exponentially.

Indications: sprains & strains, any congested tissue, frostnip, Raynaud's, slow-healing wounds, gangrene, staph

Materials needed: 5 gal buckets for ankles, visible clock or timer, kitty-litter pan sized basin for arms, smaller vessels for hands or feet. Place towel between the buckets to absorb drips, and have one handy to dry off after. Fill one with iced water and the other with hot to tolerance (about 112 degrees is good) Keep more ice, tea kettle with boiled water handy.

- Submerge in hot water for 3 minutes, plunge in cold for 90 seconds, back and forth for 9 revolutions or roughly 20 minutes. Start with hot, end with cold.
 About halfway you'll need to add more hot and more ice to keep the temps ideal.
- Add Wound Wash tea, Lavender ess oil to this to bump it up a degree in healing power.

Oral Rehydration Blend

- 1 gal. strong herbal sun tea: Hibiscus, Lemon Balm, Lemon verbena, Lemongrass, Tulsi, Spearmint or Peppermint, Rosehips
- Mix with a little warm water or tea: 2c sugar, 1c salt (can make Simple Syrup instead)
- 1 quart fresh lemon juice, or 10-12 fresh squeezed lemons
- 1 quart Aloe Vera Juice * NOT Aloe gel! =purgative

- Strain and pour into a 5 gallon vessel
- Add block ice floating in it's own waterproof container

Dosage is one ounce:16 oz water.

Wound Wash

Sterile Mason jar, make a strong infused tea, strain with butter muslin, use for irrigating wounds.

Can contain: Mugwort, Larrea, Hops, Lavender, Calendula, Usnea, Yarrow, Thyme, Oregano, Berbine-containing root bark coarse powder, Seaweeds, Licorice, Plantain, Comfrey, Roses, Violet, Monarda, Sages, etc.

Poisoning

Charcoal is the go-to.

(Universal Antidote)

Pulverized, activated charcoal (or burnt toast) 2 parts
Tannic acid (strong black tea) 1 part
Magnesium oxide (or Milk of Magnesia) 1 part

Follow with **MASHH Clinic Detox Blend** (treats tear gas and chemical weapons exposure through the liver). 2 capsules with 3 meals/day for 2 weeks.

Equal Parts:

Standardized Milk Thistle Seed Powdered Extract

Dandelion root powder

Burdock root powder

optional additions:

Marshmallow root powder

Turmeric root powder

MASHH CLINIC FIRE CIDER

Tip of the hat to Rosemary Gladstar for popularizing this inexpensive kitchen medicine. The recent trademarking of the generic, freely shared term "Fire Cider" by Shire City Herbals has resulted in 3 herbalists who have refused to stop labeling their product "Fire Cider" being sued for trademark infringement. *Support the Fire Cider 3!* Boycott this product wherever you see it on the shelves, alert the store manager, and MAKE YOUR OWN:

- 2 bulbs garlic
- 6 in. fresh ginger root
- 6 in. fresh horseradish root
- 12 capsicum
- 1 head parsley
- 1 onion
- 1/2 gallon good apple cider vinegar

Chop it all up, soak 2 weeks in dark place, shake daily or bury the jar in the earth, mark the location. After two weeks have passed, strain marc through sterile cheesecloth, into sterile vessel and add:

- juice of 1 lemon
- about 1 1/2 cup of vegetable glycerine
- 1-2 T Rosehip powder
- raw honey if desired

Pour into dark colored bottles, label and cap tightly for storage.

Tea for Sleeping

3 parts Chamomile
1 part Hops
1 part Catnip
1 part Peppermint
1 part Skullcap

C-C-F Tea for Indigestion

Coriander
Cumin
Fennel
Simmer the seeds 15-20 min.
Atrain, add sweetener if desired.

Hospital Advocacy

It's helpful to proactively learn how to navigate area hospitals in case you are allowed in with a potential patient. Bring your flower essences; they're easiest to gently place into water that you innocently administer without drawing suspicion under their nurse's watchful eye. (Homeopathics are a sham and aren't recognized by science, right?) Massaging the patient's feet with therapeutic oils is another good method to get herbal medications to your patient in a hospital setting. Herbs and spices can be decocted in milk, soups and broths teeming with herbal ingredients can be delivered. Zoom balls are an excellent way to disguise herbal ingredients that might draw attention from the floor nurses.

First Aid Kit Ingredients

Primary Conditions to account for:

- Skin injuries: Cuts, burns, punctures, rash
- Sprains, strains
- Pain, headaches
- Immune support
- GI support
- Reproductive support
- Eye injuries
- Dental problems
- Endocrine problems
- UTI/Kidney problems

Plant Medicines

Common first aid garden cultivars and weeds, easy-to-find-and-obtain wild forest & vacant lot medicines found in the Pacific Northwest, Rocky Mountains and Desert regions

Always extensively research the geology and human impacts history of the place you are gathering from! Check the United Plant Savers threatened list. Check the Red List to make sure the plant you want to harvest is not on it. Take into account recent weather abnormalities such as drought. Observe carefully before harvesting, ask people and plants for permission. Always connect with the local indigenous people or tribal office before you head out onto their territory. Make sure you're not digging in toxic soil, or taking from someone else's wild-cultivated stand.

All these plants are chosen because they are often readily-available, can be mashed and used instantly, or made into a tea. Many are multi-use and thus have the honor prime position in our first aid kits. Relatively listed in order of my most-used.

- Plantain (Plantago spp.) all purpose first aid plant, poulticing, diarrhea, soothes inflammation
- Lavender (Lavandula angustifolia) broad spectrum anti-biotic, anti-bacterial, anti-viral
- Yarrow (Achillea millefolium) hemostatic; stops bleeding. UTI. Foot soak for hot conditions
- **Hypericum** *perforatum* blunt trauma, contusions, sprains
- **Arnica** *montana* blunt trauma, contusions
- Mugwort (Artemesia douglasiana) moxibustion, spring bitter tonic, magical, drawing
- Calendula (Calendula officinalis) best skin herb, also soothes & heals gut lining, IBS
- Oregon Grape Root (*Mahonia nervosa*) Antimicrobial; liver. stagnation, eczema, constipation, heat or infections in the digestive tract, mouth infections, eye infections, skin infections, UTI, hemorrhoids, sore throat, acne, syphilis
- Usnea *spp*. hemostatic, anti-microbial, kills candida, anti-herpetic with olive leaf, micoplasmic pneumonia. topical dressing, anti-septic, inhibits gram-positive bacteria
- **Chickweed** (*Stellaria media*) juice/succus for assisting removal of any lumps in body, cysts, cooling for hot conditions, lymph support
- **Cleavers** (*Galium spp.*) juice/succus: skin, diuretic, poultice, diuretic, glandular fever, febrifuge, gentle lymphatic
- Chamomile (Matricaria) anti-bacterial, good stye remedy, calming, great herb for children, soothes gut

- White Willow Bark (Salix alba) All purpose pain reliever and anti-inflammatory. 1899 Bayer modifys and sells acetylsalicylic acid, aspirin
- White Oak Bark (Querqus alba) All-purpose reliable astringent; nosebleeds, diarrhea, vomiting, menstrual flow
- Manzanita (Arctostaphylos) spring tips used in poison oak remedy
- Fennel (Foeniculum) carminative, dispels gas, resolves hunger pains
- Rose (Rosa spp.) cooling for skin, astringent, hydrosol, rose water, rosehips for Vit C
- Borage (Borago officinalis) mucilagenous. good substitute for marshmallow root, aloe
- **Feverfew** (Tanacetum parthenium)
- California Poppy (Eschscholzia californica) all purpose pain remedy, bitter
- Nettles (Urtica dioica) oxygen transport, high vit and mineral content, superfood
- Black Walnut (Juglans spp) broad spectrum anti-fungal, anti-parasitic
- Western Red Cedar (Thuja plicata) powerful anti-fungal, lung support
- **Hops** (*Humulus lupulus*) nervine, sedative for sleep, bitter.
- Wild Oats (Avena spp.) nervine, nutritive. Skin aid for rashes, burns
- Grindelia (Gumweed) expectorant, Poison Oak
- Goldenrod (Solidago) Anti-inflammatory with wide spectrum of uses
- Uva Ursi (Arctostaphylos uva-ursi) UTI
- Corn Silk (Zea mays) UTI
- Self Heal (Prunella)
- Blackberry (Rubus fruiticosus) root bark ideal but leaves work. Astringent, anti-diarrheal for dysentery
- Mullein (Verbascum thapsus) bactericide
- Miner's Lettuce (Claytonia perfoliata) gently demulcent, Vit C
- **Teasel** (*Dipsacus sylvestris*) pulls bacteria from tissue, into bloodstream; some are using for treating Lyme's disease & the 3 known co-infections
- Self Heal (Prunella vulgaris) deep cuts, wounds, insect bites, styes, lipomas
- Quack grass, Couch grass (Agropyren repens) kidney stones, gout, cystitis, prostatitis, UTI
- Red Osier Dogwood (Cornus sericea) Pain, anti-diarrheal, laxative
- **Violet** (*Viola spp*) 900 species worldwide. Topical for bruises. Salicyclic acid reduces pain & swelling. Relieves congested tissue, swollen glands, cancer.
- Sage (Salvia officinalis)
- Creosote bush (Larrea tridenta)
- Ailanthus (Tree of Heaven) cooling, astringent. Dysentary, diarrhea, asthma, epilepsy, worms, fever, spasm
- Seaweeds: Red Marine Algae (Gigartina)- Clinical trials have shown that these sulfated polysaccharides can suppress HIV, herpes and influenza viruses. Bladderwrack (Fucus) bonds with Strontium 90 and removes it from the body.
- Other good friends: Capsella, Mints, Marshmallow root, Oregano, Thyme, Manzanita, Yerba Santa, Elephant Tree, Lemon Balm, Yerba Santa, Pearly Everlasting, Lemon Verbena, Monarda, Motherwort, Hawthorn, Gotu-Kola, Echinacea, Wild Carrot Seed,....
- Imports: Myrrh gum powder, clove bud

Basic Random tools you may want to include in your kit:

Topical: Wool sock tops, toddler socks, finger cots, steri strips, plastic wrap, strips of wool fabric, tweezers or cuticle clippers, baking soda, aloe gel, sunblock, honey, clay, wool flannel for staunching bleed outs or using as emergency moon pads, shotgun "all purpose" salve, hot water bottles, kitty litter pans (new, for hydrotherapy with hands, wrists, elbows), 5 gal

buckets (lower extremity hydrotherapy), extra clothes, raincoat, sleeping bag, pillows, strips of old t-shirts, safety pins, flashlight, muslin, butter muslin, ziplocks, spray bottles, water bottles to give, disposable camera with flash, condoms, preg test kits, veggie broths, saltines, jerky, Vit C, funnels, solar shower, para cord, clamps, waterproof tape, clothes pins, rubber bands, lighter, candles, cheap toothbrushes, paste, dish pans for foot soaks

Office/Tool buckets (containers should be waterproof):

Office supplies like pens & waterproof notebooks, Green painter's tape for labeling, Sharpie ultra-waterproof markers, 3x5 note cards, extra tent stakes, small axe or hatchet, rope, 2-way radios, pony clamps, plastic bags all sizes

First Aid essentials:

Steri-Strips, Butterfly bandages, all sizes bandaids, knuckle & fingertip bandages, finger cots, gauze 4X4s, 3X3s, 2X2s, Tegaderm or other waterproof goretex bandage, micropore tape, athletic tape, vet wrap/Coban, irrigation syringe, Epi-Pen, thermometer, sharps kit, Sierra cup, Lavender EO

Recommended First Aid Training

Generally, first aid courses with a wilderness focus are the most useful. They generally teach a wider scope of skills than urban first aid courses, and account for the fact that people do not usually have all the optimal supplies and may have extended contact with the victim before emergency personnel arrive. Three or Four-day Wilderness First Aid (WFA) courses are appropriate for those who want a general introduction to the most common first aid situations. Ten-day Wilderness First Responder courses are very comprehensive and are highly recommended for anyone who lives or spends much time in places more than 20 minutes from definitive care. Take note that during direct actions or natural disasters, even the inner city can be considered being more than an hour from definitive care if the roads are shut down or if there are mass casualties that exceed the medical system's capacity.

Wilderness First Responder and Wilderness First Aid courses with supplemental herbal training are available through a partnership of the MASHH Clinic and Wild River Medical Training. Herbal First Aid courses of varying lengths are also offered through the MASHH Clinic Collective.

The MASHH Clinic Collective: Plants * People * Planet Herbal First Aid, Education, Events, Wellness, Disaster Preparedness

MASHH is a grassroots collective based in far northern California and Oregon. We are primarily Street and Forest Medics who are experts in herbal first aid. We offer our skills and help get

medical supplies & clinical support to a variety of off-grid events including nonprofit gatherings of herbalists, primitive skills gatherings, forest defense campaigns, native lands rights actions, base clinics at social justice movements, as well as disaster zones around the world. We have set up remote clinics at events such as the Northern California Women's Herbal Symposium, the Montana Herb Gathering, the Northwest Herbal Fair, the Buckeye Gathering, and are available for hire at large events that have been approved by the indigenous landholders.

Our mission is to provide accessible, sustainable, affordable, natural medicine for all people but especially those engaged in environmental and social justice, and particularly those engaged in nonviolent direct action campaigns to defend wilderness ecosystems and biodiversity. We take direct action against the industrial medical complex and provide traditional, plant-based first aid, preventative healthcare, and education meant to empower the people. Herbs First!

Recommended Reading:

"Herbal Repertory in Clinical Practice" by Michael Moore, SWSBM

"Medicinal Plants of the Pacific Northwest" and all other field guides, website & chap books by Michael Moore, Southwest School of Botanical Medicine.

"Botany in a Day" by Thomas Elpel, HOPS press

"Shanleya's Quest" by Thomas Elpel, botany card game with accompanying story book

"Pocket Guide to Herbal First Aid" by Nancy Evelyn, Crossing Press, 1998.

"Backcountry First Aid & Extended Care" by Buck Tilton, WMI of NOLS, The Globe Pequot Press, 2002.

"Healing Wise" by Susun Weed, Ash Tree Publishing, 1989

"The Herbal Kitchen" by Kami McBride, Conari Press, 2010

"A City Herbal" by Maida Silverman, Ash Tree Pub, 3rd Ed 1997.

"The New Healing Yourself" by Joy Gardner, The Crossing Press, 1989

"The Male Herbal" by James Green, Christopher Publications, 2001

"Natural Medicine for Children" by Julian Scott, Avon Books, 1990

"The Complete Herbal Handbook for Farm & Stable" by Juliette de Bairacli Levy

"Herbal Healing for Women" by Rosemary Gladstar, Fireside by Simon & Shuster, 1993

"Dental Herbalism- Natural Therapies for the Mouth" by Leslie M. Alexander, 2014

"Complete Book of Dental Remedies" by Flora Parsa Stay

"Where there is No Doctor" and "Where Women Have No Doctor" and "Where There is No Dentist"

Kids, Herbs, Health by White and Mavor, 1998