

# Doomsday planning for less crazy folk

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Written by [lcamtuf@coredump.cx](mailto:lcamtuf@coredump.cx), last update Aug 2017. Twitter: [@lcamtuf](https://twitter.com/lcamtuf). More about the author [here](#).

## 1. Introduction [\[link\]](#)

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The prepper culture begs to be taken with a grain of salt. In a sense, it has all the makings of a doomsday cult: a tribe of unkempt misfits who hoard gold bullion, study herbalism, and preach about the imminent collapse of our society.

Today, we see such worries as absurd. It's not that life-altering disasters are rare: every year, we hear about millions of people displaced by wildfires, earthquakes, hurricanes, or floods. Heck, not a decade goes by without at least one first-class democracy lapsing into armed conflict or fiscal disarray. But having grown up in a period of unprecedented prosperity and calm, we take our way of life for granted - and find it difficult to believe that an episode of bad weather or a currency crisis could destroy almost everything we worked for to date.

I suspect that we dismiss such hazards not only because they seem surreal, but also because worrying about them makes us feel helpless and lost. What's more, we follow the same instincts to tune out far more pedestrian and avoidable risks; for example, most of us don't plan ahead for losing a job, for dealing with a week-long water outage, or for surviving the night if our home goes up in smoke.

For many, the singular strategy for dealing with such dangers is to pray for the government to bail us out. But no matter if our elected officials prefer to school us with passages from [Milton Friedman](#) or from [Thomas Piketty](#), the hard truth is that no state can provide a robust safety net for all of life's likely contingencies; in most places, government-run social programs are severely deficient in funding, in efficiency, and in scope. Large-scale disasters pit us against even worse odds; from New Orleans in 2005 to Fukushima in 2011, there are countless stories of people left behind due to political dysfunction, poorly allocated resources, or lost paperwork.

And so, the purpose of this guide is to combat the mindset of learned helplessness by promoting simple, level-headed, personal preparedness techniques that are easy to implement, don't cost much, and will probably help you cope with whatever life throws your way.

In contrast to most other docs of its kind, this page is pure, unadulterated labor of love; there are no affiliate links, paid product placements, or ads anywhere in the guide.

## 2. Mapping out the unknown [\[link\]](#)

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Effective preparedness can be simple, but it has to be rooted in an honest and systematic review of the risks you are likely to face. Plenty of excited newcomers begin by shopping for ballistic vests and night vision goggles; they would be better served by grabbing a fire extinguisher, some bottled water, and then putting the rest of their money in a rainy-day fund.

To maintain sanity while trying to enumerate risks, I found that it's best to focus on broad outcomes instead of trying to track down every single way for things to go south. Say, it should not matter if you are laid off because of a downsizing, because your new boss hates you, or because they finally catch you stealing paperclips. The outcome is the same: you are out of a job and urgently need a way to pay your bills.

Another insidious distraction is the desire to immediately figure out how to respond to all the scenarios we end up dreaming of. Let's save that for later; by prematurely focusing on the second half of the problem, we may end up glossing over some of the less tractable scenarios - or make haphazard assumptions that will cloud our judgment in other ways.

I also found that to come up with a rational threat model, we need to think of "risk" as a product of both the probability and the consequences of a given event. By that metric, stubbed toes and zombie outbreaks are equally uninteresting; one of them has nearly zero significance, the other, nearly zero odds.

What else? Ah, right: the final piece of advice I have is to keep things uncomplicated. There are popular doomsday predictions that deal with cutting-edge particle physics, god-like computer hackers, vast government conspiracies, or extraterrestrial messages hidden in pop songs. I suppose we can't *really* rule that stuff out, but historical data suggests that there's a lot more merit in worrying about falling off a ladder or getting hit by a car.

All right! With these caveats in mind, let's go over some canonical scenarios that are worth thinking about.

## 2.1. Problem space #1: Small-scale events [\[link\]](#)

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It's always fun to speculate about solar flares and supervolcanoes; it's far more mind-numbing to seriously evaluate the consequences of backed up sewage or burst water mains. But in reality, such unglamorous, small-scale incidents are far more likely to disrupt and reshape our lives.

Broadly speaking, disastrous outcomes of such humdrum contingencies can be divided into several groups:

- **Insolvency.** If a person over the age of 40 tells you that they have never lost a job, they are pretty lucky (or lying). Yet, the risk is seldom taken seriously; many middle-class, single-income families would be in deep trouble if it ever took them more than 2-3 months to find a new, equally well-paying gig.

- **Disrupted access to water, food, energy, or transportation.** Substantial and prolonged outages happen everywhere; many of us will experience at least one at some point in our lives. A week without electricity may be just inconvenient and scary, especially in a high-rise or in a seedy neighborhood; but even a single hot day without potable water is universally bad news.
- **Loss of shelter.** Every year, there are over 350,000 house fires in the United States. Such accidents usually aren't deadly - but if you are unlucky, they can leave you stranded in the middle of the night in your PJs, with no documents or credit cards at hand.
- **Unintentional injury.** Largely preventable and predictable incidents - such as falls, vehicle collisions, and poisonings - account for some 40 million ER visits annually. And lest you say people are simply too quick to rush to the hospital, said incidents also result in about 100,000 US deaths every year.
- **Intentionally inflicted harm.** Violent crime is essentially *normal* almost everywhere in the world. In the US in the 90s, your lifetime likelihood of victimization was estimated to be around 80%; the odds of suffering criminal injury hovered at 40%. Today, the numbers are likely much better - but life-threatening encounters remain a very real risk.
- **Debilitating illness or death.** It's going to get you; maybe next week, maybe in 50 years. We can't really predict the day, but we can understand and meaningfully manage the impact it will have on those who depend on us - say, our stay-at-home partners or young kids.

All in all, the risks discussed in this section have three defining characteristics: they are relatively likely to happen; are strikingly easy to mitigate (we'll get into that soon); and tend to be so unglamorous that they seldom make the cut in any "serious" guide to emergency preparedness.

## 2.2. Problem space #2: Mass calamities [\[link\]](#)

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If an errant backhoe took out the utilities for your block, you would probably head to the grocery store to pick up bottled water (and use their restrooms, too). But if a once-in-a-century storm damaged major roads and left half the city without running water, your options wouldn't be as clear-cut.

That's why we have to look at larger-scale emergencies through somewhat different lens, taking into account their likely magnitude, duration, and the nature of the forces at play. Some of the plausible scenarios to think about include:

- **Natural disasters.** Common examples include floods, hurricanes, earthquakes, wildfires, and heatwaves. In some regions, such events are very rare; in others, they are almost guaranteed every decade or two.
- **Industrial accidents.** Many people live in the proximity of heavy industries - say, refineries, freight railroads, or power plants. Depending on the type of industrial facilities nearby, you may want to evaluate the potential consequences of upwind and upstream explosions or chemical spills.
- **Social unrest.** Riots are a distinct risk in many urban and suburban areas around the world. When angry mobs take it to the streets, widespread arson and violent crime are not unheard of, sometimes going on for days or weeks.
- **Economic crises.** All highly developed countries go through cyclic recessions and periods of high unemployment; the US had about ten big ones in the past 100 years alone. Sometimes, such events are accompanied by bank runs and collapses of financial institutions; other times, they involve hyperinflation, product rationing, and currency controls.
- **Pandemic.** It's been a while since the highly developed world experienced a devastating outbreak, but it may be premature to flat out dismiss the risk. In 1918, an unusual strain of flu managed to kill 75 million people. We aren't necessarily better prepared for a similar event today.
- **Terrorism or conventional war.** We think we would see it coming - but history shows that such events tend to catch nations off guard. These phenomena are noteworthy not only because of their immediate death toll, which can be relatively low - but because of the far-reaching and long-term socioeconomic disruption they can cause.

Most of us will probably not get tangled up in a large-scale disaster of any sort, but it is only wise to hedge your bets. There are countless examples to demonstrate that such events happen often and can strike close to home - say:

- The EU debt crisis, from 2009 onward. A series of events that led to staggering unemployment rates in Greece, deposit confiscations in Cyprus, and uncertain prospects for the entire eurozone.
- Hurricane Sandy in 2012. Damaged more than 300,000 homes in the US, left millions without power - some of them for up to two weeks.
- California wildfires of 2007. The blaze destroyed thousands of homes and forced 1 million SoCal residents to seek improvised shelter at stadiums and schools.

- Hurricanes Katrina and Rita in 2005. Put 80% of New Orleans under water, stranded countless motorists when 3 million people attempted to evacuate.
- A decade of social unrest in France, from 2005 on. A series of widespread urban riots led to more than 13,000 cars being torched and hundreds of structures damaged or destroyed.
- The European heatwave of 2003. A seemingly benign weather anomaly killed 70,000 - mostly in highly developed and wealthy countries, such as France and Spain.
- The Los Angeles riots of 1992. An epic rampage that resulted in about 2,000 injuries, 4,500 structures being looted, and some 1,000 buildings set ablaze.

Preparing for such emergencies may seem exceedingly difficult, but much can be accomplished with very simple tools. For example, if you own a car, always keeping the tank at least half full, and having a small box of rudimentary supplies in your trunk, can go a long way. Again, we'll go over many other low-cost preparedness strategies soon.

### 2.3. Problem space #3: The zombie apocalypse [\[link\]](#)

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Many of the best-known works of science fiction explore the possibility that one day, perhaps soon, the very fabric of our society may simply unravel - and that those who survive The Event would be forced to fend for themselves in a ravaged and hostile world.

To connect with the reader, the writers of such post-apocalyptic fiction skillfully play up contemporary fears, often implying that we may be on the verge of an extinction event or a fundamental societal shift. The usual literary themes include:

- Uniquely virulent and deadly diseases (*28 Days Later*, *The Stand*),
- Preposterously violent weather anomalies (*The Day After Tomorrow*, *Snowpiercer*),
- Unimpeded emergence of totalitarian techno-dystopias (*Blade Runner*, *Gattaca*, *The Hunger Games*),
- Global thermonuclear war (*Alas Babylon*, *The Day After*, *Fallout*),
- Robots deciding to kill all humans (*Battlestar Galactica*, *Terminator*),
- Impertinent extraterrestrials (*Edge of Tomorrow*, *Independence Day*),
- Hand-wavy ecosystem collapses (*Children of Men*, *The Road*, *Interstellar*),
- Cosmic collisions (*Lucifer's Hammer*),
- Something with magnets (*The Core*, *One Second After*).

It's no wonder that all this vivid imagery keeps many preppers preoccupied with civilization-ending events. Some of their worries are based on patently absurd or exaggerated science; some are valid, but rather unlikely to materialize within the span of our lives; and many others boil down to interesting but somewhat idle speculation, devoid of quantifiable risk or historical precedent.

At least in theory, the recipe for surviving civilizational collapse is simple: you need to get away from other people and become self-sufficient. It's fairly clear that deprived of their industrial backbone, most of our cities and suburbs wouldn't be able to support even a tiny fraction of their current population densities - and would become horrid death traps. Living off the grid shields you from all but the worst doomsday events.

My advice? Heck yeah, if farming is your cup of tea, buy a plot of land in the countryside. But if you'd rather live the rest of your days without having to skin deer or plow a field, focus on better quantified and substantiated risks - and don't let asteroids or space zombies keep you up at night.

## 3. The prepared lifestyle [\[link\]](#)

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Of course, there is no use in worrying about the hypotheticals if we're not going to actually tackle the risks. But it pays to be smart about it, too: when it comes to emergency preparedness, the right mindset can matter a lot more than a small fortune spent on ninja gear and canned cheese. So, before going on a shopping spree, let's talk about several simple, everyday principles that can shield you from harm.

As you will undoubtedly notice, much of the content in this section has little to do with hardcore prepping; some of the chapters touch on seemingly banal topics, such as financial planning, community building, or the prevention of burglaries and car wrecks. You have heard most of this advice before - but if you are serious about dealing with adversities and shielding yourself and your family from harm, you need to internalize these rules, understand where they are coming from, and actually live by them every day.

(Of course, before we dive in, let's make one thing clear: this guide is an opinion piece, not revealed truth. While I did my best to make it thoughtful and accurate, it comes with no guarantees - and you should do your own homework before taking life advice from people on the Internet.)

### 3.1. Prepper commandment #1: Save some money [\[link\]](#)

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There are those who are born into familial wealth or who display supernatural business acumen. Then there is the rest of us, perhaps having robust and satisfying careers, but ultimately tiptoeing the line between middle-class prosperity and crushing poverty. It may be a matter of

our employer going out of business, it may be a shift in the job market, an illness, or a legal dispute - but in all likelihood, it would not take much to send us over the edge. I have friends who lived paycheck-to-paycheck on cozy Silicon Valley salaries of \$100k+ a year, only to lose their cars and homes in the midst of the 2007 financial crisis - having found out the hard way that unemployment benefits in the San Francisco Bay Area max out at \$450 a week.

I can't claim to have good advice for people who are already in a tough spot: if your household earnings are well below median, you may simply have no disposable income to build a personal safety net. But for most other folks, the ability to prepare for the zero-income contingency is well within reach - and it would be unwise not to give it a go. Sure, even a lifetime of belt-tightening won't make the average middle-class family fabulously rich. But rainy-day funds work in a different way: their purpose is to get you through a rough spell, not to pay for a mansion or a fancy car. Since the amount needed is directly proportional to how much you currently make, it makes relatively little difference if your household brings in \$70k or \$140k a year. Either way, if you set aside 10% of every post-tax paycheck, you should have a 6-month financial safety net established within 3 years and a change.

Of course, this is easier said than done. We tend to scale up our living expenses in proportion to earned income, so even in the \$100k+ bracket, people living paycheck-to-paycheck are not a rare sight. And it's usually not the big-ticket stuff that gets them: we're far more likely to overspend on all the smaller, habitual purchases, because their cumulative cost is less apparent - and potential savings are much easier to miss. The patterns to look for will depend on your lifestyle and on how much you make, but here are several suggestions for where to search for that 10%:

- **Groceries.** Try to shop at less expensive grocery stores and try out lower-shelf brands - especially when it comes to commodities such as cooking oil, paper towels, milk, seltzer water, flour, sugar, or salt. Table salt tastes and works the same, whether you paid \$1 at Walmart or \$15 for a Sherpa-approved Himalayan variety at Whole Foods. Groceries eat up a good chunk of our monthly budgets, so even seemingly inconsequential savings tend to add up very fast.
- **Restaurants & taxis.** Many young, urban-dwelling folks frequently dine at restaurants, go to clubs, or take cabs around town. If that sounds like you, don't give it up, but scale back slightly by designating several days a week strictly for public transport and home food. Contemporary frozen dinners can be surprisingly tasty, and Netflix has some good shows.
- **Gadget upgrades.** If your older phone, laptop, or a TV set are still working fine, keep them for another year or two. Sure, it's fun to play with a new toy, but the excitement wears off quickly, and being a bit behind probably won't make your life

feel hollow and pointless. All things considered, you are not impressing your friends that much by showing them that you had \$500 or \$1,000 to throw away.

- **Subscription services.** Small monthly fees add up to gargantuan sums over the years. Do you really need cable TV, or can you watch most of the same shows online for less? Are you still paying for a landline or for that AOL account? How often are you using that gym membership? Can you try out lower speed for your Internet service? Or slightly increase the deductible on your car?
- **Home improvement.** Even if you are renting, you can save big bucks by learning how to reupholster or refinish furniture, patch drywall, paint walls and trim, install tile and cabinets, fix or replace faucets, unclog drains, and take care of other simple DIY jobs. Home improvement can be incredibly rewarding, too.
- **Vacation.** If you're itching to go to a popular destination like Vegas, Hawaii, or Disneyland - how about a camping trip? For kids and adults alike, sleeping in a tent and playing around a campfire can be more enjoyable and less stressful than waiting in line to meet a middle-aged dude dressed as Donald Duck.
- **Extra cash.** If you ever get a bonus or a raise at work, don't squander it by reflexively spending more on mundane, everyday stuff. Put back that fancy bottle of barrel-aged olive oil, that pair of ergonomic toe socks, or that wi-fi enabled toaster. Smile, set the proceeds away, and go about your life as if nothing ever changed.

Somewhat counterintuitively, saving money is not just about cutting down expenses; seeing a higher balance on a checking account tends to instinctively make us less frugal, too. To counter this trend, I found it helpful to set up a small, daily transfer to a savings account, in an amount that blends in with daily purchases - say, \$10 or so. This method takes much less planning and mental discipline than trying to make one big deposit every month. And hey - when you are comfortable with \$10, you can painlessly test the limits by gently ramping the amount up.

Now, a word of caution: beware of debt. Many of us are taught that owing money is normal, even desirable; indeed, for middle-class folks, some forms of indebtedness may be difficult to avoid. But unnecessarily accrued debt cuts into your bottom line in two insidious ways. First of all, monthly installment payments limit your flexibility in an emergency - so if your income shrinks, your savings will be depleted at a merciless and non-negotiable rate. Secondly, high-interest loans, such as credit cards, amount to giving out a good chunk of your income without earning anything useful in return. They are akin to voluntarily accepting a pay cut.

As a matter of practicality, don't worry too much about your existing mortgages or student loans: they are difficult to repay early, tend to have very low interest, and confer special tax benefits. But use your initial savings to pay off credit card balances, and do it quick. Be careful



with new obligations, too. Unless you already have a very generous safety net, a home loan that eats up more than 15% of your paycheck over the course of 30 years is a very risky deal; and going over 30% is almost certainly dumb, at least as far as financial continuity planning goes.

As for the optimal size of your emergency fund, there are no hard rules. Around six months' worth of post-tax earnings should provide a very comfortable cushion for short- and medium-term disasters of all sorts. Even in a deeper crisis, six months is plenty of time to scale down expenses, find a new line of work, or regroup in some other way.

Now, chances are, if you follow the advice contained in this section, you will not feel an urge to ramp up spending the moment you hit the 6-month mark. So, keep going; with the initial rainy-day fund established and good fiscal habits in place, you can start treating the extra funds with more flexibility - for example, "borrowing" against them to self-finance larger purchases, or aiming to retire a bit earlier and a bit more comfortably than the government expects you to. And by the time your savings are sufficient to get you through a full year of unemployment, I bet that your outlook on life, work, and personal finance will change in an [interesting way](#).

Oh, one more thing: when trying to reform your fiscal habits, it can be useful to think of money as a unit of debt owed to you by the society, awarded in exchange for your hard work. Despite the popular saying, when allocated wisely, that money can buy you safety, comfort, influence, or true friendship and happiness. It would be foolish to squander it on trinkets - just as it would be foolish to take it with you to the grave. My advice is simple: make every transaction count.

### **3.2. Prepper commandment #2: Don't lose what you saved** [\[link\]](#)

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If all goes well, your rainy-day fund will eventually grow big enough for you to face a wonderful and important question: how do I keep all that capital safe? Although it may seem like a remote concern, events such as bank collapses, market crashes, and currency devaluations happen all over the world with near-clockwork regularity - and there are few things more infuriating and disenfranchising than finding out that the fruits of many years of your labor have been wiped out by a market panic or an administrative decree.

The answer to the question of safeguarding your wealth lies in the solution to another riddle: the mechanism by which the society determines the worth of a piece of money to begin with. It's a puzzle central not only to everyday financial planning, but also to any attempts to decipher and meaningfully evaluate countless mainstream conspiracy theories and doomsday predictions related to the financial world.

So, let's start from the beginning! Throughout much of the recorded history, the monetary systems of the western world employed so-called *commodity money*, generally settling on coins minted out of silver or gold. The two metals were favored because of their nearly universal appeal, and because of their inherently constrained, labor-intensive supply. In this system, early

prices likely reflected the worth of a particular good compared to the valuation of the coin as a non-monetary commodity. Over time, the exact "melt value" of the coins started to matter less, and the currency functioned as a more abstract medium of exchange - but its precious metal content stabilized the economy by ensuring that the coinage had an inherent and lasting value, even if the issuing state simply vanished from the map.

By the 19th century, many European countries moved on to a more flexible model where coins were made out of cheaper metals, and banknotes were printed on paper or cloth. To encourage the use of these new instruments and to establish their value, the governments promised to freely exchange such intrinsically worthless tokens for a predefined amount of gold. In other words, as long as people had faith in their rulers, the fundamental mechanics of this new *representative currency* remained roughly the same as before.

In theory, both of these systems looked simple and robust. But there was another, somewhat subversive force at play: in the 17th century, many European states have witnessed the emergence of fractional-reserve banks. These private ventures operated according to a simple scheme: they accepted people's money for safekeeping, promising to pay a premium on every deposit made. To meet these obligations and to make a profit, the banks then used the pooled deposits to make high-interest loans to other folks. The financiers figured out that under normal circumstances and when operating at a sufficient scale, they needed only a very modest reserve - well under 10% of all deposited money - to be able to service the usual volume and size of withdrawals requested by their customers. The rest could be loaned out.

The very curious consequence of fractional-reserve banking was that it pulled new money out of thin air. The funds were simultaneously accounted for in the statements shown to the depositor, evidently available for withdrawal or transfer at any time; and given to third-party borrowers, who could spend them on just about anything. Heck, the borrowers could deposit the proceeds in another bank, creating even more money along the way! Whatever they did, the sum of all funds in the monetary system now appeared much higher than the value of all coins and banknotes issued by the government.

Of course, no new money was being created in any physical sense: all that banks were doing was engaging in a bit of creative accounting - the sort of which would probably land you in jail if you attempted it in any other comparably vital field of enterprise. If too many depositors were to ask for their money back, or if too many loans were to go bad, the banking system would fold. Fortunes would evaporate in a puff of accounting smoke, and with the disappearance of vast quantities of quasi-fictitious ("broad") money, the wealth of the entire nation would shrink.

In the early 20th century, the world kept witnessing just that; a series of bank runs and economic contractions forced the governments around the globe to act. At that stage, outlawing fractional-reserve banking was no longer politically or economically tenable; a simpler alternative was to let go of gold and move to *fiat money* - a currency implemented as an abstract

social construct with no predefined connection to the physical realm. A new breed of economists saw the role of the government not in trying to peg the value of money to an inflexible commodity, but in manipulating its supply to smooth out economic hiccups or to stimulate growth. Depending on who you ask today, contemporary monetary policies - especially in the era of bank bailouts and debt-fueled GDP boosting - are either a brilliant way to stabilize free markets and promote wealth, or a reckless charade that papers over systemic problems and sets us up for serious trouble in the coming years.

That question aside, the obvious peril of fiat money is that in the long haul, its value is determined strictly by people's willingness to accept a piece of paper in exchange for their trouble; that willingness, in turn, is conditioned solely on their belief that the same piece of paper would buy them something nice a week, a month, or a year from now. It follows that a simple crisis of confidence could make a currency nearly worthless overnight. A prolonged period of hyperinflation in Germany and Austria, with prices doubling every couple of days, was one of the precipitating factors that led to World War II. In more recent times, dramatic episodes of hyperinflation plagued the fiat currencies of Israel (1984), Mexico (1988), Poland (1990), Yugoslavia (1994), Bulgaria (1996), Turkey (2002), Zimbabwe (2009), Venezuela (2016), and several other nations around the globe.

For the United States, the switch to fiat money came relatively late, in 1971. To stop the dollar from plunging like a rock, the Nixon administration employed a clever trick: they ordered the freeze of wages and prices for the 90 days that immediately followed the move. People went on about their lives and paid the usual for eggs or milk - and by the time the freeze ended, they were accustomed to the idea that the "new", free-floating dollar is worth about the same as the old, gold-backed one. A robust economy and favorable geopolitics did the rest, and so far, the American adventure with fiat currency has been rather uneventful - perhaps except for the fact that the price of gold itself skyrocketed from \$35 per troy ounce in 1971 to \$850 in 1980 (or, from \$210 to \$2,500 in today's dollars).

Well, one thing did change: now better positioned to freely tamper with the supply of money, the regulators in virtually all the highly developed countries adopted a policy of creating it at a rate that slightly outstripped true economic growth. They did this to induce a small, steady degree of inflation, embracing a belief that doing so would discourage people from hoarding cash and force them to reinvest it for the betterment of the society. Of course, critics like to point out that such a policy functions as a "backdoor" tax on savings, conveniently aligning with government's far less noble interests. Still, either way: in the US and most other developed nations, the purchasing power of any money kept under a mattress will drop at a rate of somewhere between 2 to 10% a year.

All right. Financial systems are messy. Fiat money and fractional-reserve banking, although wildly successful, can fail in interesting and horrific ways. Foreign trade, neglected here but absolutely vital for most European countries, adds even more variables to the mix. So, let's talk

about what can be done to protect your rainy-day funds against some of the most likely or most talked-about risks.

### **3.2.1. Fiscal challenge #1: Dealing with "normal" inflation** [\[link\]](#)

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At a rate of 4%, inflation will halve the purchasing power of your savings in about 17 years; at 6%, the process will take just 11 years and a change. While it's hardly a prepper-grade emergency, you need to tackle the problem sooner than later - or face huge and unnecessary losses down the road.

For our parents, the solution was simple: they had to take their money to a bank. The returns were sufficient to offset the loss, and since the value of their money already depended on the health of the financial system, they weren't facing that much added risk. But today, the trick no longer works: people are skittish about the state of the economy and are trying to play it safe, so banks already have more deposits than they can use - and offer near-zero interest rates across much of the developed world.

There are many other ways to get returns on your capital, but most are associated with limited liquidity or significant outlay costs. One well-known exception are publicly traded companies. Businesses usually go public because they want to expand their operations - say, build a new factory or hire more workers. Instead of getting an expensive loan, they put themselves up for sale, allowing people to purchase and trade fractional ownership in the company. The investors' willingness to pay for this privilege depends on two factors: the intrinsic value of the enterprise (its assets, debts, operating profits) and the "hype premium" - the faith in the company's long-term prospects and the health of the entire industry. For some companies, the intrinsic value is modest, and the premium is huge; their shares are usually subject to violent price swings on even seemingly minor macroeconomic news. For other, less exciting businesses, the situation may be the opposite.

The conundrum of owning stock is that it serves as a hedge against inflation only in an otherwise viable economy. At the first sight of serious economic trouble, the premiums paid on corporate stocks take a nosedive and not recover for months or years; in a genuine downturn, the intrinsic value of many companies will also shrink. Since a downturn is probably the time when you will need your rainy-day money the most, it's important to play it safe. Putting somewhere around 30-40% of your emergency stash into the stock market may be a good call. Going all in is a very risky bet, since in an economic crisis, it's not rare to see stock indices plunge 50%.

The fundamental rule is to not be greedy: within the scope of this guide, your goal should be to preserve capital, not to take crazy risks. If you are tempted to put your money into Tesla, Twitter, or some penny stock mentioned by your third cousin, you are not thinking straight. Pick about 10-20 boring companies that seem to be [valued fairly](#), that are free of crippling debt,

and that have robust prospects for the coming years. Stay clear of financial enterprises, of highly speculative sectors such as biotech or solar power, and of heavily regulated industries that lack the flexibility to deal with sudden economic shifts (say, airlines). Relatively safe picks can be found in no-frills domains: basic chemicals, staple electronic components, profitable freight railways, mechanical assembly manufacturing, home and office supplies, and so on.

It is worth noting that many personal finance experts advise against hand-picking your investments. Instead, they advocate a process known as "indexing": buying into an investment vehicle comprising hundreds of stocks, structured to represent the stock market as a whole. The proponents of indexing have a point: most people who try to pick individual winners in the stock market usually fare no better than an index fund. But in the context of prepping, I think this advice is flawed. To remain calm in tumultuous times, it is important to maintain a firm grasp of the merits of your investments. One can convincingly reason about the financial condition, the valuation, or the long-term prospects of a paper mill; the same can't be said of an S&P 500 index fund - which, among other things, contains the shares of about a hundred global financial conglomerates.

### **3.2.2. Fiscal challenge #2: Having no access to your bank account** [\[link\]](#)

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Sooner or later, you may find yourself unable to access your bank deposits for a couple of days or weeks. It could be a matter of IT trouble at your bank, of a lost wallet, or of being a victim of identity theft. Heck, take Greece or Cyprus: when the confidence in the nation's financial institutions is shattered, it's easy to get caught up in government-imposed bank closures and withdrawal controls. (Folks in the United States may also recall the forced closure of Washington Mutual in 2008, or several state-level "bank holidays" imposed to combat bank runs during the savings & loan crisis back in the 80s.)

For short-term survival, simple solutions work best: just keep about 2-4 weeks' worth of cash somewhere at hand; have enough money on you to get you back home when traveling, too. Of course, be mindful of the risk of burglary, so if you're keeping the funds at home, pick an unobvious location for the stash; more about that soon.

As for the remainder of your money, I suggest splitting it across two largely unrelated financial institutions with different risk profiles - say, a big national bank and a local credit union. As long as the deposits are insured by the government (as they normally are in the US and in Europe, up to a per-account limit), this approach greatly increases the availability of your money, and probably doesn't expose you to any substantially new dangers. Keeping all your savings outside the banking system is an option, too, but it's not necessarily a smart choice. With fiat currencies, this move does not truly insulate you from that many longer-term risks, but adds the very real possibility of losing all your funds to fire or theft.

Perhaps of note: over the past 5 years, many European governments have moved to severely restrict the use of cash by imposing per-transaction or daily limits as low as \$1,000. The stated reasons have to do with money laundering and tax evasion, but such measures also make it harder to store or use physical currency. Be mindful of that caveat.

### **3.2.3. Fiscal challenge #3: Dodging hyperinflation and "bail-ins"** [\[link\]](#)

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Ask a financial advisor about the possibility, and they will probably recommend keeping some of your funds overseas. But the odds aren't great of correctly picking a currency with more staying power than the one in which you get paid. Historically, the Swiss franc had a reputation for being an exceptionally safe choice, in part because of being the last major currency still quasi-pegged to gold; but Switzerland abolished this requirement in a referendum in 2000.

Another complication is that even if you make the right call, many governments impose onerous reporting requirements on foreign assets - and especially in times of economic hardship, they treat them with suspicion and contempt. Host countries are also more cavalier about confiscating foreign deposits, as evidenced by the Cypriot "bail-ins" in 2013. Lastly, the public associates overseas accounts with tax evasion and money laundering, so it may be difficult to garner any sympathy for your case when things go wrong.

One school of thought popular in the prepper community is to convert some of your savings into commodity metals: copper, tin, silver, platinum, palladium, and the likes. All of them are easy to store, last indefinitely, and will certainly hold value far better than a fiat currency in free fall. On the flip side, you may still need to accept substantial loss: an economic collapse will disrupt industrial demand, causing the prices of many such commodities to slump.

This brings us to gold: this metal occupies an interesting niche, because its value is driven chiefly not by industrial applications, but by direct consumer demand and by its status as a mainstream financial instrument. In fact, investors and governments alike frequently flock to it in times of economic uncertainty and stagnation, as they did in the wake of the financial crisis of 2007. Of course, this goes both ways: should the economy pick up steam, the demand may decrease and the currently elevated prices of gold may fall closer to their historical, inflation-adjusted average of \$800 per troy oz. Still, the metal is an interesting and reliable hedge against economic disasters, especially given that it is very easily bought and sold. If you are worried about hyperinflation, you may want to convert some of your savings into this shiny commodity, although I wouldn't go over 20-30% or so.

Because of its very high value-to-volume ratio, physical gold is stored and moved around very easily, but keeping substantial amounts at home can be ill-advised; theft is a very real risk, and most insurance policies will not adequately cover the loss. Safe deposit boxes at a local bank, available for around \$20 a year, are usually a better alternative - although they come with some trade-offs; for example, the access to deposit boxes was restricted by the government during the

Greek debt crisis in 2015. Non-bank storage services do not have that problem, but cost quite a bit more.

### **3.2.4. Fiscal challenge #4: Oh no! Zombie apocalypse!** [\[link\]](#)

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The global financial system simply disappears. Mutant hordes roam the earth!

The preservation of wealth after a civilization-ending event is a popular topic of idle banter in the prepper community. Some folks believe that commodities such as silver and gold would return as the basis of a primitive post-apocalyptic economy - and if we're wildly speculating, in the longer haul, that seems like a fair guess. But in the immediate aftermath, it seems more likely that economic activity would be minimal and limited to barter or communal ledgers. Nobody would want to exchange a candy bar for a gold coin if they can't be sure about being able to find any other food.

This may sound like a good argument for putting all your money into freeze-dried meals, medicine, shovels, and other survival supplies. But of course, that decision would become a huge liability should the apocalypse not come, or simply not come soon enough: you probably can't pay a roofer or a dentist with a pallet loaded with ammo, cigarettes, and canned ham.

Here's my advice: keep the bulk of your savings in cash, stocks, and other assets you can easily liquidate or put to use today; even if you genuinely worry about the apocalypse, plan to spend no more than 2-4% of your money on essential prepper supplies. Sure, when the zombies come, your financial instruments will almost certainly become worthless; but you better believe that the value of your survival gear will increase 100-fold. Zombies or not, your net worth will be safe. Your delicious, tasty brains - well, that's something to worry about!

### **3.3. Prepper commandment #3: Learn new skills** [\[link\]](#)

In the 90s, it seemed that you couldn't go wrong by getting into professional journalism, opening a video rental store or an arcade, or selling calculators, encyclopedias, disposable cameras, answering machines, and audio CDs. We would be very naive to hope that the next twenty years will not bring similarly dramatic disruption to many of the seemingly cozy professions of today.

So, here's another unorthodox prescription for building a comprehensive preparedness plan: develop useful and marketable secondary skills. A simple and enjoyable way of doing so is to pick a hobby you can get passionate about - and then work hard, be very honest about your own mistakes and shortcomings, and try to get better at it every week. You shouldn't seek immediate profits, since progressing from a hobby to a paid occupation inevitably takes away some of the fun; but try to gravitate toward pursuits that could conceivably morph into viable career choices

within a decade or so. If you have a family, help your spouse and children pursue thoughtful hobbies of their own, too.

The value of such a step extends beyond the mere task of shielding you from glacial shifts in the job market: if a major disaster suddenly cripples the local economy, there may be no more jobs for insurance claims adjusters or account executives, but carpentry or metalworking skills could be in high demand for the coming year or two. You can never predict it exactly, but the more you can do, the better you can cope with whatever adventures come your way.

When it comes to recommendations, there is no short list of hobbies that are objectively better than the rest; the selection is vast, and the right choice will inevitably depend on your own interests, natural talents, the space you have available, and on countless other constraints. That said, here are some fairly popular options that may be worth thinking about:

- Woodworking and carpentry,
- Metalworking, knife making, gunsmithing,
- Glassblowing, pottery,
- Sewing, embroidery, leather crafting, toy making,
- Amateur electronics or robotics,
- Computer programming,
- Graphical design,
- Creative writing or online journalism,
- Farming or hunting (in rural regions),
- Community education and local charity work.

Not all of these hobbies can be turned into well-paying gigs unless you truly excel at them - but they are guaranteed to be challenging, meaningful, and fun. The Internet gives you ample opportunities to learn from others, compare notes, and get feedback on your work - all without prematurely subjecting yourself to the pressures of the commercial marketplace.

Of course, marketable hobbies aside, some of the more determined preppers pursue interests such as martial arts, pro marksmanship, bushcraft, paramilitary combat tactics, and other extreme survival strategies. Such talents can be quite useful in a couple of plausible if unlikely scenarios - but their major disadvantage is that during a simple economic downturn, they won't put bread on the table or pay your bills. It's not unwise to give them some consideration, but be sure to balance it with more pragmatic skills.

### **3.4. Prepper commandment #4: Don't hurt yourself** [\[link\]](#)

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Yup. Unintentional injury may seem like a topic unbecoming a true prepper, but it will be hard to live out a post-apocalyptic Mad Max fantasy with a bum leg or a broken neck; and more



prosaically, serious prior injury may limit your ability to provide for yourself and your family, confront a robber, or get out of a burning home. It may seem like a far-fetched worry, but the lifetime probability of suffering serious harm is much greater than we intuitively suspect.

Now, there are some dangers to life and limb that we simply can't predict or prevent: the occasional falling piano, the murderous roommate, the untimely stroke. Then there are the risks we take willingly, accepting the inherent and unavoidable trade-offs of our hobbies or jobs: the possibility of being snatched by a giant squid while snorkeling off the coast of California, or the near-certainty of lung fibrosis from toiling in a sugar mine. These are the things we can't or don't want to give up - and that's perfectly fine.

But there are also the "hold my beer" moments: the unnecessary displays of bravado, overconfidence, or thoughtlessness. We recognize them from cringeworthy yet hilarious Youtube clips of people getting hurt - but we are guilty of the same: we get honked at for carelessly changing lanes, we end up climbing more than a fair share of rickety ladders and office chairs, and every now and then, we all get a bit cavalier with lawnmowers, escalators, ATVs, or other power tools.

We keep getting away with all that goofiness, and that only serves to make us more certain that our own transgressions carry no serious risks. But government statistics tell a strikingly different tale: in the US alone, unintentional injuries result in 40 million ER visits and 100,000 deaths every year. Heck, accidental injury is the leading cause of death for people between the ages of 1 and 45 - far ahead of cancer, heart disease, gun violence, and other pop culture bogeymen. And the injuries themselves are very prosaic, too: all you see are falls, cuts, burns, vehicular collisions, poisonings, and so forth. The "idiots" we sometimes watch on Youtube are us. They just happen to have been caught on camera on the day their luck ran out, perhaps aided by downing a couple of beers.

In the end, ladders, cars, and space heaters are a much greater threat to your well-being than a gun-totting robber or an army of zombie marauders could ever be. So, gleaned from accident statistics, here are some of the familiar-sounding but crucial survival tips. It may sound unlikely, but if something appears on this list, it's responsible for quite a few gruesome deaths or injuries every year; take it to heart.

#### **3.4.1. Safety tip #1: Don't be a moron when working at heights** [\[link\]](#)

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Sure, the lightbulb needs changing and that office chair is really close, but it would take you only 15 seconds more to bring a more sturdy stool from another room, so don't take chances if you don't have to. Similarly, having someone hold a wobbly ladder for you or securing it with some rope can be a minor hurdle - but it's gonna be much less of a hurdle than dealing with a compound fracture or a dent in your skull.

Whatever you do, keep in mind that you probably experienced most of your falls as a kid, and that can profoundly skew your perception of danger: falling five feet and landing on your side is different when you weigh 50 lbs, and different when you are 180 lbs.

### **3.4.2. Safety tip #2: Drive defensively and stay calm on the road** [\[link\]](#)

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Got a car? Don't go too fast, keep a three-second distance to the vehicle in front of you, and always scan for cross traffic when approaching intersections or making turns: other drivers may be less attentive than you. Be very careful when changing lanes, do it slowly, and be sure to adjust your mirrors to eliminate blind spots (you don't really need to see the sides of your car). Slow down for cars stopped in other lanes - they may be letting a pedestrian through. Wear seat belts, keep children in fitting car seats, get some rest on longer trips, and don't talk on the phone - it doesn't matter that it's hands-free. Avoid frequent rides with people who drive badly, too.

Interestingly, driving and safeguarding your finances have something in common: when you end up hurting another person in an at-fault accident, they may go after your savings or real estate to recoup medical expenses, lost wages, and other costs. So, in addition to driving defensively, have a look at your insurance policy. The minimum liability coverage mandated by the state can be as low as \$15,000; relatively few victims will settle with the insurer for that amount if they think that taking you to court could net them ten times as much. Bumping your limit to \$250,000 is usually pretty cheap. In fact, if you have collision coverage, you can more than make up for it by increasing your deductible to \$1,000.

Biking on public roads? Wear a helmet and bright-colored clothing, stay well clear of the doors of parked vehicles, move in a straight line instead of weaving in and out of the traffic, and watch for cars trying to make right turns. Scan for cross traffic at intersections and signal all turns. Don't run red lights - it's not worth the seconds shaved off your commute. Don't ride without holding the handlebars; it makes you look very hip, but when you do that, a single rock or an unnoticed pothole can throw you right under the wheels of a passing bus.

### **3.4.3. Safety tip #3: Show respect to dangerous machines and chemicals** [\[link\]](#)

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Read up on the safety rules pertaining to your hobbies and to your daytime job; seek out horror stories from other people in the business, too. Be very careful around select power tools, such as chainsaws, table saws, angle grinders, lathes, and nail guns - they have quite a penchant for taking fingers off and eyes out. Don't horse around any heavy machinery; if it's weighs more than you, it can kill you in the blink of an eye. This is also important for children: teach them not to play behind or under parked cars. And if you have a toddler, use straps to secure rickety dressers and other tall, heavy furniture.

At home, be very alert around deep fryers and pots of boiling water. Wear eye protection when working with drain cleaners, bleach, and other caustic substances. Learn about the overdose risks of paracetamol (ibuprofen is a much safer pick) and take a critical look at your prescription drugs. If you're ever doing DIY electrical work, learn how to do it properly, and get a non-contact voltage probe to double-check for live wires before you touch anything.

#### **3.4.4. Safety tip #4: Don't die in a fire** [\[link\]](#)

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Install smoke detectors and keep them operational; if they are going off too often, try to move them farther away from the kitchen, or switch to photoelectric sensors, which are much less sensitive to minor cooking mishaps. There are many wired and battery-operated units to choose from.

Get at least two good-sized ABC fire extinguishers (5-10 lbs or so) and keep one in your bedroom. Learn how to [deal with oil fires](#), don't stockpile excess flammable materials, and be very careful when [pouring flammable liquids](#) near open flames. Be smart about where you put space heaters and candles, and don't smoke in bed. [Water your Christmas tree](#) and use LED tree lights. Unplug devices with [lithium-polymer batteries](#) when leaving home. Don't put grills next to siding-clad walls and don't overload extension cords. When cooking, stay in the kitchen or set a timer to remind yourself that the oven is on.

Folks in rural areas who live far away from any fire stations, but who have a pond, a creek, or a pool on their property, may want to look at a [fire pump kit](#). It's a fairly expensive tool (\$1,000 or so), but it can rapidly put out even a large blaze - provided that you have a pond, a pool, or a cistern nearby.

#### **3.4.5. Safety tip #5: Just in case, keep your senses razor-sharp** [\[link\]](#)

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If you're regularly drinking or doing psychoactive drugs, try to kick the habit - or at least scale it back. I'm not going to give you a talk about the evils of cannabis, but by the end of the day, impaired judgment is impaired judgment. It inherently increases the odds of waltzing into trouble or getting hurt.

### **3.5. Prepper commandment #5: Don't become a victim** [\[link\]](#)

In addition to the dangers of poor financial planning and the ever-present specter of unintentional injury, another threat we should reckon with is becoming a victim of a crime. Although the risk is not as pervasive as the challenges discussed earlier in this chapter, it still earns a distinction as one of the things that many readers will almost certainly have to face at some point in their lives.

Ask a hardcore prepper for advice on this matter, and they will probably tell you to start practicing hand-to-hand combat, get a knife, or carry a gun. But in reality, we need a more nuanced and proportional approach to threats, and one that emphasizes avoidance and de-escalation, rather than the ability to resolve each and every conflict with a single well-placed shot. Sure, a self-defense weapon can save your butt in some life-or-death situations, but these are comparatively rare; such a tool won't deter a pickpocket, won't stop a burglar from ransacking your place while you are at work, and won't prevent a hacker from emptying your bank account while you're busy watching the reruns of *Gilmore Girls*.

In other words, while this guide certainly doesn't have an anti-self-defense or an anti-firearm slant, we'll try to take a broader view before delving into the comparative merits of karate chops, blade weapons, firearms, stun guns, and pepper spray.

### **3.5.1. Defense tip #1: Practice situational awareness when on foot** [\[link\]](#)

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When walking around town, keep scanning your surroundings and be mindful of people around you. If your spidey senses are tingling, just bail: make a sharp turn and sprint away. Don't worry that some random dude closing up on you at night might be perplexed or offended by your move. Don't freeze up if somebody hollers or authoritatively barks an order at you - complying is a very powerful instinct, and some assailants know to exploit it.

Of course, some street-savvy readers may consider it to be in poor form to sprint away from a threat, and may be inclined to confront the danger and see where that takes them. It's an OK choice if you are well-armed or physically fit, but is certainly not a way to minimize the probability of harm.

### **3.5.2. Defense tip #2: Make yourself pickpocket-proof** [\[link\]](#)

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In shopping malls, on mass transit, and in other crowded settings, don't carry your most precious valuables in front or back pockets; a purse is also a clear no-no. Inner pockets of jackets, and breast- or knee-level pockets of pants and shirts, are much harder to muck with. Discreet, slim waist packs or under-the-garments neck wallets work even better. Emphasize to your friends that you are wearing such fashion accessories only ironically; who knows, maybe you will start a trend.

### **3.5.3. Defense tip #3: Protect your valuables at home** [\[link\]](#)

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Most break-ins are purely opportunistic: thieves are in and out within five minutes, quickly rummaging through all the places where people usually keep valuable stuff. You can bank on them going through every nook and cranny of your bedroom, looking under the mattress, peeking into every drawer - and grabbing everything that looks shiny and is easy to lift. Their usual targets include phones, cameras, tablets, laptops, jewelry, firearms, loose cash,

checkbooks, credit cards, and prescription meds. Vital documents that may be useful for identity theft or benefits fraud, such as drivers licenses, passports, and SSN cards, are also a fair game.

Break-ins are difficult to prevent, especially in suburban single-family homes with secluded backyards and street-level windows and doors; tall fences and window bars can work, but they are expensive and tend to draw the ire of your neighbors. The most cost-effective solution may be to keep your windows and doors closed when away, but beyond that, just optimize for hassle-free outcomes. You can leave some less important goodies in plain sight - say, some cheap jewelry, a modest amount of cash, and a beat-up phone - and put all the real valuables in a much less obvious or less accessible spot. A heavy safe will usually do; [diversion safes](#) are pretty cool, too, if you trust yourself not to accidentally throw them away.

We'll talk about home security equipment later on - but in general, devices such as alarm systems, cameras, or sophisticated locks play a lesser role in keeping your belongings safe; a well-trained dog can work wonders, but especially in an urban or a suburban setting, such a pet is a substantial commitment (and can turn out to be a lazy bum).

If there's another powerful and low-cost burglary prevention tool at your disposal, it's being careful not to attract targeted theft. Be mindful of who you invite into your home, who handles your keys, and how much you signal about your financial status to your more distant family, random acquaintances, or strangers parked across the street. If you have children, teach them about the virtues of modesty, too. If you tell them that the thieves will probably take their game console, they may even listen to what you have to say.

Advertising your wealth aside, another sure way to invite burglars is to make it seem that your house is unoccupied: packages piling up in front, an overflowing mailbox, an empty driveway, all lights turned off at night. Asking a neighbor to park a car in your driveway, putting some lights on a [multi-cycle timer](#) (\$8), and having someone pick up your mail, are just several examples of low-cost solutions that are worth trying out whenever going on a longer trip.

#### **3.5.4. Defense tip #4: Plan for dangerous encounters** [\[link\]](#)

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Sometimes, you can't avoid a confrontation. Figure out how to react if somebody asks you to get into a car, demands cash, or barges into your occupied home. It would be a complete shock for you, but they have probably done it before - so you gotta rehearse if you want to have the upper hand. Even if they have a weapon trained on you, it's a game of confidence and wits, not just physical force.

For muggings, keeping several \$10 or \$20 bills in your front pocket (and having real valuables somewhere else) can be enough to send them on their way; in busy locations, you should also be able to just ignore the mugger and briskly walk away. For more serious incidents, it may be

useful to respond with something that is non-threatening but catches the assailant off guard. Simply feigning a panic attack or initiating a startling conversation ("*hey, are you a friend of CJ? Pretty sure we've met last year!*") can throw them off balance - allowing you to fight back or get away. Of course, you also need a plan for that next step; that's where your running skills, your bare-hands self-defense talents, or your weapons proficiency can come into play. But again, you need to actively practice and develop approaches that have a chance of working in real life; there's no verbal diversion strategy in the world that would give you enough time to fumble through your purse to find an old, gummed up can of pepper spray.

For home intrusions, you should try to act out various scenarios: say, confronting the bad guy or trying to escape. Take into account that break-ins can happen at different times of day or night. Remember that intruders may have varied intents; some folks may be homicidal or high, but most will just want your laptop and will be very worried about getting hurt. Many robbers work in pairs, too.

Whether you like it or not, you may eventually have to defend yourself, so be sure to understand the law. You shouldn't take such advice from random people on the Internet, but as far as I can tell, in much of the US and in many other western countries, you have no duty to run away from an attacker and can use deadly force if you have a reasonable and immediate reason to fear for your life or the lives of others. But there are exceptions; for example, despite recent reforms, a duty to retreat exists in some form in several northeastern states and in some corners of the Midwest. There are also differences in how seemingly similar self-defense statutes get interpreted by the police, by prosecutors, and by courts in different parts of the world.

### **3.5.5. Defense tip #5: Don't be an easy target online** [\[link\]](#)

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Your cyber-life matters - or at the very least, your bank account password and your credit card numbers do. To avoid falling prey to hackers, keep your software up-to-date, choose decent and unique passwords for all important websites, don't install sketchy freebies, and don't fall for legit-looking but unexpected messages and prompts. When in doubt, just leave the site you were on, do some web searches to understand what's going on, and maybe try again some time later.

Beware of financial scams. If you get an IM from a friend on an unannounced overseas trip urgently asking for a loan, call them or check in with their family first. And no, there's no inheritance waiting for you in Nigeria, your chatroom bride-to-be in Ukraine is not short on cash, and you are not the 1,000,000th visitor to *timecube.com*.

Oh, one more thing: don't log into your bank, e-mail, or any other sensitive services from other people's computers; if you absolutely have to, change your password as soon as you get home. It's not that your acquaintances are evil, but they may be more sloppy than you when it comes to keeping their devices safe.

### 3.5.6. Defense tip #6: Don't make enemies [\[link\]](#)

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If you're doing something that's morally reprehensible or socially unwelcome, you are greatly increasing the odds of getting hurt. It doesn't matter if you think it's perfectly legal: if you are a monumental and malicious jerk, a bored prosecutor will probably dream up a [felony charge](#) to hit you with. Or perhaps they won't, but one of the people you wronged will lose it and take justice into their own hands. In other words, if you want to escape harm, don't mess with others out of malice, jealousy, boredom, or for petty personal gain.

### 3.6. Prepper commandment #6: Get in shape [\[link\]](#)

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In the United States, about one in three adults is obese - that is, are overweight to the point where the condition likely interferes with their health or their daily lives. And while many folks in the prepper community tend to grossly overstate the importance of tip-top physical fitness, there is no denying that obesity is a very real foe. For example, among low-BMI individuals, the incidence of diabetes hovers around 1-4%, but the same number skyrockets to 50-80% for obese folks. Many other, serious metabolic and cardiovascular diseases follow the same curve - and can make it very difficult for the affected families to cope even with fairly prosaic and short-lived emergencies.

In all likelihood, if you are obese or slowly getting there, you know quite well that losing some weight is not really the hard part: if you were to stop eating for a week, you would likely shed 5-10 pounds or more. But it would be a miserable experience, and one almost guaranteed to be followed by an even faster rebound. So, the real challenge of weight management is coming up with a long-term strategy that does not amount to torture - and does not leave you constantly craving for familiar foods.

Alas, most of the popular diets make this task awfully hard: they force their followers to abandon a lifetime of dietary habits, taste preferences, and eating schedules - and stuff themselves full of kale, turnips, quinoa, acai berry, or whatever else happens to be this week's "fat-fighting superfood". To add insult to injury, most of the nutrition fads are not actually backed by real, reproducible science; suffice to say that in the 70s, [table sugar](#) was widely touted as a dieting aid. Even today, weight loss advice tends to revolve around robustly debunked concepts - say, the existence negative calorie foods, the alleged superiority of low-carb but high-fat diets, the evils of HFCS and aspartame, or the significance of eating meals on a particular schedule throughout the day.

Just as importantly, our innate nutritional instincts can be badly misguided, too: for example, contrary to common wisdom, bananas are not really healthier than potatoes, and the bulk nutritional qualities of a glass of apple juice are pretty close to those of a can of Sprite. Heck, good ol' butter has fewer calories than olive or coconut oil, so a "healthy" bruschetta is not far off from a less-reputable southern delicacy: deep-fried butter on a stick. It gets better: a

supposedly nutritious burrito from Chipotle easily packs four times as many calories as a greasy burger from McDonald's, while a loaded coffee at Starbucks is about the same as downing two hot dogs with a heaping side of mashed potatoes to boot. The end result is a truly abysmal track record for most weight loss regimes; the long-term success rate for people who try to slim down is estimated to be somewhere between 5 and 20%.

My advice is that if you want to lose weight, it's best to stay away from celebrity-endorsed diets, dubious nutrition claims, and rigid, unworkable plans that seek to control your every urge. While every situation is different, here are several ways to eat less while still staying happy:

- Start your breakfast with [high-quality protein powder](#) and [insoluble dietary fibers](#) (about 20-30 grams each; you can mix them together in a cup of cold water). There is fairly clear evidence that fiber and protein can increase satiety and reduce cravings throughout the day. Sure, it's not "natural", but it beats making implausible resolutions to organize your life around low-calorie, fiber-rich meals - especially if you don't like veggies or don't usually cook your food.
- Beyond this, stick to your favorite foods and don't feel pressured to skip regular meals - but cut **all** portions in half, even if it means throwing a half-eaten burger out. Don't go back for seconds, too. It will feel wrong the first couple of times, but it's surprisingly easy to do. That's because portion control is almost completely psychological; your blood hormone and nutrient levels go up only some time after you cleaned your plate. Eating more slowly can make this step a lot easier, too.
- For habitual snacking in front of a computer or a TV, see if you can substantially reduce calories while still sticking to satiating and tasty treats. This can be easier than it sounds: say, helping yourself to a nice serving of [salted popcorn](#) (110 kcal), preparing a cup of [buttery mashed potatoes](#) (110 kcal), or sipping some hot [instant chicken soup](#) (50-80 kcal), is an excellent alternative to Cheetos, M&Ms, or even supposedly healthy peanuts (easily 600-800 kcal). If you enjoy pickles or raw sauerkraut, they are extremely low-calorie, so have as much as you want; in the same vein, carrots are a pretty guilt-free choice. Chewing gum can keep you occupied between meals, and if you are downing multiple cans of sugary drinks a day, artificially-sweetened sodas offer a [good alternative](#).
- When buying food, don't fall for "diet", "reduced fat", "low sugar", or "low carbs" ice cream, yogurts, cakes, pizza, pasta, and so on - the differences are so minor that you might as well have the real thing and stop fooling yourself. Watch out for deceptive portion sizes, too. For example, Cheetos are labeled as 150 kcal per "serving", but there are almost 10 servings in a regular bag! Frozen fries are another great example: they look pretty low-cal until you realize that a serving is just 10-15 pieces or so - certainly not enough to make you feel full.



- While dieting, try to drink a bit more and start taking [OTC multivitamin supplements](#); they don't offer clear-cut benefits under normal circumstances, but they can compensate for mineral and vitamin deficiencies if you never had a particularly thoughtful diet, and are about to start eating less than you were accustomed to.
- Don't hit the gym. Hold off with intense workouts at least until you are close to your target weight. Daily exercise schedules are hard to keep for more than a couple weeks, especially if you lead a busy life; on top of that, a drastic increase in physical activity can trigger cravings or upend your nutritional needs. If you are itching to burn some extra fat, incorporate less punishing activities into your daily routine - say, walking or leisurely biking to work.
- Be in this for the long haul. Effortlessly losing 1-2 lbs per week while slowly developing better habits is far more meaningful than starving yourself for a month to get immediate but short-lived results. Get an accurate bathroom scale, take daily measurements first thing in the morning, calculate key milestones, and put it all in a spreadsheet to keep yourself honest and motivated. It will probably take 6-9 months to get the outcome you want; daily or weekly weight fluctuations are almost completely meaningless, but you should be seeing a consistent and predictable biweekly drop.

I can't promise that this approach will work for everyone, but after trying countless other methods, I found that regime quite enjoyable, effective, and worry-free; at the ripe old age of 35 and with three kids in tow, I ended up losing over 65 pounds - going down from a BMI of 29 to 20 or so.

Of course, if you are very obese or have any serious health conditions, such as diabetes or CVD, talk to a doctor first. In such situations, aggressive dieting can carry additional risks and calls for some monitoring along the way; a routine blood test or an ECG shouldn't cost much. And it goes without saying that if your diet makes you feel listless or sick, it's definitely time to stop right away!

Now, when it comes to fitness per se, I firmly believe that there is no need to go overboard; good health is far more important than Rambo skills. While getting buff may be a fun pastime for some young folks, there are very few emergencies that would force you to run 30 miles or climb a 20 foot wall. Being able to walk or bike for several hours is likely good enough to deal with all practical scenarios we talked about thus far.

### **3.7. Prepper commandment #7: Make friends with neighbors** [\[link\]](#)

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The funny thing about disasters is that they seldom unfold precisely as planned. Perhaps you will lose a job and get robbed the same week. Perhaps in the middle of a prolonged outage, you will find out that some of your emergency supplies have been misplaced, damaged, or spoiled. Maybe your plan to walk a mile to get drinking water from a river will get foiled by a broken limb. And maybe a brilliant home defense strategy will prove worthless when standing eye to eye with an angry mob of rioters armed with rocks.

In trying times, people always come together and find strength in local communities. Even if you don't expect it, you will almost certainly be able to count on the kindness of strangers. But your odds can be greatly improved by getting to know your neighbors ahead of the time, by cultivating trust and mutual respect, and by getting a sense of each others' toolkits and skills. In a grim situation, being on good terms with a doctor or a veterinarian can quite literally save your life. And heck, some rural communities in the US even maintain communal stashes of emergency supplies!

Of course, it goes both ways: you will almost certainly find it harder to get help if your neighbors still resent you for puking on their doormat and constantly partying at night; so once again, not being a jerk to other people is not just good manners, but a very legitimate survival skill. Even if it's not really your nature, say "hi", engage in small talk, and offer to help with minor hurdles every now and then. Bring your neighbors a pie or some donuts, add them on Facebook, and try to find common interests. Socialize with coworkers who live nearby, too. Even if the zombie apocalypse never comes, it still won't be a waste of your time.

Now, many "true" preppers would tell you to keep mum about your plans, so that in an emergency, you don't have to fend off armies of freeloaders begging for a slice of your meager supplies - or worse yet, trying to take them by force. I think that this attitude is short-sighted; sure, it makes sense not to broadcast your plans to the entire world, and there is no conceivable benefit to posting Facebook selfies with your stash of freeze-dried food or with a pile of cash. But the clear value of convincing some of your friends to start prepping greatly outweighs the distant possibility that one of them will attempt to raid your home the moment the power goes out.

### **3.8. Prepper commandment #8: Write down a response plan** [\[link\]](#)

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To cope with a true emergency, it's not enough to know the risks and sit on a pile of overpriced survival gear: you need to plan ahead. If your house is on fire, there may be no time to rifle through folders to gather all your vital documents; if the floodwaters are rising or a chemical tanker overturns on a nearby highway, it may a bit late to start thinking about refueling your car. And if you're stranded on a rural road in a broken-down vehicle, you may sorely regret not putting any drinking water in the trunk.

In fact, even in situations that don't unfold in such a dramatic way, sketching out a plan can help you optimize spending and spot potential problems early on. For example, there may be little merit to stockpiling 50 lbs of rice if you can't possibly store enough water to cook it all. But then, a quick look at the map may reveal that there is a freshwater reservoir within a biking distance of your home. Great - maybe all you need is a bike basket and a pair of spare inner tubes.

So, here's your homework: make a list of all the major threats discussed in this guide, alongside with any other contingencies you worry about. For each and every one of them, draft a detailed, step-by-step preparedness and response plan that sounds right to **you**, and that you can see yourself actually putting into action. Don't obsess over getting all the details right; we'll try to refine your choices in section 4, and even then, it may take several iterations to settle on an approach you are really happy with. For now, simply list all the noteworthy dangers, jot down some initial answers to the following questions, and see where that takes you.

### **3.8.1. Threat assessment topic #1: Is it a priority?** [\[link\]](#)

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Do some research to make sure you are not wasting your time on implausible risks. How likely is it that you would have to face this particular danger, and how much damage can it conceivably cause? For example, do you live in a 100-year flood zone? In the path of tropical storms? In a high-crime neighborhood? Be sure to search around and study publicly available resources; reaching out to local emergency response organizations can be a good plan, too. Try to focus on reputable sources; the science in doomsday movies and on conspiracy websites seldom checks out.

(If you decide that you don't care about a particular risk, skip the remaining questions and just move on to the next problem on your list.)

### **3.8.2. Threat assessment topic #2: What do you need to be ready?** [\[link\]](#)

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Do you need to secure any supplies or make other arrangements to prepare for this scenario? If you need to stockpile items, do you have enough room? How long would these supplies last in an emergency, and how often would you need to replace them in storage? Are there any additional steps that you want to take to be in a better place a month, a year, or five years from now? Make a detailed list and tally the costs.

Be critical of any assumptions you are making in your plan: sure, you have seen it all in the movies, but search for statistics or historical accounts to better understand how such events typically unfold in real life. Don't assume that all contingencies are covered by a generic home insurance policy, too: for example, earthquake and flood coverage is often sold separately (and costs a lot); and in any case, even if the insurance will eventually pay, you still need a short-term survival strategy to deal with the loss.

When it comes to dangers such as break-ins, fires, or earthquakes, be sure to walk around the house and take note of anything that unnecessarily exacerbates the risk. Perhaps throwing out old junk, reorganizing the contents of kitchen cabinets, adding [earthquake latches](#), or fixing a broken lock would be a better use of your time than ordering space-age prepper gadgets from Amazon.

For natural disasters common in your region, you can find a lot of relevant (if US-specific) advice on the webpages of [CDC](#), [FEMA](#), and the [American Red Cross](#). You can also have a look at the excellent, detailed hazard maps available from FEMA, USGS, NOAA, and several other agencies.

### 3.8.3. Threat assessment topic #3: How, exactly, will you respond? [\[link\]](#)

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If this particular calamity strikes, what's the step-by-step playbook you would follow, and how much time would you have to carry out the plan? Will you be sheltering at home, or is this a situation where you need to evacuate? If the answer is "it depends", what would be the key factors, and how quickly would you need to make the final call? If you pick the wrong option, how bad would it be?

Bugging out puts you at a tremendous disadvantage, so it's almost always better to dig in; but if you have to leave, also ask yourself this:

- **...where would I go?** Is the location sufficiently far away to be unaffected by the event you're running away from? If you are driving, will you have enough gas to get there? (Again, would it help to have a habit of keeping the tank at least half full?) Are the roads likely to be congested or blocked? How many people will think of exactly the same location? What if the destination proves to be inaccessible, overcrowded, or unsafe?
- **...what do I need to bring?** How much can you realistically take with you when leaving by car, by bike, or on foot? What are the most important items, and will you be able to grab them quickly enough? To simplify things, would it make sense to maintain a small cache of supplies in the trunk of your car or at a friend's place - and if yes, what should be in that box?

### 3.8.4. Threat assessment topic #4: What if you are somewhere unexpected? [\[link\]](#)

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If you have a daytime job or go to school, there is a good chance that the event you are preparing for could unfold while you are at that location - or somewhere on the way. Do you need a special plan to handle this possibility? Can you get back home easily? Do you need water, food, money, or clothes to make that trip? How likely is it that you would be hurt or stranded somewhere?

Separately from this, consider the risks of less frequent but more dangerous trips. If you're sightseeing a particularly inhospitable or remote destination, what do you need to survive if, say, you get lost or your car breaks down?

### **3.8.5. Threat assessment topic #5: Do you need to talk to your family?** [\[link\]](#)

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If you have a spouse, walk them through your plans and make sure they can access the essential supplies and know how to use them in your absence. If you have children, give them the very basics as well. For example, in case of a fire, they should know the safest way out without having to wait for you; tell them how to react to home intrusions and medical emergencies, too.

If you are separated from others and need to meet someplace other than home, make sure that everybody will remember where the meeting point is - and will know what to do if you can't make it on time. Keeping some instructions in a wallet can go a long way.

### **3.8.6. Threat assessment topic #6: How can your plans backfire or fail?** [\[link\]](#)

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Try to identify the aspects of your plan that are most likely to go wrong, and come up with viable alternatives. Take a hard look at any new problems you are creating, too: for example, if you want to store gas in your garage, it will probably help in an evacuation, but will also increase the odds of accidentally starting a serious fire. Or, consider a far more prosaic case: if you are planning to stockpile batteries or bottles of insect repellent, you should make sure they can't leak and spoil other, more vital supplies nearby.

## **3.9. Prepper commandment #9: Plans have flaws, so also write a will** [\[link\]](#)

People die, sometimes unexpectedly and in silly, undignified ways. Dying is seldom a pleasant affair and you generally don't get to choose the "how" or "when", but there is no better way to spoil your final moments than the sudden realization that you *really* screwed over the people you loved the most - and that it's too late to fix that now.

So, if you have children, a stay-at-home spouse, or any other people who may be dependent on you, it makes sense to write a will. Even if you don't have much of an estate to dispose of, your will can provide instructions for the custody of minor kids, potentially shielding them from abusive relatives or from foster care. This can be particularly important for expats, whose closest surviving family members may be in another country, difficult for the court to pinpoint or communicate with.

In most jurisdictions, to draft a will, you don't need a lawyer; the only skill that comes handy is the ability to express yourself clearly and unambiguously. There are countless state- and country-specific templates available online; in many cases, to carry legal weight, the will just needs to be co-signed by disinterested parties acting as witnesses - or cheaply notarized.

Where possible, you should name an executor in the will - a trusted person who will follow your instructions and take care of the formalities. If you don't, one will be probably appointed by the court. This will be costly and may lead to disappointing outcomes.

When writing this document, describe your "ideal" scenario, but also think about all the complications that may crop up and derail your plan. For example, what if both you and your spouse die, but your children survive? Or, who should get what share of the money if your spouse is badly hurt and can't resume caring for the kids, so they end up in the custody of a relative? What if your designated executor or custodian is unable or unwilling to perform the duties? And in an extreme case, if there are no surviving relatives, do you have any favorite charity?

Of course, for the will to be executed, it needs to be found. It makes sense to keep one copy in an intuitive location in your home, because that's where people will be looking for it first; but if there's a fire or a flood, that copy may be lost. So, make another witnessed or notarized copy and give it to the executor or to a close family member who doesn't live with you. Some folks don't recommend creating multiple legally binding copies of the same will, since it may cause some confusion, but from a disaster preparedness perspective, it's a smart call.

In many states, even with an uncontested will, it may take many months for the probate process to be wrapped up. If you are the sole provider for your family, make sure that they will have the means to survive in the meantime. The right kind of a shared bank account ("joint tenancy with right of survivorship") can do the trick. There are several other approaches to this problem, too, but they tend to be more dicey from the legal perspective - or more costly and more time-consuming to set up.

## 4. Prepper gear & supplies [\[link\]](#)

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Yes! That's the part where he stops blabbing about personal finance and wills, and we all get to shop for nunchucks and throwing knives!

### 4.1. Water [\[link\]](#)

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...Gotcha. But yup, let's talk about the supplies and tools that may enable you to prepare for common emergencies in a cost-effective way.

Even with adequate shelter and with limited physical activity, losing access to water means certain death after a couple of truly rotten days. Thankfully, in the developed world, this is a very uncommon fate: emergencies that leave communities without potable water are not rare, but when they happen, the government practically trips over itself to immediately restore service or to get water trucks on the road.

At the same time, it's not entirely crazy to worry that in some circumstances, the response may not come quickly enough; heck, the Department of Homeland Security says that for the first 72 hours after a disaster, [you may be on your own](#) and should have enough supplies to survive. The odds of ending up in a real pickle may be modest, but the stakes are extremely high - and compared to the complexity of preparing to some other contingencies, the cost of stockpiling some drinking water is practically nil. If nothing else, when a calamity strikes, you would have one less thing to worry about.

An argument can be made that even in an emergency, potable water is never too far away; after all, most human settlements have been erected near natural reservoirs: rivers, lakes, or easily reached underground aquifers. But this is an oversimplification. In rural areas, water supply can be fairly meager and vulnerable to weather fluctuations and other cyclic phenomena. For cities, it is true that many of them are seated on the banks of major lakes or rivers, but suburban sprawl can easily put some residents 10-20 miles away from the nearest reservoir; on top of that, some of the 20th century settlements in semi-arid and desert climates rely on water hauled from tens or hundreds of miles away.

Heck, even if you do have a nearby water source, it may take surprisingly little to spoil it: for example, after an unusually powerful storm, floodwaters can carry toxic sewage from treatment plants and into rivers and lakes. All in all, stockpiling some amount of drinking water is just a smart, low-effort prepper strategy, especially in areas with an elevated likelihood of large-scale natural disasters or industrial accidents.

This brings us to the "how". In most cases, the absolute minimum water intake is somewhere around one quart per person per day; but note that this assumes no weather extremes, no substantial exertion, and no immediate hygiene needs. When these assumptions hold true, storing about 1.5 to 2 gallons per household member - enough for perhaps up to a week - should provide a viable if modest buffer for short-term emergencies. Store-bought gallon jugs are pretty cheap, hassle-free, and easy to squeeze in just about anywhere; if you keep them away from sunlight and heat, they should last 5+ years before needing to be rotated or thrown out. Don't try to save a buck by reusing milk or juice jugs, though: they are almost impossible to clean properly and may end up supporting bacterial growth.

Well, that's the bare minimum - but if you have a garage, a basement, or other unused storage space, I would actually recommend going a bit further and grabbing one or two [5 gallon cans](#) (\$18) per every household member. Although multi-week water outages are very unlikely, this simply gives you a more comfortable safety margin: if something goes awfully wrong and it becomes clear that help is not coming any time soon, you will still have time to look for alternatives or evacuate. A reserve also puts you in a better situation if it's unusually hot or if you have any urgent hygiene needs. The cans are very easy to use: wash them with a small amount of regular, non-scented laundry bleach, rinse, and fill up with tap water. Rotate the contents every 2-4 years or so.

If you want to prepare for more outlandish, long-term disasters, or if you have a large family, you can make realistic plans only if you live in a single-family home. This decision alone may give you access to 50-100 gallons of water sitting in the water heater (unless it's a tankless design). Next, if you have some backyard space, you may opt for relatively inexpensive [55 gallon plastic barrels](#) (\$70), taking up about as much space as a small curbside trash can. Another common option, costing about the same per gallon stored, is a [275 gallon tote](#) (\$325). Such solutions can easily provide water for an entire family for up to several months at 2 quarts per person per day, with some allowance for laundry and hygiene needs. Some preppers stockpile even more - but really, if you waited this long and the conditions are still dire, it may be high time to hit the road and find some other place to live.

(Of course, there are rural places that get water only seasonally, and where huge storage cisterns or rainwater collection systems are already a necessity; but within the scope of this guide, we're looking beyond what's normally needed to subsist.)

While home storage of water is not hugely complicated, things get a bit dicey when you have to evacuate - or if you end up being stranded away from home. If you have a car, your best bet is to put together a small emergency supplies box that, among other essentials, houses one or two 1-gallon jugs of water - and keep it in your trunk at all times. But without a car, your prospects are less cheerful: in case of a widespread disaster, your range will be severely limited, and even if you take some modest amount of water with you, you will need to reach a more hospitable location within 1-2 days. A bicycle, a plan, and a good map will help. A [folding cart](#) or an inconspicuous box of supplies kept at work may be viable choices, too.

As for drinking untreated water: contrary to popular beliefs, in temperate climates, you are generally not taking huge risks by drinking from a backcountry lake or a creek; if it looks and smells all right, it's quite likely fine. On the flip side, a bout of diarrhea is probably the last thing you want to experience in such a situation, so it's good to take precautions if you can. Boiling your drinking water is a very robust method of eradicating microscopic wildlife (more about that soon). When boiling is not an option, adding several drops of regular, old-fashioned laundry bleach per gallon of water, then letting it sit for 30-60 minutes, will have a roughly comparable effect. Note that bleach has a limited shelf life; you will need to rotate it every 5 years or so. When on the go, [sodium dichloroisocyanurate](#) pills can be more convenient than liquid bleach and work just as well.

There are several other water purification techniques, including iodine, various types of filters, or even ridiculously expensive desalination systems. The recent [Flint water crisis](#) highlights the value of permanently installed and well-maintained RO units. But for short-term survival, my take is that most of the filtration systems targeted at preppers increase costs without offering clear-cut benefits. And really, don't overthink it: if the choice is between dehydration and drinking straight from a scummy pond, drink from the pond.



## 4.2. Food [\[link\]](#)

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You can survive several weeks without food, but you won't be having a very good time. Food is costly, its supply is fairly easily disrupted, and it's a resource that the government may be much less inclined to deliver to your doorstep when things go wrong. So, with a variety of reasonable scenarios to worry about - anything from natural disasters to economic downturns - it just makes sense to be able to feed yourself even if you can't buy groceries for a while.

Of course, everybody has some non-perishable food around the house, but it's much better to create a dedicated stash: this way, you can count on the supplies always being at hand, and you can stockpile something more nutritious than stale crackers, a suspect bottle of olive oil, and a rusty can of tomato sauce. With a well thought-out stockpile of ready-made food, it's also a lot easier to hit the road.

For short-term survival, the highest priority is just energy - preferably in a form that doesn't cost much, lasts forever, requires no preparation, and takes up little space. Generally, you're looking at high-sugar or high-fat foods. Some of the common zero-preparation options include:

- **High-sugar energy bars.** Grocery store brands have limited shelf life, but several prepper-targeted, [Mylar-packed varieties](#) can last 5-10 years. Such products are inexpensive (~300 kcal per dollar), convenient, and energy-dense (~2,000 kcal per pound). On the flip side, they are probably pretty nauseating as your primary food. Imagine living solely off Jelly Bellies for a week.
- **Dry survival rations.** Sold under several brands, including [Datrex](#), [ER Bar](#), [S.O.S.](#), [Grizzly](#), and more. Biscuit-like, less sugary and with a more agreeable taste than energy bars - somewhat reminiscent of shortbread. In my book, S.O.S. and Datrex taste best. Very inexpensive (~550 kcal per dollar) and should last 5-10 years when stored in a cool place. A tolerable choice for short- to medium-term nutrition in an emergency. Easy to pack, giving you ~2,200 kcal per pound.
- **Canned meat, veggies, or fruit.** Storage life in excess of 20 years (regardless of "best by" dates). Tasty, relatively cheap (~200-300 kcal per dollar), and the choice is pretty broad. Fruits, veggies, and soups are not very energy-dense (~200 kcal per pound), making them impractical for hiking or bugging out; on the flip side, the syrup may provide some additional hydration. Meats fare much better, tipping the scales at around 1,500 kcal per pound. Canned foods are a good option for longer-term planning, provided that you have enough shelf space.
- **Freeze-dried dinners.** Popular with hikers. Extremely lightweight (up to 2,500 kcal per pound) and surprisingly tasty. The most reputable brand is [Mountain House](#). Fairly expensive on a calorie basis (100-150 kcal per \$1), but you get a

choice of raspberry crumble, chicken with dumplings, bacon and eggs, and everything in between. Storage life in excess of 15 years. The drawback is that they need some boiling water to reconstitute (cold water will also work, but not make a tasty meal).

- **Military MREs.** I don't find them particularly tasty, but they are popular among preppers. A bit on the heavy side (usually around 1,100 kcal per pound). Portable warm food with a ton of different menus available - although for the best price, you usually need to buy a variety box and can't cherry-pick. Moderately expensive (~150 kcal per dollar). Shelf life around 5-7 years, depending on manufacturer and storage conditions. A good source is [TheEpicenter.com](http://TheEpicenter.com).
- **Nuts.** At ~3,000 kcal per pound, nuts are surprisingly energy-dense for something that can be eaten as-is. Relatively cheap (~400 kcal per dollar). The major drawback is a relatively short shelf life, probably not exceeding a year or two. Nuts also do not provide complete nutrition, but that's only a concern in the long haul.
- **Vegetable shortening.** Extremely cheap and energy-dense (2,500 kcal per dollar, 4,100 per pound), making it a unique choice when space or money is in critically short supply. In contrast to other common fats, store-brought [cans of vegetable shortening](#) should stay fine for 4 years or more. The product is very bland, but it's perfectly palatable when spread on crackers, mixed with bacon bits, and so forth. It does not provide complete nutrition - but again, that won't harm you in the short haul.

For folks who want to focus on the most plausible risks, I suggest stockpiling dry survival rations to last perhaps 2-3 weeks; seven 3,600 kcal packets per person should do the trick. That may sound like a lot, but keep in mind that it may take a while for stores to reopen after an earthquake or a flood - so it's not a bad plan to play it safe. And while eating ration bars for a week sounds bland, you may be in no mood for home cooking when you have to fix a collapsed roof and the utilities are cut off.

For those who are worried about less likely, longer-term contingencies - or who want to limit their future grocery expenses in case of a financial shortfall - a more varied stockpile to cover 3-4 months is a reasonable choice. At that timescale, it's still smart to begin with some number of hassle-free survival rations, but it is important complement them with a more palatable menu: freeze-dried or canned meals, MREs, or cheap home-made food. Crisco aside, some of the nutritious and easily stored staples include [Mylar-bagged, oxygen-scavenged](#) white rice, white flour, dried beans and grains, pasta, sugar, honey, powdered milk, salt, spices, and so forth; when stored properly, all of them can last 5 years or more. [Freeze-dried](#) or garden-grown fruit and veggies can add some flavor to your post-disaster cooking, too. Heck, you can even buy

supposedly tasty [butter](#), [chicken breast](#), [canned bacon](#), and [bread-like crackers](#) with 10+ year shelf life (although they are not cheap).

As for the appropriate calorie intake: almost all adults can function normally on 1,500 calories a day for extended periods of time, although they will slowly lose weight (probably not more than half a pound a week). If you are skinny or if you're aiming for surviving many months with no access to other food, budgeting 2,000-2,200 kcal per day is a safer bet.

For hardcore preppers convinced that they may be left with no access to food for a very long time, it would be also important to maintain a robust intake of protein; somewhere around 40-50 g per day is believed to be optimal, although you certainly don't need to observe it religiously. Ready-made protein-rich foods include some energy bars, most dry ration packets, some freeze-dried dinners, canned meat, and military MREs; smaller amounts can be found in some veggies, too. You can also stockpile [protein powder](#) - it's bland but relatively cheap (\$1 per day). [Freeze-dried scrambled eggs](#), [powdered milk](#), and related products, including long shelf life [canned](#) or [powdered cheeses](#) and [pancake mixes](#), work well, too. As mentioned earlier, protein and dietary fiber also have a well-established satiating effect, helping you maintain a balanced diet - which can otherwise be tricky when snacking on high-calorie foods. Oh: having some OTC multivitamins may be a good plan, especially to supplement vitamin C.

Of course, some "doomsday" preppers worry about even more exotic, post-apocalyptic scenarios mentioned in section 2.3, basically aiming for indefinite self-sufficiency. I don't think it's a particularly sound concern, but if the prospect of a civilizational collapse keeps you up at night, my best advice is to move to a rural community where you could farm, fish, or hunt. Some urban survivalists fantasize about trapping local squirrels, pigeons, or raccoons - but they would run out of food very fast. Small urban and suburban gardens are usually difficult to maintain and don't produce enough to feed a family, too.

### 4.3. Fuel and electricity [\[link\]](#)

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It takes just a single downed power line to knock out your furnace, AC unit, cooktop, refrigerator, and to make the lights go out; and when such an outage happens due to a larger-scale natural disaster, repairs can easily take days or even weeks. We think of fuel as a more dependable resource, but if 1979 is any guide, you only need [one well-timed revolution](#) in the Middle East to make it nearly impossible to fill up a car in some parts of the United States. Of course, such events are usually inconvenient, not disastrous, so it's perfectly fine not to dwell on them in your plans. At the same time, it doesn't hurt to take a closer look at what's at stake - and what the potential solutions may be.

Of all the plausible scenarios, another major oil crisis would probably hit most car-owning families the hardest, limiting their ability to get food or to take care of other, everyday needs. Generally speaking, there is no simple fix: keeping a gallon or two in your garage won't make

much of a difference, while maintaining significant reserves of gas for personal use can be done safely (and legally) only if you own a large, rural plot of land. Electric vehicles, especially if charged from rooftop solar panels, can offer a wonderful backup in some parts of the world, but they carry a very hefty price tag. The best workaround may be the least inspired one: if you own a car, you can always keep your tank at least half full (a familiar mantra by now), and have enough food and other essentials to be able to wait out the worst.

A service interruption or a fuel crisis that takes your cooktop out of service for a week or two is the other hardship perhaps worth worrying about. It's not just about eating well: in an emergency, the ability to boil water is one of the best methods of making it safe to drink. While the owners of rural homes with 500 gallon propane tanks may have little to worry about, the rest of us would not be having fun. For those who cook using municipal natural gas, a simple backup is a [small, countertop electric burner](#), costing about \$15. Conversely, for people with electric ranges, a portable [camping stove](#) (\$13) and a handful of dirt-cheap 1 lb propane tanks (\$4 at any hardware store) can be a safe, no-hassle choice. A pound of propane can boil around 12 gallons of water; the entire setup is also very easy to put in a backpack if you ever need to leave - so it's basically worth getting either way.

No heating in the middle of a particularly nasty winter can be problematic, too - although it's mostly a matter of comfort, not survival. In most places, with robust shelter and adequate clothing, bedding, and food, it's fairly hard to freeze to death at home (but note that the cold may make some infections or medical conditions worse; you may have to worry about frozen water pipes, too). The situation can become a lot more dire if you are on foot in the middle of nowhere, so truly hardcore, wilderness-minded preppers may have something to ponder about; but hauling a sufficient amount of fuel is typically impractical to begin with, so their best bet would be warm clothing, improvised shelter, and the ability to build a fire. We'll talk about that in the section that deals with camping supplies.

In some parts of the world, extreme heat can be far more dangerous than cold. When AC is not an option, it's usually possible to avoid trouble by staying in the shade, drinking a lot, and limiting physical activity. If it gets really nasty, the best way to cool yourself is to wet your clothing and hair, then stand in front of a running fan. You have a bigger problem if you happen to be stranded in a broken down car somewhere in the middle of a desert - but carrying some water and several other supplies in your trunk should help a great deal. More about that soon.

During a prolonged blackout, keeping flashlights, radios, and cell phones running can become a challenge of its own. The most cost-effective approach is to stick to devices that can take regular AA, AAA, or PP3 (9V) batteries; modern alkaline cells have very long shelf lives (10 years), can be [bought cheaply](#) in bulk, and will do the trick for almost all portable electronics you can think of. Of course, modern power-hungry smartphones are a notable exception to this rule. For that, you can always try [solar chargers](#) (\$50) - they work well, but are a bit fragile and may not perform too amazingly in wooded areas or on overcast days. You can also go for [hand-crank](#)

generators (\$30, labor-intensive) or [AA power banks](#) (\$15, mixed reviews). But ultimately, also allow for the possibility of not being able to call others for a while.

For powering more serious electrical equipment, a generator is a popular choice for people living in the backwoods. That said, this option comes with an interesting trade-off: if you were ever to face a contingency that may last for a longer while, it may be more important to conserve fuel for driving, cooking, or heating, than to use it for keeping the lights on. A fully-fledged solar installation helps you avoid such dilemmas, but costs an arm and a leg. A possible compromise is a jury-rigged solar setup done at a smaller scale: if you hook up [100W panel](#) (\$160) to a [deep-cycle lead-acid battery](#) (\$60) and a [low-cost inverter](#) (\$30), you gain the ability to recharge laptops and phones, or even power several desk lamps, a decent-size fan, or a small refrigerator. The whole contraption costs around \$250 and is easy to stow away if you're not very short on space.

(If you take this route, charge the lead-acid battery fully, bag it, and then put it in the fridge or in another cool place; this will extend its shelf life by many years. Li-poly and regular non-rechargeable batteries benefit from being stored at low temperatures, too. But whatever you do, don't freeze any of them!)

That's probably about it... well, all right: this section focused chiefly on the immediate consequences of an outage, but a severe fuel crisis or a long-lasting power grid failure would have profound, cascading effects on the entire economy - probably including out-of-control unemployment, high inflation, product shortages, and more. That said, these are the outcomes we can already prepare for by other means. As for extreme preppers who aspire to long-term energy self-sufficiency, I think it's going to be a difficult feat: even with a solar installation, under constant cycling, the batteries may not last much longer than 5 years. Short of finding a cheap Soviet [RTG](#) on eBay, they may simply have to adapt to living without electricity or gas.

#### 4.4. Electronics [\[link\]](#)

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Although this may sound very disappointing to a typical geek, the list of genuinely useful prepper electronics is pretty short. Here's what I can honestly recommend:

- **A large pen drive.** Computer hardware failures are far more common than space zombies or mutant superbugs. Because of this, one of your best investments can be a [decent 128 GB pen drive](#) (\$30) with a copy of all your important files; in case of bank mix-ups, throw in copies of recent account statements, too. And hey, if want to feel like a cyber-ninja - you can always grab a [copy of Wikipedia](#). It will undoubtedly come handy for rebuilding the civilization, and it's just 12 GB.
- **Flashlights.** Unless you are living in a rural area, you don't need an eye-searing torch that chews through ten boxes of batteries in a day. Get two small, high-

quality AA flashlights that give you at least 20 hours on low power; keep one near your bed, and another in your car or in an emergency stash. For a low-cost option, try [Fenix E12](#) (\$25). If you want 100+ hours of battery life and don't mind the price tag, check out [Fenix LD22](#) (\$55).

- **A lantern.** Not essential, but useful for preparing food, dining, reading, and other fun blackout activities where a narrow beam would be less comfortable than omnidirectional light. I like [this device](#) (\$35) - it's small, fairly inexpensive, and very robust.
- **An old-fashioned radio receiver.** A battery-operated AM/FM radio will be a good way to stay in the loop if cell networks and the Internet are down, and the civilization is temporarily banished back to the dark ages (aka the 90s). A cheap, brand-name model, such as [Sony ICFP26](#) (\$18), will do just fine.
- **Handheld FRS/GMRS radios.** Many preppers obsess about long-distance communications, but in a typical emergency, chatting with people 100 miles away is not a priority. In contrast, a hand-held two-way radio can be very useful for keeping in touch with your friends and family during any prolonged outage. Again, pick a device that accepts the kind of batteries you can stockpile cheaply. Expect a range of 2-3 miles in rural regions, and less than a mile in highly urbanized areas - no matter what the manufacturer claims. With all that in mind, [Olympia R500](#) (\$55) is a good choice.

Ham radio is a longer-distance option, but generally requires a license; if you are interested in amateur radio, getting a Technician license in the United States is [fairly straightforward](#), and can help you coordinate local response to more substantial emergencies.

- **A thermometer that won't run out of juice.** Responding to serious emergencies can be stressful and physically taxing, making it easy to catch nasty infections along the way. To know how bad things have gotten, it's good to have a reliable way to take body temperature; keep in mind that many low-cost axillary thermometers use LR41 batteries, and that you probably don't have any spares lying around. One good choice is [this](#) (\$35). A traditional glass thermometer will also work, but is more fragile.
- **A small space heater and a fan.** Sometimes useful for coping with temperature extremes. Decide for yourself if you need it. If yes, pretty much any make and model will do.
- **A dashcam or a security camera for your home.** We'll talk about these later on.

Except for flashlights, don't keep any batteries in your emergency electronics, as to minimize the danger of an electrolyte leak messing up the device.

Of course, there are many other high-tech gadgets popular among some of the more affluent and paranoid preppers - anything from satellite phones, to night vision goggles, to heated insoles. In all likelihood, none of that is worth the cost. If I had to pick two extravagant "doomsday" accessories that could conceivably be useful to some people if something truly awful happens to the world, I'd go with a [waterproof hiking GPS unit](#) and a portable Geiger counter. Both are powered by AAA batteries and cost around \$140. (We'll talk about Geiger counters and their relative merits a bit later on.)

Inspired by science fiction books and a handful of real-world incidents, some hardcore survivalists worry that their portable electronics or vehicles could be disabled by [EMP weapons](#) or solar flares. The concern over solar flares is misplaced; the threat of EMP is a tad more valid, but even if EMP warfare came to pass, small electronics and quasi-shielded automotive circuitry would probably not be permanently affected by anything other than a close blast. Power plants and transmission lines are a different story. Heck, in 1989, solar flares knocked out [a good chunk of the Canadian power grid](#). Still, for that, a surge protector works better than tinfoil.

## 4.5. Essential tools [\[link\]](#)

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While not all urban-dwelling readers may be particularly interested in DIY work, there are times when it's hard to call a handyman. So, almost every home will benefit from having a well-maintained "emergency" toolbox containing several items useful for performing basic repairs and dealing with other minor incidents:

- A cheap pocket knife ([link](#), \$20),
- A basic, no-frills multitool ([link](#), \$30),
- A small adjustable wrench ([link](#), \$8),
- At least 100 ft of paracord or UHMWPE rope ([link](#), \$10),
- A big roll of duct tape ([link](#), \$10),
- A rudimentary sewing kit ([link](#), \$5),
- A decent pen or a mechanical pencil ([link](#), \$12),
- A pack of writing pads ([link](#), \$6),
- Sharp, large scissors ([link](#), \$5),
- Needle-point tweezers ([link](#), \$10),
- A compact but sturdy hammer ([link](#), \$15),
- A box of 1" nails ([link](#), \$2),
- A usable can opener ([link](#), \$7),

- A sealed bag with several boxes of matches (\$5).

Having a [medium-size bucket](#) (\$8) at home is a must, too. If you own a bicycle and are expecting to use it in emergencies, it would be wise to throw in a [bike tool](#) (\$20), several [tire levers](#) (\$5), a [patch kit](#) (\$5), one or two spare tubes (\$10), and a [portable pump](#) (\$10). Finally, for those who are worried about the decidedly unlikely prospect of having to escape home and fight off radscorpions in the wilderness, a [lightweight hatchet](#) (\$25), a [folding saw](#) (\$20), a [larger fixed-blade knife](#) (\$24), a [folding shovel](#) (\$25), a [compass](#) (\$9), and some matches or a lighter in a waterproof container can come handy in several ways.

A subset of this is also worth keeping in a car. It's not just about zombies or life-and-death situations: if you hit something in a parking lot and your bumper cover comes off or your liftgate won't stay shut, it's nice to be able to tie it down and get back on the road. Similarly, a shovel can help you get back on the road after getting stuck in snow or mud. But speaking of survival: a pocket knife, kept within reach (e.g., in the center console), can be used to cut seat belts if you get into a wreck; and in a pinch, it will double as a self-defense tool. [Belt cutters](#) can also fulfill that first task, and may be easier to operate if you are hurt - although they are less useful for other purposes. I'd also recommend getting an [automatic center punch](#) - it's a neat \$7 tool that effortlessly shatters tempered glass (i.e., side and rear windows) when the doors won't budge. It [works way better](#) than many of the specialized car escape devices sold on the Internet.

If you own a house, especially in a region prone to earthquakes or tropical storms, you should probably have a sledgehammer, a chainsaw (with a charged battery or some fuel at hand), bolt cutters, and a pry bar. These heavy tools are essential for clearing debris and getting to whatever's underneath. Keep them far from your other supplies: if your primary stash gets pinned under other junk, you can use the tools to get it out. Don't store pry bars and similar equipment in plain sight; robbers often use found tools to force patio doors, to pop safes, or [worse](#).

No matter where you live, it's also nice to have some materials at hand to patch up broken windows on a stormy night. [Window security film](#) can be used to keep broken glass in place, while a roll of thick plastic sheeting or tarp from a hardware store can come handy for temporary repairs; space permitting, you may also want to keep several wooden planks. For suburban and rural homes in regions prone to extreme weather, pressboard and sandbags may be worthwhile, too. Traditional sandbags tend to be extremely labor-intensive to fill, so plan accordingly; [water-filled barriers](#) are much easier to deploy, but cost more. [Absorbent sock-style barriers](#) can be used to deal with minor flooding, but only up to an inch of water or so; they may be less useful for inclement weather, but may prove indispensable for dealing with backed-up sewage or similar ills.

And now, for something completely different: during a longer water outage, you won't be able to flush your toilet - a little-appreciated but grave hygiene risk. When living in a single-family



home, you should probably get a shovel and a pickax: they are useful in the backyard either way, but if push comes to shove, such tools allow you to dig out a latrine and address the sanitation problem in a fairly sustainable way. Of course, dumping bagged human waste into trash will work for a while, too, but it quickly becomes a liability.

## 4.6. Camping equipment [\[link\]](#)

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Many hardcore preppers spend their time fantasizing about heroic survival in the endless, pristine wilderness, equipped with nothing more than a bug out bag, a trusty rifle, and their own iron will. But even in far more realistic situations, being able to set up a camp can be a valuable skill. During mass evacuations, there is always a good chance of being stuck on a congested highway for a day or two, or reaching your destination only to find out that all the hotels and motels are full. The benefits are clear for some small-scale emergencies, too: if backed-up sewage makes your home uninhabitable for a while, setting up a tent in a friend's backyard can be much cheaper than staying in a hotel for several weeks.

Above all, the nice thing about it is that camping gear doesn't need to just sit in your closet, collecting dust on the off chance that something bad may happen a decade from now. You can simply grab it and head out for the weekend every now and then; camping is fun, doubly so for kids. It's also a great opportunity to test some of your other equipment, and spot potential flaws in your preparedness plans.

Especially if you're living in the suburbs or in the countryside, I recommend having the following items at hand:

- **Maps.** Essential for finding hospitable destinations, getting there, and finding alternative routes if something goes wrong. I suggest getting both a country road atlas and a more detailed map of your county or state. If you have a car, just keep them there - they may also come handy if you get lost and your cell phone dies.
- **Weather-appropriate clothing.** A well-maintained stash of warm clothes, including [waterproof ponchos](#) and rain boots. In a pinch, you can also use [metallized Mylar blankets](#) (\$0.80 a piece): tie them with some tape to make improvised rainproof, windproof, or thermally insulating clothing and hats, shoe liners, and more. The blankets cost very little and take up virtually no room, so I strongly suggest keeping some in your car. If you're stranded in an inhospitable place, they could save your life.
- **Shelter.** The usual combo is an appropriately-sized, waterproofed tent, a set of sleeping bags & pads, and possibly some [compressible or inflatable pillows](#) for comfort. In cold weather or during heavy rainfall, it's also possible to shelter in your vehicle, with Mylar blankets serving as a substitute for sleeping bags; and on

a hot day, the same material and some rope can be used to improvise a shade. Again, the blankets are worth having in your car at all times.

- **Food prep gear.** As discussed in section 4.3, one of the best ways to cook food or to sterilize drinking water on the go is to have several portable propane tanks, a [miniature stove](#) (\$13), and a lightweight [covered pot](#) (\$28). Some [plastic dinnerware](#) (\$13) can be a nice touch. Make sure that the stove fits your propane tanks; you may need a [Lindal valve adapter](#) (\$20) if not.
- **Mosquito repellent.** Yep. End up in the wrong part of the woods and these bastards can suck you dry. Go for [40% DEET](#) (\$5) or [20% picaridin](#) (\$6). Actually, get both.

Of course, there is also the luxury option: buying a camper or an RV. Such vehicles are frowned upon in many cities, but if you are in a rural area, if it's within your budget, and if you can see yourself using it regularly, go for it - and don't look back.

## 4.7. Hygiene, health, environmental protection [\[link\]](#)

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Humans are pretty fragile. In many of the more serious scenarios discussed in this guide, your survival or well-being may be critically dependent on the ability to deal with incidental medical emergencies, to curb the spread of communicable diseases, or to maintain sanitary conditions at home.

Of course, there are situations where prompt medical attention is simply a necessity; for example, although it may be theoretically possible for an untrained enthusiast equipped with an anatomy handbook to perform appendectomy, the odds of the patient surviving are pretty damn low. That said, outside the domain of major surgery, the outlook is not necessarily as grim - so even when professional help is not available right away, not all hope may be lost.

### 4.7.1. Health & hygiene topic #1: Basic cleaning supplies [\[link\]](#)

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Before we dive into heady stuff, let's talk good housekeeping!

It pays to be prepared for nasty spills or sanitation emergencies. In addition to some of the tools discussed in earlier chapters, a good starting point is a large box of 13 gallon [trash bags](#) (\$10-\$30), another box of thick, 42 gallon [contractor bags](#) (\$30), a set of [disposable vinyl gloves](#) (\$4) plus a pair of tough [PVC or nitrile ones](#) (\$11), some rubbing alcohol (\$6), and a bottle of regular laundry bleach (\$3). Rubbing alcohol is an excellent solvent and a rapid-evaporating disinfectant; bleach is a potent, long-lasting biocide and a great odor neutralizer. Oh - as noted earlier, an [absorbent sock-style barrier](#) may be useful for containing particularly nasty spills, too.

When it comes to comfort and personal hygiene, I would also suggest stockpiling a carton of toilet paper, a pack of [old-school soap bars](#), a bottle of [no-rinse body wash](#) and [shampoo](#) (to conserve water), some antiperspirant, toothpaste and a toothbrush, nail clippers or scissors, and several disposable razors. At home, such items can come handy only during prolonged emergencies; but as a part of your in-car kit, they are invaluable if you are ever stuck somewhere or forget to take your toiletries with you on a camping trip.

As mentioned earlier, water outages can create an unpleasant problem with the disposal of human waste. While a bucket with a trash bag can be used as an impromptu toilet, to keep the conditions sanitary, some form of waste treatment is a must. A cheap option is pouring a layer of clumping (bentonite-based) kitty litter over it after every use; other budget solutions include cement and lime. More expensive choices are [gelling agents](#) and [RV waste digestants](#).

Laundry is another (if slightly less pressing) problem that many preppers may have to reckon with. Well-chosen antiperspirants and [BZK-based antimicrobial sprays](#) do wonders to control bodily odors and extend the life of undergarments. Beyond that, careful hand-washing and rinsing techniques help minimize waste - but when there is no running water, doing laundry is still going to be a rare luxury for most.

#### **4.7.2. Health & hygiene topic #2: Visibility on the road** [\[link\]](#)

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In addition to assorted tools and hygiene supplies, your car kit should probably include a [high-visibility vest](#) (\$7); if your vehicle gives up life, it's better to be visible when trying to revive it or walking to get help. I'm less convinced about the benefits of carrying flares or flare guns; while they can be useful in serious emergencies, they also pose some fire risk.

#### **4.7.3. Health & hygiene topic #3: Medical education** [\[link\]](#)

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Before you even think about self-medicating or treating wounds, you should get a reasonably systematic understanding of emergency medicine. I recommend getting ["Wilderness Medicine: Beyond First Aid"](#) (\$10): it is accessible, focuses on situations where diagnostic and treatment facilities are limited, and goes well beyond the basics. Just as importantly, it avoids weird spiritual, homeopathic, or naturopathic claims that often creep up in prepper books.

Two other publications I can recommend are ["Where There is No Doctor"](#) and ["Where There is No Dentist"](#) by the Hesperian Foundation (\$17 a pop for a paperback, but also available online for free). They pay less attention to contemporary meds or nuanced emergency procedures, and spend more time on holistic, community-oriented care for practitioners in some of the most impoverished regions of the world. This probably makes the publications worthwhile for hardcore preppers who worry about widespread, long-term cataclysms.

Now, even after reading all these, don't get too cocky: there are good reasons why it takes about 10 years to become a doctor, and why it involves not just reading a book or two, but also dissecting cadavers and watching other medics at work. When trying to render medical aid, not understanding the limits of your knowledge can literally kill.

#### **4.7.4. Health & hygiene topic #4: Common meds** [\[link\]](#)

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When living in squalor conditions and running short on supplies, even seemingly prosaic medical conditions can become life-threatening. For example, in less developed countries, otherwise non-lethal diarrheal diseases cause almost 2.5 million deaths every year. The reason is simple: without proper care, the disease makes it easy for the victims to get terminally dehydrated or succumb to severe electrolyte imbalance.

And it's not all about dying, too: a nasty toothache or a debilitating allergy can make it very difficult to stay productive and alert. With all that in mind, my list of essential and easily available prepper medicines includes [ibuprofen](#) (\$10, pain relief), [cetirizine](#) (\$15, allergy management), [amoxicillin](#) (\$15, broad-spectrum antibiotic), [loperamide](#) (\$10, anti-diarrheal), [meclizine](#) (\$7, prevents vomiting), [miconazole nitrate](#) (\$10, treats fungal skin infections), [bacitracin ointment](#) (\$5, bacterial skin infections), [topical lidocaine](#) (\$20, anesthetic), and [hydrocortisone cream](#) (\$6, anti-itch). For disinfecting your hands and cleaning wounds, [benzalkonium chloride wipes](#) (\$4) can work pretty well; for burns, many people swear by [hydrogel dressings](#) (\$5) or [hydrogel creams](#) (\$13), too. Finally, for treating severe dehydration, try [oral rehydration packs](#) (\$30).

Manufacturers' expiration dates on all meds are very conservative, but even the US government [intentionally ignores them](#) for its stockpiles of shelf-stable drugs. As far as I can tell, when stored in a fridge, all of these products should be good for 5+ years.

Of course, if you need any prescription meds to survive, try to get a reserve. Except for the case of narcotic painkillers, most doctors should be quite willing to help. In contrast to the shelf-stable substances discussed earlier on, be very careful with expiration dates if your stockpile includes any easily perishable drugs (say, insulin).

The aforementioned short list aside, there are other substances that may treat conditions such as anaphylaxis (epinephrine), or diseases such as tuberculosis and leprosy (isoniazid), uncomplicated appendicitis (levofloxacin), cholera and anthrax (doxycycline), malaria (artemisinin), typhoid fever, skin infections, and MRSA (TMP/SMX), systemic fungal infections (fluconazole), intestinal parasites (albendazole), and so on. In many places, you could legitimately stockpile them without prescription, and some prepper guides will encourage you to do so; but if you are truly concerned about such emergencies, be very aware of the difficulty of properly diagnosing unfamiliar diseases, and the serious health problems that many of these products may cause.

A handful of OTC dietary supplements may be useful for treating some chronic conditions in situations where prescription drugs are not available - but if you want to learn more, be prepared to wade through a sea of low-quality research and outright quackery. Preliminary but somewhat plausible findings include the apparent antidepressant properties of saffron and fish oil, the beneficial effects of curcumin on some types of chronic pain, or the utility of berberine and salacia reticulata in managing type 2 diabetes. Again, tread carefully; [examine.com](http://examine.com) is a good starting point for getting the data behind some of the claims.

Ah, one more thing: for your car kit, I recommend getting some ibuprofen and [caffeine pills](#) (\$8). Sure, if you are getting sleepy, you should pull over and get some rest - but if you really can't, caffeine can help you stay alert. Note that it's possible to overdose; the symptoms are typically just very unpleasant, but in rare cases, can be life-threatening.

(For folks who consume coffee or caffeinated beverages daily, and who have near-complete tolerance to caffeine, [adrafinil pills](#) can be a viable emergency choice. Adrafinil is a powerful wakefulness-promoting agent with no stimulant properties, and is not a regulated substance in the US and many other parts of the world. Note that daily long-term use carries some risk of liver toxicity and other side effects. Do your homework.)

#### **4.7.5. Health & hygiene topic #5: Dental emergencies** [\[link\]](#)

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Blame modern diets, blame our longevity, or blame the mistakes of mother nature - but the bottom line is that for most humans, dental problems are a question of "when", not "if". And when excruciating pain strikes at an inopportune time, it's really no laughing matter: in absence of adequate medical care, tooth problems have been known to push some people to the verge of suicide.

Unfortunately for preppers, the management of serious pain in an emergency situation is tricky: virtually all the potent painkillers have narcotic properties and are very illegal to buy or possess without a prescription. Fixing the underlying tooth problem can be similarly elusive: you need expert knowledge and a collection of expensive and bulky tools: high-speed drills, suction units, and so forth. In the end, the best preparedness strategy is just prevention: take good care of your mouth and stop by for a routine checkup at least once a year.

Of course, while this approach reduces the odds of being blindsided by a painful problem, it does not make the risk go away: a chipped tooth or a painful abscess can strike with virtually no warning. If you can't see a dentist right away, OTC painkillers can offer partial relief, but no amount of ibuprofen will let you forget about an exposed nerve. Topical [benzocaine ointments](#) may work better in some situations, but they don't last very long. Sometimes, swishing some cold water in your mouth, or sucking in air through a carefully positioned straw, can offer decent relief. In the longer haul, amoxicillin can clear up many dental infections, while [zinc oxide / eugenol cement](#) can be used for emergency repair of damaged teeth. There are some

reports that repeated treatments of cavities with [silver nitrate](#) can be beneficial, too - but be aware that the substance is caustic and tends to semi-permanently stain skin (and anything else it comes into contact with).

#### **4.7.6. Health & hygiene topic #6: Hemorrhage and wound management** [\[link\]](#)

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Severe bleeding is one of the major causes of death following an injury. It's an emergency on its own, and knowing how to manage it until help arrives can make all the difference between life and death.

A decent hemorrhage kit should probably include a generous amount of bandages, a [tourniquet](#) (\$5-\$15), [clotting gauze](#) (\$40), and some duct tape. You should read the manuals and consult an up-to-date first-aid guide, but the basic idea is to apply lots of pressure to any profusely bleeding wounds. This can be done with bandages, clothing, duct tape, or even your elbow, knee, or hips. Clotting gauze or sponges, when pushed into the wound cavity, can help stop bleeding more quickly and stabilize the victim. Tourniquets used to be frowned upon in the past, but when dealing with major trauma to a limb, they sure beat bleeding out to death; it's just that they cause some tissue injury, and if kept on for too long, necrosis may set in and the limb may have to go.

Don't just keep that stuff in your home; it's actually more important to have such a kit in your car (ideally in the center console) and carry something equivalent when biking, hiking, climbing, hunting, or engaging into other injury-prone sports. There are some [lightweight ready-made kits](#) (\$19) that may do the trick, although making your own is always a better choice.

In addition to such immediately necessary supplies, some prepper guides recommend purchasing sutures, along with tissue forceps and hemostatic clamps. Such equipment may be useful for neatly closing major wounds in situations where bandages won't do - but suturing correctly requires a fair amount of practice and know-how. For gnarly cuts, [skin staplers](#) or [skin closure strips](#) + [benzoin swabs](#) tend to involve less hassle - and are harder to mess up.

For longer-term wound management, in addition to hydrogels and benzalkonium chloride disinfectants discussed earlier on, there is some utility to [non-adherent dressings](#) (\$30) and [abdominal pads](#) (\$7). In a pinch, when dealing with high-drainage wounds, sanitary pads should also do the trick.

#### **4.7.7. Health & hygiene topic #7: Broken or crushed limbs** [\[link\]](#)

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Your emergency medicine book will go into more details about setting bones, applying splints, or even doing field amputations with a knife and a saw. But even just to deal with a sprained ankle, a [folding cane](#) (\$14) may be good to have somewhere in your stash. Beyond that,

bandages are useful for improvising splints; in areas where improvisation may be difficult - say, in the desert or up in the mountains - [portable folding splints](#) (\$10) can be handy, too.

#### **4.7.8. Health & hygiene topic #8: Respiratory and environmental protection** [\[link\]](#)

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When it comes to transmittable diseases, your best bet is avoiding exposure: if there's something really nasty making rounds in your community, stay home - or at the very least, avoid public transport and other crowds. With that in mind, [N95 masks](#) (\$2 a piece) probably provide adequate protection against most airborne diseases. The other major transmission vector is hand contact, so don't touch other people, avoid public-use surfaces, wear gloves, and resist the instinct to touch your face without first washing or disinfecting your hands. We subconsciously touch our faces a lot more frequently than we suspect.

If you worry about releases from chemical plants or overturned ammonia tankers, [3M multi-gas cartridges](#) (\$17) and [half facepieces](#) (\$12) may offer robust protection when sized and fitted properly. That said, in most cases, it's more important to develop a plan for sealing your home; walk around and take note of any crawl space inlets, bathroom and kitchen exhausts, chimneys, fireplaces, and any other gaps. In an emergency, you can cover them with trash bags and duct tape.

Although we are entering the realm of extremely unlikely events, if you genuinely worry about encountering an overturned chemical tanker while driving down the highway, [3M 5512 escape respirators](#) (\$16) offer decent short-term protection against many threats. In addition to low price, their major advantage is their small size; you could conceivably have one for every occupant, and just store that gear in the vehicle.

Of course, some extreme preppers will settle for nothing less than a military-grade gas mask rated for chemical, biological, and nuclear warfare. While it is true that such masks offer much better protection against nerve agents and similar extremely harmful substances, it's not a likely concern in most parts of the world - and either way, it's doubtful that you would have enough time to suit up once the symptoms kick in.

On a perhaps more realistic note: since many of the common and harmful industrial gases are highly water-soluble, breathing through a wet towel or other moist piece of cloth, or draping it to form a tent over an infant's car seat or a stroller, might offer some very short-term protection when all other options fail.

#### **4.7.9. Health & hygiene topic #9: Vector control** [\[link\]](#)

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In some parts of the world, mosquitoes, flies, and other biting insects are major vectors for extremely serious diseases, such as malaria, African sleeping sickness, dengue fever, or lymphatic filariasis. The same is not a grave concern in more temperate climates; although

malaria used to be a problem in some of the southern states, it has been eradicated by 1951. Today, some of the most serious incidents in the US and in Europe are the occasional cases of Lyme borreliosis or the West Nile virus.

Still, if you are worried about the situation changing for the worse, repellents such as DEET and picaridin can provide the first line of defense. Beyond that, more radical solutions may include [electric bug zappers](#) (especially when coupled with mosquito attractants, such as octenol or lactic acid), [permethrin](#) or [pyrethrin](#) insecticide sprays (applied to clothes or to the perimeter), [mesh jackets](#), window screens, and [bed nets](#). For crawling insects, borax and diatomaceous earth can act as a deadly barrier, too.

While serious zoonotic diseases can be also spread by birds, rodents, or even cats and dogs, such vectors are more easily controlled or avoided by maintaining sanitary conditions at home; in extreme cases, traps or poisons such as bromadiolone may do the trick, but unless you are living in a place prone to infestations, I wouldn't worry too much.

#### **4.7.10. Health & hygiene topic #10: Dealing with nuclear fallout** [\[link\]](#)

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There are quite a few pop culture myths surrounding the dangers of nuclear incidents, contributing to a defeatist attitude among even some of the most hardened preppers. But in reality, such events are a lot more survivable than portrayed in fiction - and perhaps more importantly, the world that awaits the survivors would not necessarily be all that bleak. A good way to explore this topic is a book titled ["Nuclear War Survival Skills"](#). It sounds goofy, but it's been written by the folks who worked on the Manhattan Project, and is as close to scientific truth as you can get; plus, it is not copyrighted and can be downloaded for free.

But to summarize, let's start with the eponymous threat of nuclear war. A typical ICBM strike is likely to kill most people within a 1 to 10 mile radius of the explosion, with most perishing due to the blast wave and intense heat, not gamma rays. In fact, as witnessed in Hiroshima and Nagasaki, when one sees a flash of light, ducking behind cover is quite likely to save their life. But more importantly, even an "all out" nuclear exchange with another superpower would leave most of the United States unscathed. It would also not turn the planet into a post-apocalyptic wasteland - at least not any more than the hundreds of nuclear tests already conducted in the twentieth century.

The fallout threat tends to be overblown, too. For one, air bursts, which are preferred because of their improved blast radius, do produce that much of it; far more tends to be released during nuclear power plant meltdowns or ground bursts. In any case, whatever gets kicked up in the air can travel hundreds of miles before settling down. So, in the aftermath of an incident, getting indoors and sealing your home should be your first instinct. Basic respiratory protection can help, too.



At first, the falling dust will be extremely radioactive and even short-term exposure might be lethal - so your best bet would be to seek shelter in the basement, or near the center of mass of any other building. This maximizes the mass between you and the outside world, shielding you from the gamma rays produced by whatever happens to settle on the roof and the outside walls. The density and volume of the shielding material matters more than anything else. It does not have to be lead; mattresses and bulky furniture should do.

Luckily for the survivors, the highly radioactive isotopes present in the fallout are also very-short lived; the intensity of radiation will likely drop ten-fold within 6-8 hours, and will decrease a hundred-fold within two days. If you wait a week or two, it should be quite safe to venture out. Of course, it's still best to stay indoors for as long as possible, and when heading out, it's good to keep the trips short, to wear [disposable coveralls](#) (\$11), and to take care not to track any residues into your home. But you don't need to lock yourself in an underground vault.

This brings us to an interesting question: if the radioactivity decays so quickly, why aren't people moving back to Fukushima or Chernobyl? Well... spare for several small hotspots, the exclusion zones are safe to walk around, but it can be more dangerous to drink contaminated water or eat local wildlife or crops. Our body may end up using some of the longer-lived radioisotopes as biological building blocks - which would expose us to low-grade radiation, at an *extremely* close range, for the rest of our lives. While it is usually not a death sentence, this phenomena is bound to produce a measurable spike in mortality across any sufficiently large population. It is more humane and more socially acceptable to keep people out.

Still, this does not mean that the survivors of a nuclear war would have to choose between starvation and death. Water and food stored in closed containers will not become radioactive - people would just have to be mindful of the dust on top. Crops can be grown after removing several inches of topsoil, and most rivers, streams, and creeks become safe quite rapidly (shallow bodies of standing water are a different animal). In other words, with basic precautions, it's quite possible to thrive in the aftermath of even the worst nuclear war. All it takes is some luck and a bit of knowledge; blast-proof bunkers are not a must.

In fact, one of the most significant health consequences of nuclear accidents is also very easy to manage: it's the release of copious amounts of radioactive iodine, a short-lived substance that gets absorbed by the thyroid gland. To deal with this issue, people in the affected areas are typically offered potassium iodide pills; this temporarily saturates thyroid and prevents any further uptake of iodine for a couple of days or weeks. Such tablets are [available over-the-counter](#) and dirt cheap (\$7), so it's not a bad idea to have some at hand.

Other than that, there isn't much that can be done to limit the damage caused by serious exposure to radiation. Some animal studies suggest that pyrroloquinoline quinone (PQQ), an OTC dietary supplement, can have fairly pronounced radioprotective benefits. While the evidence is very preliminary, the substance is believed to be pretty safe, so you can certainly

[grab some](#) just in case. Another potentially beneficial OTC products along the same lines are [diindolylmethane](#) (DIM) and [n-acetylcysteine](#) (NAC).

With all this out of the way, let's get back to a gadget mentioned a bit earlier in this guide: Geiger counters. Unless you're an emergency responder, you may not really need one. That said, such a device could conceivably help you stay informed and keep your family and friends at ease - and I don't mean just the remote possibility of a nuclear war. Consider all the bogus rumors of contaminated water and food in the aftermath of Fukushima; a radiation meter could have put any such speculation to rest.

Of course, to use a Geiger counter effectively, you need to know how to interpret the results. Although some controversy exists, the prevailing view is that the effects of radiation are cumulative in a fairly linear fashion; here's what you can expect once you hit a particular dose:

- **100 mSv (millisieverts):** no immediate effects. A marginal but measurable increase in the likelihood of developing cancer later in life (+0.5%). This dose was received by a handful of residents during the Fukushima disaster in 2011.
- **1 Sv:** mild radiation sickness and a substantial increase in lifetime cancer risk (around +6%). A dose that might have been received by some subset of residents near Chernobyl in 1986.
- **2 Sv:** severe radiation sickness with vomiting and hair loss. Dangerous but with good chances of survival. A pretty substantial risk of cancer down the line (+12%).
- **5 Sv:** typically lethal, although there is a chance of recovery with proper medical treatment. Survivors are highly likely to develop cancer later on.
- **10+ Sv:** nearly always fatal. A dose received by some of the first responders at Chernobyl.

Some Geiger counters can keep track of the cumulative dose for you, but most will simply display the rate at which you are getting exposed - typically in microsieverts per hour ( $\mu\text{Sv/h}$ ) or microroentgens per hour ( $\mu\text{R/h}$ ; for gamma radiation,  $1 \text{ R/h} \approx 1/100 \text{ Sv/h}$ ). To figure out what the reading means, you need to do the math: for example, at  $600 \mu\text{Sv/h}$ , you will hit 100 mSv within a week, and 1 Sv within about two months. (The usual background rate from natural sources hovers around 0.1-0.2  $\mu\text{Sv/h}$ .)

For folks interested in getting a nice, compact Geiger counter, [Radex One](#) (\$120) is pretty hard to beat; it is tiny, inexpensive, and can be hooked up to a PC to continuously monitor the environment (and send e-mail or SMS alerts). The one caveat is that similarly to many other low-cost units, this device maxes out at 1 mSv/h - enough to know that something is very wrong, but not enough to tell if you're going to receive a life-threatening dose in an hour or somewhere

within the next six months. In other words, some of the more hardcore preppers may want to invest in a more capable unit, such as ADM-300 (which goes all the way to 100 Sv/h) or RAD-60R (3 Sv/h). Decommissioned military and civilian devices in excellent working condition can be found on eBay for around \$200.

## **4.8. Self-defense and personal security** [\[link\]](#)

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As discussed earlier in this guide, we face surprisingly high lifetime odds of becoming victims of burglary, assault, or other major crime. To deal with this danger, the guide promotes a handful of passive risk avoidance and loss minimization strategies, with the bulk of this advice found in section 3.5. But it would be dishonest to claim that such methods will always shield us from harm - so in this chapter, let's have a look at some of the tools that serve as the last line of defense when all other approaches fail.

### **4.8.1. Defense topic #1: Protecting your personal property** [\[link\]](#)

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It is fiendishly difficult to safeguard your belongings when you're not home. When dealing with opportunistic burglaries, a heavy, bolted-down safe, ideally ordered directly from a reputable manufacturer, is probably your best defensive tool. Against sophisticated adversaries on a targeted job, almost all bets are off; in such cases, operational security (section 3.5.3) is more important than any amount of high-tech gear.

Now, when asked about the best way to make a residence burglar-proof, most people would probably mention getting an alarm system. But alarm systems are fairly weak deterrents against theft; most statistics suggest that they reduce the likelihood of a break-in by around 50%. So, do the math: take the costs of installing an alarm system (probably around \$2,000 for a comprehensive solution), plus the ongoing monitoring fees (easily \$200-\$500/year), and then contrast these numbers with the likely loss in case of one or two break-ins over the next several decades. Keep in mind that even if the numbers are favorable, a high-quality safe (\$500+) may still be a more cost-effective approach.

Alarm systems aside, cameras are another popular security tool. They do relatively little to deter theft, but can document all sorts of problematic encounters - and in the event of a burglary, perhaps improve the odds of recovering stolen goods. Decent wi-fi cameras start at \$100 a piece; many models can record to a local SD card, although having a centralized DVR unit (\$200+), ideally stowed away in an inconspicuous place, will make the system more robust.

Some preppers advocate "hardening" the perimeter of your home. The returns on this investment will vary; for example, high-security locks and reinforced doors may be worthwhile in high-rise apartment buildings, where the front door may be the only way in. For single-family homes, the burglars will probably not bother with the locks at all; forcing open a bathroom

window takes much less work. Tall fences and locked backyard gates can help, although their benefits are limited in rural areas or in shady neighborhoods.

The other tools worth mentioning here may be remote motion detectors, such as [passive IR monitors](#) or [beam sensors](#). They won't do squat when you're not on premises, but when you're home, they can give you an advance warning about unwanted visitors. It's a remote concern, but the sensors are relatively cheap, so just do what feels right.

As for cars: there is no hope. Don't leave anything of substantial value in the vehicle, and if the car itself is expensive, have it insured against theft (setting your deductible to \$1,000 or more keep the premiums low). Avoid tempting the thieves in any way: countless car windows have been smashed over a \$5 bill and some coins left in the cup holder. Put spare change somewhere else.

#### **4.8.2. Defense topic #2: Limiting liability for car accidents** [\[link\]](#)

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Vehicular accidents are depressingly common; while defensive driving can limit your risk, the possibility of injuring another person or causing property damage never really goes away. When you are involved in a car wreck in unclear circumstances, or when your statements do not match the words of another driver, video evidence may be the best way to escape criminal charges or to resolve civil claims.

It used to be that dashcams were prohibitively expensive; but today, the prices start at \$50, so it makes sense to give the devices a try. I can recommend [Rexing V1](#) (\$100), but there are countless other options to choose from. The bottom line is, if you own a car, it's probably the most affordable and meaningful liability insurance policy you can get.

#### **4.8.3. Defense topic #3: Fighting for your life** [\[link\]](#)

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In theory, a person's natural right to self-defense is broadly recognized in much of the western world - but in practice, different societies look at it in very different ways. Today, in much of Europe, the very notion that one private citizen could lawfully harm another human being is met with suspicion and distaste; the control over life and death is more willingly delegated to the agents of the state.

These differences manifest in how the regulators around the globe approach anything from knives to pepper spray - but of course, no topic is more contentious than firearms. The debate about the social benefits and costs of gun ownership is [hopelessly polarizing and clouded by emotion](#); I'm certain that roughly half of the folks reading this document have a very visceral, negative reaction to the very idea that a private person should be allowed to carry a gun - and I do not honestly expect to change their minds.

That said, when we look beyond the dogma, the underlying facts paint an [incredibly nuanced picture](#) of the right to bear arms - putting into question many of the deeply-held and seemingly common-sense beliefs. For example, despite the striking ubiquity of legally owned firearms in the United States - about one per every resident - the country actually enjoys lower per-capita rates of suicide, robbery, assault, or rape, compared to some of its esteemed European peers. This simple fact deals a serious blow to the creed that more guns translate to more crime.

Of course, this observation ignores one important fact: compared to EU countries, the United States suffers from a markedly elevated (but rapidly falling) rate of homicide. About two thirds of them are committed with guns - but lest we jump to conclusions, the non-firearm-related murder rate alone puts America well ahead of most of Europe, suggesting that the cause may have more to do with societal differences than with the availability of a particular tool. A finding that supports this theory is the fact that upward of 80% of US gun homicides [trace back to gang activity and drug trade](#), often within the disadvantaged or impoverished strata of the society that are far less prominent on the old continent. Another telling observation is that comparisons of overall murder rates across US states or across EU countries with vastly different firearms ownership profiles [don't reveal a convincing correlation](#) between the two variables - something you would expect to see if legally owned guns had a causatory relationship with violent crime.

There is also a more utilitarian way of looking at it. From an individualistic, survival-focused point of view, the social costs (real or imagined) are basically moot: if you live in a place where guns are readily available to criminals, it's hard to think of a violent confrontation where not owning a firearm would put you at an advantage. There is a body of fairly compelling research showing that defensive gun uses happen in the US at a rate of somewhere [between 500,000 and 1,500,000](#) times a year, with almost all confrontations resolved without firing a single shot. The inherent dangers of owning a firearm are often overstated by gun control advocates, too: unintentional injury or death due to having a gun at home is [surprisingly rare](#).

All in all, it's OK to reject armed self-defense (or shun guns in particular) on religious or moral grounds - but doing so is probably not a particularly rational decision within the scope of this guide. From a rational standpoint, you should always pick the tools that are best suited for the scenarios you anticipate (provided that the state allows you to). Of course, a firearm is not always the answer, so let's take a broader look at some of the most popular options for shooting away looters or defending yourself:

- **Bare hands.** No deterrent effect, but surprisingly effective when a confrontation can't be avoided - especially when facing a single assailant. Reserved for people who are physically fit and willing to invest a fair amount of time into training. One of the most pragmatic and widely-taught schools is Krav Maga, and there's certainly no harm in checking it out.

- **Pepper spray.** An excellent, temporarily incapacitating weapon - very difficult to resist and capable of buying you just enough time to escape. Works quickly and reliably at distances up to perhaps 10 feet; can also stop some animal attacks. Usually not heavily regulated, making it easy to obtain and carry even in places that frown upon other forms of armed self-defense (but check the laws). Pepper spray becomes less effective in strong wind; there is also some risk of blowback, but this is mitigated in narrow-stream products, such as [Sabre Pepper Gel](#) (\$18).
- **Knives.** Very lethal and dangerous at close quarters, but only provided that you have the element of surprise on your side. They require some degree of physical fitness and training to use well. Their value is diminished when facing multiple assailants or dealing with a gun-wielding individual: even if you stab them, you are probably still gonna get shot. In a handful of places, carrying a knife may be illegal or subject to somewhat confusing restrictions, so perform due diligence if you want to take this route.
- **Stun guns.** A nice idea, in theory. Unfortunately, most products require direct body contact with the attacker, are easily foiled by clothing, and may be less effective against people who are well-built, unusually agitated, or just high on drugs. While it's a popular self-defense choice, I can't honestly recommend it over pepper spray.

(Projectile-type stun guns, such as Taser C2, are far better and work at a distance - but you need to have perfect aim on first try. They also cost quite a bit.)

- **Firearms.** A very effective and supremely intimidating weapon, with lethality ranging from 20% for handguns to 80% for shotguns; for a novice user, the effective range is somewhere between 10 and 100 yards. Guns are heavily regulated in much of the world, but widely available in the US - although there are several states or municipalities that make it very difficult to get a permit unless you are [a celebrity or a prominent donor](#).

Even if your local government does not issue carry permits or erects other bureaucratic roadblocks, having a firearm in your home can provide a very effective deterrent in case of home intrusions. That said, a gun is also a responsibility: similarly to a chainsaw, you are either serious about following the safety rules, or somebody may get hurt.

Interestingly, the legal bar for claiming self-defense is typically no different whether you are using a less-lethal weapon or lethal force. But of course, the legal and psychological consequences of being wrong can be far more severe if you kill a person, versus just making their eyes itch. There are no easy answers, so do some soul-searching first. If you can't imagine

killing another person to protect your family - and living with the consequences - don't get a knife or a gun.

#### 4.8.4. Defense topic #4: Understanding firearms [\[link\]](#)

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If you are contemplating getting a gun for home defense or for more outlandish survival scenarios, the first choice you will face is between a handgun, a shotgun, and a rifle. Here's what you need to know:

- **Handguns.** This category encompasses a wide selection of small, lower-powered firearms that can be easily carried without attracting attention. Most have a fairly modest stopping power and require quite a bit of practice to accurately hit anything more than 10 yards away. A telling statistic is that in shootouts, the police have a hit rate somewhere between 10% and 30%; contrary to what some gun control supporters claim, an average policeman does not get that much practice, and probably trains less than your typical gun enthusiast - but these numbers are still something to keep in mind.

Handguns are typically regulated more heavily than other firearms, in part because they account for the overwhelming majority of all gun crime. If you can get one, your basic choice is between:

- **Semi-automatic pistols.** Typically capable of firing somewhere around 6-17 rounds from a removable magazine; reloading is very fast, provided that you carry another magazine with you. Their user interface is relatively complex, and some knowledge is needed to deal with potential misfires, jams, or to avoid negligent discharges - although the probability of any such issues is generally very low.
- **Revolvers.** A more ancient type of a repeating firearm, usually holding 5-8 rounds in a non-removable cylinder. They are functionally simple, very dependable, and pretty accurate - but take more time to reload if it ever comes to that.

You may be tempted to go for the most lightweight and highest-powered handgun you can find, but you would have to cope with punishing recoil and potentially blinding muzzle flash, so it's not always a good call. In home defense situations, 9 mm pistols and .38 Special+P revolvers are probably the sweet spot. There are too many models to make specific recommendations, but you can't go particularly

wrong with Glock, Beretta, Sig Sauer, Ruger, Smith & Wesson, or Springfield Armory; some [very futuristic](#) if a tad more expensive revolvers are made by Chiappa, too. Whatever you do, avoid Taurus.

- **Rifles.** Long, heavy guns, usually with detachable magazines housing anywhere from 4 to 30 rounds. Rifles fire high-velocity projectiles capable of accurately striking distant targets - and even a complete novice should be able to hit targets 25-50 yards away. With plenty of practice (and expensive optics), some rifles allow reliable hits at 1,000 yards or so.

The most popular category are semi-automatic rifles, including the scary-looking [AR-15 clones](#), the much less villainous [Ruger Mini-14](#), and a bunch of in-between choices, such as [Ares SCR](#). All three are known for reliability and good accuracy. Semi-automatics typically fire relatively small but high-energy projectiles (e.g., .223 Remington / 5.56x45 mm NATO); such projectiles are still suitable for home defense and hunting small to medium game.

Another popular pick are bolt-action rifles, including [Remington 700](#), [Ruger Hawkeye](#), and [Ruger Precision Rifle](#). Although there is a lot of variety, many are chambered for larger cartridges ideal for hunting big game (from .243 Winchester to .50 BMG) and are more suited for long-range shooting. For home defense, overpenetration becomes a significant concern.

In the US, long guns are subject to fewer restrictions than handguns, chiefly because of their negligible role in street crime; that said, "assault weapons" - i.e., semi-automatic rifles with scary-looking cosmetic features, such as barrel shrouds or forward grips - have been a subject of recurring moral panics and various state- or municipality-level restrictions and bans.

Perhaps interestingly, there is a handful of rifles chambered for handgun ammunition, including [Ruger 77 series](#) and [Henry Big Boy](#). In the prepper context, their appeal is that you only need to keep one kind of ammo for both firearms. Putting a handgun caliber in a rifle gives you greatly improved accuracy, virtually no recoil, and somewhat improved range - but going past 100 yards is still going to be a stretch.

- **Shotguns.** Long, heavy, large-bore weapons with tremendous stopping power, variously firing one large metal slug or a swarm of high-energy pellets; less-lethal rubber batons are also sometimes used for crowd or animal control. Aimed as easily as rifles, but because of the less ergonomic shapes of projectiles and their lower velocities, the effective range of a shotgun doesn't extend far beyond 100-



200 yards. In places such as Australia or the UK, buying a shotgun is subject to fewer restrictions than other types of firearms.

Excellent for home defense, where they combine high stopping power and accuracy with reduced risk of overpenetration. Also popular for waterfowl hunting (where multiple projectiles reduce the need for very precise aim), deer hunting, and for encounters with predators such as mountain lions, bears, and the like.

Most shotguns pack a substantial amount of recoil, although lower-powered loads or smaller-gauge variants (e.g., 20 ga) can be operated by small-framed or younger shooters. Capacity typically ranges from 2 to 8 shells. A very affordable, popular, and reliable type of a shotgun is pump-action (reloaded by racking the slide); two best-known examples are [Remington 870](#) and [Mossberg 590](#).

If you decide to get a gun, you must learn how to operate it safely: sign up for a basic course or have someone truly competent take you to the range. The basic safety rules can be summed up as:

- **Rule #1:** When picking up a gun, always assume that it's loaded. Don't trust others and definitely don't trust your own memory. Always double-check. If you don't know how to operate a particular gun, ask before touching it. In firearms with removable magazines, always check the chamber after removing the mag.
- **Rule #2:** Assume that you will eventually break rule #1, so when handling a gun, always keep it pointed in a safe direction. "Sweeping" other people is a no-no, so is looking down the barrel. At the shooting range, the safe direction is down range, toward the backstop. At home, just be mindful of neighbors and people in other rooms.
- **Rule #3:** Assume that you will eventually break rules #1 and #2, so keep your finger off the trigger unless the gun is aimed and you're ready to fire.
- **Rule #4:** When firing, know your target and what's beyond it. You don't want to shoot a drunk family member in the middle of the night, or have a bullet go through your target and strike a bystander.

With the rules internalized, you are extremely unlikely to cause unintentional harm. Keep practicing at least twice a month until you get good, and then go to the range at least several times a year. Try to use practice ammo with lead-free primers and clean bullets (e.g., RUAG Copper Matrix, Magtech Clean Range, Winchester Super Clean, Federal Ballisticlean) and avoid tracking lead residues from indoor ranges back home - especially if you have small kids. Always wear hearing and eye protection, too.

Keep your firearms in a quick-access safe if you have young children or expect people with kids to visit you every now and then. A safe is also a good way to deter opportunistic theft; a clever hiding place will also do, but criminals often have the same ideas as you and know where to look. Be smart about picking the right safe and placing it sensibly: you don't want to have to walk to the other end of the house, or to fiddle with keys or rotary dials, when every second counts. Electronic combination or biometric safes are usually pretty good, unless you go for the bottom dollar (don't).

## 5. Organizing and tracking your supplies [\[link\]](#)

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Robust bookkeeping is an essential component of any preparedness plan. Without a neat spreadsheet to go back to, you will eventually lose track of the stuff you have, won't be able to locate critical supplies in a pinch, and won't know if and when your batteries, food, or meds have gone bad.

To get it right, make a list of all your emergency gear, along with expiration dates where applicable. Next, go through the list marking all the "stays home" stuff - the supplies that are impractical to haul around or not particularly essential when evacuating. Make sure that all the tactical gear - such as flashlights, fire extinguishers, first-aid kits, and self-defense weapons - are in a logical and easily reached place. For the remaining "stay home" items, just find an unobtrusive location, stow them away, and write the spot down in your spreadsheet.

The task of organizing the essentials you want to travel with is a bit more involved. For car owners, I suggest preparing two separate kits:

- **Boxed evacuation essentials.** Camping and survival supplies to get you through at least one week, in case you need to leave home and can't be sure about finding a hospitable location right away. The gear should be boxed or bagged to make it easy to load into your vehicle. Include some amount of water and food, and make sure that the entire kit actually fits into the car. For many US cars, [56 quart storage totes](#) (\$19) work very well.
- **A get-me-home box.** A container always kept in the trunk, small enough so that it doesn't hinder your normal use of the car, but substantial enough to help you survive several days (or cope with other, more prosaic roadside emergencies). The kit should include 1-2 gallons of water, Mylar blankets, rope, and other car supplies discussed earlier in the guide. A [collapsible water bottle](#) and a [folding daypack](#) can be useful if you have to walk on foot from a broken car to the nearest town. Throwing in some cash - just enough to pay for gas, a meal, a motel room, or a ride home - is also a good plan.

While you're at it, also check that you have a spare tire, a jack, a lug wrench, and a box of extra fuses. They come optional on some very cheap cars, and may be simply missing when you buy a used one. Some people find out too late.

Folks without a car are at a marked disadvantage, but should still try to put together a 72-hour "bug out bag" - and ideally, keep it somewhere within a walking or biking distance of their home (say, at work or at a friend's place). It's best to keep it light; some cash, 2-4 quarts of water, a 3,600 kcal emergency ration, and a raincoat will be almost certainly more useful than a gun and a collection of throwing knives.

Either way, when done with the list, be sure to re-read the response plans you drafted earlier on and cross-reference them with this spreadsheet. Iterate until you're happy with both, then print out the docs and place them somewhere intuitive. In a stressful situation, you will be able to quickly review the printouts to confirm that you are not missing anything.

## 6. Final words [\[link\]](#)

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Hey, nice! You made it to the very end! So, here is a closing thought...

Rational prepping is meant to give you confidence to go about your business, knowing that you are well-equipped to weather out adversities. But it should not be about convincing yourself that the collapse is just around the bend, and letting that thought consume and disrupt your life.

Stay positive: the world is [probably not ending](#), and there is a good chance that it will be an even better place for our children than it is for us. But the universe is a harsh mistress, and there is only so much faith we should be putting in good fortune, in benevolent governments, or in the wonders of modern technology. So, always have a backup plan.

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