Using Your Cellphone Without Burning Your House Down

Stored energy tends to be dangerous. Gasoline is dangerous. Garage door springs are dangerous. Flashlight batteries are dangerous. Propane tanks, aerosol cans and many toys are also dangerous if they are broken or misused.

Dangerous? Yes. We learn how to handle them safely, and we use these things often. For the most part, we're fine.

The Lithium-ion battery began development in 1976 and was first commercially used in 1991. It has become very widely used in cellphones, tablets, toothbrushes, earbuds, electric cars, laptops and most other contemporary rechargeable devices.

Lithium-ion batteries are flammable when damaged. *Like gasoline, they burn vigorously. And they can burn explosively. They are also difficult to extinguish if they start burning, and the smoke they generate is toxic.*

Lithium-ion batteries are toxic. *If a lithium-ion battery case becomes damaged, the chemicals inside can self-ignite, and even if they don't, the stuff inside them is toxic and dangerous.*

Your cellphone may become a little warm during normal use. Your phone is a computer, and does not have a cooling fan, like most computers have. If it's working hard, it warms up a bit. ***Your phone should never be hot.*** *If it is, stop using it, immediately. Get it repaired or replaced.*

If your phone becomes swollen or distorted, that's a real good sign of a damaged battery. A damaged battery is dangerous. Have a technician look at it, repair it if practical, and replace the phone if necessary.

If your phone has been damaged, keep in mind that they cram a lot of miniaturized precision electronics into that itsy-bitsy phone

case. If something is physically broken, or it's operation isn't right, the damage may extend to the battery. If you suspect battery damage, get it checked out. The close tolerances inside your phone's case leave the battery only a millimeter, or so, from a fire-causing short circuit.

If your phone gets wet, don't push any buttons, and let it sit for 72 hours and see if it dries out, and it is again usable. Sometimes it will be, and sometimes not. ***DO NOT PUT THE PHONE ON THE CHARGER*** *while it is drying out. Also, do not put the phone in sand or rice. If the phone gets hot or there is something that appears to be amiss during this process, take appropriate action.*

If your phone's operation changes, the touch screen stops working right, your phone doesn't charge, or a feature you never turned on suddenly is, have your phone checked out.

Ahhhhh, summer in Arizona! Your phone's safe operating temperature is 32 to 95 degrees, and the safe storage temperature is -4 to 113 degrees. It is not wise to leave your phone in a hot place (like inside your car). Your phone likely (but not guaranteed) will shut itself down if it gets too hot. If that happens, heed the warning and take your phone to a cooler place until it cools off.

The components inside your phone (and particularly the battery) are sensitive to heat and may become damaged because of high heat. If your phone has been left in a hot environment, it would be best to let it cool off BEFORE you try to turn it on. If something seems wrong when you finally do turn it on again, get it checked out.

Credits:
https://en.wikipedia.org/wiki/History_of_the_lithium-ion_battery
ct-world.com/how-to-put-out-a-lithium-ion-battery-fire/#:~:text=Water%20mist%20has%20proven%20to,of%20civilians%20and%20first%20responders.
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