

# Everyday Emergency Kit<sup>1</sup>

Keith Conover, M.D., FACEP Revision 8.6 6/16/17

✓	#		Exp. Date
<b>Survival Etc. Bag<sup>2</sup></b>			
	4	large leaf bags for shelter <sup>3</sup>	(5/17) <sup>4</sup>
	1	magnesium firestarter	NA
	1	Fiskars™ knife sharpener <sup>5</sup>	NA
	1	lightweight water bag	(5/17)
	1	btl. iodine water tablets <sup>6</sup>	(5/17)
	1	350 kcal food bar (ProBar), sealed in plastic	(5/17)
	1	pair disposable handcuffs <sup>7</sup>	NA
	2	2 yard roll duct tape	(5/17)
	1	15 mL btl. Sawyer picaridin insect repellent <sup>8</sup>	(5/17)
	1	15 mL bottle sunblock	(5/17)
	1	pr. "slip into your glasses sunglasses" <sup>9</sup>	NA
	2	ultralight splints (pieces of 1-gal plastic milk/water jug.) <sup>10</sup>	(5/17)
	1	small packet toilet paper	(5/17)
	1	Rite-in-the-Rain notebook	(5/17)
	1	pr. paramedic shears <sup>11</sup>	NA
	1	20" hand chain saw <sup>12</sup>	NA
	1	Petzl e+lite headlight <sup>13</sup>	(5/17)
	6	Spare batteries for above (takes 2 at a time) <sup>14</sup>	(5/17)
	1	tiny pencil sharpener	NA
	1	Small pencil	NA
	1	tiny survival compass	(5/17)
	2	large safety pins	NA
	1	blanket pin	NA
	2	paper clips	NA

<b>Medical Bag</b>			
		License, DEA, Board Cert, prescriptions	NA
	1	Tick Twisters (3 sizes) <sup>15</sup>	NA
	1	string for ring removal	NA
	1	OB-type compressed tampon (dressing)	(5/17)
	1	2-balloon nasal hemostat <sup>16</sup>	(5/17)
	1	Rapid Rhino anterior nasal pack <sup>17</sup>	(5/17)
	1	#15 + #12 scalpel blades	(5/17)
	1	packet rehydration salts	(5/17)
	2	2x2" QuikClot gauze <sup>18</sup>	(5/17)
	1	TourniCot finger tourniquet <sup>19</sup>	(5/17)
	1	6.5 Endotracheal Tube <sup>20</sup>	(5/17)
	1	5.0 ET tube: peds/cric	(5/17)
	1	surgical lubricant packet (nasal intubation)	(5/17)
	1	one-way valve (mouth-to-tube ventilation)	(5/17)
<b>Injection Equipment</b>			
	2	25 ga SQ needles	(5/17)
	2	21 or 22 ga IM needles	(5/17)
	2	18 ga IV catheters	(5/17)
	1	20 ga IV catheter	(5/17)
	3	18 ga needles	(5/17)
	1	saline flush 20 mL bottle	(5/17)
	1	IV start pack	(5/17)
<b>Injectable Medications</b>			
	1	midazolam injection 50mg/10mL	
	3	epinephrine 1:1000 1 mL <sup>21</sup>	3/18
	1	bupivacaine 0.5% 10mL <sup>22</sup>	
	2	diphenhydramine 50 mg Injection	6/16
	4	morphine sulfate injection, 20 mg vial	
	2	naloxone 2 mg injection	
	2	droperidol 2.5 mg/mL, 2 mL vial	
	2	dexamethasone 10mg/mL, 10 mL vial	1/17
		few spare benzoin ampules for padding	
	1	atropine 8 mg vial <sup>23</sup>	
<b>Misc.</b>			
	1	albuterol (Ventolin HFA <sup>24</sup> ) inhaler	7/16

	1	LiteAir cardboard spacer for inhaler	(5/17)
	1	nitroglycerine spray bottle	1/10
	1	Kendall P2 Sharps Shuttle <sup>25</sup>	NA
	1	tetracaine eyedrops 1mL	
	1	StingEze® 3mL btl.	6/21 <sup>26</sup>
<b>Pills</b>			
	6	acetaminophen 500 mg	5/17
	8	naproxen (e.g., Aleve) 220 mg	4/17
	6	aspirin 81 mg	9/17
	12	100 mg chewable ibuprofen tablets <sup>27</sup>	4/16
	8	loperamide (e.g., Imodium) 2 mg	11/15
	12	prochlorperazine (e.g., Compazine) 5 mg tablets <sup>28</sup>	5/18
	6	ondansetron (e.g., Zofran) 4 mg oral dissolving tablets	9/15
	10	famotidine <sup>29</sup> (e.g., Pepcid) 20 mg tablets	9/16
	5	fexofenadine (e.g., Allegra) 180 mg tablets	9/16

<b>For Backcountry and City (stuffsack)<sup>30</sup></b>			
	2	pr FreeForm SE nitrile exam gloves <sup>31</sup>	(5/17)
	1	Motorola P4000 and Samsung wireless case-cellphone recharger, in Aloksac bag <sup>32</sup>	(5/17)
	8	lightweight Velcro reflective armbands <sup>33</sup>	NA
		pair light gloves and light balaclava	NA
	2	REI ultralight Velcro straps	NA
	1	length of lightweight shock cord/minibiners <sup>34</sup>	NA
	1	50-ft length Kelty Triptease cord <sup>35</sup>	NA
	2	14ga x 3.5" angiocaths for tension pneumothorax <sup>36</sup>	(5/17)
	3	Sea to Summit Nanosil Drybags <sup>37</sup>	NA
	1	Moleskin, assortment of bandaids, roll of 1" 3M Micropore tape (for blisters)	(5/17) <sup>38</sup>
	1	8 benzoin ampules, tiny pharmacy-type ziplock plastic bags for used ampules, 3 ampules of Marathon Skin Protectant <sup>39</sup>	(5/17)
	1	Kevlar bootlace repair kit	
	2	4"x7.5" Aloksac plastic bags <sup>40</sup>	(5/17)
	1	Small bottle of Tums Smoothies	(5/17)
	2	Combat Application Tourniquets <sup>41</sup>	NA

<b>In glasses case, inside above stuffsack</b>			
	1	tiny dropper btl. contact lens solution	(5/17)
	1	pair spare contact lenses	(5/17)
	1	spare contacts case	NA
	1	pair spare glasses	NA
	1	eyeglasses repair kit	NA
	3	spare pair nose pads <sup>42</sup>	NA

<b>For City and SAR (stuffsack)<sup>43</sup></b>			
	1	package pocket Kleenex	(5/17)
	1	small packet toilet paper	(5/17)
	2	prepackaged hand wipes <sup>44</sup>	(5/17)
	2	prepackaged GoJo hand cleaner wipes	(5/17)
	1	MSR PackTowl Nano Small	NA
	2	N95 masks in Ziploc bag <sup>45</sup>	(5/17)
	1	lightweight plastic shoehorn	NA

<b>Dental Hygiene (pockets on back)</b>			
	1	toothbrush and toothpaste for me, one set for my daughter	NA

<b>Winter Only</b>			
	1	pr. ice "creepers"	NA
	1	tiny btl. lock deicer	NA

<sup>1</sup> Fits into a Mountainsmith Blaze II or DayLight or Cabela's Diamond Peak lumbar pack. With the separately-sold shoulder strapettes for the Mountainsmith pack (the Cabela's one comes with them) you can carry a kid piggyback on top of it for hours comfortably.

<sup>2</sup> I used to have a small center punch for shattering car side windows to gain access in a wreck, but now I carry a combination center-punch and seatbelt cutter on my keychain: "resqme" \$20 for two.

<sup>3</sup> Packed in REI ([www.rei.com](http://www.rei.com)) heavy-duty 3"x5" zip lock plastic bags (grocery-store zip bags are bigger/heavier and don't last as long. With some work, a single large plastic leaf bag will fit in such a bag, which protects the leaf bag from getting holes (a problem if you keep one in your kit loose for years) and keeps it neatly compressed. It is thus easier to hand them out one to a person in a time-critical survival situation, too.

<sup>4</sup> (Parentheses) means to inspect on or about this date. Italics means no expiration date given by manufacturer, but fresh on this date.

<sup>5</sup> I like the Smith pocket knife sharpener better in general, and use it to sharpen knives at home and keep one in my 4WD vehicle for sharpening trail tools, but it is heavier and bulkier than the Fiskars version.

<sup>6</sup> Previously I wrote "May want to replace this with a MIOX water purification system from REI, but it's a bit pricey at \$130" but you can't get them any more; they weren't quite as good as initially promoted, but still quite good.

<sup>7</sup> As a National Park Service Ranger, I used to carry a pair of these giant cable-tie handcuffs in my hat; they're handy not only as handcuffs but also for fixing all sorts of things.

<sup>8</sup> I used to use DEET but now find picaridin superior. See [conovers.org/ftp/Ticks.pdf](http://conovers.org/ftp/Ticks.pdf).

<sup>9</sup> Or can attach to face with duct tape. My old pair broke, and when I shopped for a new pair, I found my original brand is now a rare and expensive antique. After some trial and error, I finally decided on "LensCovers Roll Up Sunglasses - one size fits all! 100% UVA and UVB Protection." I put them in a small plastic bag to protect them.

<sup>10</sup> These are very nice ultralight splints, comfortable and small. Use one by itself for a forearm/wrist, or two taped with duct tape for a longer splint for a lower leg. Do not fold in half as this will cause them to break; instead, wrap them around other parts of the kit.

<sup>11</sup> I have researched

<sup>12</sup> There are two types of flexible hand saws: heavier made out of a bit of chainsaw that work quite well but weigh several ounces, and thin actual wire ones that weigh less than an ounce. I first tried the thin/light one, and replaced each of the split ring "handles" on the end, which dig into your fingers, with 24" loops of 3.4" flat black pack-style webbing. On a 5" green stick, it didn't work worth squat, kept jamming, so switched to one of the heavier chainsaw ones. For cutting poles for poles-and-blankets or -jackets stretchers, or whatever. I've used it on some 8" logs and it works great.

<sup>13</sup> Originally, two Photon lights with JakStrap headbands; however, the Petzl Zipka Plus with AAA lithium cells was only a bit heavier, and a much better headlight in many ways. But then Petzl developed the e+Lite survival headlamp, even smaller and lighter and bright enough. Newer versions of the Petzl e+Lite have a cordlock that is also a screwdriver to change batteries and a loud whistle. I carry a Swisschamp Swiss Army knife, a small lockback knife and 2 photon lights (filled with Vaseline to waterproof them) and a windproof lighter on my person at all times except caving; if not they would be listed here.

<sup>14</sup> Sealed in a small bit of one of those plastic bags designed for heat-sealing food. Durable, waterproof, easy to open.

<sup>15</sup> See <http://conovers.org/ftp/Ticks.pdf>.

<sup>16</sup> People can bleed to death from nosebleeds; these will stop almost any nosebleed.

<sup>17</sup> An expanding-balloon-covered-with-Surgicel, the Rapid Rhino device seems far better than a Merocel sponge and weighs only a fraction more. The Model 750 will get anterior and middle and some posterior bleeds but not as painful as the 2-balloon models and is my choice for when I need to replace my existing anterior model.

<sup>18</sup> If you're trying for direct pressure on a bleeding artery, a gauze pad over your gloved finger makes it a LOT easier. Used to have regular gauze, now QuickClot 2x2s.

<sup>19</sup> Finger lacerations are common, and it's hard to stop the bleeding. Putting a TouniCot on is a quick way to get the bleeding controlled, so you can see what's going on. It is a rubberish doughnut you roll down the finger, which squeezes out the blood and then acts as a tourniquet. You can leave it on for a half-hour to let the wound clot, or to repair a laceration. Doesn't weigh or bulk much and there's no good improvised substitute, there is a trick with a latex glove where you put on the glove, snip the tip of the glove finger, and then roll the glove finger down to the base of the patient's finger, but this doesn't work with non-latex exam gloves, as they're not stretchy enough.

<sup>20</sup> For digital or nasal intubation.

<sup>21</sup> Drugs are generally good for at least two years after their expiration date. They may lose a little potency, but that's all. The only one that is really dangerous when "gone bad" is tetracycline. Epinephrine and nitroglycerin, however, lose a lot of potency and should be replaced when they expire.

<sup>22</sup> A digital block can be very effective for a very painful finger injury.

<sup>23</sup> For organophosphate or nerve gas exposure.

<sup>24</sup> I like this brand best as (a) it has a counter, and (b) it has an interlock, so it won't discharge as long as the cap is on.

<sup>25</sup> Until used, great for protecting tiny bottles of Sting-Eeze and Tetracaine to keep them from exploding when the kit is squished.

<sup>26</sup> The company used to not provide expiration dates, and I found that StingEeze worked quite well even 10 years after I purchased it. You can't get it in bottles any more, instead they have pens that you use to dab some on the skin. However, I want it in a smaller and lighter bottle, so I bought one of these pens and sawed off its head to get out the StingEeze inside. It had an expiration date less than a year in the future, so I figured I'd not refill it until about five years after the expiration date, which was 6/16. so this means 6/21. In general, medications except epinephrine and tetracycline work fine for 2-6 years after their official expiration dates, so with these two exceptions, I don't worry too much about expiration dates. StingEeze contains 10% benzocaine, which is known to cause allergy when used on the skin, and I generally prefer pramoxine-containing creams for general itching. But 10% benzocaine likely works a lot faster, so I prefer StingEeze for stings.

<sup>27</sup> I prefer naproxen (twice a day instead of four times a day as for ibuprofen, so easier on the stomach, also safer for your heart. Also carry ibuprofen as some prefer it, and these chewable tablets are also suitable for kids.

<sup>28</sup> Compazine PO is one of the better treatments for both migraine and nonspecific headache; I get migraines, as do my wife, and the Compazine works quite well, with no significant side effects.

<sup>29</sup> Thought about carrying Pepcid-AC chewables for anaphylaxis, but will just tell people to chew up the regular famotidine even if it's yucky.

<sup>30</sup> In a Granite Gear #1 (2L) silnylon stuffsack; the white color is transparent enough to see through a bit and it's easier to get stuff out of this than the other modules. This plus the two main kits (survival and medical) are what I carry on daytrips, short overnight backcountry trips, or search (not rescue) tasks.

<sup>31</sup> This brand is the only kind I've found that approaches a latex surgical glove in durability and fit. In this bag simply to make them easier to get to in a hurry.

<sup>32</sup> None of the ones that take disposable cells seem to work very well, though I keep one in my SAR pack, and rechargeable Li-ion batteries are a lot lighter. There are a variety of rechargeable ones, but for one that works with all Android mini-USB phones I like the Motorola P4000 best; it is the same size, shape and weight as my cellphone, will recharge it 2-3x, and has an integrated USB charging cord. I now have a waterproof Samsung Galaxy S7 phone and they make a wireless charger case that I also carry in the same back, it fits around the P4000. But it won't work on some others' phones.

<sup>33</sup> For walking on roads at night - very, very dangerous!

<sup>34</sup> To attach items like jackets to outside of pack.

<sup>35</sup> At 188 lbs static breaking strength, and weighing only one ounce for 50 feet, seems like a handy thing to carry. This stuff has a Spectra core and a nylon sheath with a reflective (similar to Scotchlite™) band. Since it's Spectra, it has essentially no energy absorption, but that also makes it better for tying things together than standard shroud line (parachute cord). The package says not to use for rappelling or climbing or bear bags.

<sup>36</sup> In trauma arrest, you tend to needle both sides of the chest; thus, two instead of one

<sup>37</sup> For waterproof packaging for caving or protection from falling in water/heavy rain. (2 x 2L, 1 x 4L)

<sup>38</sup> These things don't have expiration dates, but past experience suggests that I inspect the ampules and replace the Band-aids every 3 years.

<sup>39</sup> Looks like and works like Dermabond wound repair liquid, but cheaper and available without a prescription

<sup>40</sup> To protect wallet and cellphone during stream crossings or hard rain.

<sup>41</sup> Two, because the most likely use of these is for a mass shooting or bombing, and there may be multiple people needing a tourniquet. I suppose you could then argue that I should carry ten of them but two seems a reasonable compromise. Originally in the other bag, but the chances of needing tourniquets in the wilderness are much less, and this decreases the bulk and weight of what I carry in the backcountry.

<sup>42</sup> Different styles of glasses require different pads.

<sup>43</sup> Granite Gear small ultralight stuffsacks weigh almost nothing and help keep stuff organized and easy to transfer between packs. When using this kit for a first-aid/medical kit for dayhikes, biking, caving, climbing, I leave the "City" bag and the toothbrushes behind. I deleted the silly putty and cards as my daughter is now a teenager and has her own Android phone, but left this note: *If you don't think that keeping a kid entertained can be an emergency, you don't have kids. Silly putty seems to work well for a variety of ages, including parents. A small deck of cards is good for older kids.*

<sup>44</sup> Need to be protected or the foil will be damaged and will be dry. Packaged with GoJo wipes in a Q-Tips travel size container.

<sup>45</sup> For dealing with airborne illness such as norovirus, influenza.

<sup>46</sup> Roll up to 1.5-2" diameter x 6" long.