Can you safely revive a dead lithium-ion battery Yes

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More and more devices now come kitted out with rechargeable lithium-ion batteries -- you know, the ones that look like the old-style AA or C cell batteries, but are a slightly different size. The most common size is the now ubiquitous 18650, but there are loads of other sizes in use too, such as the 14500, 16340, and 26650.

Despite being so reliable, things can go wrong with these batteries. One of the most common issues is that they can become so discharged that they refuse to charge altogether. While these batteries appear dead, a little gentle persuasion can often bring them back to life.

Modern lithium-ion batteries hold an incredible amount of power, and if this power is unleashed in an unplanned way -- say by damaging the battery or short-circuiting it -- then this can cause explosions, fires, injury, or even death.

Despite these real risks, I've come across countless videos and blog posts that encourage people to do absurdly dangerous and unspeakable things to lithium batteries. There's only way I recommend to resuscitate these batteries: use a basic USB charger.

There are several of these chargers available. I like the TrustFire UC10, but that's now harder to find. I've found that basic USB chargers also work. These "dumb" chargers beat the smart ones

because they can allow the battery to draw minuscule amounts of current, slowly and safely, until it gets to the point where it can take a proper charge.

I like these USB chargers because I can use a power bank rather than a mains charger to charge the battery, allowing me to carry out the charging somewhere safe, such as outdoors or in an outbuilding.

Just this morning I brought back to life a 26650 battery that had been run too low in a friend's flashlight. I hooked the charger to a power bank, connected the battery, and waited. Initially, it seemed like nothing was happening (the meter on my power bank wasn't showing any draw), but I waited anyway.

If you are tempted to measure these batteries, definitely don't make the same mistake I saw someone once make: using metal calipers (like these ones). You will instantly and dangerously short-circuit the battery! Only use plastic digital calipers for measuring batteries.