



Guide to Fighting Robocalls

Fact Sheet

January 2019

The Problem

Illinoisans are passionate in their disdain for “robocalls”—pre-recorded messages from computer-generated dialers.

“Robocalls have become more than a nuisance,” Mary Anne wrote on CUB’s Facebook page. “I have been getting the same ones for years regarding lower interest rates on credit cards.”

Thanks to technology that allows robocallers to cheaply and easily make thousands of calls each minute, consumers were hit with a record 47.8 billion automated calls in 2018, according to estimates from telecom services firm YouMail. That comes to about **147 calls per person**. Illinois ranked sixth in the nation, receiving about 1.8 billion robocalls in 2018.

About 37 percent of those calls were scams, YouMail said. Consumers Union estimates that such telecom schemes rob us of \$350 million a year.

Yet despite the explosion of robocalls, little has been done to combat them, prompting Federal Communications Commission (FCC) Commissioner Jessica Rosenworcel to tweet that she asked major phone providers to take action to protect consumers (see right).

We can’t wait for big telecom and regulators to catch up. CUB hopes this guide gives you helpful tips on how to fight robocalls immediately.

The Law

Sales robocalls—prerecorded calls promoting goods or services—are illegal, unless a company gets your written permission, according to the Federal Trade Commission (FTC). However, certain prerecorded messages are allowed, including:

- information-only calls, such as flight cancellations, appointment reminders or school closing announcements;
- calls from a business to collect a debt you owe;
- calls from or on behalf of politicians;
- calls from certain health care providers, such as pharmacies reminding you about a prescription that is ready to be picked up;
- messages from banks, telephone carriers and charities, as long as those entities make the calls themselves.



Most Robocalls in 2018

1. Texas: **5.32 billion**
2. California: **5.3 billion**
3. Florida: **3.8 billion**
4. Georgia: **3.07 billion**
5. New York: **3.03 billion**
6. Illinois: **1.8 billion robocalls**

Source: YouMail Robocall Index

Common Scams

If the phone rings, beware of these automated calls:

Neighbor Spoofing: A robocaller uses your area code and/or prefix to appear as if someone locally—maybe even a friend or neighbor—is trying to reach you.

General Scams (IRS, health insurance, etc.): We’ve all heard of the calls that try to trick you into thinking you owe the Internal Revenue Service (IRS) money, cleverly using titles and numbers that look like they’re from the agency. Health insurance scams offer better plans or discounts as part of a scheme to steal your sensitive banking information.

These scams are especially prominent at the beginning and end of the year, when plans are ending and renewing.



“Say Yes” Scams: Have you answered an automated voice asking, “Can you hear me now?” If such a call lures you into saying “Yes,” it can use the recording as proof that you gave permission to sign up for some type of costly offer you normally wouldn’t buy.

Chinese Consulate Scams: Recently, many consumers, including staff members at CUB, have reported lengthy robocalls in Mandarin. Some ask you to meet at a consulate office to receive a package—but not before you make a payment or divulge personal banking information.

Alternative Supplier Scams: CUB staffers have reported receiving robocalls asking consumers if they want to save 30 percent on their electric bills. But when we inquire further after being connected with a real person, it turns out that the rate offered is significantly higher than the electric utility’s price.

Warning: What NOT to Do If You Get a Robocall

It’s best NOT to answer a suspicious call. But if you do answer a robocall:

- **DON’T** stay on the line (hang up immediately).
- **DON’T** try to call the number back to complain, or to follow the call’s instructions to gripe at a representative. That might lead to more calls.
- **DON’T** follow the call’s instructions. If a robocall offers you the option of pressing a number to stop future calls, that might just be a trick to confirm that your number is “live” and ripe for more calls.

Quoting the FTC, Reader’s Digest writes: “Remember that any company offering to take you off its call list by following directions (pressing buttons, speaking to a live representative, etc.) is probably going to continue calling you, and perhaps even more often.”

Also, Reader’s Digest warns that “no company making a sales call has the power to put you on the Do Not Call List.”

- **DON’T** say yes. The “say yes” scam is another reason to avoid answering. The scam tricks callers into saying “yes,” and that response is used to allow unauthorized charges on a person’s credit card account.

Reducing Robocalls

Robocall technology allows for the calls to be so easily distributed that completely dodging them is almost impossible. But there are steps you can take now to at least decrease the amount you receive.

What follows are the strategies we found through hours of research of dozens of sources. Try out different strategies, and see what works for you. CUB divided this section into five parts: traditional landlines and digital home phones; smartphones; call-blocking services offered by your wireless carrier; third-party apps; and other ways to combat robocalls.

Traditional (copper) landlines and digital home phones

Voicemail: One of the easiest ways to fight robocalls is to screen calls through your voicemail/answering machine, especially if you don’t recognize the number. Telemarketers often hang up when the call goes to voicemail.

The CEO of one robocall-blocking service told USA Today that he advised his mom to simply turn off the ringer to the home phone, send calls through an answering machine, and listen for the messages. If the caller is a friend, pick up the phone before he or she is done leaving a message.

A note about *60 on your traditional landline: On its surface, using AT&T’s *60 service to block calls may seem like a good way to fight robocalls. However, this service seems far too limited—and it comes with a monthly fee. (AT&T customer service recently told CUB it’s \$10.99 per month.)

Plus, AT&T’s website says the service only blocks up to 10 numbers from your local calling area—800, long-distance and some wireless numbers aren’t blocked. Remember, robocallers change their numbers often so it might not be worth it to invest in this blocking feature for your landline.

Another option, if you already subscribe to Caller ID, is to use its *77 service, which allows you to stop callers who block information from showing up on your Caller ID. (Note: *77 alone is not available in Illinois.)

Important: The star codes above are ONLY to be used for landlines, **NOT cellphones**. Using some star codes on cellphones can lead to an inadvertent call to emergency personnel.

Find out what free call-blocking services are on your digital home phone: Internet home phone services—like

Comcast Digital Phone Service and AT&T U-verse—offer free call-blocking features. For example, AT&T offers “Digital Phone Call Protect.” This free service automatically blocks calls from known spammers (they get a busy signal) and Caller ID tells you if other calls are suspected spammers. (You can block and unblock calls you specify.)

To activate, go to your online account and locate the “My digital phone” section. Choose “Check or manage voicemail & features.” Then select “Phone Features,” choose “Call Protect,” and follow the directions.

Star codes on digital home phones: If you have a digital home phone—also known as Voice Over Internet Protocol (VoIP) or a modern landline—you probably can activate a free call-blocking service on a limited amount of phone numbers by pushing a star code after receiving an unwanted call. That will add the number to a block list. Similarly, if your digital home phone gets a call that has no Caller ID, you can use another star code to activate an anonymous call rejection service.

Important: These star codes are ONLY to be used for digital home phones, **NOT cellphones**. Using some star codes on cellphones can lead to an inadvertent call to emergency personnel.

For more information on star codes for digital home phones:

AT&T U-verse: **ATT.com** (Search for “call blocking for digital phone.”), **1-800-288-2020**

Comcast XFINITY: **XFINITY.com** (Search for “call screening.”), **1-800-934-6489**

Note: These digital home phone providers also offer the effective robocall-blocking service Nomorobo for free. Unfortunately, traditional copper landline customers cannot use Nomorobo. (See the chart on page 7.)

Buy a call-blocking device for your traditional landline: If you own a traditional landline and you are desperate to end robocalls, one option is to buy a device that connects to your phone and blocks calls. Examples include Sentry 3.1., CPR Call Blocker and Digitone ProSeries Call Blocker (ranging in price from about \$75 to \$79 on Amazon.com).

Typically, these devices are based on a “blacklist” database of known spammers and a “whitelist” of numbers approved by you. Before you buy such a device, confirm it will work on your landline.

One concern to investigate: Will the device you’re considering block legitimate calls in an emergency or good robocalls (school announcements, a message from your pharmacy that a prescription is ready)? Also, some have complained that the set-up instructions are complicated. However, for people trying to limit nuisance calls to an aging parent’s home this could be a solution—just not a free solution.

Smartphones

Ignore: Similar to what we said in the landline section, the simplest way to combat nuisance calls is to ignore them. Check your phone’s Caller ID and let all calls go to voicemail—except ones you know are from friends and family.

Note to Android users: Brooke Crothers, a contributor to Forbes.com, recently wrote that Android phones typically have spam protection on by default. Typically, you get to it this way:

- Hit the three vertical dots at the top right of the screen.
- Tap “Settings.”
- Choose “Caller ID & spam” to turn it on or off.
- You also can turn on “Filter suspected spam calls.” You won’t get notified about missed calls or voicemail, but you can still see the filtered calls in your call history and you can check voicemail for any messages you receive, Crothers wrote.

Check if your device manufacturer offers spam-blocking protection: One example is Samsung’s “Smart Call” feature. It will alert you to a call that’s suspected to be spam or a scam, and then allow you to block the number. In Call Settings, go to “Caller ID and spam protection,” and turn it on.

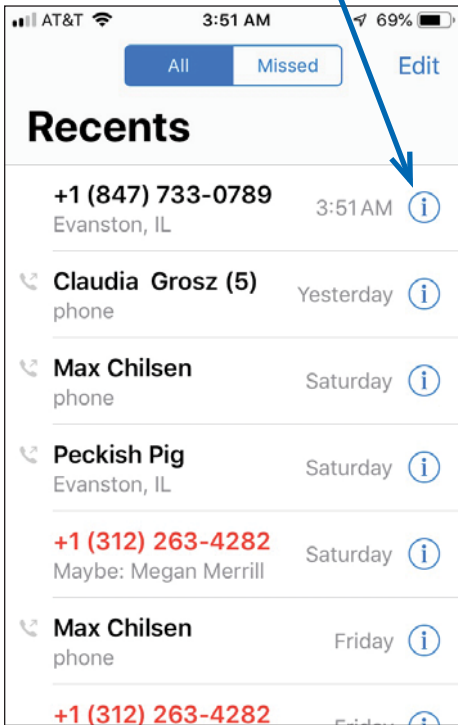
Use your smartphone’s Do Not Disturb feature: See page five for instructions. (**CUB Note:** This could be an effective solution for many people.)

Use your smartphone’s number-blocking technology: Most carriers have a regular call-blocking feature already installed on your phone, so when you get an unwanted telemarketing call, you can block that number for good. **The directions on the next page (page 4) are general—steps may vary depending on the device.** If you need help, contact your carrier.

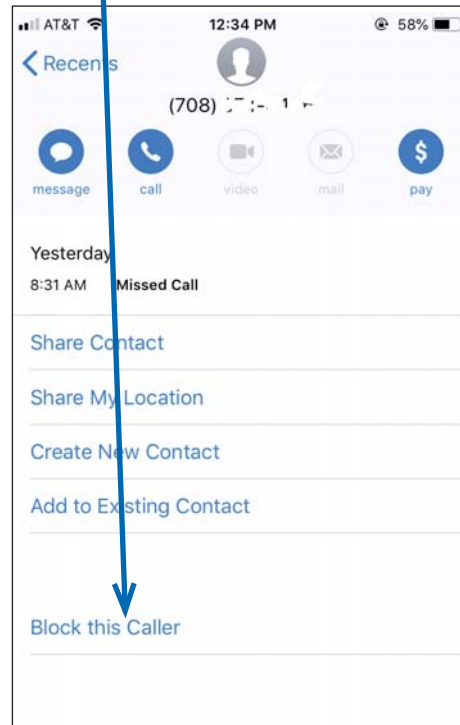


Blocking calls on iPhones:

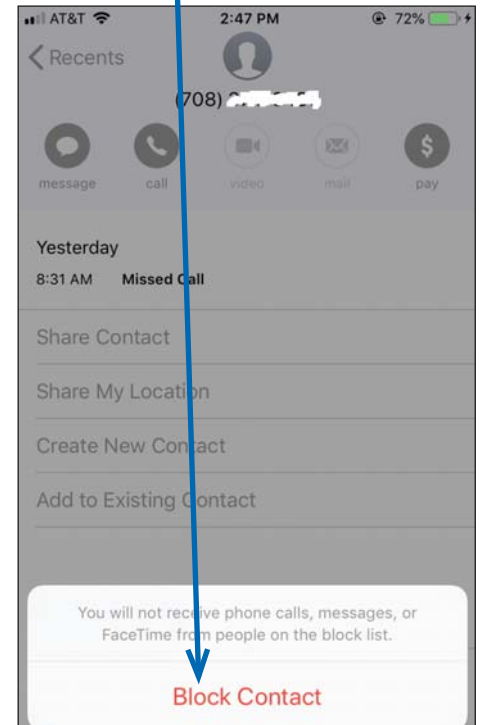
1) On your list of recent calls, tap the info icon (the encircled "i") next to the caller you want to block.



2) Choose to block this caller.

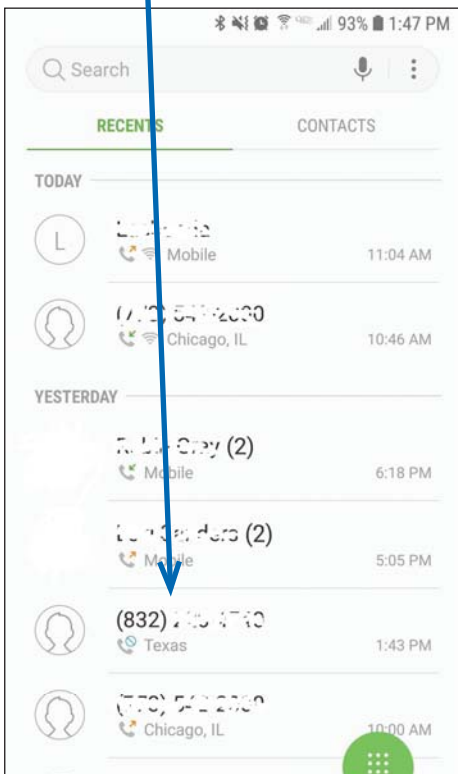


3) Confirm you want to block the contact.

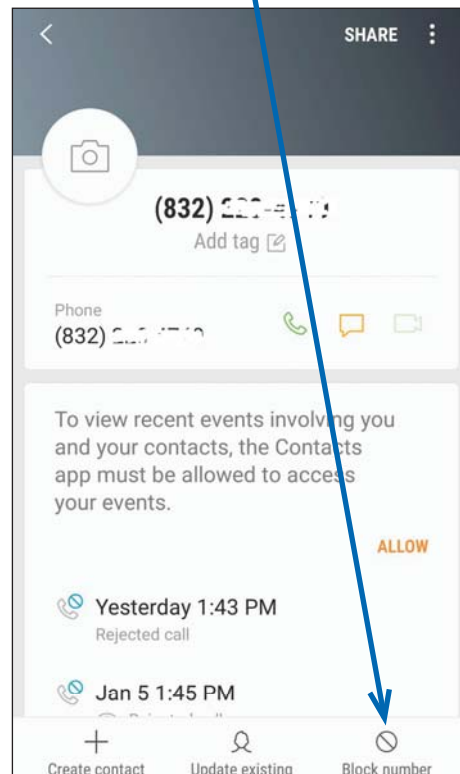


Blocking calls on Android phones:

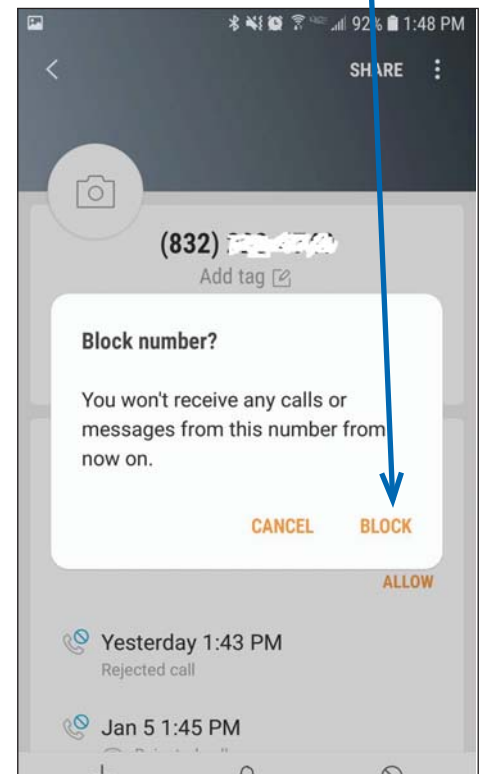
1) On your list of recent calls, tap on the caller's name and long-press the number.



2) Tap "Block number."



3) When asked to confirm, tap "block."



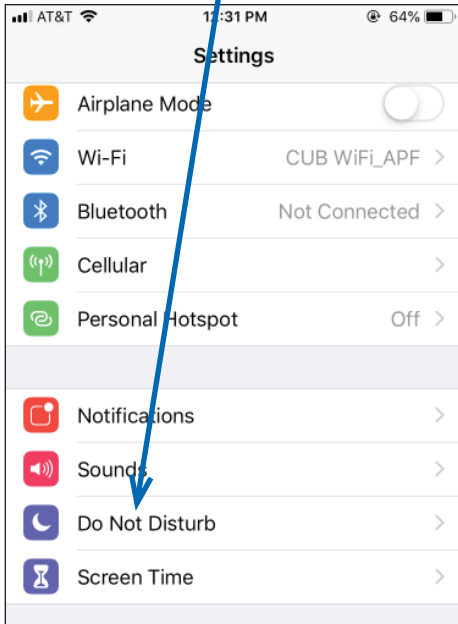
Use your smartphone's Do Not Disturb feature: You can take advantage of a "Do Not Disturb" mode, which means you won't get bothered by unwanted calls. (They'll get sent directly to voicemail. You also won't see notifications.) In this mode, you could miss calls you want. But you can set it up so your contacts list can still ring your phone. For more details go to

Support.Google.com and search for "Limit interruptions with Do Not Disturb on Android." Or, visit Support.apple.com and search for "Use Do Not Disturb on your iPhone." (**CUB Note:** This could be an effective solution for many people.)

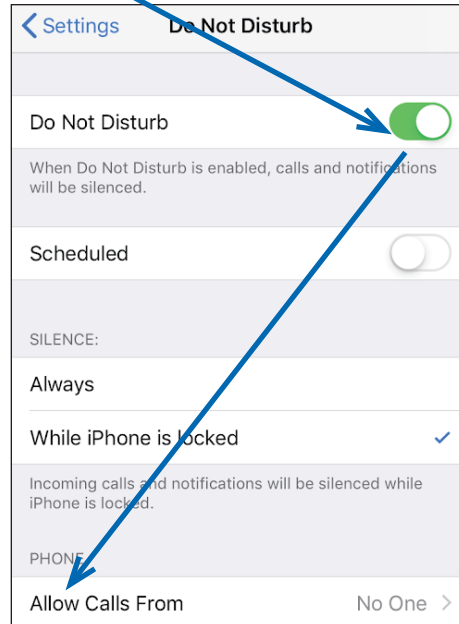
Below are general directions—steps may vary depending on the device. If you need help, contact your carrier.

Setting Do Not Disturb on iPhones:

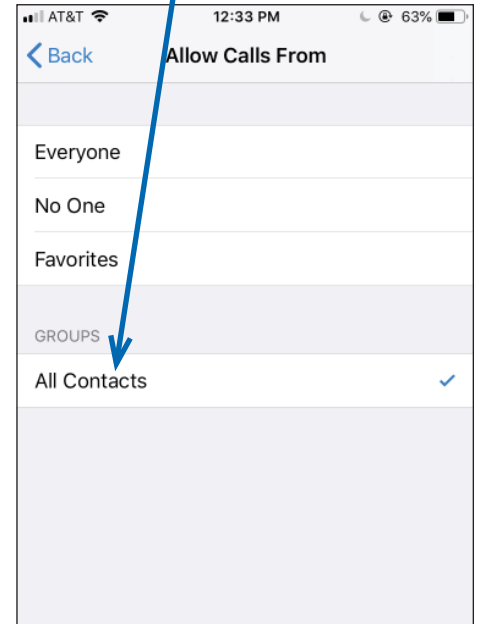
1) Go to Settings, choose "Do Not Disturb."



2) If the Do Not Disturb button is green, it's on. Then select "Allow Calls From."

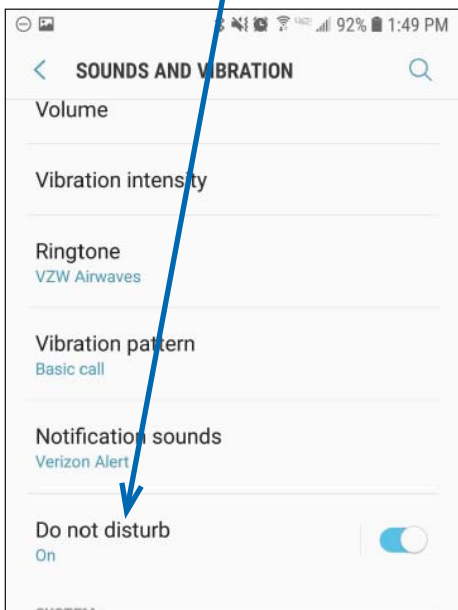


3) If you want to ignore all calls except those from your contacts list, choose "All Contacts."

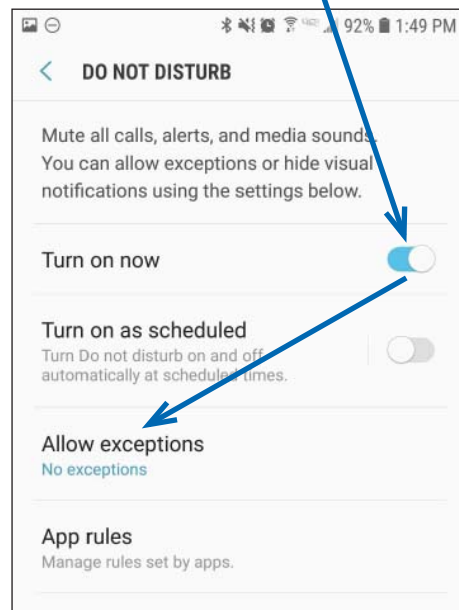


Setting Do Not Disturb on Android Phones:

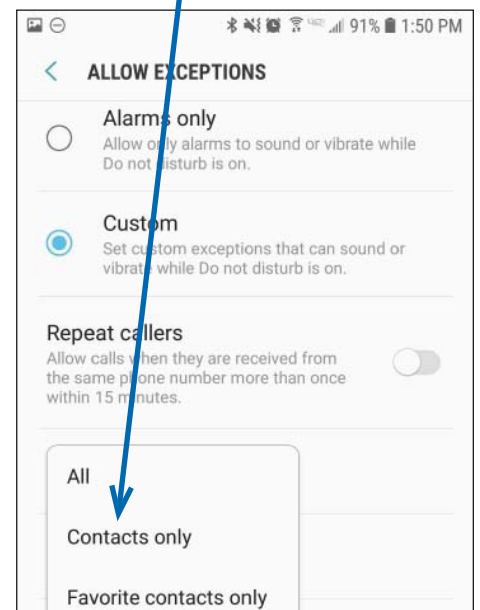
1) Go to Settings, choose "Settings and Vibrations," and then "Do Not Disturb."



2) If the Do Not Disturb button is blue, it's on. Then select "Allow Exceptions."



3) To ignore all calls except ones from your contacts list, choose "Contacts Only."



Your wireless company's call-blocking services

Your carrier offers robocall-blocking protection. CUB does not endorse telecom offers, but the chart below gives examples of what's available. Unfortunately, a plan like this could cost you a few dollars more per month, and it may not be available on all devices. Always ask your carrier what kind of free anti-robocall services it offers.

Carrier	Plan	Price	Notes	For more info
AT&T	Call Protect	FREE, but AT&T also offers an advanced service, "Call Protect Plus," for \$3.99/month/line.	Automatically blocks calls that are likely scammers. For other calls, it warns you of telemarketers and likely spammers. Only available for HDVoice-capable smartphones. Prepaid accounts NOT eligible, and devices bought through companies other than AT&T may not be eligible.	ATT.com (Search for "Block robocalls")
Sprint	Premium Caller ID	\$2.99/month/line	This identifies callers who are not already on your contacts list. It will warn you if the call is likely to be spam. Not available on all devices.	Sprint.com (Under "Shop Plans" click "Add-on Services" and find the section for Premium Caller ID.)
T-Mobile	Scam ID, Scam Block, and Name ID	Scam ID and Scam Block are FREE for post-paid customers (those who get a bill for calls already made). But the company also offers an advanced service called Name ID for \$4/month/line.	Scam ID: Alerts you immediately when you get a call from a likely scammer (free). Scam Block: Allows you to block likely scammers (free). Name ID: Identifies callers and allows you to block calls. You can send a whole categories of calls (telemarketing, survey, political) directly to voicemail. (\$4/month/line. Also, data charges may apply for Caller ID to work.)	T-mobile.com (Search for each robocall-blocking service: Scam ID, Scam Block, Name ID.)
Verizon	Call Filter (formerly Caller Name ID)	\$2.99/month/line (Note: Verizon has reportedly said it will offer this service for free beginning in March.)	Warns you about potential spam, robo and fraudster calls, and lets you block unwanted numbers. Tells you name, city and state of an incoming call from an unknown number.	VerizonWireless.com (Search for "Call Filter")

Third-party apps

Applications, available at the App Store for iPhone or Google Play for Android, can help weed out robocalls and scam numbers. CUB does not endorse apps, but this chart summarizes some of the ones available.

Remember, not all apps are compatible with all devices. Also, while some apps are free to download and use, they may offer upgrades with more features at an extra cost. As with any app, read the privacy policy to find out what kind of information each collects.

App	Price	Notes	For more info
Hiya Caller ID and Block	Free	Identifies calls you want, blocks the numbers you want to avoid.	Hiya.com
Nomorobo	Free for people who have Voice Over Internet Protocol (VoIP) lines—including AT&T U-verse and Comcast Digital Phone. For people with smartphones, \$1.99 per month or \$19.99/year after a free 14-day trial.	Automatically blocks spam/scam robocalls, but allows good robocalls (school closings, prescriptions) to pass through. Winner of the FTC's Robocall Challenge in 2013.	Nomorobo.com (For a list of all the VoIP providers that offer Nomorobo, see Nomorobo.com/signup.)
RoboKiller	99 cents/month for the iPhone to \$2.99/month (\$24.99/year) for Android devices.	Automatically blocks more than a million telemarketers and robocalls, even if they're trying to spoof or change their numbers. Winner of the FTC's Robocall Challenge in 2015.	Robokiller.com
Truecaller	Free, but there is an optional "Premium/Pro" membership with extra features that includes a monthly fee.	Identifies spam calls and allows you to block them. Has a custom call-blocking feature that allows you to block other calls you don't want.	Truecaller.com
YouMail	Free, but there are "Plus" and "Professional" versions for \$5 and \$10 per month, respectively.	Call manager that can automatically stop robocalls.	YouMail.com

Other ways to combat robocalls

Join the do-not-call list: Yes, it's still worth it to add your home and cellphone numbers to the Federal Trade Commission's Do Not Call Registry. It will still reduce telemarketing calls from legitimate companies. And you'll know that any sales call you do get is likely to be from a scammer who doesn't care about the law.

If your number is registered, then you can report offending companies to help build a case against them. Remember, the intent of the registry is to block sales calls, but you may still receive other calls, such as from debt collectors, political groups, and charities.

If you haven't already, here's how you sign up:

- Call **1-888-382-1222** from the phone you want to register (TTY: **1-866-290-4236**).

OR

- Register online at **DoNotCall.gov** (You will receive a confirmation email that you must respond to within 72 hours to complete your registration.)

File a complaint with the Federal Trade Commission (FTC): If you continue to get harassed by robocalls, file a complaint with the FTC. Here's how:

- Visit: **FTC.gov/complaint** and click on the FTC Complaint Assistant icon.

OR

- Call **1-877-FTC-HELP**.

You will be asked a series of questions. The more information you can provide, the better chance you have at getting a response and action being taken. Have the following information readily available:

- All your contact information (name, phone number, email, etc.).
- Name and number of the company or person calling you.
- Information related to the call, such as what was said to you.



Sources

In writing this guide, the Citizens Utility Board (CUB) researched the following sources:

"4G Phones | iPhone and Android Phones | T-Mobile." BYOD & Sim Cards | Get a Sim Card For Your Unlocked Phone | T-Mobile. T-Mobile. 28 Jan. 2019 <https://www.t-mobile.com/>

"7 ways to finally end robocalls." The Kim Komando Show. 25 Jan. 2019 <https://www.komando.com/columns/458656/7-ways-to-finally-end-robocalls>

"Android Robocall Blocking." CTIA - What is a Small Cell? A Brief Explainer. 28 Jan. 2019 <https://www.ctia.org/consumer-resources/how-to-stop-robocalls/android-robocalls-blocking/>

"Apple." iPhone Service Pricing - Apple Support. 28 Jan. 2019 <https://support.apple.com/>

"Apple Music now included, on us." Verizon Wireless. 28 Jan. 2019 <https://www.verizonwireless.com/?otc-domains2008&cmpcat=wireless&domain=www.verizonwireless.com>

"AT&T® Official - Entertainment, TV, Wireless & Internet." My ATT. 28 Jan. 2019 <https://www.att.com/>

"Best Value in Wireless | Sprint." Price, Reviews & Specs | Sprint. 28 Jan. 2019 <https://www.sprint.com/>

"Block Robocalls and other Unwanted Calls." My ATT. 25 Jan. 2019 <https://www.att.com/help/robocalling.html>

"Blocking Unwanted Calls." Federal Trade Commission. June 2016. 25 Jan. 2019 <https://www.ftc.gov/news-events/audio-video/video/how-file-complaint-federal-trade-commission>

"Call Filter FAQs." Verizon Wireless. 28 Jan. 2019 <https://www.verizonwireless.com/support/call-filter-faqs/>

"Call Protection | Automatic Scam Protection for Your Phone | T-Mobile." BYOD & Sim Cards | Get a Sim Card For Your Unlocked Phone | T-Mobile. T-Mobile. 25 Jan. 2019 <https://www.t-mobile.com/resources/call-protection>

"Call Protection | Automatic Scam Protection for Your Phone | T-Mobile." T-Mobile. 25 Jan. 2019 <http://t-mobile.com/resources/call-protection>

"Comm. Rosenworcel Calls for Free Robocall Blocking Tools for Consumers." Federal Communications Commission. 13 Dec. 2018. 25 Jan. 2019 <https://www.fcc.gov/document/comm-rosenworcel-calls-free-robocall-blocking-tools-consumers>

"Consumer Resources: How to Stop Robocalls." CTIA - What is a Small Cell? A Brief Explainer. 25 Jan. 2019 <https://www.ctia.org/consumer-resources/how-to-stop-robocalls/>

"Corporate Federal Account Holders." Price, Reviews & Specs | Sprint. 25 Jan. 2019 <https://www.sprint.com/en/shop/services.html?id16=robocalls>

"December 2018 Nationwide Robocall Data." Robocall Index. 25 Jan. 2019 <https://robocallindex.com/>

"Digital Cable TV, Internet and Home Phone | XFINITY." Watch TV Online, Stream Episodes and Movies | Xfinity Stream. 28 Jan. 2019 <https://www.xfinity.com/>

"Finally! No more annoying robocalls and telemarketers." Stop robocalls and telemarketers with Nomorobo. 28 Jan. 2019 <http://nomorobo.com/>

"- FTC Complaint Assistant." - FTC Complaint Assistant. 28 Jan. 2019 <https://www.ftccomplaintassistant.gov/#crnt&panel1-1>

"Hiya: Caller ID, Call Blocker & Protection for a Better Phone Experience." Hiya Blog. 28 Jan. 2019 <https://hiya.com/>

"How to File a Complaint with the Federal Trade Commission." Federal Trade Commission. 29 Mar. 2016. 25 Jan. 2019 <https://www.ftc.gov/news-events/audio-video/video/how-file-complaint-federal-trade-commission>

"How to stop robocalls and telemarketing calls for good." The Kim Komando Show. 25 Jan. 2019 <https://www.komando.com/cool-sites/254740/stop-telemarketing-calls-for-good>

"How to Stop Robocalls in 2019." HighYa. 25 Jan. 2019 <https://www.highya.com/articles-guides/how-to-stop-robocalls>

"IOS Robocall Blocking." CTIA - What is a Small Cell? A Brief Explainer. 25 Jan. 2019 <https://www.ctia.org/consumer-resources/how-to-stop-robocalls/ios-robocall-blocking>

"National Do Not Call Registry." Consumer Information. 06 Apr. 2018. 25 Jan. 2019 <https://www.consumer.ftc.gov/articles/0108-national-do-not-call-registry>

"Robocall blocker review." Product Reviews and Ratings - Consumer Reports. 25 Jan. 2019 <http://www.consumer-reports.org/cro/magazine/2015/07/robocall-blocker-review/index.htm>

"Robocalls." Consumer Information. 13 Mar. 2018. 25 Jan. 2019 <https://www.consumer.ftc.gov/articles/0259-robocalls>

"Security Apps to Protect You & Your Phone - AT&T." My ATT. 28 Jan. 2019 <https://www.att.com/features/security-apps.html>

"Stop Robocalls - Totally Free!" YouMail Visual Voicemail. 28 Jan. 2019 <https://www.youmail.com/>

"Stop Unwanted Robocalls & Telemarketers with RoboKiller." Robocall Task Force by RoboKiller. 28 Jan. 2019 <https://robokiller.com/>

"Submit a Consumer Complaint to the FTC." Federal Trade Commission. 01 Dec. 2017. 25 Jan. 2019 <https://www.ftc.gov/faq/consumer-protection/submit-consumer-complaint-ftc>

"Truecaller is transforming today's phonebook to make it more intelligent and useful." Truecaller. 28 Jan. 2019 <https://www.truecaller.com/>

"Use caller ID & spam protection - Phone app Help."

Google. Google. 28 Jan. 2019 <https://support.google.com/phoneapp/answer/3459196?hl=en>

“Verizon Safeguards & Controls.” Verizon Wireless. 25 Jan. 2019 <https://www.verizonwireless.com/support/verizon-safeguards-and-controls/>

“What You Can Do To Limit Robocalls.” CR Advocacy. 25 Jan. 2019 <https://advocacy.consumerreports.org/research/what-you-can-do-to-limit-robocalls/>

Blanco, Octavio. “5.1 Billion Robocalls Flooded Consumers’ Phones in October: Report.” Product Reviews and Ratings - Consumer Reports. 25 Jan. 2019 <https://www.consumerreports.org/robocalls/billions-of-robocalls-industry-regulars-pressured-to-find-a-solution/>

Blanco, Octavio. “Relief From Spoofed Robocalls Is on the Way.” Product Reviews and Ratings - Consumer Reports. 25 Jan. 2019 <https://www.consumerreports.org/robocalls/spoofed-robocalls-relief-is-on-the-way/>

Blanco, Octavio. “State Attorneys General Push for Faster Action to Fight Robocalls.” Product Reviews and Ratings - Consumer Reports. 25 Jan. 2019 <https://www.consumerreports.org/robocalls/best-ways-to-fight-robocalls/>

CahnDec, Lauren. “Here’s the Truth About the Do Not Call List.” Reader’s Digest. Reader’s Digest. 25 Jan. 2019 <https://www.rd.com/advice/truth-about-do-not-call-list/>

Channick, Robert. “Hey, Rachel in cardholder services: Illinois and 38 other states are fighting back against robocalls.” Chicago Tribune. 07 Dec. 2018. Chicago Tribune. 25 Jan. 2019 <https://www.chicagotribune.com/business/ct-biz-robocall-state-coalition-20181206-story.html>

Crothers, Brooke. “How To Block, Stop Robocalls, Scams: ‘Nuclear Option’ On iPhone XS, iOS 12, Pixel 3, Android.” Forbes. 28 Jan. 2019. Forbes Magazine. 28 Jan. 2019 <https://www.forbes.com/sites/brookecrothers/2019/01/27/best-single-way-to-block-stop-robocalls-spam-on-the-iphone-android-ios-12-pixel-3-iphone-xs/#232469b87ef2>

Crothers, Brooke. “In 2019 Here’s How To Stop And Block Robocalls, Spam, And Unknown Calls On iPhone, Android.” Forbes. 03 Jan. 2019. Forbes Magazine. 25 Jan. 2019 https://www.forbes.com/sites/brookecrothers/2018/12/30/in-2019-heres-how-to-stop-robocalls-scammers-on-iphone-android-verizon-att/?fbclid=IwAR1PkLUNDyHWr1kHIWeToAbP5skNGEU3kcFbMCn0xXZg0_tekie8LCSjqrw#3c819ed63fbc

National Do Not Call Registry. 28 Jan. 2019 <https://www.donotcall.gov/>

Fazzini, Kate. “Robocalls jumped 60 percent in the U.S. last year and scammers are finding more ways to make money.” CNBC. 04 Jan. 2019. CNBC. 25 Jan. 2019 <https://www.cnbc.com/2019/01/02/as- robo-calling-ramps-up-consumers-increasingly-wonder-why-carriers-cant-stop-scammers-from-spoofing-their-phone-numbers.html>

Google. Google. 28 Jan. 2019 <https://support.google.com/>

Kirchheimer, Sid. “How to Get Spam Calls to Stop.”

AARP. 05 Oct. 2018. 25 Jan. 2019 <https://www.aarp.org/money/scams-fraud/info-2018/tips-to-stop-spam-calls.html>

Jolly, Jennifer. “How to stop those annoying, endless robocalls to your smartphone.” USA Today. 25 Apr. 2017. Gannett Satellite Information Network. 28 Jan. 2019 <https://www.usatoday.com/story/tech/columnist/2017/04/16/how-to-stop-robocalls-on-iphone-smartphone-android/100474848/>

Jolly, Jennifer. “How to beat robocallers and telemarketers on your landline.” USA Today. 01 May 2017. Gannett Satellite Information Network. 28 Jan. 2019 <https://www.usatoday.com/story/tech/columnist/2017/04/30/how-beat-robocallers-and-telemarketers-your-landline/101041228/>

Meek, Andy. “Robocalls are out of control, and these were the most common types in 2018.” BGR. 14 Dec. 2018. BGR. 25 Jan. 2019 <https://bgr.com/2018/12/13/robocall-scams-most-common-2018>

Murphy, David. “How to Prevent Robocalls and Minimize Phone Spam.” Lifehacker. 08 Aug. 2018. Lifehacker.com. 25 Jan. 2019 <https://lifelhacker.com/how-to-prevent-robocalls-and-minimize-phone-spam-1828192361>

Murray, Teresa Dixon. “What to do about those annoying, non-stop robocalls: Money Matters.” Cleveland.com. 05 Apr. 2018. Cleveland.com. 28 Jan. 2019 https://www.cleveland.com/business/index.ssf/2018/04/what_to_do_about_those_annoyin.html

My ATT. 28 Jan. 2019 <https://www.att.com/esupport/article.html#!/local-long-distance/KM1010653?gsi=KCgbTsC1>

My ATT. 28 Jan. 2019 <https://www.att.com/esupport/article.html#!/u-verse-voice/KM1235421?gsi=WeXb8FBD>

My ATT. 28 Jan. 2019 <https://www.att.com/esupport/article.html#!/wireless/KM1252907?gsi=NY75XYmf>

Patwegar, Waseem. “Turn OFF Do Not Disturb For Certain Contacts On Android Phone.” Techbout. 24 Jan. 2018. 25 Jan. 2019 <https://www.techbout.com/turn-off-do-not-disturb-for-certain-contacts-on-android-phone-35657/>

Pesce, Nicole Lyn. “Here’s why you’re getting so many spam phone calls.” MarketWatch. 24 Dec. 2018. MarketWatch. 25 Jan. 2019 <https://www.marketwatch.com/story/heres-why-youre-getting-so-many-spam-phone-calls-2018-10-12>

Shaban, Hamza. “Nearly half of cellphone calls will be scams by 2019, report says.” The Washington Post. 19 Sept. 2018. WP Company. 25 Jan. 2019 https://www.washingtonpost.com/technology/2018/09/19/nearly-half-cellphone-calls-will-be-scams-by-report-says/?utm_term=.33c13f4790e4

Welch, Chris. “How to stop annoying robocalls on your iPhone or Android phone.” The Verge. 10 May 2018. The Verge. 25 Jan. 2019 <https://www.theverge.com/2018/3/6/17071478/spam-calls-how-to-stop-block-robocalls-robots-scam-iphone-android>

Wong, Ashley. “Comcast or Capital One calling? It may be

a robocall scam. Here are the top 10." USA Today. 12 July 2018. Gannett Satellite Information Network. 25 Jan. 2019 <https://www.usatoday.com/story/tech/2018/07/06/robocalls-top-10-scams-led-fake-comcast-capital-one-calls/759945002/> YouMail, and Inc. "Nearly 48 Billion Robocalls Made in

2018, According to YouMail Robocall Index." PR Newswire: News distribution, targeting and monitoring. 23 Jan. 2019. 28 Jan. 2019 <https://www.prnewswire.com/news-releases/nearly-48-billion-robocalls-made-in-2018-according-to-youmail-robocall-index-300782638.html>