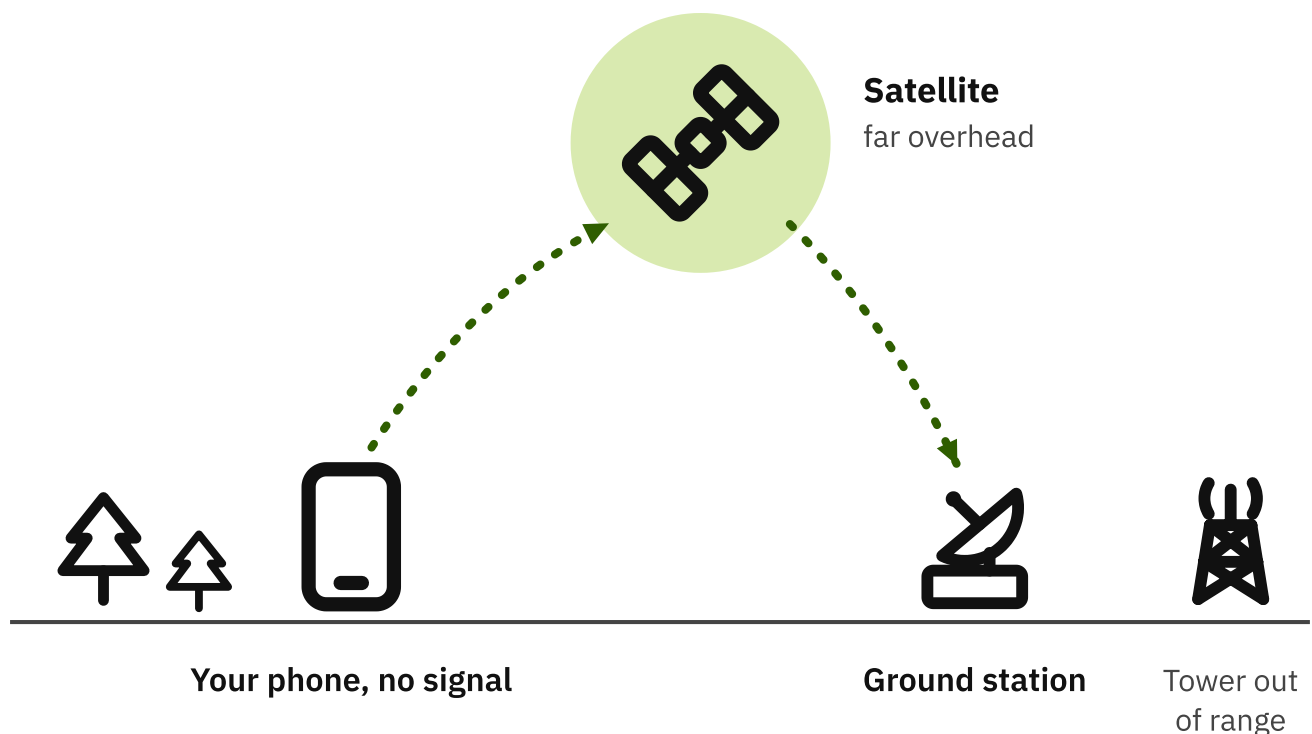


Satellite Texting, Explained

How your phone can send a text with no cell signal, and why it's a backup, not a promise.



The short answer

Many newer phones can send a text through a satellite. It works when there's no cell signal and no Wi-Fi. It works outdoors, it's slow, and it's for short messages.

This guide answers three questions. What is satellite texting? Why does it matter to you? And what should you do before you head somewhere with no signal?

A word on the words

Your **carrier** is your phone company. **SOS** means a call for help. In this guide, **911** means the emergency number where you are.

What's inside

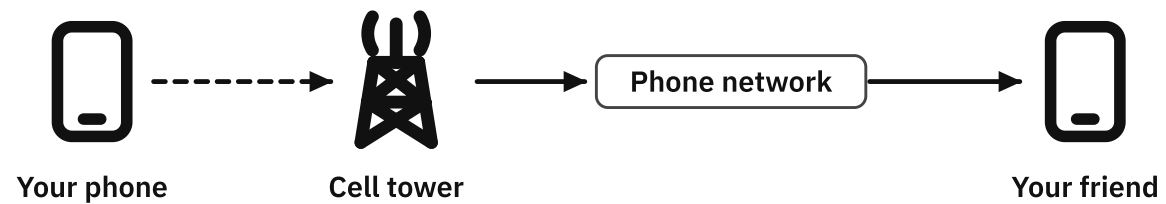
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How a text reaches a satellite

A normal text goes to a cell tower close by. A satellite text goes up to a satellite first. Then it comes back down to Earth.

A normal text

Goes to a tower close by



A satellite text

Goes up to space, then back down

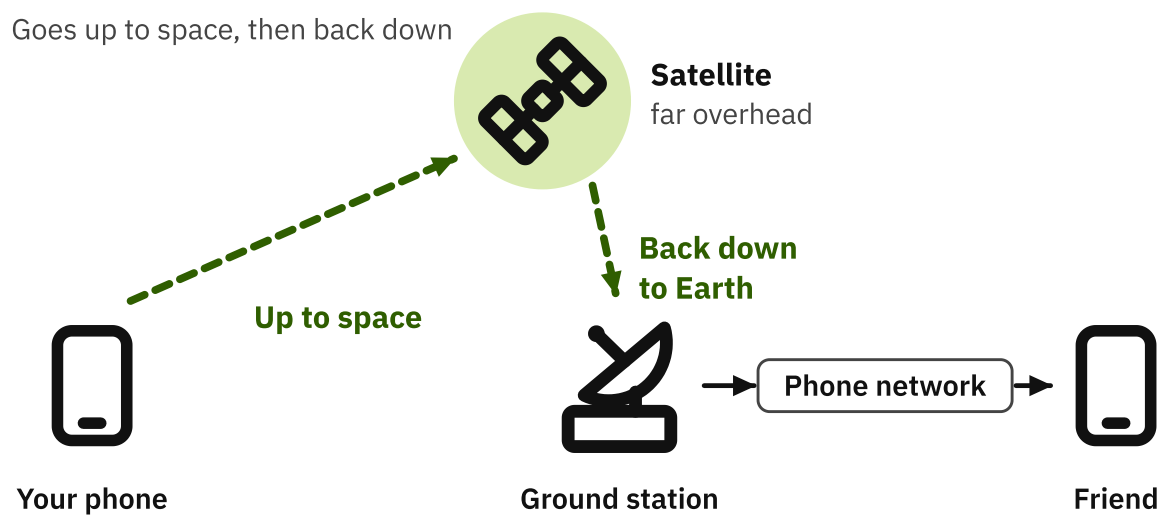
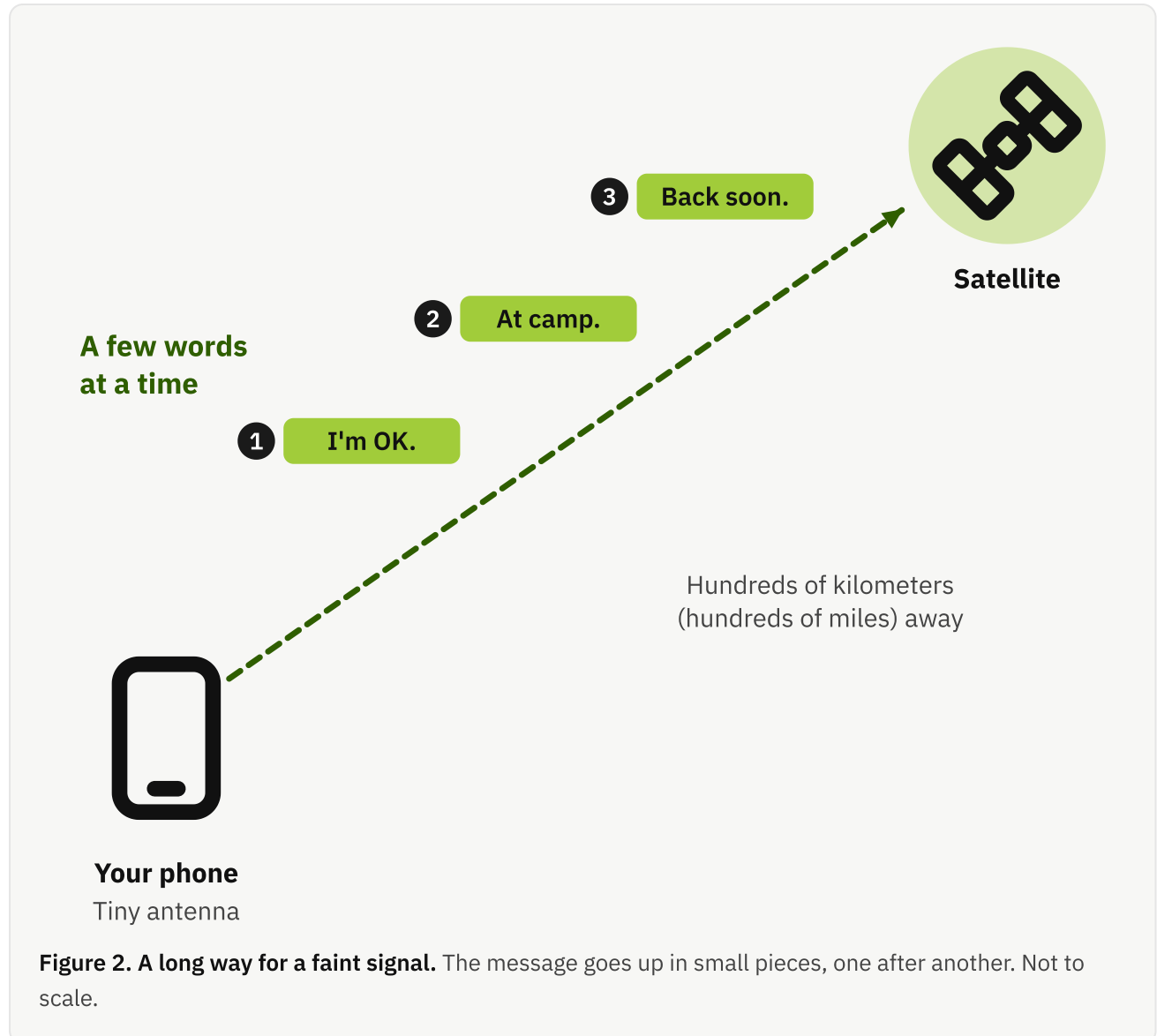


Figure 1. One text, up and back down. The green legs are the trip through the air: the slow, fragile part. Not to scale.

HOW IT WORKS

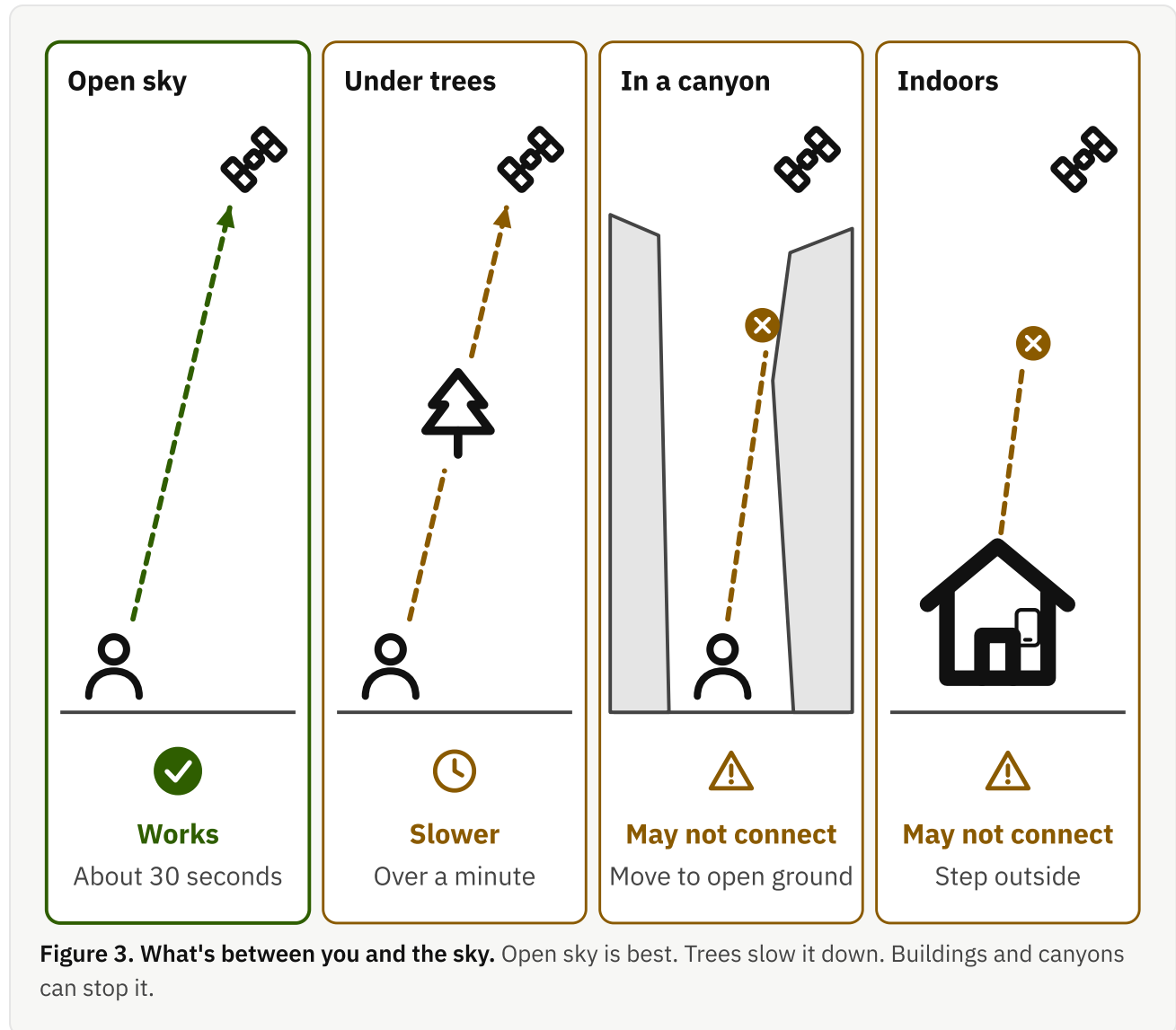
The satellite is far away, and your phone's antenna is tiny. So the signal that gets there is faint, like a whisper across a stadium.

To get through, the phone sends a few words at a time. That's why a text can take a while.



It needs to see the sky

Satellite texting works outdoors, with a clear view of the sky. Anything overhead gets in the way.

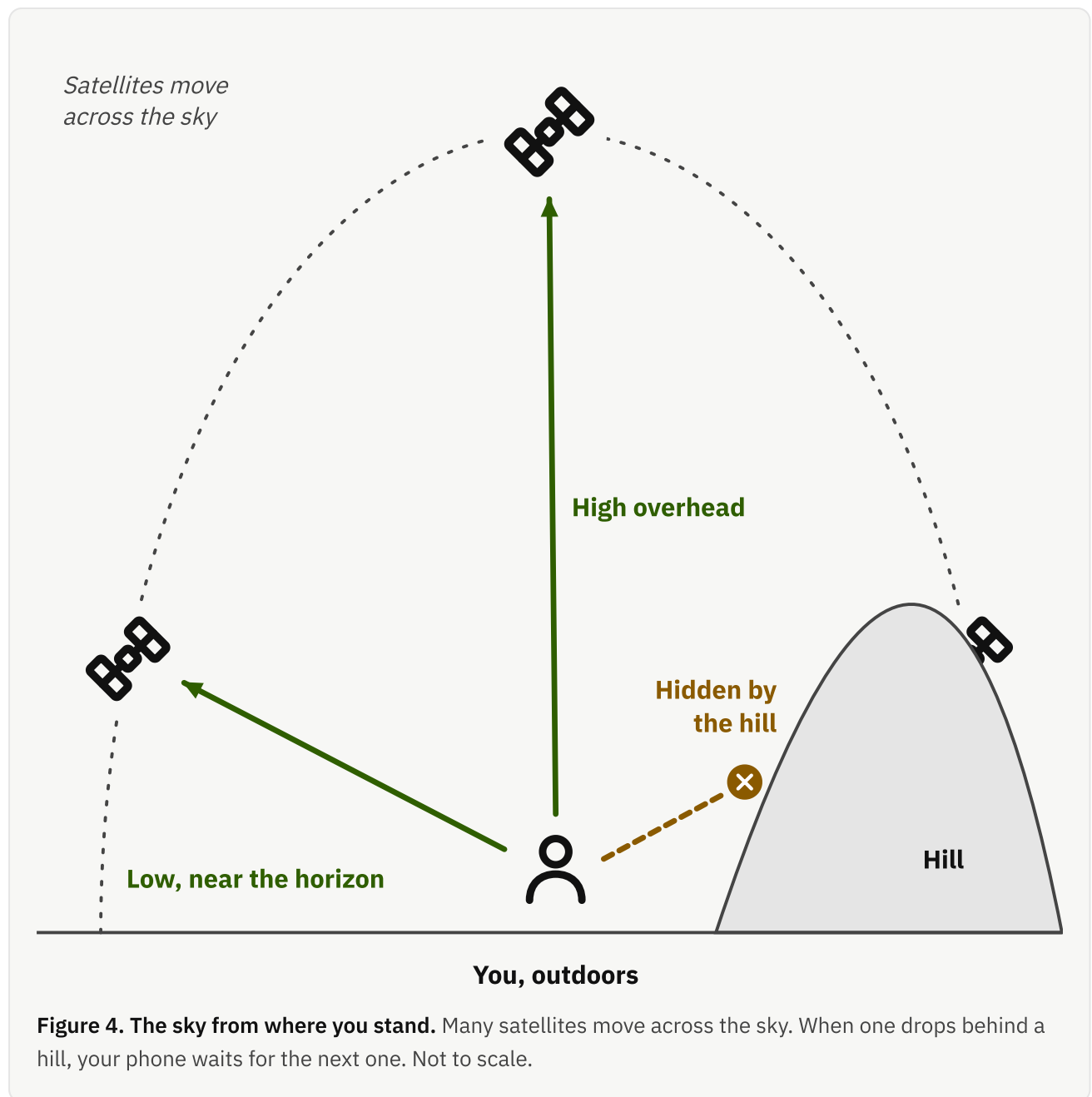


Trees slow it down. Under leaves, a text can take over a minute.

Buildings block it. Step outside before you try.

WHY IT MATTERS TO YOU

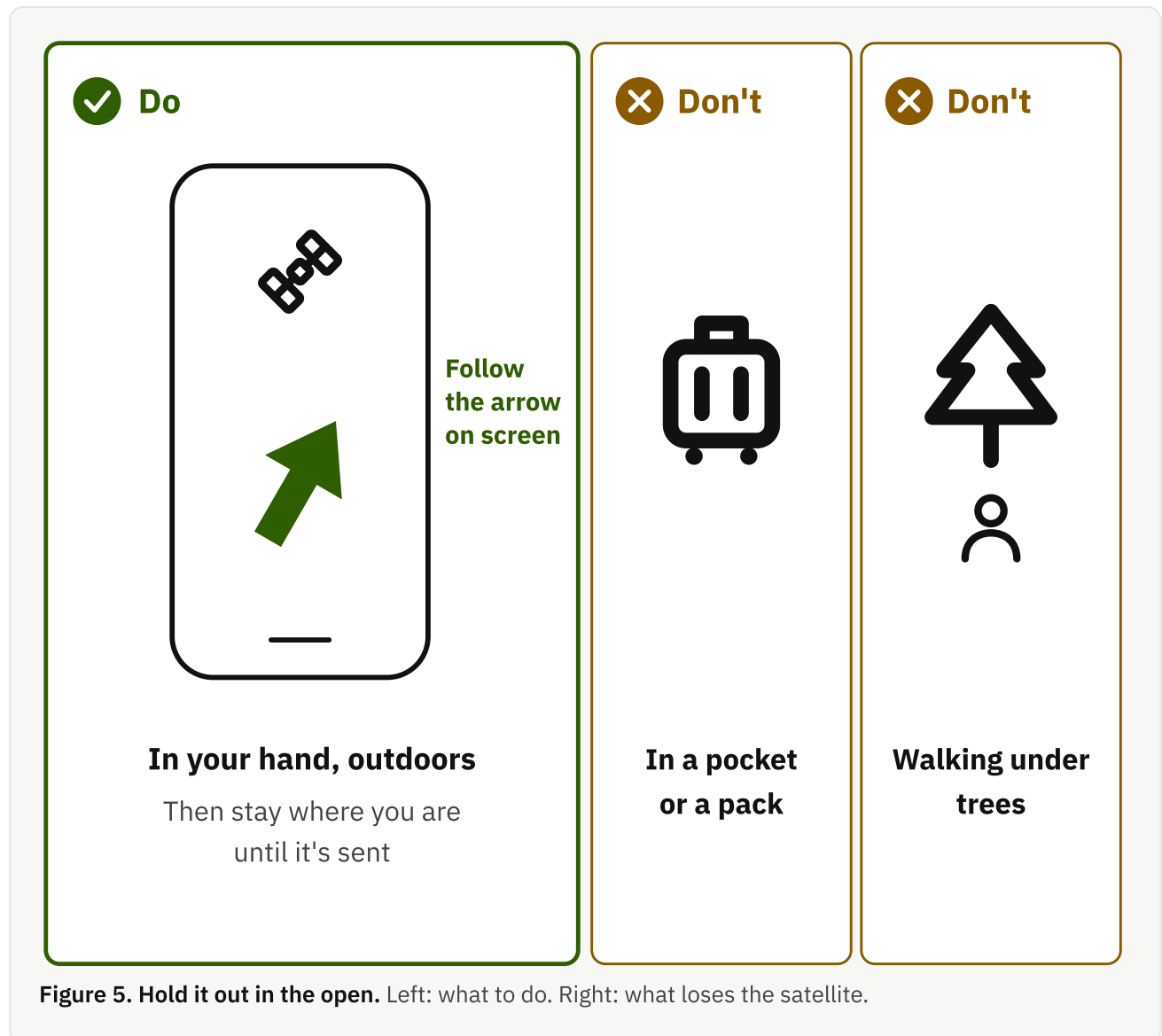
The horizon matters too. The satellite may be low in the sky. A hill or a wall of trees on one side can hide it.



Far north, it may not work at all. Parts of Alaska aren't covered.

Holding the phone, and waiting

Your phone tells you what to do. Follow the arrows on the screen.



GETTING CONNECTED

Some phones ask you to turn until you face the satellite. Others find it on their own. Either way, keep the phone in your hand, not in a pocket or a pack.

Once you're connected, stay where you are. Walking under trees or indoors can lose the satellite.

What you can send

Short texts get through best. Photos, video and calls mostly wait until you're back in coverage. Some phones can also share your location.

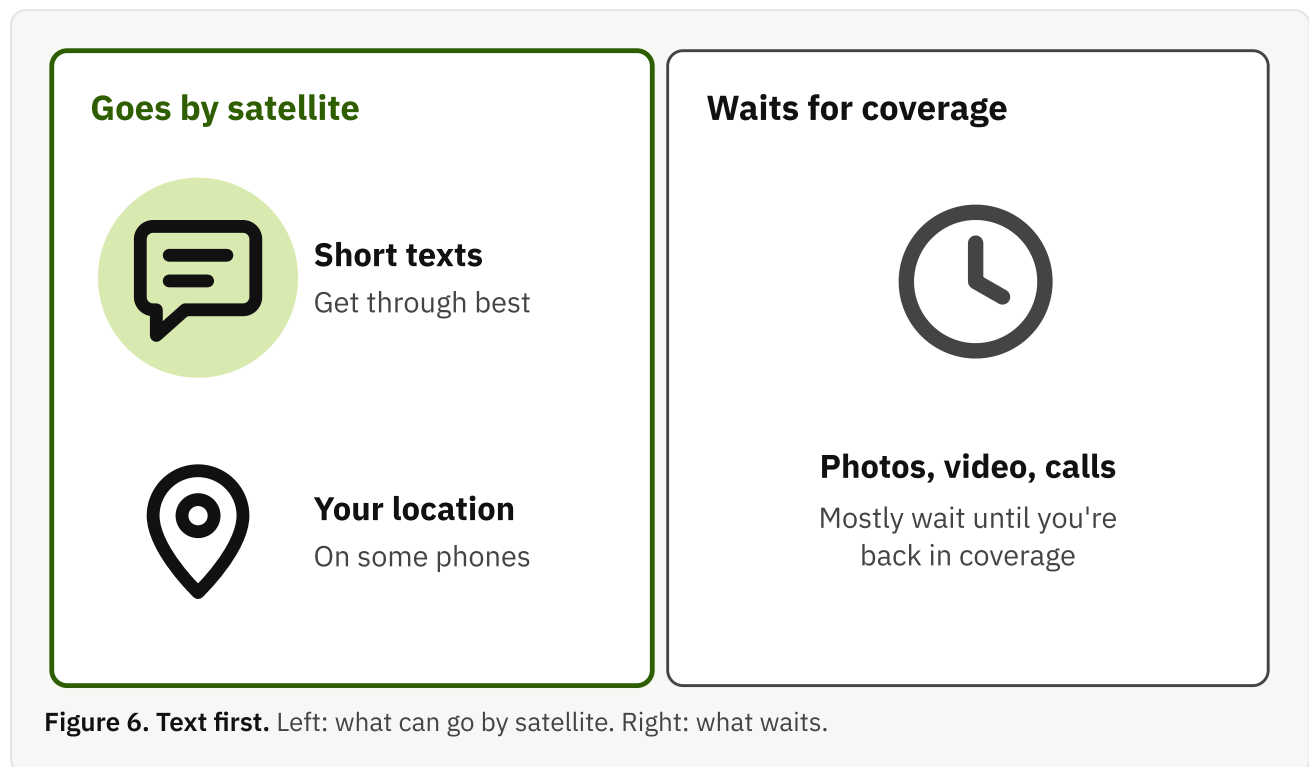


Figure 6. Text first. Left: what can go by satellite. Right: what waits.

A backup, not a promise

Satellite texting can reach help from places no cell tower covers. It can't reach help from everywhere, every time.

⚠ STOP

Don't make satellite texting your only way to get help

It needs open sky, a phone that supports it, a charged battery and time. Under trees, indoors or in a canyon, it may not connect. Leave your route and your return time with someone at home.

It needs all four at once



Open sky
overhead

+



A phone
that has it

+



A charged
battery

+



Time
to wait

⚠ **Miss one, and it may not connect**

So leave your plan with someone



You



Someone at home

Your route

When you'll be back

Figure 7. A backup, not a promise. All four have to line up at once. Your plan with someone at home is the part that doesn't depend on the sky.

KNOW THE LIMITS

It can be slow, or not work. Carriers say satellite texts, even to 911, may be delayed or may not go through.

Emergency alerts may not reach you. Some satellite services don't pass along weather or safety alerts.

Not every phone has it. It depends on your phone, your carrier and the country you're in. Check with your carrier and your phone maker. This changes often.

Set it up before you go

Almost everything has to be done while you still have a signal.

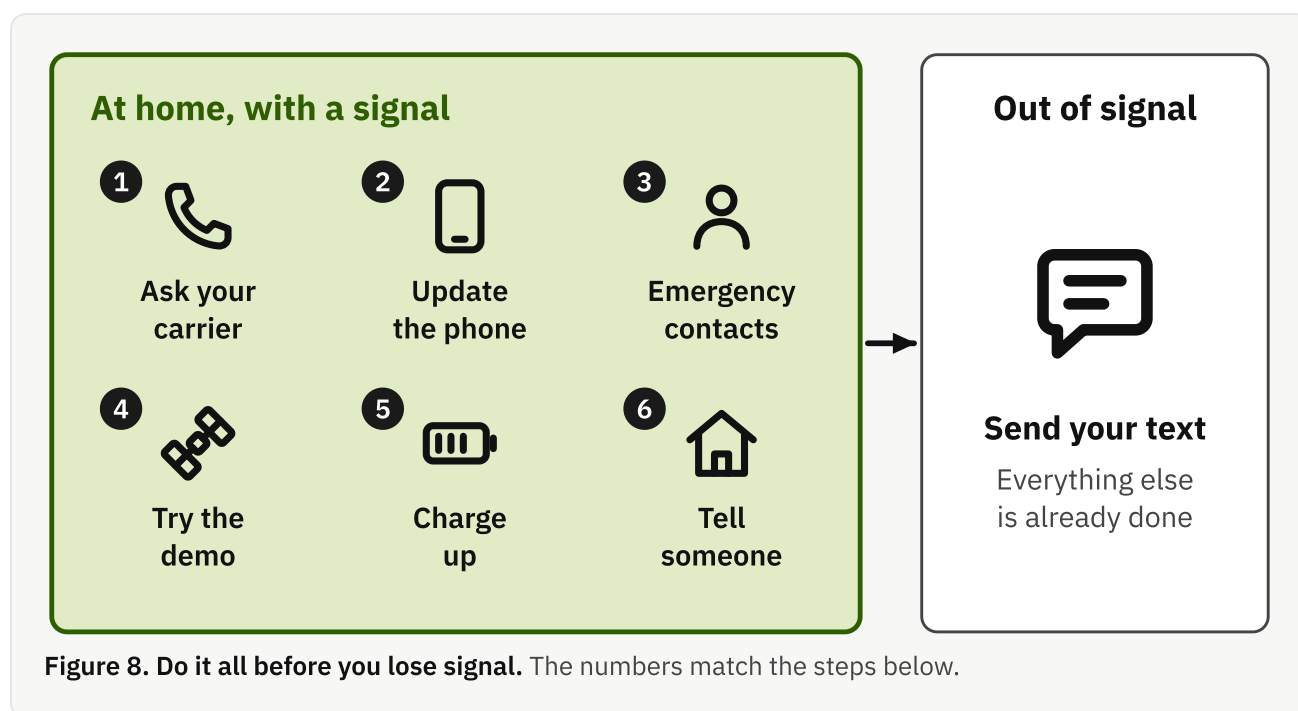


Figure 8. Do it all before you lose signal. The numbers match the steps below.

BEFORE YOU GO

- 1 **Ask your carrier** whether your phone and plan support satellite texting where you're going.
- 2 **Update your phone's software.**
- 3 **Set up your emergency contacts and medical details.** On an iPhone, they're in the Health app.
- 4 **Try the demo, outdoors.** The steps are below.
- 5 **Charge the phone,** and bring a battery pack on longer trips.
- 6 **Tell someone** where you're going and when you'll be back.

Try the demo on an iPhone

- 1 Go outside, somewhere with open sky.
- 2 Swipe down from the top right corner to open Control Center.
- 3 Tap **Cellular**, then **Satellite**, then **Try Demo**. The demo doesn't call anyone.

Try the demo on a Pixel

- 1 Open **Settings > Safety & emergency > Satellite SOS**.
- 2 Follow the demo steps on the screen.

Four things people get wrong

Each myth is followed by what's true.

MYTH Satellite texting is like having a cell signal.

FACT It's slow, and it's mostly text. Under open sky, a message can take half a minute.

MYTH It works indoors or under trees.

FACT It needs the sky. Trees slow it down. Buildings and canyons can block it.

MYTH Every phone has it.

FACT It depends on your phone, your carrier and where you are. Ask before you go.

MYTH It's only for emergencies.

FACT Emergency texts came first. Now some phones and carriers let you text family and friends too.

SOURCES

Where these facts come from

Checked 28 September 2026. Phones, countries and plans change every few months. Check your carrier and your phone maker before a trip.

- Apple support article 101573, "Use Emergency SOS via satellite on your iPhone" (published 22 July 2026): phones, the 20 countries and regions, two free years, calling first, relay center, accidental sessions, where iPhones bought in some countries can't use it
- Apple support article 120930, "About Messages via satellite on your iPhone" (published 15 May 2026): US, Canada, Mexico and Japan; iOS 18; 30 seconds and over a minute; what you can't send; not for emergencies; carrier fees
- Apple support article 105097, "Connect to a satellite with your iPhone" (published 15 September 2025): satellites that move, "hundreds of miles away"; holding the phone; trees, hills, canyons; 62° latitude; the demo
- Google, Pixel Phone Help, "Get emergency help through satellite with your Pixel phone": Pixel 9 and later except the 9a, the country list, satellites "in fixed positions", facing and tilting the phone, the demo
- Verizon, "Satellite SOS and messaging FAQs": Skylo, the listed phones, where it works, basic text only, no extra fee, no Wireless Emergency Alerts
- T-Mobile, "T-Satellite support" and "T-Satellite with Starlink": coverage, partners abroad, "cell towers in space", no pointing, what it carries, \$10 a month or included, text to 911 and its limits

Other guides in this series

How GPS Works, Explained covers the satellites your phone listens to for maps.

Starlink, Explained covers satellite internet at home, which is a different thing. *Weak*

Cell Signal at Home, Explained covers what helps when the signal is poor but not gone.

About this guide

Written for people who aren't technical. Company names appear only where their own documents are the source. The guide is independent and isn't affiliated with any phone maker, carrier or satellite company.

About the author

Keith Parsons, CWNE #3, has designed, installed and troubleshoot Wi-Fi for over 25 years. He runs Wireless LAN Professionals and the WLPC conferences.