



FINANCIAL PREPAREDNESS

"One of life's most painful moments comes when we must admit that we didn't do our homework, that we are not prepared." ~ Merlin Olsen

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Batteries

Power (or energy) is one of the most critical yet often overlooked areas of prepping. In an emergency, you need your batteries to work, and you need them to work *now*, because if they don't, usually there is no other solution.

Over the last 15 years, I accumulated dozens of batteries (also known as "cells"), mostly rechargeable AA and AAA. I knew how many batteries of each size and type I had and where they were (I tracked this on my massive prepping spreadsheet), but I didn't know (or how to tell) how much life (if any) was left in each battery. I was increasingly getting frustrated when, for example, after sitting quietly for 15 minutes so I could take my blood pressure, I would then discover that the blood pressure cuff wouldn't work because at least one of the batteries was dead, even though I had recently replaced them with ones that were freshly charged.

I knew I needed to step up my game and get this area squared away once and for all. I didn't know much about batteries, so I did some research online. It turns out that batteries are more complicated and nuanced than I thought. I'm still not an expert on batteries, but this issue should provide the vast majority of the information you need to know.

First you should take a step back and think about batteries strategically, like a prepper would. If you ever find yourself in a situation where new batteries will no longer be available to purchase, you want to own devices that use the most common sizes in case you can obtain some (via bartering, scrounging, etc.) from the existing stock. This consideration is identical to that of which caliber of ammunition your weapons platforms should use (9mm for pistols and 5.56 for rifles). For batteries, that would be AA, followed by AAA. Some portable solar panels can recharge AA and/or AAA batteries, so ideally, many if not most of your batteries should be rechargeable.

I used to think that the type of battery (rechargeable, alkaline or lithium) didn't really matter that much, but depending on the device, it can. So you want to be thoughtful about which kind of batteries you use in which device, especially if the device is critical and/or you use it infrequently or in extreme conditions.

Rechargeable batteries are typically nickel-metal hydride, or NiMH. They're more expensive than single use alkaline batteries but are a much better value since they can be reused many times. Rechargeable batteries are good for frequently used, higher power-draw devices that are not mission critical, such as video game controllers. One of the biggest drawbacks (especially from a prepping standpoint) of rechargeable batteries is their high self-discharge rate (even when properly stored). So don't charge your rechargeable batteries and then put them in storage and forget about them, because during an emergency months later, you'll probably discover that they have partially or completely self-discharged.

In recent years, I've discovered the value of lithium batteries. They're expensive but usually last quite a while, work in very low temperatures, and have a long shelf life, which make them perfect for mission critical applications (such as gun lights and flashlights) and long-term storage. When I take my dog outside at night during the warmer months, I want to be able to see any lurking copperheads or bears, so I use a flashlight (ThruNite TN4A) powered by four AA lithium batteries. It lights up the ground like daylight and throws a beam of light so far that it feels like I'm wielding a very long light saber. It's impressive and definitely worth the extra cost of the batteries. There are some times and places in life when you just can't afford to mess around. Lithium batteries are for pros.

I've also recently discovered a use for non-rechargeable alkaline batteries. I use them in low-draw devices such as alarm clocks, thermostats, smoke detectors, wall clocks and remote controls. These batteries lose power at a much slower rate than rechargeable batteries.

OK, now for the fun part (yes, I actually found this process to be kind of fun). Here's how to test, recharge, identify, organize, use, store and maintain your existing supply of batteries. Yes, you may own dozens of batteries, but chances are that a significant number of them are dead or will no longer hold a charge, aren't sufficiently charged, or are improperly stored. The worst time to discover this is during an emergency or at the beginning of a crisis. Getting this squared away will increase your peace of mind (and make you look like a prepping stud later). Here are the tools you'll need:

First you'll need a small pry tool to remove batteries from devices, plastic storage cases and your battery recharger. I like the one on the [Swiss Army Classic SD7](#) so much that I've made it part of my basic [EDC](#).

[ZTS Mini Multi-Battery Load Tester](#) This indispensable item allows you to determine the current state of each of your batteries (how much power is left in alkaline and lithium batteries, and how much life is left in rechargeable batteries). It's easy to use. Place the positive end of a battery on the appropriate terminal and place the tip of the attached testing wand straight down on top of the negative end of the battery. Within two seconds, the tester will show you how much charge or life is left in the battery (in increments of 20%). If the tester doesn't cycle then either the battery is dead or you didn't test it correctly. This product was recommended to me by a neighbor who's an electrical engineer. It's made in America and is one of those quality "buy it once for a lifetime" items. ZTS also sells [a more expensive tester than can test more than 30 battery types](#), but for most people, the Mini should meet their needs.

If the charge or life is less than 100%, use a black Sharpie pen to write the number (i.e., 6 for 60%) on the side of the battery.

Recharge your rechargeable batteries using an [Energizer Recharge Pro battery recharger](#). I really like this device, which comes with four AA rechargeable batteries and can recharge both AA and AAA batteries. As soon as you place some batteries in the charger, if it thinks one or more of them are bad, a red X on the device will flash, and a warning sound will buzz repeatedly. (It doesn't tell you which battery it is, but it does tell you on which side of the charger it's on.) If it determines that all of the batteries are still good, it will start charging them and a red light will appear. Once the batteries are more than 50% charged, the light will turn yellow. Once the batteries are fully charged, the light will turn green, it will emit a soft chime, and the charger will stop charging the batteries. This prevents damage to the batteries which can happen if you forget and leave them in a charger for a long time after they are fully charged. This charger charges batteries quickly.

Group your batteries together based on size, type and charge or life left. For example, put all of your AA rechargeable batteries with a full life together, and your AAA alkaline batteries with a charge of 6 together.

Retest the batteries that tested dead, then dispose of them in a responsible way. Here are instructions for [rechargeable](#) and [single use](#).

Batteries should be stored in such a way that their ends don't touch anything, especially other batteries. For about the last decade, I've used [these plastic battery caddies](#), but I just read that batteries should be stored in their original packaging or in a plastic case. I just bought a set of these [plastic battery storage cases](#), which can hold either 4 AA or 5 AAA batteries, and which can be linked together. Batteries should be stored in a cool, non-humid location. I've also read that they should be stored horizontally.

For rechargeables, Panasonic eneloop seem to have a good reputation. Lately I've been buying Duracell alkaline and Energizer lithium batteries via Amazon Subscribe & Save.

During a crisis, batteries will be worth their weight in silver, so stock up now while they're available and reasonably priced.

You'll want to use up all of your 2 and 4 batteries first, followed by 6 and 8. Save your best batteries for hard times. During a crisis, generally you would want to use up your rechargeable batteries first. If you had a solar panel that could recharge batteries, you could continue to use them. You'd want to save your lithium batteries for mission-critical gear and your alkaline batteries to power devices when your rechargeable batteries no longer worked.

Going forward, when you remove rechargeable batteries from a device after they've been drained, test them before you recharge them. And set up a recurring task on your calendar to recharge your rechargeable batteries at least twice a year.

Recommended

[Free to Focus: A Total Productivity System to Achieve More by Doing Less](#) by Michael Hyatt. 4.5 stars.

[Silence Patton](#) on Amazon Prime Video. Fascinating.

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