Your Phone and the Environment

If your phone gets wet
If your phone gets hot

STOP!!!

What you do next
is very important!

Do NOT put your phone on the charger!

In either of these situations, your phone may never work again. However, there is still a chance that your phone can be nursed back to health.

If your phone gets wet

If your phone gets wet, press the power button (and only the power button) to turn the device off. If you can remove the battery, do so. If your phone has an after-market cover, remove it from the phone. Take a dry towel and dry the phone the best that you can.

If you have a supply of desiccant packets (they come with merchandise, and usually say 'do not eat' on them), then put your phone in a container with them, seal the container, and let it sit 24 to 48 hours. If you don't have desiccant packets, let the phone air dry for 48 hours in a dry place. You can use a fan to gently circulate the air around the device, to assist with the evaporation of the dampness in the phone.

Do NOT use rice, a blow dryer, a microwave oven, a conventional oven, or any other means to dry out your phone. Leave your phone off the charger until it is completely dry.

If your phone gets too hot

Your phone is sensitive to heat. If you leave it in a hot car, or perhaps on an outside table, or anywhere else that might make the device hot.

If this happens, move the phone to a cooler place, and let it return to a cooler temperature by itself. DO **NOT** put the phone on the charger!!! Do NOT put it in the freezer, or pack it in ice, or anything like that.

If your phone is becoming hot to the touch by itself, that is not a good thing either. The battery may be failing (and that should be addressed immediately), the phone may be failing in another manner, or the software is overloading the phone. In the latter case, review your apps for what you might uninstall.

Why is the phone so sensitive?

The first cell phone was over 9 inches high and 5 inches wide, developed by Motorola in 1973. There was actually a cell phone that came in a suitcase (manufactured by Siemens, in 1985). Needless to say, the buying public wanted smaller, less expensive phones, that did more things. Nowadays cell phone are quite small, and are personal computers in their own right.

In the 50 years since the first cell phone was developed, the electronics have gotten smaller and smaller, and now, much of it needs a microscope in order to view it. The circuit in your phone’s CPU may be best viewed with an electron microscope. The radio frequencies involved also call for precision circuitry.

Precision and miniaturization come with a trade-off. These electronics are much more sensitive to the environment that they’re in. Manufacturers know this, and build their phone to be as durable as they can be.

Water has always been an enemy to electronics. Unless water is laboratory-grade pure, it is likely to be a conductor of electricity and the cause of short circuits. Many modern phones are leak resistant, but it would be a mistake to rely on that. For many phones, pressing the buttons on them creates pathways for moisture. The best plan: Keep your phone out of the water.

Your phone has a recommended operating temperature, and for many phones, it is 32-95 degrees, and a phone may be able to tolerate temperatures to around 109 degrees. Many phones, nowadays, have temperature sensors in them, that will turn the phone off when the device gets too hot. You should heed that warning and let your phone cool off before turning the phone back on, and do not rely on that built in safety device.

Repeated exposure to heat will reduce the life of your phone, and exposure to high temperatures may cause the components to warp. That's never a good thing for precision electronics.

Batteries

Cellphone batteries are dangerous. Exposure to both heat and water may damage a battery, or shorten its lifespan. You should proceed carefully after a heat or water exposure event, if your phone is hot to the touch, or your phone is not charging properly, or you you suspect that the battery may be damaged in any way, get it checked out. Never put a phone on the charger while your phone is wet, or while the phone is too hot. A damaged phone battery is dangerous, and can explode. If your phone is subjected to water or heat exposure, proceed with care, look for signs of damage, and replace the phone or the battery if things don't seem right.

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