

THE MOST AND LEAST
RELIABLE CARS

YOUR SNOW BLOWER
SHOPPING GUIDE

THE COVID-19 RISK
YOU MUST KNOW ABOUT

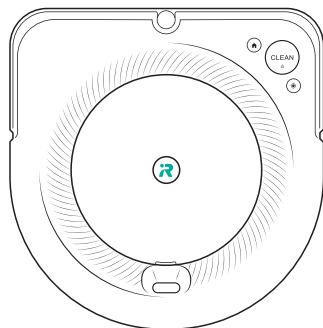
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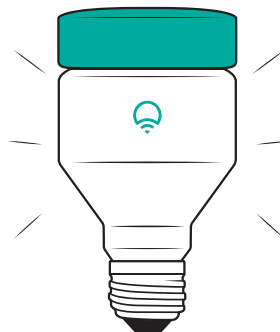
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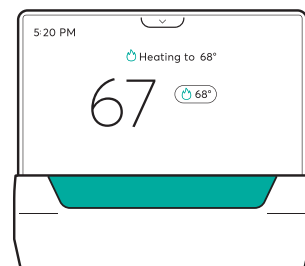
KEEP AN EYE ON YOUR HOME



VACUUM EFFICIENTLY
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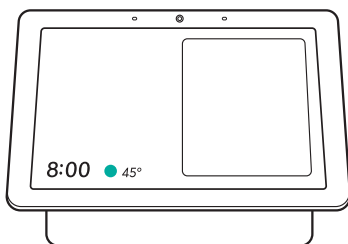
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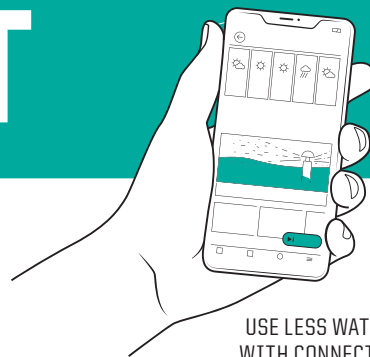
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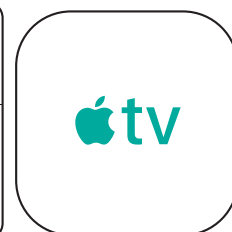
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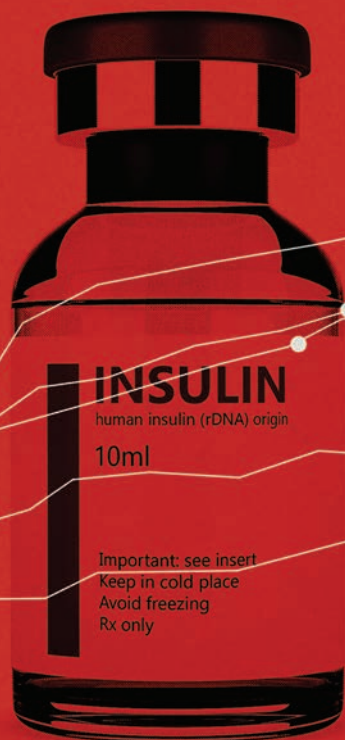
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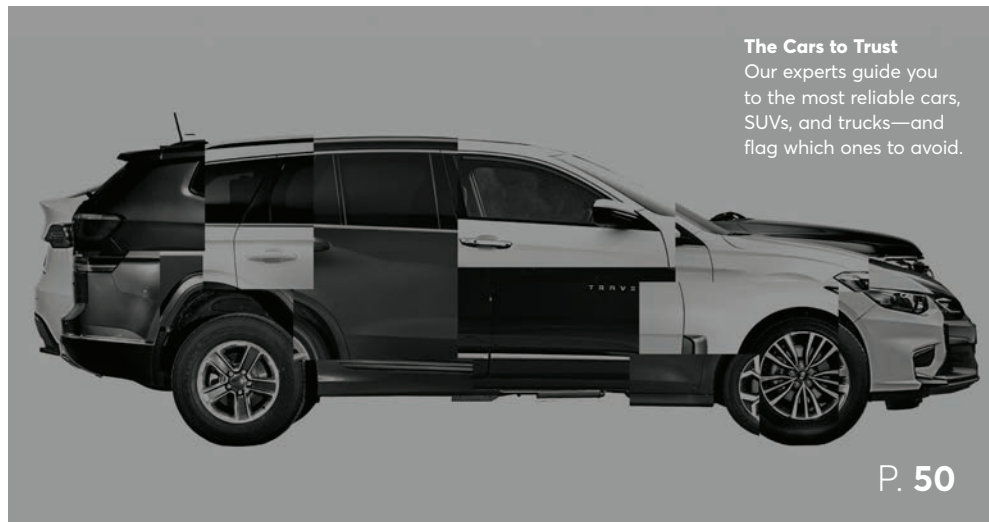
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Making Smart Devices Safer



IN THE PAST FEW YEARS, our homes have become filled with products that can connect with each other. TVs, lights, doorbells, vacuums, even our sprinkler systems are now often designed to connect to the internet and communicate with us. In fact, CR has rated hundreds of these smart products, extolling the many ways they make our lives easier, more enjoyable, and safer, too.

But while these smart devices have brought us greater convenience and made our homes more efficient, they also require us to be smart about how we use them.

At CR, we always want to ensure that you are making informed choices about the products you bring into your home, and it's no different with these devices.

Security cameras and video doorbells are real game changers when it comes to increasing personal security. You can keep an eye on loved ones from anywhere, and even answer your front door without worrying about social distancing—an important plus in this age of COVID-19.

But many of these devices can also share your personal information with their manufacturers, or worse, be susceptible to hacking. A key way to protect yourself is to modify your privacy settings so that your camera is as secure as possible and you have control over what data and information are shared.

CR's Digital Lab brings a new level of scrutiny to connected devices in today's marketplace, including research we conduct and new tools we are creating to provide you with data security ratings for smart devices.

Above all, we want manufacturers, such as the ones featured in our article "Your Ultimate Smart Home Toolkit," on page 24, to design smart products with your well-being in mind, and we won't let up until we see digital standards in place for them.

Marta Tellado

Marta L. Tellado,
President and CEO
Follow me on Twitter
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Improving Air Travel Safety

WHAT'S AT STAKE

As recently as October 2020, the Centers for Disease Control and Prevention acknowledged the risks inherent in travel during the COVID-19 pandemic, saying that “staying home is the best way to protect yourself and others.”

Yet many Americans are weighing those risks against a yearning to spend time with family or a need to fulfill an out-of-town professional obligation.

The problem is, we don't have a reliable standard for assessing the risks that plane travel poses. Although the Department of Transportation has issued onboard safety “best practices” ranging from air filtration and cleaning standards to social distancing and masking guidelines, these are merely recommendations. As such, they've largely been left to the discretion of individual airlines and airports. “It's the Wild West for anyone considering flying right now, with some carriers doing a better job than others,” says William J. McGee, CR's aviation adviser. “We need a sheriff to make sure everyone abides by the same rules.”

HOW CR HAS YOUR BACK

In September 2020, CR delivered a 62,000-signature petition to DOT Secretary Elaine Chao demanding enforceable safety standards. And several groups joined CR in appealing directly to Chao in an October letter: “Your non-binding best practice recommendations ... are no substitute for uniform enforceable requirements that consumers can rely on,” it urged.

WHAT YOU CAN DO

Our COVID-19 Travel Toolkit, at [CR.org/travel0121](https://www.consumerreports.org/travel0121), has tips on staying safe while traveling.

Putting Gear to the Test

WHAT'S AT STAKE

In late August the Consumer Product Safety Commission announced recalls of two bike helmets that had previously failed CR safety tests. The agency said the small version of the Woom Bikes USA kids' helmet and the Morpher flat folding helmet both fail to meet federal safety standards, “posing a risk of head injury.”

HOW CR HAS YOUR BACK

CR discovered the problems in 2019. The Woom helmet, since replaced by a newer model, failed CR's rear impact absorption test. The Morpher, designed to fold for compact stowage, failed the side impact absorption test. CR immediately notified the manufacturers and the CPSC, and published the findings on [CR.org](https://www.consumerreports.org) in July 2019, flagging both as “Don't Buy: Safety Risk.”

WHAT YOU CAN DO

If you own one of these helmets, replace it as soon as possible. You can consult our bike helmet



PROGRESS UPDATE

■ CR's November cover investigation into PFAS—the “forever chemicals” linked to an array of health problems, including cancer and learning delays in children—found these worrisome compounds in dozens of bottled water products. Now CR advocates are mobilizing consumers to urge the industry to adopt a more stringent standard. So far, more than 33,000 consumers have sent appeals; you can add your name at [CR.org/pfas0121](https://www.consumerreports.org/pfas0121). CR is also supporting a federal bill that would require the Environmental Protection Agency to set PFAS limits in drinking water. It passed in the U.S. House of Representatives in 2020.

ratings at [CR.org/helmets0121](https://www.consumerreports.org/helmets0121). (In the meantime, wearing one of them is better than riding a bike with no helmet at all.)

And try to get your money back: Woom offers full refunds if you call 855-966-6872 or email safehelmet@woombikes.com. (Morpher has since gone out of business.)

Clarity on the Cost of EVs

WHAT'S AT STAKE

Because the retail prices of electric vehicles (EVs) are typically higher than those of gas-powered equivalents, some consumers assume the clear environmental benefits of EVs are a luxury they can't afford.

In fact, the opposite is true: When you factor in total ownership costs, most EVs will actually save owners money.

HOW CR HAS YOUR BACK

A new CR analysis found that the lifetime ownership costs of the most widely sold EVs on the market under \$50,000 are typically \$6,000 to \$10,000 lower than those of the best gas-powered vehicles in their class.

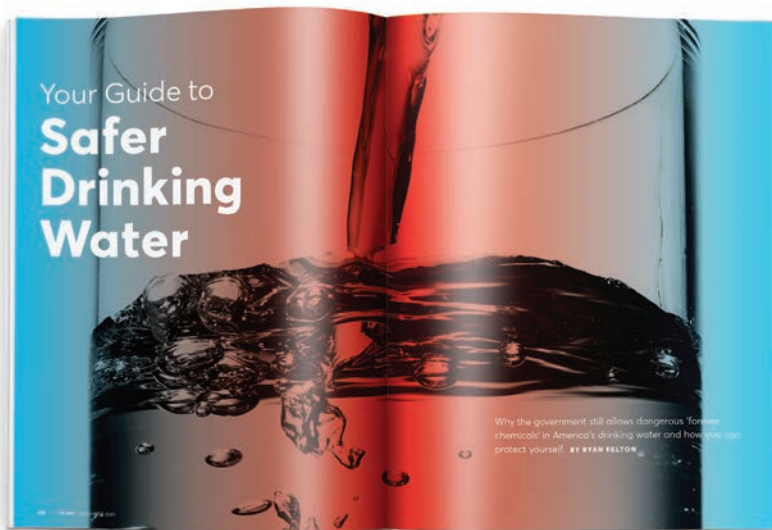
The analysis factored in the lower fuel and maintenance needs of EVs, as well as fresh data showing that newer long-range EVs hold their value as well as or better than their gas-powered counterparts.

The study also addressed the issue of “range anxiety.” It found that owners of EVs capable of driving at least 250 miles between charges—as most new EVs sold can—are able to do 92 percent of their charging at home and need to stop at charging stations only six times a year, on average.

WHAT YOU CAN DO

Check out CR's electric and hybrid vehicle buying guide, plus our full EV model ratings, at [CR.org/evguide0121](https://www.consumerreports.org/evguide0121).





“Your Guide to Safer Drinking Water,” in our November issue, revealed results of our test of 45 bottled water brands and offered ways to protect yourself from potentially toxic chemicals. Readers shared their concerns. To add your voice, go to CR.org/water0121.

THANK YOU for your recent article about contaminants in drinking water and also your previous research related to metals in baby food. I feel blindsided that innocuous things contain unsafe contaminants. I feel like I’m fighting an invisible enemy, and your research has helped me to eliminate some possible sources.

—Lauren Freeman, Seattle

IF YOU READ most labels on bottled water, you will see that it is taken from municipal

supplies just like your own town water. It is my impression that the only water that can be labeled “spring water” is water taken from an actual spring.

—Tom Schoon, via CR.org

EDITOR’S NOTE The Food and Drug Administration sets strict regulations for spring water, which it says must be “derived from an underground formation from which water flows naturally to the surface.” It has to be collected at the spring itself, or through a borehole, or well, that taps the aquifer feeding the spring. Brands that identify as spring water, such as Evian Natural Spring Water, for example, should comply with these regulations. But it’s true that most bottled water sold in the U.S. is not spring water.

Instead, most come from the same municipal sources as tap water—something consumers may not be aware of. Coca-Cola produces its Dasani water at its Detroit plant by purchasing, treating, and bottling municipal water before selling it at an upcharge to consumers. Pepsi bottles its Aquafina water brand in Detroit in the same way. This type of municipal purified water cannot be labeled as spring water, but it also isn’t required to be labeled as being from a municipal source. Still, some products, including Aquafina, clearly state on the bottle that the water was sourced from a municipal supply.

I READ YOUR ARTICLE on safe drinking water. I had the impression the PFAS (per- and

polyfluoroalkyl substances) come from the plastic bottles. If so, how are they getting into the drinking water? The report talks about bottled water but not canned. I thought cans have a plastic lining inside. I drink diet soda and carbonated flavored water. Are these also at risk?

—Don Morgan, Concord, CA

EDITOR’S NOTE Experts CR spoke with say that it’s unclear where PFAS in bottled (or canned) water come from. It could be the source water itself or—in the case of carbonated water—from the carbonation process.

OUR FAMILY lives on Fort Drum, N.Y., where water is tested annually, and test results are provided to residents in electronic form. The current test result for all PFAS is 66.1 ppt, which is more than 66 times the safe amount recommended by CR. Because of your article, we are installing a CR-recommended reverse osmosis filter in our house. Thank you for bringing this issue to our attention!

—Leigh Feathers, Watertown, NY

THANK YOU for your excellent safer drinking water guide. I am struck by the underlying paradigm of the pollution debate. In the case of polyfluoroalkyl substances, which may have contaminated tap water for 110 million Americans, we are trying to close the barn door after the horse is loose. The European Union’s precautionary principle [places the burden of investigating a chemical’s safety on the manufacturer rather than the regulatory agencies]. Had the U.S. adopted the precautionary principle when the EU did, we might not have this problem.

—Christopher Cocca, Palo Alto, CA



WRITE

Go to CR.org/lettertoeditor to share your comments for publication.



ELECTRIC VEHICLE Q's

IN NOVEMBER 2020's "New Ways Carmakers Are Getting You More MPG," you said, "EVs use no gasoline and emit zero tailpipe emissions." But you ignored where all this incremental electricity for EVs is going to come from, such as coal-fired power plants. You also ignored the pollution that is generated to produce the batteries and the power loss as the electricity travels from the power plants to the charging station.

—Lance Ulrich, via CR.org

EDITOR'S NOTE Some electricity used for electric vehicles comes from fossil fuels. But, on average, an EV in the U.S. emits 60 percent fewer greenhouse gases per mile than a comparable gas-powered vehicle, our experts say. Even in West Virginia, the state with the dirtiest electric grid, an EV will reduce emissions by 20 percent. In states with cleaner grids, like Idaho and Vermont, EVs will reduce emissions by more than 90 percent. It's also true that EVs require more energy to manufacture, but a typical EV can make up for any additional emissions from manufacturing within six to 18 months of driving.

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CR COMPARED maintenance costs for internal combustion engines (ICE), EVs, and hybrid cars. A hybrid is more complex than either an EV or an ICE. Why are hybrid maintenance costs more in line with an EV than an ICE? I have been reluctant to get a hybrid because of the added complexity. Am I worrying about the wrong thing?

—Neal Donaldson, Castle Rock, CO

EDITOR'S NOTE The study our cost comparison was based on included plug-in hybrids, not regular hybrids. A plug-in hybrid is more complex than either a battery EV or a conventional internal combustion vehicle. However, most plug-in hybrids on the market today can perform between 50 and 75 percent of a typical owner's driving without starting up the gas engine. This means lower maintenance and less wear and tear on the gas powertrain. For example, a plug-in hybrid with 100,000 miles on it may have just 25,000 to 50,000 miles on the gas engine, meaning it will last a lot longer and require less maintenance. And regenerative braking significantly reduces brake replacements.



MEDICAL BILLS

RE: "Could Your Medical Bills Make You Sick?" (November 2020), health care costs have increased dramatically. My income is good, but I avoid going to the doctor because everything costs way too much. Lab tests, diagnostic tests, and scans are ridiculous even after billing insurance, and insurance premiums have gone sky high even with a high deductible.

—Kelly Parker, via CR.org



MASK SOLUTIONS

In addition to the tips shared in "Fix Your Mask Frustrations" (Insights, November 2020), I tape my mask in place with medical adhesive tape on the underside. This reduces fogging of glasses and keeps me from constantly fiddling with the mask.

—Dee Pierce, Denver

EDITOR'S NOTE Medical grade tape, when applied correctly to the underside, is one way to help maintain the location, fit, and seal of a mask on your face—and is a good option if it helps you avoid touching your mask. The outside of your mask can have infectious particles on it, so touching it with your fingers risks spreading the virus. If you need to adjust your mask, use the strings, the elastic, or if you must, carefully handle the outermost edges of the mask. Wash your hands immediately after touching any part of your mask.



IMPORTANT YOGURT TIPS

REGARDING November 2020's "Healthy Yogurts That Taste Good, Too," I'm curious about the health benefits of yogurt. Is it beneficial all by itself? In other words, does simply adding yogurt to one's diet without making any other changes result in the stated health benefits? Or does the benefit come from replacing something unhealthy in a diet with yogurt?

—Anthony Ward, Glenview, IL

EDITOR'S NOTE Yogurt by itself is a rich source of calcium, and one of the few foods that offer live active cultures, which may help support a healthy microbiome. Adding it to your diet (without removing anything else) will give you those benefits. But if you're concerned about preventing diseases such as type 2 diabetes, heart disease, and hypertension, it's smart to replace an unhealthy food in your diet with one of our top-rated yogurts. Yogurt will do the most good when combined with an overall healthy diet.

MAKING YOGURT is very easy, and much cheaper than buying a commercial version. All you need is a pot and an oven with an incandescent light in it. A candy thermometer and a wire whisk are convenient but not essential.

—Peter Feibelman, Albuquerque, NM

EDITOR'S NOTE Homemade yogurt can be a great option. If you want to speed up the yogurt-making process, some multi-cookers offer a yogurt setting. The Zavor multi-cooker shown on page 17 of this issue, for example, promises a "two-step" yogurt setting, though our labs haven't tested that specific function.

What We're Testing in Our Labs ...

In our 63 labs, we continually review and rate products. Here, timely picks for this month.

5G Smartphones

WE TESTED: 15 models

WE TEST FOR: Quality of a model's front and rear cameras, display, battery life, and overall performance. We also assess ease of use and durability when dropped.

ABOUT THE SCORES:

Median: 79

Range: 68-85

First Place 5G & Great Photos

Samsung Galaxy Note20 Ultra 5G, 128GB
\$1,300

85
OVERALL
SCORE



Durable & Excellent Display

Apple iPhone 12 Pro, 128GB
\$1,000

82
OVERALL
SCORE



Long Battery Life (40 Hours)

LG Velvet 5G, 128GB
\$600

72
OVERALL
SCORE



Air Fryers

WE TESTED: 31 models

WE TEST FOR: Ease of use of a model's controls, how quietly it operates, and how easy it is to clean. We also measure the food basket capacity of each model.

ABOUT THE SCORES:

Median: 66

Range: 47-75

Hot Deal

GoWise USA GW22731
\$80

73
OVERALL
SCORE



Easiest to Clean

Power AirFryer XL
\$100

70
OVERALL
SCORE



Large Capacity

Ninja Foodi 2-Basket DZ201
\$180

68
OVERALL
SCORE



Ask Our Experts

My air fryer has started giving off a burnt smell. What's going on?



IF YOU DON'T CLEAN your air fryer after every use, food debris and grease will build up in its drawer and on the heating element—and they'll burn the next time you use the fryer, producing a burnt odor and even smoke. "Most air fryers we've tested need regular cleaning," says lead tester Larry Ciufo. Take out the basket and drawer, then wipe the inside of the fryer with a damp, soapy cloth and wipe the heating element with a clean, damp rag. (Some manufacturers advise using a soft brush—but not steel wire—to remove food.) If food is baked onto the basket or drawer, use a toothpick to dislodge it, then soak both parts in hot, soapy water. Wipe with a soft sponge, dry, and reassemble.

ILLUSTRATION: SERGE BLOCH

For the latest ratings of these and other product categories, readers with a Digital or All Access membership can go to [CR.org](https://www.consumerreports.org).

Wireless Sport Headphones

WE TESTED: 29 models
WE TEST FOR: Sound quality, including tonal accuracy, clarity of sound, and more. We also assess each model for fit.

ABOUT THE SCORES:

Median: 66
Range: 31-86

Best Sound Under \$100
Mee Audio X10
\$80

71
OVERALL
SCORE



Long Battery Life (8 Hours)
JBL Endurance Sprint
\$50

66
OVERALL
SCORE



Bargain & Long Warranty
Skullcandy Indy
\$40

66
OVERALL
SCORE



Affordable Over-the-Range Microwaves

WE TESTED: 56 models
WE TEST FOR: How easy it is to use, how evenly it heats and defrosts, and how quickly and quietly it works. We also measure each unit's usable capacity.

ABOUT THE SCORES:

Median: 65
Range: 46-86

Best Heating for Your Buck
GE JVM3160RFSS
\$250

77
OVERALL
SCORE



Excellent Defroster
Black+Decker EM044KIN-P
\$200

73
OVERALL
SCORE



Reliable Brand for Less
Whirlpool UMW1160CS
\$180

65
OVERALL
SCORE



Ellipticals

WE TESTED: 27 models
WE TEST FOR: Ease of use and how well a machine adapts to people of different sizes. We also assess user safety and soundness of construction.

ABOUT THE SCORES:

Median: 67
Range: 47-77

Best Overall Performance
Vision S7100
\$2,600

77
OVERALL
SCORE



Easy-to-Use Space Saver
Diamondback 1060Ef
\$1,500

76
OVERALL
SCORE



Nice Price & Safety Features
Horizon 7.0 AE
\$1,000

68
OVERALL
SCORE



Gas Ranges

WE TESTED: 48 single-oven 30-inch models
WE TEST FOR: How evenly it bakes cookies and cakes, how well it broils burgers, and how quickly the highest stovetop burner heats water.

ABOUT THE SCORES:

Median: 64
Range: 37-81

Hot Deal
Samsung NX58R5601SS
\$650

79
OVERALL
SCORE



Best for Baking
GE JGS760SELSS
\$1,840

76
OVERALL
SCORE



Great at Self-Cleaning
Frigidaire FFGF3054TS
\$720

70
OVERALL
SCORE



Note: We rate different products according to different testing protocols; as a result, Overall Scores of one product category are not comparable with those of another.

COMING NEXT MONTH Antivirus Software & More



Where's the best place to put my extra freezer?

Since the pandemic began last spring, many Americans have invested in a stand-alone freezer (or even a second fridge) in an effort to increase food storage space so that they can limit trips to the supermarket. It makes sense to put that extra fridge or freezer somewhere out of the way—such as in a garage. In fact, a number of freezer models we test are marketed as “garage ready.” But if the space isn’t insulated, you might not want to keep it there.

“You need to make sure that the unit is not exposed to temperatures above 110° F or below 0° F because that may damage a freezer or fridge,” says Larry Ciuffo, who oversees our freezer tests. Wendy Treinen, director of brand and product communications at GE Appliances, says, “In very cold temperatures, the freezer

‘gets confused’ and shuts off because it thinks it is already maintaining a 0° F temperature.” If it’s too cold and the compressor shuts off, your food could thaw and even spoil.

If your garage isn’t insulated, consider moving your freezer to a spot that’s less exposed to outdoor temperatures. (A basement or laundry room may be warmer.) Just make sure that the space is dry and that the freezer is away from windows; drafts and sun make it hard for a freezer to maintain the right interior temperature. It’s safest not to use an extension cord for any major appliance, so place the freezer close to an outlet. In the market for a new freezer? Digital or All Access members can see our freezer ratings at [CR.org/freezers0121](https://www.consumerreports.org/freezers0121).

Is buying refurbished tech products worth the savings?

It certainly can be. “Refurbished” is a term for electronics that were returned, repaired (though some may have been returned for other reasons), cleaned, and resold, typically with the promise of “like new”

performance and often at a lower price.

When our tech editors looked for refurbished headphones online, for example, we saw prices anywhere from 20 to 60 percent lower than new ones—even on models that rate high in our tests. We found refurbished pairs of Beats by Dre BeatsX Wireless headphones—a CR Best Buy at its normal sale price of \$100—for as little as \$40. And we saw refurbished Samsung Galaxy buds—about \$110 new, and one of the highest-rated wireless pairs in our testing—for \$50.

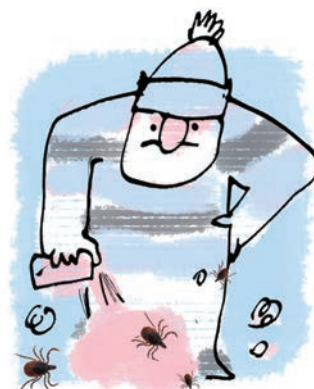
But it’s important to buy refurbished tech from a trusted source and to read the fine print, checking the return policies and warranty. Start by looking on manufacturer websites—some sell refurbished products directly to consumers and offer a good warranty. (Apple, for example, offers Certified Refurbished smartwatches, iPads, and more, all with a one-year warranty.) We’ve also found good tech selections online at Amazon, Best Buy, and Walmart. In fact, Amazon has an entire Renewed department with products it guarantees to look and function like new; most come with a 90-day warranty. Best Buy has a Geek Squad Certified Refurbished program, with

varying warranties and a 15-day return policy on many items. Walmart has a 90-day warranty, though return policies vary. So always check the individual item’s policy, and inspect the item when it arrives.

Do I need to worry about ticks in winter?

It depends on where you live. Many species of ticks that transmit diseases to humans in the U.S. tend to be inactive during the winter. But there are two key exceptions: the blacklegged tick (aka deer tick), widely distributed across the eastern U.S., and its West Coast cousin, the western blacklegged tick. Both transmit Lyme disease and can be active in winter when temperatures rise above 35° F and no snow is on the ground.

Blacklegged ticks can also carry a “whole laundry list” of other pathogens, says Ellen Stromdahl, a retired entomologist from the tick-borne disease laboratory of the U.S. Army Public Health Center in Maryland. Those include anaplasmosis, babesiosis, and the rare but deadly Powassan virus. While the risk of contracting a tick-borne illness is lower in winter than during the rest of the year, it’s still important to take precautions, such as spraying insect repellent on your boots and clothing when hiking or doing yardwork.



We have more than 140 in-house experts who research, test, and compare. Submit your questions at [CR.org/askourexperts](https://www.consumerreports.org/askourexperts) ... and watch for the answers.

CR Insights



IN THE KNOW

FIND THE RIGHT SMARTWATCH FOR YOUR BUDGET

SMARTWATCHES HAVE a lot to offer: They can track your sleep and fitness goals, turn speech into texts, and pay for coffee with a single tap. But many popular models aren't cheap: The new Apple Watch Series 6, which sits at the top of our smartwatch ratings, is also one of the most expensive, starting at \$400 for a 40-mm GPS-only model and \$500 for the cellular-capable model. However, the Apple Watch SE—released at the same time as the Series 6 but with a more budget-friendly starting price of

\$280—represents a new middle ground for consumers.

The SE looks similar to the Series 6 and has many of the same features, including sleep-tracking, an always-on altimeter, and a compass. It also includes Fall Detection, and Family Setup (a tool for monitoring a child or elderly parent). Of course, the SE doesn't have some of the add-ons that the Series 6 model does, such as a blood-oxygen sensor, which—according to Apple—shows how effectively your body uses oxygen during

workouts and while asleep.

If you're not sure which to choose, ask yourself how often you'll use extras like the blood-oxygen sensor. Another thing to consider: Apple Watches are compatible only with iPhones. We also recommend the Fitbit and Samsung models at right, which are compatible with both Apple and Android phones, offer many of the same essential fitness and convenience features, and can go much longer without a charge than Apple Watches, which claim a short battery life of just 18 hours.

SMARTWATCH SUPREME

✓ **Apple Watch Series 6 (40 mm) Steel Case GPS + Cellular**
\$500

88

OVERALL SCORE



BUDGET-FRIENDLY BUY

✓ **Apple Watch SE (40 mm) GPS**
\$280

87

OVERALL SCORE



EASY TO USE & EXCELLENT FOR ANDROID

✓ **Samsung Galaxy Watch 3**
\$400

81

OVERALL SCORE



CLAIMED BATTERY LIFE OF SIX DAYS

✓ **Fitbit Sense Smartwatch**
\$330

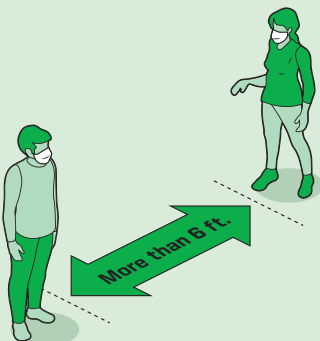
79

OVERALL SCORE



HEALTH UPDATE

STAY SAFE FROM COVID-19 THIS WINTER



Keep Your Distance

Americans have quickly become accustomed to social distancing, or standing at least 6 feet away from others in public. But 6 feet may not be enough: According to updated Centers for Disease Control and Prevention guidance released in the fall, the coronavirus can sometimes spread through the air at distances greater than 6 feet. That's most likely to happen when people are in enclosed spaces where particles can build up in the air over time, and when people are expelling lots of respiratory droplets by singing or exercising, the CDC says. If you'd like to see others, consider bundling up for masked outdoor visits, still keeping your distance. If you must enter poorly ventilated or crowded indoor areas, wear a mask, limit your time inside, and wash your hands. Better yet, avoid such high-risk spaces altogether.

Share COVID-19 Information in Other Languages

If you have friends and family who don't speak English well, it can be difficult to share important information about the coronavirus. In an effort to relay COVID-19 prevention messaging to those not proficient in English, the CDC has set up an online multilingual communication toolkit with articles and infographics translated into more than 30 languages. Go to cdc.gov/coronavirus/2019-ncov/need-extra-precautions/communication-toolkit.html. Spanish speakers can also go to cdc.gov/spanish for a translated version of the CDC's website. The CDC's YouTube channel also features informative videos in American Sign Language.

FOOD IQ™

WHAT'S IN YOUR OATMEAL CUP?

THE MOST IMPORTANT attributes when choosing a breakfast are that it's healthy and quick to prepare, according to a 2020 survey from market research firm Mintel. Single-serve oatmeal cups—most of which just require adding hot water or a zap in the microwave—satisfy the need for a speedy breakfast and also seem like a healthy choice, touting whole grains or “superfood oats.” But do you sacrifice nutritional benefits when you opt for instant oats over longer-cooked ones? After evaluating 24 cups from popular brands, our experts share three of our healthy picks and what to look for on the label before you pop the top.

Note the Kind of Oats

All types of oats are whole grains. Instant oats are processed into thinner flakes than steel cut or rolled oats, which means they are digested more quickly and can lead to spikes in blood sugar levels. Look for brands—such as Better Oats Steel Cut Maple & Brown Sugar Cup and Nature's Path Organic Hot Oatmeal Maple Pecan—that specify steel cut or rolled oats on the package.

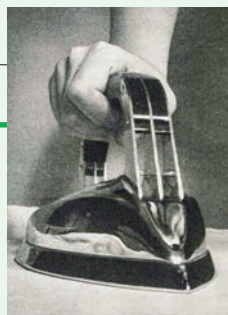
Check for Added Sugars

The amount of added sugars in your cup matters more than the type of sugar it contains. Coconut sugar, brown sugar, cane sugar, or maple sugar may sound

PHOTOS, BOTTOM LEFT TO RIGHT: CONSUMER REPORTS; ECOBEE; WALT DISNEY TELEVISION/ADAM TAYLOR/GETTY IMAGES; CONSUMER REPORTS

CR Time Traveler HOME INNOVATIONS

1936 We test 15 new “automatic irons,” which provide temperature controls that can be adjusted for different fabrics.



1947 CR tests four new automatic washers that rinse and wring out laundry, “all without the help of a housewife.” One bargain buy washes just as well as the others, for \$105 less.



1956 We test a popular new type of TV: “portable” sets with handles and small screens around just 14 inches. Their picture isn't as clear as the one on regular-sized TVs we test, but consumers love them.

1966 We test an unusual but convenient type of electric can opener: the handheld Ronson Can-Do. In our review we say “it is very fast, almost disconcertingly so.”



healthier than plain table sugar, but they offer no health advantages. And 10 of the 24 oatmeal cups we looked at had a whopping 10 to 18 grams of added sugars—that's 2½ to 4½ teaspoons. Three of the cups contained no added sugars (such as the Mush and RXBar RX A.M. cups shown), but if you like a little sweetness, pick a cup that has no more than 9 grams per serving.

Scrutinize the Ingredients List

Think twice about picking a product with pea protein, soy protein isolate, or chicory root fiber—those are highly processed ingredients, and it's better to get nutrients from whole foods. Instead, check the label for healthy boosts such as additional whole grains (the Purely Elizabeth cup, at right, contains amaranth and quinoa), as well as nuts and seeds, which add fiber, and healthy fats.



Mush Overnight Oats Apple Pie
\$4.50 for 6 oz.

CALORIES	230
CARBOHYDRATES	34 g
ADDED SUGARS	0 g
FIBER	5 g
PROTEIN	7 g

Notes: No added sugars. Ready-to-eat straight from the fridge.



Purely Elizabeth Apple Cinnamon Pecan Superfood Oats
\$2.99 for 2 oz.

CALORIES	230
CARBOHYDRATES	37 g
ADDED SUGARS	3 g
FIBER	6 g
PROTEIN	7 g

Notes: Organic. Contains amaranth, quinoa, pecans, and several types of seeds.



RXBar RX A.M. Oats Maple (shown above)
\$2.99 for 2.18 oz.

CALORIES	250
CARBOHYDRATES	35 g
ADDED SUGARS	0 g
FIBER	6 g
PROTEIN	12 g

Notes: No added sugars. Egg whites provide extra protein.

Go to [CR.org/oatmeal0121](https://www.consumerreports.org/oatmeal0121) for details on all 24 cups we evaluated.



1977 CR tests 24 DIY home burglar alarms, including a model with new motion-detecting technology, cleverly disguised as a book.

1997 The year's hottest home innovation is the DVD. CR tests three of the first players on the market and urges consumers to wait to buy, because prices (around \$600) are just too expensive.



2007 Stuart Lombard claims to create "the world's first smart thermostat." He says other thermostats were "not internet connected, they were dumb as a doorknob."

2013 Jamie Siminoff presents the original iteration of the Ring, a WiFi-connected video doorbell, then called the "doorbot," on the TV show "Shark Tank."



✓ **Nest Learning Thermostat**
\$250

83 OVERALL SCORE



2021 The Nest Learning Thermostat, which can be controlled by an app, tops our lab ratings of smart home thermostats, though it's also one of the priciest.

FACE-OFF

CAN A HALF-PRICE HUMIDIFIER GET THE JOB DONE?

WHEN YOU CRANK UP your heat in the winter, the humidity level inside your home can quickly drop from pleasant to parched. Large humidifiers, which generate enough moist air to cover spaces between 500 and 1,000 square feet, can help keep spacious rooms from feeling like a desert. Plus, models with large water tanks run longer on fewer refills than smaller sizes—but they can be pricey: Some large humidifiers in our ratings were priced around \$200. Do you really need to pay that much to humidify a big room? To find out, we compared a \$140 Rowenta model with a Honeywell competitor for \$70.

The cheaper Honeywell has a lot to offer. It provided Excellent moisture output in large rooms in our tests, outperforming the Rowenta, which earned only a Good rating. It also has a 73-inch-long power cord—about a foot

longer than the Rowenta’s cord, making it easy to position where you need it. Our convenience test found that the Honeywell is easy to clean (something you should do at least weekly, if not daily, regardless of model), but keep in mind that it’s evaporative, meaning its fan blows cool air over a wet “wick” or filter to produce the moisture. The wick costs about \$6.50 and should be replaced after about three months of use, or when it becomes crusty or brittle.

The Rowenta, on the other hand, is ultrasonic, using vibrations to produce mist, and doesn’t require a wick. It also has a few extras for its higher price, including both cool and warm misting; the Honeywell offers only cool. This cool mist can help with swelling in your nasal passages when you have a cold, though people without a cold may prefer the comfort of a warm mist in winter. And the Rowenta has a humidistat, which shuts off the unit when the room reaches a chosen humidity level. (In colder climates, the humidity should range from 30 to 40 percent to prevent window condensation.) It can also handle hard tap water better and is slightly quieter, which may be best if you’ll use it in or near a bedroom.

Still, the Honeywell may be the better value for budget-savvy consumers.



Honeywell HCM-350
\$70

74
OVERALL SCORE



Rowenta HU5230U
\$140

72
OVERALL SCORE

⬆️	OUTPUT	⬇️
⬆️	CONVENIENCE	⬆️
⬆️	NOISE	⬆️
⬆️	EFFICIENCY	⬆️
⬇️	HARD WATER	⬆️



CR MONEY SAVER

CERTIFIED REPAIR SHOPS

IS THE PRICE you’re being charged for your car’s repair or maintenance fair? To help you know, and ensure you get a good price, CR partnered with RepairPal, an auto repair and maintenance information company, to provide you with easy access to quality shops.

Those in the Certified Repair Shop program must meet stringent requirements to enroll. Certified shops not only need to have the proper experience and equipment to do the job right but also must meet high standards for customer satisfaction, as measured by surveyed feedback from verified customers—not just intel gleaned from online reviews. To be in the program, repair shops must offer certain guarantees and protections, including a minimum 12-month, 12,000-mile warranty on all parts and labor, and the parts they use must be original equipment (from the car factory) or high-quality aftermarket components.

You’re also guaranteed to get a fair price based on industry guidelines, national averages, and costs in your area. Simply go to [CR.org/carrepair](https://www.crisp.org/carrepair) to use our Car Repair Assistant, a tool that estimates the cost of the service you need before your visit. If the shop exceeds that estimated cost, RepairPal—not you—pays the difference. You shouldn’t have to travel far to find a certified shop: 78 percent of CR members have a RepairPal certified business within 10 miles, and 52 percent of CR users have four or more RepairPal certified shops within 10 miles.

ICON: ELIAS STEIN



PRODUCT SPOTLIGHT

THE VALUE OF A GOOD RICE COOKER

STOVETOP RICE SEEMS easy enough—you measure out the rice and water, and set it on the burner. But there are variables that can lead to mushy or burnt rice, including timing, how hot the burner is, the type of pot you use, the tightness of the lid’s seal, and even your kitchen’s humidity level. Rice cookers shrug off all those variables because they’re a sealed vessel with a precisely controlled heat source. The best ones make perfect rice every time with the press of a button—convenient if you regularly make fried rice, arroz con pollo, or plain steamed rice. But our experts wanted to know: Do all rice cookers consistently deliver great rice—and why buy one over a multi-cooker with a rice function?

So we tested six rice cookers

from popular brands, cooking small and large batches of long-grain white rice and long-grain brown rice. A panel of trained tasters then judged each batch in a blind side-by-side taste test. The ideal batch of rice was cooked evenly top to bottom—no mushy or crunchy pockets—with soft, fluffy grains. Then tasters compared the taste from each model with rice made in a multi-cooker. We also evaluated convenience, such as how easy each model was to clean, and the clarity of control settings.

“Most rice cookers perform very well, though some weren’t as good at making brown rice,” says Larry Ciufo, CR’s lead rice cooker tester. **“But even the lowest-rated rice cookers make better rice than any multi-cooker we’ve tested—and often cost much less,”** he says. And many can also cook oatmeal or other grains. Of course, a dedicated rice cooker can’t slow-cook or pressure-cook meats, so buying one depends on whether grain dishes are a priority for you. At right, see a few of the best rice cookers we tested, as well as a top-rated multi-cooker.

76

OVERALL SCORE



PERFECT RICE, BUT PRICEY

✓ **Zojirushi NP-GBC05**
\$270

■ 4/5 RICE COOKING

■ 5/5 CONVENIENCE

This 3-cup induction model makes great rice but takes its sweet time—almost 45 minutes to cook white rice and 90 minutes for brown rice. Still, it’s the best-performing rice cooker we tested, and the only model we tried that has raised buttons and audio cues for people with visual impairments.

70

OVERALL SCORE



BUDGET-FRIENDLY BUY

✓ **Instant Zest 8-cup**
\$30

■ 4/5 RICE COOKING

■ 4/5 CONVENIENCE

Note that the Zest’s “8-cup” name refers to cooked rice. It turns out white rice in a little over 30 minutes and brown rice in about 60. Though the white rice was cooked through, it was often too sticky. Brown rice had a good texture and a nice bite. It also has presets for making quinoa and oatmeal.

64

OVERALL SCORE



BEST FOR SEASONED RICE

✓ **Aroma ARC-954SBD**
\$40

■ 4/5 RICE COOKING

■ 4/5 CONVENIENCE

White rice takes about 45 minutes, and brown rice about 55 in the Aroma. Some brown rice came out a bit undercooked, and some white rice was slightly mushy. But if you make seasoned rice, you may like using its sauté mode to soften onions or toast spices. It also has presets for quinoa and oatmeal, and a five-year warranty.

WHAT ABOUT A MULTI-COOKER?

82

OVERALL SCORE



TOP MULTI-COOKER

✓ **Zavor Lux LCD ZSELL02**
\$160

■ 4/5 RICE COOKING

■ 4/5 CONVENIENCE

This 10-function multi-cooker rates Very Good at cooking rice—but it still falls short of the rice made by any rice cooker we tested.* That said, the Zavor can help with a lot more tasks: It’s Excellent at pressure-cooking and slow-cooking, and Very Good at steaming veggies.

*We rate different categories of kitchen appliances on different scales, so a Very Good rating for rice cooking in a rice cooker is held to a higher standard than a Very Good rating for rice cooking in a multi-cooker.

REPAIR OR REPLACE

DOES YOUR LG REFRIGERATOR HAVE COOLING PROBLEMS?



IF YOU OWN an LG French-door or side-by-side refrigerator manufactured between Jan. 1, 2014, and Dec. 31, 2017, you might be entitled to anywhere from \$50 to more than \$3,500 in compensation as part of a class-action lawsuit LG settled in September.

The lawsuit alleged that almost 1.6 million LG refrigerators sold might stop cooling because of compressor-related problems. The settlement covers 61 models, which are listed with the relevant serial number ranges at lgfridgesettlement.com. If

you own one of the covered models, **the deadline to file a claim for a past cooling problem is Jan. 11, 2021**. Go to lgfridgesettlement.com to fill out a claim form. You can also email or physically mail a completed form to LG.

In the settlement agreement, LG maintains that the refrigerators are not defective and denies any wrongdoing. “We agreed to the settlement to avoid further litigation costs and in the interest of customer satisfaction,” says John Taylor, senior vice president of LG Electronics USA. Still, LG

is providing owners of models covered in the settlement with an extended five-year warranty from the purchase date, and LG’s Enhanced Customer Care Program for any future repairs related to the problem—even if you have yet to experience cooling problems (as long as the cooling issue occurs within five years of the purchase date). If your fridge already needed repairs, LG is also offering monetary compensation if you file a claim by the deadline, but the amount awarded varies on a case-by-case basis.

HOW LG FRIDGES RATE IN CR’S RELIABILITY SURVEYS

In our member surveys of French-door and side-by-side fridges, LG’s predicted reliability ratings are just Good (yellow), rather than Very Good or Excellent—but none of the other 16 brands we surveyed in these categories rate any better—and a few even rate worse. So CR still recommends certain models of LG French-door and side-by-side fridges that perform well enough in our rigorous lab testing.*

FRENCH-DOOR

LG, Signature Kitchen Suite, Bosch, Café, Fisher & Paykel, GE, Kenmore, KitchenAid, Whirlpool, Amana, Jenn-Air, Maytag, Monogram

Samsung, Frigidaire, Viking

Electrolux

SIDE-BY-SIDE

LG, Kenmore, KitchenAid, Samsung, Whirlpool, Amana, Frigidaire, GE, Maytag

Bosch, Café, Electrolux

JANUARY IS THE BEST TIME TO BUY ...

For more info, go to CR.org/buy0121.

BEDDING & LINENS



HUMIDIFIERS



ELLIPTICALS



DIGITAL SCALES





RECALLS

TO STAY INFORMED ABOUT RECALLS FOR YOUR VEHICLES, READERS WITH MEMBERSHIP CAN USE OUR FREE CAR RECALL TRACKER AT [CR.ORG/MORE](https://www.cra.org/more).



VOLKSWAGEN VEHICLES

Volkswagen is recalling more than 218,000 Jetta sedans from the 2016 through 2018 model years to repair a problem in which bolts in the engine may loosen over time, potentially leading to a fuel leak that could cause a fire. Drivers may notice a fuel odor or see leaking fuel coming from the engine compartment, according to a document from the National Highway Traffic Safety Administration (NHTSA).

What to do: Drivers who notice a fuel smell or leak in any vehicle should immediately pull over to a safe location and shut off the vehicle. "Never drive or run a vehicle that smells of fuel or is leaking," says John Ibbotson, CR's chief automotive services manager. Then contact an authorized Volkswagen dealer, who will be able to provide towing. The manufacturer says the fix involves replacing the fuel rail bolts and, if necessary, the fuel rail. Owners can also contact Volkswagen at 800-822-8987.

PRESTONE ANTIFREEZE

Prestone is recalling about 687,000 antifreeze products (14 different models under six different brand names) because they contain ethylene glycol, which must be in child-resistant packaging as required by the Poison Prevention Packaging Act. The products' caps were not rotated enough during manufacturing to engage the

child-resistant mechanism, posing a risk of poisoning if the contents are swallowed by young children. The products were sold at Ace Hardware, Advance Auto Parts, AutoZone, O'Reilly Auto Parts, Highline, Home Depot, Lowe's, Pep Boys, and Walmart stores and online from January 2020 through May 2020 for \$10 to \$22.

What to do: Twist the cap until the child-resistant mechanism is engaged. Call Prestone at 888-269-0750 or go to [prestone.com](https://www.prestone.com).

RING VIDEO DOORBELLS

Ring is recalling about 350,000 Ring video doorbells (2nd Generation) because the battery can overheat when the incorrect screws are used for installation, posing fire and burn hazards. The doorbells were sold at electronics and home goods stores nationwide and online at Amazon and [ring.com](https://www.ring.com) from June 2020 through October 2020 for approximately \$100.

What to do: Contact Ring at 800-656-1918 for revised installation instructions.

ENDLISS TECHNOLOGY PHONE CASES

Endliss Technology is recalling about 367,000 Trianium cell phone battery pack cases because the lithium-ion battery inside can overheat, posing a burn hazard to consumers. The cases were sold

at Amazon from September 2014 through July 2020 for \$30 to \$100.

What to do: Stop using the phone case and dispose of it following local laws on battery disposal. Call Endliss at 844-609-0874 or go to [tranium.com/recall](https://www.tranium.com/recall) for details and to get a free replacement power pack.

HARBOR BREEZE CEILING FANS

HKC-US is recalling about 280,000 Harbor Breeze Kingsbury 70-inch ceiling fans because the light globe can fall from its housing, posing impact and laceration hazards. The fans were sold at Lowe's stores and online at [lowes.com](https://www.lowes.com) from April 2010 through December 2018 for about \$230.

What to do: Call HKC at 877-239-7267 or go to [hkcfans.com](https://www.hkcfans.com) to request a new owner's manual and light kit label to ensure correct installation of the light.

JAKKS PACIFIC SCOOTERS

Jakks Pacific is recalling about 162,300 MorfBoard Skate & Scoot Combo scooters with "Y" handlebars because the handlebar joint can break, posing a fall hazard. The scooters were sold at Walmart, Target, Toys "R" Us, Meijer, and BJ's Wholesale Club stores, and at Amazon and [morfboard.com](https://www.morfboard.com) from February 2018 through August 2020 for about \$100.

What to do: Take the scooter away from children and contact Jakks Pacific at 855-602-5464 or go to [jakks.com](https://www.jakks.com) to receive a free replacement "T" handlebar.

KOBALT CORDLESS ELECTRIC CHAINSAWS

Hongkong Sun Rise Trading is recalling about 150,000 Kobalt 40-volt lithium-ion cordless electric

chainsaws because the chainsaw can remain in the "on" position, posing a laceration hazard. The chainsaws were sold at Lowe's stores and online at [lowes.com](https://www.lowes.com) from January 2014 through March 2020 for about \$200.

What to do: Stop using the chainsaw and contact Hongkong Sun Rise Trading at 855-378-8826, or go to [greenworkstools.com](https://www.greenworkstools.com) for details and to arrange a free repair.

PELOTON BIKE PEDALS

Peloton is recalling about 54,000 PR70P clip-in pedals fitted on about 27,000 Peloton bikes because the pedals can break unexpectedly during use, posing a laceration risk. The pedals were sold at [onepeloton.com](https://www.onepeloton.com), and through Peloton telephone sales and showrooms from July 2013 through May 2016. The pedals were on Peloton bikes that sold for about \$2,000.

What to do: Stop using bikes fitted with these pedals. Peloton is notifying all affected consumers directly on how to receive free replacement pedals, along with instructions for self-installation. Call Peloton at 844-410-0141.

BED BATH & BEYOND CHAIRS

Bed Bath & Beyond is recalling about 10,000 Salt lounge chairs because the locking mechanism on the chair frame can disengage, posing a fall hazard. The chairs were sold at Bed Bath & Beyond stores and online at [bedbathandbeyond.com](https://www.bedbathandbeyond.com) from April 2020 through August 2020 for about \$40.

What to do: Stop using the chairs and return them to any Bed Bath & Beyond for a full refund, or a credit if the purchase price can't be determined. Go to [bedbathandbeyond.com](https://www.bedbathandbeyond.com) for details.

Estimated ER-treated injuries



from manual snow
and ice removal in 2019

25,041

Source: National Electronic Injury Surveillance System.

PRODUCT UPDATE

THE LATEST RATINGS FROM OUR LABS

The Right Snow Blower for You

Here, the basics, for when you
don't want to shovel your way
through another snowstorm.

by Paul Hope



✓ Toro 38842
\$1,800

91 OVERALL
SCORE



INSIDE
CR'S LABS

Wet sawdust mimics
heavy snow, so CR Test
engineer Eric Hado can
keep testing even when
no snow is falling.

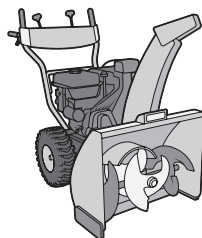
WHEN IT COMES to yard tools, few are more essential than a snow blower that works when you need it to. If your lawn mower won't start, your grass just grows a little shaggy until you can get it repaired. But if your snow blower won't start, you could be shoveling for hours just to pull out of your driveway.

How do you find a snow blower that won't leave you stranded? Check Consumer Reports' reliability ratings to see which brands are least likely to give you problems, based on data from CR members who own them. We rate the three types of snow blowers on the market: single-stage, two-stage, and three-stage. ("Stage" here refers to the mechanism used to collect and throw snow from the machine, and the more stages there are, the more powerful the snow blower is.)

Single-stage snow blowers rely solely on a high-speed auger (a corkscrew-shaped device) to collect snow and send it out through the chute. Because they scrape the ground, they're not the best choice for a dirt or gravel driveway. Two-stage machines add a fanlike impeller behind a raised auger to help throw the snow out of the chute with more force, which is useful in bigger snowfalls. Three-stage models have an additional piece of machinery: an accelerator for even faster snow clearing.

Snow blowers are powered in one of three ways: by gas, via a battery, or with a power cord plugged into an outlet. Single-stage machines are available in all three options. Most two- and three-stage snow blowers are gas-powered; based on our tests, gas models generally outperform their electric and battery-powered counterparts.

The best snow blower for your needs depends on how much snow you usually get. Here, we break down the right type of snow blower for you, based on



5 SNOW BLOWER FEATURES TO LOOK FOR

If you opt for a two- or three-stage machine, some of these features could help make your work easier. Note that certain features mentioned here are found only on larger models.

HEATED HANDGRIPS With these, you'll be able to wear thinner gloves, which will make it easier for you to maneuver your snow blower.

MULTIPLE SPEEDS A model with three or more speeds allows you to slow down to tackle a snowbank at the end of your driveway or speed up for areas with lighter snow.

EASY CHUTE CONTROLS A joystick or crank control lets you change the chute direction with one hand while keeping the other hand on the snow blower, so you don't have to stop the auger.

AIRLESS TIRES Solid plastic tires won't puncture or go flat, which is especially helpful if your driveway is unpaved or rough. They're rarely standard, but certain manufacturers sell them as an add-on.

HEADLIGHT You'll appreciate being able to see where you're going if you're out when it's early morning or dusk.

typical snowfalls in your area. (You can check the snowfall report by entering your city and state at the National Weather Service's website.) We also show you the most important features to look for and how to troubleshoot common snow blower problems.

If You Get 6 Inches of Snow or Less Per Storm

A single-stage battery-powered snow blower may be your best choice for tackling this level of snowfall: This type is easy to maneuver and is particularly adept at clearing paths, walkways, and decks. (Heavier gas snow blowers can be more difficult to handle.) Battery-powered models have prices similar to those of gas models, and you don't have to deal with storing gasoline (see below). CR advises skipping corded models; none we've tested in the past five years performed well enough for us to recommend.

If You Get up to 9 Inches of Snow Per Storm

If your area usually experiences moderate snowfall, you'll want a single-stage gas snow blower. These are smaller, lighter, and easier to maneuver than two- and three-stage gas models, but they're generally more powerful than battery models. (The exception, based on our tests, is the new Ego two-stage battery snow blower, which should have no problems handling moderate amounts of snow.) Gas models require an annual oil change; the job is pretty easy—you just drain the oil into a pan and refill with the type of oil specified in your owner's manual. Neglecting this task can cause the engine to wear, and even die, prematurely.

One important caveat: For the single-stage gas blower, the occasional big snow—we're talking over 9 inches—can be challenging: You'll need to blow snow halfway through the storm, as long as it's safe to do so, instead of making a single pass at the end. If those



big snows aren't a regular occurrence, it makes sense to go smaller rather than pay more for a heftier snow blower.

If You Get up to 16 Inches of Snow Per Storm

If you live in a perpetual winter wonderland, we recommend that you go for a two-stage gas snow blower. While they can be expensive—from \$400 to \$3,100—they're best for clearing a big snowfall. They can be heavy and bulky—often weighing 200 to 300 pounds—but most have features designed to make handling easier, such

as self-propelled wheels and steering clutches. Dave Trezza, who oversees snow blower testing at Consumer Reports, says that even with these features, "it's not like pushing a lawn mower. It's more like pushing a big, heavy wheelbarrow." As with single-stage gas models, you'll need to change the oil annually to keep your snow blower ready for next winter.

If You Get More Than 16 Inches of Snow Per Storm

You need a powerful snow blower, so opt for a three-stage gas model. The

accelerator in these snow blowers helps them suck up and expel snow even faster than many of the best two-stage models. They're expensive—the prices for those in our ratings range from \$1,200 to \$2,600—but you get a lot for the money, including features such as headlights and heated handgrips that are standard on the models in this category. These machines are quite heavy, though—certain models top out at around 300 pounds—which can make them harder to handle and maneuver than more modest two-stage machines.

HOW TO FIX COMMON SNOW BLOWER TROUBLES



THE PROBLEM

The Blower Won't Start

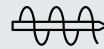
If you have a gas model, first check to see whether there's gas in the tank. If the gas blower has an electric starter, make sure the blower is plugged into an outlet. Otherwise, if the gas is more than 30 days old, ethanol in the fuel may have caused moisture to build up in the fuel system. Use a gas siphon to drain the gas from the blower, then refuel with fresh stabilized gasoline and try again. For electric models, make sure that the tool is plugged in or that the battery is fully charged.



THE PROBLEM

The Engine Runs, but the Auger Won't Turn

With the engine off and key removed, inspect the auger and/or impeller for obvious problems, such as a rock or chunk of ice that's keeping moving parts from turning. Next, inspect the shear pins, typically located near the auger. Check your manual for the exact location. These pins will break when your blower hits an obstruction—like a rock—then the auger will stop working. Replacing these pins should get your snow blower working again. You can buy them online or in stores; it's always smart to keep a few extra on hand.



THE PROBLEM

The Auger or Discharge Chute Is Clogged

Turn off the engine of a gas snow blower or unplug the cord, or remove the battery, of an electric model. Use a clearing tool or broom handle to clear the clog—never your hands or feet, even if you're wearing gloves: A stationary auger and impeller are often under enough belt tension to harm hands and feet, even with the engine or electric motor off.




THE PROBLEM

The Snow Blower Runs Rough

If your gas blower is shaky or jittery when it's on, there may be a problem with fuel combustion. Check the fuel or spark plugs—each is fairly simple to do. First, drain the fuel from the tank and refill it with fresh gas. Next, try replacing the spark plug by disconnecting the rubber boot attached to the plug and removing the plug with a ratchet wrench. You'll need a special spark plug socket, available at home centers or automotive stores. Replace the plug with a new one. If neither of these works, you'll have to take the snow blower to a dealer for repair; call the manufacturer to locate one near you.

Ratings ➤ **Snow Wonders** These snow blowers from our tests make quick work of clearing your driveway and paths, whether you get a little snow or a lot.

Brand + Model	Overall Score	Price	Survey Results	Test Results						Features + Specs									
			Predicted reliability Owner satisfaction	Removal speed	Plow pile removal	Throwing distance	Surface cleaning	Handling	Noise	Controls	Engine size	Electric start	Multiple speeds	Single hand controls	Free-wheel steering	Single-lever chute adjustment	Headlight	Heated handgrips	Width (in.)

SINGLE-STAGE BATTERY: BEST FOR LIGHT SNOW UP TO 6 INCHES

✔ Toro Power Clear e21 39901	66	\$650	—	—	⬇	⬆	⬆	⬆	⬆	⬆	60-volt			•	NA		2		21
✔ Snow Joe ION100V-21SB	66	\$800	⬇	⬇	⬇	⬆	⬆	⬆	⬆	⬆	100-volt			•	NA		2		21

TWO-STAGE BATTERY: BEST FOR LIGHT TO MEDIUM SNOW UP TO 9 INCHES

✔ Ego SNT2405 ⁽¹⁾	79	\$1,300	NA	NA	⬇	⬆	⬆	⬆	⬆	⬆	56-volt			•			4		24
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SINGLE-STAGE GAS: BEST FOR LIGHT TO MEDIUM SNOW UP TO 9 INCHES

✔ Toro Power Clear 821 QZE 38757	80	\$750	⬆	⬆	NA	⬆	⬆	⬆	⬆	⬆	252-cc	•		•	NA				21
✔ Toro 824 QXE 36003	76	\$880	⬆	⬆	NA	⬆	⬆	⬆	⬆	⬆	252-cc	•	•	•	NA	•			24

TWO-STAGE GAS: BEST FOR MEDIUM TO HEAVY SNOW UP TO 16 INCHES

✔ Toro Power Max HD 928 OAE 38840	92	\$1,400	⬆	⬆	⬆	⬆	⬆	⬆	⬆	⬆	265-cc	•	•	•		•	1		28
✔ Troy-Bilt Arctic Storm 30	92	\$1,500	⬆	⬆	⬆	⬆	⬆	⬆	⬆	⬆	357-cc	•	•	•	•	•	1	•	30
✔ Toro 38842	91	\$1,800	⬆	⬆	⬆	⬆	⬆	⬆	⬆	⬆	375-cc	•	•	•	•	•	1	•	32
✔ Ariens 926078	90	\$3,100	⬆	⬆	⬆	⬆	⬆	⬆	⬆	⬆	420-cc	•	•	•			1	•	28
💰 Cub Cadet 2X 30" HP	90	\$1,200	⬆	⬆	⬆	⬆	⬆	⬆	⬆	⬆	357-cc	•	•	•	•		2		30
✔ Ariens Deluxe 30 EFI	90	\$1,800	⬆	⬆	⬆	⬆	⬆	⬆	⬆	⬆	306-cc	•	•	•			1	•	30
✔ Simplicity 1696920 ⁽²⁾	82	\$1,500	⬆	⬆	⬆	⬆	⬆	⬆	⬆	⬆	306-cc	•	•	•	•		2	•	24
💰 DR Power Equipment SB13124DEN ⁽²⁾	79	\$800	—	—	⬆	⬆	⬆	⬆	⬆	⬆	212-cc	•	•	•			1	•	24

THREE-STAGE GAS: BEST FOR HEAVY SNOW OF MORE THAN 16 INCHES

✔ Cub Cadet 3X 30" Pro H	89	\$2,600	⬆	⬆	⬆	⬆	⬆	⬆	⬆	⬆	420-cc	•	•	•	•		2	•	30
✔ Cub Cadet 3X 30" HD	85	\$1,700	⬆	⬆	⬆	⬆	⬆	⬆	⬆	⬆	420-cc	•	•	•	•		1	•	30
✔ Cub Cadet 3X 26" Trac	84	\$1,800	⬆	⬆	⬆	⬆	⬆	⬆	⬆	⬆	357-cc	•	•		•		3	•	26

➤ Digital and All Access members can find the latest, complete ratings at [CR.org/snowblowers0121](https://www.consumerreports.org/snowblowers0121).

HOW WE TEST: **Overall Score** combines test results with survey data for predicted reliability and owner satisfaction. **Predicted reliability** reflects the likelihood of problems or breakage within the first five years for gas models or four years for electric and battery models. **Owner satisfaction** reflects how likely members are to

recommend their snow blower to others. Models with a dash (—) indicate that we have insufficient data for the brand, and these models get the category average score. For **Removal speed**, we use a highly controlled mixture of wet sawdust, packed in standardized piles, and time how long models take to clear the mixture. **Plow pile removal**

is an assessment of how quickly and thoroughly models cut through a large mound of wet sawdust, designed to simulate a pile left by the town plow at the end of your driveway. **Throwing distance** captures how far each model throws the mixture. **Surface cleaning** reflects how much of our mixture is left behind on a blacktop driveway.

Handling denotes how easy each machine is to push, pull, and turn. **Noise** is measured in decibels at the ear of the operator; a score lower than Good means you'll need hearing protection. **Controls** is our assessment of the ease of changing speeds, adjusting the discharge chute, and moving the handlebar.

YOUR ULTIMATE SM

How to connect smart speakers, doorbells, vacuums, TVs—even your sprinkler system—to better organize, control, and protect your home. Plus: CR's top-rated smart home products.

by Daniel Wroclawski

Our homes have been pulling double—or triple or quadruple—duty for almost a year, serving also as schools, offices, gyms, and more. But your home can work even harder: With connected devices you can automate tasks and chores so that your home actually anticipates your needs.

While smart home products can seem intimidating, they're becoming more mainstream, easier to use, and more prolific. "Over the past few years, we've been evaluating more smart devices, from speakers to video doorbells to water leak detectors," says Maria Rerecich, CR's senior director of product testing. And prices are falling, too—Philips now sells a \$13 color-changing smart bulb, and Wyze has introduced a \$30 video doorbell.

Maybe you're getting your feet wet with a basic smart speaker or looking to integrate a handful of devices. We have plenty of tips that will make it easier. To get started, here's a rundown of the 13 types of devices covered on the following pages.

1



2



3



4



5



1. Smart speakers

\$40 to \$500

A smart speaker's digital assistant (Amazon's Alexa, Google's Assistant, and Apple's Siri) can serve as the brains of a smart home, controlling other devices with voice commands or automating them.

2. Wireless security cameras

\$25 to \$400

You can view recorded and live footage on your phone, and receive alerts when the cam detects people, packages, and more.

3. Video doorbells

\$30 to \$250

A video doorbell lets

you view footage, receive alerts, and speak to visitors. Most need to be hardwired, but some are battery-powered.

4. Smart locks

\$100 to \$400

Smart locks give you keyless entry to your home and let you monitor who comes

and goes from your smartphone.

5. Smart lighting

\$8 to \$100

Control your lights with your phone or voice to change brightness, color, and more from inside the house or out. There's a variety of devices here: bulbs, lightstrips,

and fixtures, as well as smart on/off or dimmer switches that work with your existing light fixtures.

6. Smart plugs

\$15 to \$65

These small units connect a standard outlet to the internet. That means you can control whatever you

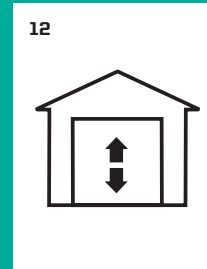
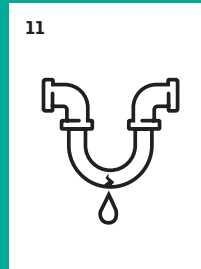
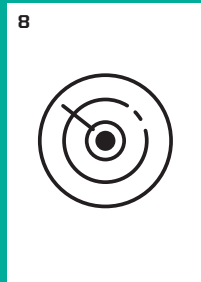
plug into them—from a coffee maker to a space heater—using your smartphone or smart speaker.

7. DIY security systems

\$180 to \$530

These internet-connected systems promise easy setup and simplicity. And for a

ART HOME TOOLKIT



monthly fee, many offer optional monitoring (meaning there's a pro watching for alarms just like with a traditional system).

8. Smart thermostats

\$65 to \$400
The best have "learning" algorithms that create custom heating

and cooling schedules. Most work with digital assistants, so you can crank up the heat with a voice command.

9. Robotic vacuums

\$190 to \$1,300
These little vacs roam your floors to suck up dirt and debris with little to no input. Most

connect to WiFi for app and voice control.

10. Smart TVs/streaming devices

\$30 to \$3,300
You may already own a smart TV or streaming media player to watch Netflix, Hulu, etc. But you can also control certain models with your voice using a

smart speaker and use them to view connected cameras and doorbells.

11. Water leak detector systems

\$350 to \$700
These systems watch for leaks and shut off the water supply to mitigate damage.

12. Smart garage door opener

\$40 to \$350
Connect your garage door to the internet so that you can open and close it (and check whether it's open or closed) from your smartphone or smart speaker.

13. Smart sprinklers

\$90 to \$300
Replace your sprinkler system's wall-mounted controller with one of these and it will use weather forecasts to adjust levels so that you don't over- or underwater.



Start With a Smart Speaker

A CONNECTED SPEAKER can take on a multitude of roles in your house. Speakers from Amazon or Google can add new abilities through voice apps known as “skills” or “actions,” while Apple smart speakers work with select apps from your iPhone or iPad. Here’s a small sampling of what you can do with a single speaker or a few working together. Some tasks require minimal setup in the speaker’s app, then can be activated by a voice command.

Streamline Your Mornings

- Launch a workout skill, such as Easy Yoga or 7-Minute Workout, to get in some exercise, and the speaker will broadcast the instructions.
- Listen to the morning news briefing from outlets such as NPR or USA Today while you make breakfast.

- With multiple smart speakers, you can ask the assistant to play a message throughout your home telling your kids the school bus is arriving soon—or that it’s time to log on for distance learning.
- Get the day’s weather forecast before you head out the door. And if you designate your office location, you can ask Alexa or Google “What’s my commute look like?” to check the traffic.
- Ask your speaker for a run-down of your calendar that day, whether you’re attending meetings in person or via Zoom.

Create a Multiroom Sound System

You can do this with multiple speakers that use the same assistant (Alexa, Google, or Siri). When you set up your speakers for the first time,

each assistant’s app will walk you through the process of creating a multiroom speaker group. When you’re finished, tell the assistant to, for example, play music downstairs.

Enlist a Sous Chef

Alexa- and Google-enabled smart speakers can help out in the kitchen.

- Need inspiration? Say “Find recipes for [blank],” then scan through the ideas. This requires a speaker with a touch screen; see our picks, at right.
- When whipping up an elaborate meal or cooking separate dishes for picky eaters, set multiple kitchen timers with commands like “Set a pasta timer for 10 minutes; set a broccoli timer for 7 minutes.”
- When you run out of a staple during meal prep, tell your smart speaker “Add [blank] to the shopping list.”
- Ended up burning dinner? Ask your speaker to call your favorite restaurant so that you can order delivery.

Keep Tabs on an Elderly Family Member

If you have a loved one who lives alone, Amazon’s free elder care feature for its smart speakers, called Alexa Care Hub, monitors their interactions with the speaker and sends you alerts if it notices no activity for an extended period. The feature allows you to call or video chat your family member to check in, or they can ask Alexa to call you for help, if needed. It could be a light-touch way to keep an eye on a relative who wants to maintain a degree of independence, says Justin Brookman, director of privacy and technology policy for CR. “As with any surveillance technology, I can see potential for abuse, too. People might not understand they’re being tracked, especially if they’re not the ones setting up Alexa.”

Use It as a Security System

Thanks to its microphones and sound-detection algorithms, your Amazon or Google speaker can stand in for a basic security system. Amazon’s free service, called Alexa Guard, can alert you when you’re away if your speaker detects the sounds of smoke/CO alarms or glass breaking. (Or pay \$5/month for an upgraded version.) With Google’s Nest Aware service, \$6/month, your speaker will alert you if it hears a smoke alarm or glass breaking. You’ll also be able to call your home’s 911 dispatcher from the Google Home app (handy if you’re out), though not from the speaker itself. Enable these services from the Alexa and Google Home apps.

SMART SPEAKERS WITH A SCREEN

- 69 AMAZON ECHO SHOW (2ND GENERATION) \$230**
- 63 GOOGLE NEST HUB MAX \$230**
- 61 JBL LINK VIEW \$300**

Add More Devices—and Control Them With Simple Voice Commands

YOUR SMART SPEAKER can interact with many other devices. With each new addition, you'll get increased functionality. The setup doesn't need to be complex.

To connect devices to your speaker, you'll have to add them in your assistant's app (the Alexa app, Google Home app, or Apple Home app). Know that not as many products work with Apple HomeKit/Siri compared with Alexa and Google. Some products use the separate Apple Shortcuts or Google Assistant app to connect to their assistants. To get you started, here are six devices that can work with your speaker.

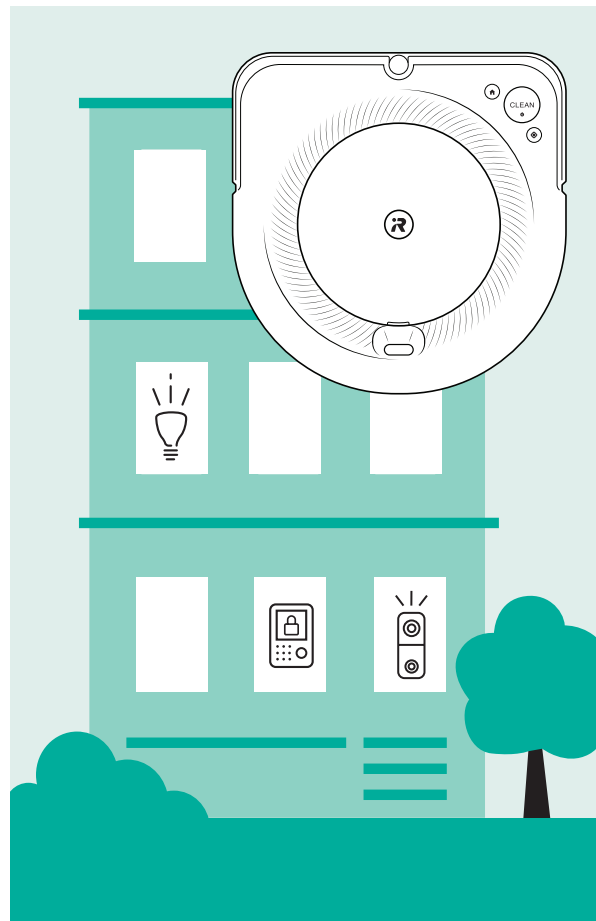
- Smart bulb/plug/switch: Give the lights a name in your assistant's app, then say, for instance, "Turn on the hall lights."
- Video doorbell: "[Assistant],

show me the front door." For step-by-step guides on connecting a doorbell to Alexa or Google, see our guides at [CR.org/echo0121](https://www.cnet.com/tech/smart-home/cr.org/echo0121) and [CR.org/nest0121](https://www.cnet.com/tech/smart-home/cr.org/nest0121).

- Robotic vacuum: "Start the robot vacuum." (You'll need a connected model; see two top picks from our tests, below.)
- Smart thermostat: "Turn up the heat" when you're cold.
- Wireless printer, with Alexa: "Print out the grocery list."
- Smart garage door: "Close the garage door."

ROBOTIC VACUUMS

- 81** **iROBOT ROOMBA S9+**
\$1,300
- 71** **EUFY 30C**
\$300



HOW TO LOCK IT ALL DOWN

This simple truth bears repeating: Anything you connect to the internet runs the risk of getting hacked or controlled remotely by someone else. To help mitigate such risks, follow these privacy and security guidelines.

- Use strong, unique passwords for each device, and store them in a password manager so that you don't forget them.
- Use two-factor authentication, if available, on all your devices. This feature sends a second, temporary passcode to you via text, email, phone call, or an authentication app to verify that it's you trying to log into the devices' app or site.
- Enable automatic updates on all devices that support it (including your WiFi router). "There is no perfect smart device that is secure forever," says Cody

Feng, CR's test engineer for privacy and security. "Automatic updates can shorten the amount of time that devices remain vulnerable to unpatched security flaws."

- Be thoughtful about the rooms you place smart speakers in, due to their always-on microphones. Or mute them when you don't require their assistance.
- Periodically review and delete your smart speaker's audio recordings. Amazon, Apple, and Google let you do this in the settings for their assistants.
- It might sound obvious,

but aim security cameras where you need them, not where you don't. Avoid putting them in private areas, such as bedrooms.

- Think twice about whether to give devices access to the location data from your smartphone. It might be helpful for your smart thermostat to know when you're on your way home, but it's not that beneficial for your video doorbell. The trade-off? You might miss out on certain features, such as the ability to share your video doorbell footage with your neighbors.



Automate Even More by Syncing Multiple Devices

TO MAKE YOUR smart home truly run itself, you can create routines via your speaker's digital assistant. These simple programs, usually made up of "if, then" lists that you create (as in, IF you arm the security system, THEN turn off the lights). Once they're set up, certain conditions will automatically trigger the routines, or you can activate them with voice commands you choose. Both Amazon and Google use the term "routines," but Apple differentiates between scenes and automations: Scenes are

activated with your voice (or a button press in the Home app); automations run on their own.

Control a Few Devices With a Single Voice Command

Use the Amazon Alexa, Google Home, Apple Home, and/or Apple Shortcuts apps to create your own routines. The interface in each app is slightly different, but the process is essentially the same: You type in the command you want to give (such as "Alexa, good night"), then choose the devices you want to automate, along with the changes you want those

devices to make. For example, you might select a smart plug (connected to a fan) and have it turn on. When you're done crafting your routine, enable it so that you can use the voice command. Here are a few basics to get you started:

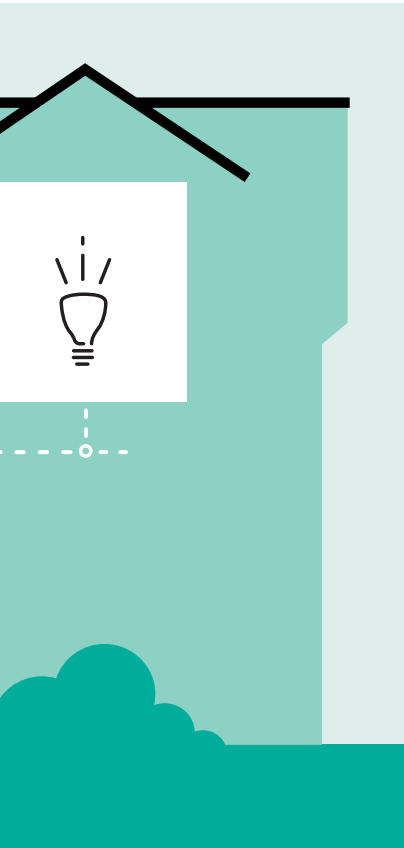
- "Good night"—lock the door, turn off the lights, and fire up the robotic vacuum to clean while you sleep.
- "Good morning"—turn on the lights, turn up the heat, and play the morning news.
- "It's movie night"—dim the lights, turn on the TV, and open Netflix.

For complete step-by-step instructions on how to use Alexa, Google Assistant, and Siri/Apple HomeKit to control your smart home, go to CR.org/alexa0121, CR.org/google0121, and CR.org/siri0121.

Let Your Smart Home Anticipate Certain Needs

The following routines happen automatically when certain conditions are met, but they're possible only with Alexa and Siri. Outside of voice commands, the Google Assistant can trigger routines only at a specific time or when you leave/arrive at home. Google users aren't completely out of luck, though. There are third-party services, such as IFTTT or Yonomi, that can be used to automate all sorts of devices. (Yonomi is free; IFTTT charges a monthly fee of \$4 after three free custom automations.)

- When your security camera detects motion outside at night, have your speaker's digital assistant automatically turn on or brighten outdoor



lights. This is a great way to deter potential intruders at night without blaring an alarm. Simply create a routine that activates when your outdoor security camera detects motion at night and have it turn on outdoor lights (or set their brightness to 100 percent).

■ When you arm your security system (see two top picks, below) when you're leaving home, have your digital assistant set the thermostat to turn down the heat.

DIY WIRELESS SECURITY SYSTEMS

86 **ABODE ESSENTIALS STARTER KIT** \$250

83 **SIMPLISAFE THE ESSENTIALS SS3-01** \$270

3 POTENTIAL PITFALLS TO AVOID

The functionality of connected devices can be pretty slick, but some aspects of smart home gear can still cause headaches.

1. Not all devices work well together

For example, you can't view live video feeds from Ring cameras and doorbells (owned by Amazon) on Google Nest smart displays. However, Amazon, Apple, Google, LG, Samsung, and more than 100 other companies are working on a new standard called Project Connected Home Over IP (CHIP) that could finally end the compatibility problems that have plagued the smart home industry since its early days. CHIP-compatible products will enter the market in late 2021, but until then, your best bet to ensure compatibility is to choose one eco-system and stick to it.

2. Smart appliances aren't that smart

Though connected speakers, thermostats, and the like are growing exponentially more popular, the same can't be said for their cousins in the large appliance aisle. CR's consumer experience & usability research team conducted a qualitative study last March and found that the connected features of these appliances often don't work well or aren't very useful. In our study, consumers found it

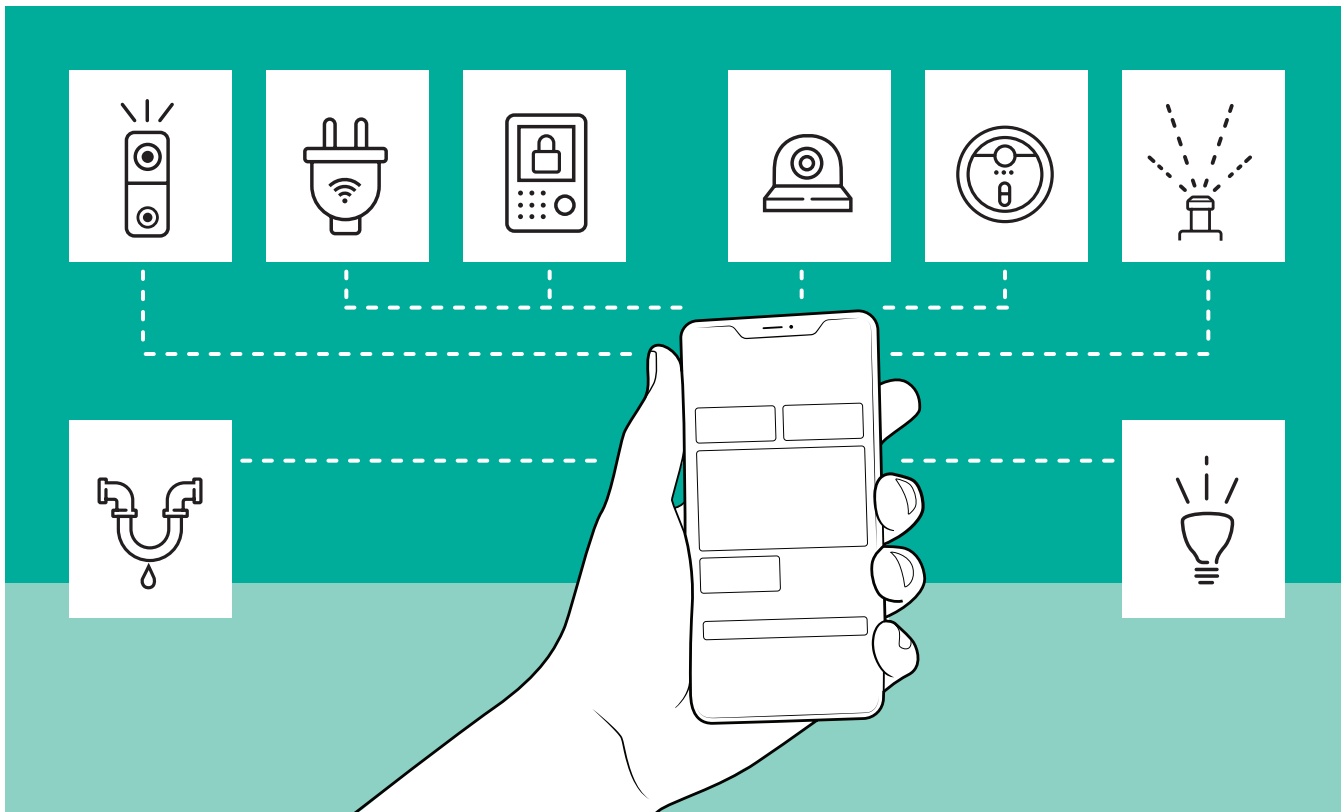
difficult to connect smart appliances, such as dishwashers and ovens, to WiFi. They also found the smartphone apps to be glitchy and unreliable. "Connected appliances should help people get back to their lives, rather than adding additional mental burden," says Charu Ahuja, CR's director of consumer experience & usability research.

Smart features that consumers want, such as remote start to preheat the oven and internal cameras to check food from afar, aren't yet widely available. If you're shopping and into the idea, make sure the connected features you want are available on the model you're considering. One study participant was disappointed to learn that some features in her appliance's app weren't available on her lower-end model.

3. Manufacturers can (eventually) disable your device

Say you buy a product from a startup and the company is acquired or goes under. Your device could get "bricked," or stop working. We've seen this happen to folks who purchased, for example, Guardzilla security cameras and Revolv smart home hubs. It tends to be safer to buy smart devices from more established brands. The trade-off: privacy concerns, due to the vast amounts of data these companies collect. "And big companies may piece together data from different devices and services you use, and make a more detailed digital profile about you," says Cody Feng, CR's test engineer for privacy and security.





When One Device Is All You Need

NOPE, YOU DON'T have to invest in multiple products (or even a smart speaker) if you'd like to set up some targeted automations. A stand-alone device—one that's designed to handle a single chore or task—can prove surprisingly useful, no other hardware required.

Keep an Eye on Your Home With Smartphone Alerts

Just about every connected device is capable of sending simple push notifications. Here are a few ways you can deputize these devices to keep watch over your house, and your family, 24/7:

- Know exactly when the kids get home from school, with an

alert from a smart lock, a video doorbell, a security camera, or a security system.

- Install a security system door sensor on any door and get a ping when somebody opens it. Examples: on the patio door to guard against an adventurous child slipping outside, on the cabinet door where you keep the liquor, or on the kitchen cupboard where you keep cookies hidden from the kids.

- Outsmart porch pirates with a video doorbell, such as the Google Nest Hello or Arlo Video Doorbell, that can detect when packages are left outside your door.

- End your "Did I lock the door?" anxiety with a smart lock that

has a door open/close sensor, such as the Wyze Lock or August WiFi Smart Lock. If you're out, you can double-check that the front door is closed and locked.

Make Your Home More Convenient and Efficient

Here are some stand-alone products that can do just that:

- Stop water leaks before they cause major damage with a water leak detector with a shut-off valve. (See the top two models from our tests, at right.)
- Install a smart sprinkler controller, which checks weather forecasts to adjust watering schedules and levels, saving you water—and money. (See the best from our tests, at right.)
- Use a smart bulb or switch that tracks local sunset times to automatically illuminate your porch lights precisely at sunset all year long. These are available

from brands such as Philips Lighting and Wemo.

- Let in guests or contractors when you're not home with a WiFi-enabled smart lock. You can unlock the door from the lock's app or give the visitor a PIN code that works for a set amount of time or only at certain times of day.

WATER LEAK DETECTORS

- 93 FLO BY MOEN SMART WATER SHUTOFF SYSTEM 900-001**
\$500
- 74 GUARDIAN BY ELEXA LEAK PREVENTION SYSTEM GVD3**
\$300

SPRINKLER CONTROLLERS


- 77 RAINMACHINE TOUCH HD-12**
\$240
- 69 ORBIT B-HYVE 57950**
\$120

Ratings ➤ **Get Smart From the Start** CR's top-rated smart doorbells, locks, security cameras, speakers, and thermostats will give your smart home a strong foundation.

Brand + Model		Overall Score	Price	Test Results					Features						
<div><div><div></div><div></div></div></div>															
				Video quality	Data security	Data privacy	Response time	Smart IQ	Claimed resolution	Rechargeable battery-powered	Hardwired for power	Geofencing	Monitoring zones	HDR	Works with Amazon Alexa (A) and/or Google Assistant (G)

VIDEO DOORBELLS

✓ Nest Hello Video Doorbell	83	\$230	⬆	⬆	⬇	⬆	⬇	1080p		•	•	1	•	A, G	•
✓ Wisenet SmartCam D1	80	\$230	⬆	⬆	⬇	⬇	⬆	1600x1200		•		•		A, G	
✓ SimpliSafe Doorbell Pro SS3	76	\$170	⬆	⬆	⬆	⬇	⬇	1080p		•			•		•
✓ Ring Video Doorbell 3 Plus	74	\$230	⬆	⬆	⬇	⬇	⬇	1080p	•	Opt.		•	•	A	•
✓ Ring Video Doorbell 3	74	\$200	⬆	⬆	⬇	⬇	⬇	1080p	•	Opt.		•	•	A	•
✓ Eufy T8200	66	\$160	⬆	⬇	⬇	⬆	⬆	2K HD		•	•	•	•	A, G	
✓ Blue by ADT Video Doorbell	66	\$200	⬆	⬆	⬇	⬇	⬇	1080p		•		•		A	

Brand + Model	Overall Score	Price	Test Results					Features									
			Video quality	Data security	Data privacy	Response time	Smart IQ	Claimed resolution	Field of view (angle)	Person alerts	Monitoring zones	Indoor/outdoor	Rechargeable batteries	Two-factor authentication	Works with Amazon Alexa	Works with Google Assistant	Works with Apple HomeKit


WIRELESS SECURITY CAMERAS

✓ Nest Cam IQ Outdoor NC4100US	86	\$400	⬆	⬆	⬇	⬆	⬆	4K sensor, 1080p	130°	1	1	•		•	•	•	
✓ Arlo Pro 2 Smart Camera VMC4030P	81	\$180	⬆	⬆	⬇	⬆	⬆	1080p	130°	1	1	•	•	•	•	•	•
✓ Nest Cam IQ Indoor NC3100US	80	\$300	⬆	⬆	⬇	⬆	⬆	4K sensor, 1080p	130°	•	1			•	•	•	
✓ Nest Cam Indoor NC1102ES	78	\$130	⬆	⬆	⬇	⬆	⬆	1080p	130°	1	1			•	•	•	
✓ Arlo Ultra VMS5140-100NAS	76	\$325	⬆	⬆	⬇	⬆	⬆	4K sensor, 1080p	180°	1	1	•	•	•	•	•	•
✓ Arlo Pro 3 VMC4040P	76	\$200	⬆	⬆	⬇	⬆	⬆	2K sensor, 1080p	160°	1	1	•	•	•	•	•	•
✓ Ring Stick Up Cam (Battery) 3rd gen	73	\$100	⬆	⬆	⬇	⬆	⬇	1080p	110°	1	•	•	•	•	•		
✓ TP-Link Kasa Cam KC120	73	\$50	⬆	⬆	⬇	⬆	⬇	1080p	130°		•				•	•	
✓ Blue by ADT Indoor Camera	73	\$200	⬆	⬆	⬇	⬆	⬇	1080p	130°		•		•	•	•		
✓ D-Link DCS-8525LH	71	\$100	⬆	⬆	⬇	⬆	⬇	1080p	98°-pans and tilts		•				•	•	
✓ Logitech Circle 2	71	\$105	⬆	⬆	⬇	⬆	⬆	1080p	180°	1	1	•		•	•	•	•
✓ D-Link DCS-8300LH	71	\$85	⬆	⬆	⬇	⬆	⬇	1080p	137°		•				•	•	
✓ TP-Link Kasa Cam KC200	71	\$80	⬆	⬆	⬇	⬆	⬇	1080p	130°		•	•			•	•	

1) Requires a monthly fee. 2) Requires additional hardware.

3) Exceptions exist depending on HVAC system; might require power extender kit or two-wire relay module.

4) Because these models use your existing lock, resistance to kicking, picking, and drilling depends on your current deadbolt.


Brand + Model	Overall Score	Price	Test Results									Features					
			Kick-in as sold	Kick-in reinforced	Drilling	Picking	Ease of remote access	Convenience	Security add-ons	Connectivity	Keyless lock	Voice control	Electronic keys	Access log	WiFi connection	Auto lock	Auto unlock

WIFI-CAPABLE SMART LOCKS (USES WIFI OR WIRELESS ADAPTER TO CONNECT TO THE INTERNET)

✓ Yale Assure YRD256-CBA-619	87	\$250	⬆	⬆	⬆	⬆	⬆	⬆	⬆	⬆	⬆	⬆	⬆	⬆	⬆	⬆	⬆
✓ Kwikset Premis 919TRL 15 SMT	79	\$200	⬆	⬆	⬆	⬆	⬆	⬆	⬆	⬆	⬆	⬆	⬆	⬆	⬆	⬆	⬆
✓ Schlage Encode WiFi BE489WB-CAM-619	76	\$250	⬆	⬆	⬆	⬆	⬆	⬆	⬆	⬆	⬆	⬆	⬆	⬆	⬆	⬆	⬆
✓ Kwikset Halo 939WiFiTSCR	76	\$230	⬆	⬆	⬆	⬆	⬆	⬆	⬆	⬆	⬆	⬆	⬆	⬆	⬆	⬆	⬆
✓ Kwikset SmartCode 888 ZW500	75	\$120	⬆	⬆	⬆	⬆	⬆	⬆	⬆	⬆	⬆	⬆	⬆	⬆	⬆	⬆	⬆
✓ Schlage Connect BE469NXCAM619	73	\$200	⬆	⬆	⬆	⬆	⬆	⬆	⬆	⬆	⬆	⬆	⬆	⬆	⬆	⬆	⬆
✓ Schlage Sense Smart BE479CEN619	72	\$230	⬆	⬆	⬆	⬆	⬆	⬆	⬆	⬆	⬆	⬆	⬆	⬆	⬆	⬆	⬆
✓ Nest x Yale Lock RB-YRD540-WV	71	\$280	⬆	⬆	⬆	⬆	⬆	⬆	⬆	⬆	⬆	⬆	⬆	⬆	⬆	⬆	⬆

RETROFIT SMART LOCKS (USES YOUR EXISTING LOCK; CONNECTS TO INTERNET VIA WIFI OR WIRELESS ADAPTER)⁴


✓ August WiFi Smart Lock AUG-SL05-M01-G01	86	\$250	NA	NA	NA	NA	⬆	⬆	⬆	⬆	NA	⬆	⬆	⬆	⬆	⬆	⬆
✓ August Smart Lock Pro AUG-SL-CON	82	\$230	NA	NA	NA	NA	⬆	⬆	⬆	⬆	NA	⬆	⬆	⬆	⬆	⬆	⬆
✓ Wyze Lock WLCKG1	82	\$110	NA	NA	NA	NA	⬆	⬆	⬆	⬆	NA	⬆	⬆	⬆	⬆	⬆	⬆
✓ Friday Home Friday Labs FLSS	75	\$185	NA	NA	NA	NA	⬆	⬆	⬆	⬆	NA	⬆	⬆	⬆	⬆	⬆	⬆
✓ August Smart Lock AUG-SL04-M01-S04	74	\$130	NA	NA	NA	NA	⬆	⬆	⬆	⬆	NA	⬆	⬆	⬆	⬆	⬆	⬆

Brand + Model		Overall Score	Price	Test Results			Features							
			Smart IQ	Manual operation	Automation	C wire required ⁽¹⁾	Two-wire compatible	Has geofencing	Occupancy sensor	Vacation schedule setup	Remote sensor included	Learns behavior	Voice command	

SMART THERMOSTATS

✓ Nest Learning Thermostat	83	\$250	⬆	⬆	⬆	⬆	⬆	⬆	⬆	⬆	⬆	⬆	⬆
💰 Nest Thermostat E	83	\$170	⬆	⬆	⬆	⬆	⬆	⬆	⬆	⬆	⬆	⬆	⬆
✓ Honeywell Home T9 RCHT9510WF	73	\$170	⬆	⬆	⬆	⬆	⬆	⬆	⬆	⬆	⬆	⬆	⬆
✓ Ecobee Smart with Voice Control EB-STATE5-01	73	\$250	⬆	⬆	⬆	⬆	⬆	⬆	⬆	⬆	⬆	⬆	⬆
✓ Johnson Controls Glas smart thermostat	70	\$220	⬆	⬆	⬆	⬆	⬆	⬆	⬆	⬆	⬆	⬆	⬆
✓ Schneider Electric WiserAir 10BLKUS	69	\$240	⬆	⬆	⬆	⬆	⬆	⬆	⬆	⬆	⬆	⬆	⬆
✓ Honeywell Home T5+ RCHT8612WF	66	\$150	⬆	⬆	⬆	⬆	⬆	⬆	⬆	⬆	⬆	⬆	⬆

¹ Requires a monthly fee. ² Requires additional hardware.
³ Exceptions exist depending on HVAC system; might require power extender kit or two-wire relay module.
⁴ Because these models use your existing lock, resistance to kicking, picking, and drilling depends on your current deadbolt.

Brand + Model	Overall Score	Price	Test Results			Features								
			Sound quality	Versatility	Ease of use	Supported digital assistant(s)	Audio format	Supports voice identity	Optional multi-room sharing	Adjustable tone settings	Speaker phone w/built-in mic	Calling	Messaging	Warranty (mo.); parts/labor



SMART SPEAKERS

✓ Google Home Max	76	\$300	⬆️	⬆️	⬆️	Google	Stereo	•	•	•		•		12/12
💰 Amazon Echo Show (2nd Generation)	69	\$230	⬇️	⬆️	⬆️	Alexa	Stereo	•	•	•		•	•	12/12
💰 Amazon Echo Studio	68	\$200	⬆️	⬆️	⬆️	Alexa	Stereo	•	•	•		•	•	12/12
✓ Sonos Move	68	\$400	⬆️	⬆️	⬆️	Alexa, Google	Mono	•	•	•		•	•	12/12
✓ Bose Home Speaker 500	65	\$300	⬆️	⬆️	⬆️	Alexa	Stereo	•	•	•				12/12
💰 Amazon Echo (4th Generation)	65	\$100	⬇️	⬆️	⬆️	Alexa	Mono	•	•	•	•	•	•	12/12
💰 Amazon Echo Show 8	65	\$105	⬇️	⬆️	⬆️	Alexa	Stereo	•	•	•		•	•	12/12
💰 Bose Home Speaker 300	65	\$200	⬆️	⬆️	⬆️	Alexa, Google	Stereo	•	•	•		•		12/12
✓ Bose Portable Home	65	\$350	⬆️	⬆️	⬆️	Alexa, Google	Stereo	•	•	•		•		12/12
💰 Sonos One (Gen 2)	64	\$200	⬆️	⬇️	⬆️	Alexa	Mono	•	•	•				12/12
✓ Google Nest Hub Max	63	\$230	⬇️	⬆️	⬆️	Google	Stereo	•	•	•		•	•	12/12
💰 Google Nest Audio	63	\$100	⬇️	⬆️	⬆️	Google	Mono	•	•			•	•	12/12
✓ Marshall Uxbridge Voice	62	\$200	⬇️	⬇️	⬆️	Alexa	Mono	•	•	•				NS/NS
✓ Amazon Echo Plus (2nd Generation)	62	\$150	⬇️	⬆️	⬆️	Alexa	Mono	•	•	•		•	•	12/12
💰 Amazon Echo (3rd Generation)	61	\$100	⬇️	⬆️	⬆️	Alexa	Mono	•	•	•		•	•	12/12
✓ JBL Link View	61	\$300	⬇️	⬇️	⬆️	Google	Stereo		•			•	•	12/12
✓ Riva Concert	61	\$190	⬇️	⬆️	⬆️	Alexa	Stereo	•		•		•	•	36/36
✓ Marshall Stanmore II Voice	60	\$350	⬇️	⬇️	⬆️	Alexa	Stereo	•	•	•				12/12
✓ JBL Link Music	60	\$60	⬇️	⬇️	⬆️	Google	Mono	•	•			•		12/12
✓ Belkin Soundform Elite	59	\$300	⬇️	⬇️	⬆️	Google	Mono	•	•			•		24/24
✓ JBL Link 20	59	\$90	⬇️	⬇️	⬆️	Google	Stereo	•	•					12/12
✓ Cavalier Audio The Maverick	59	\$250	⬇️	⬇️	⬆️	Alexa	Stereo	•	•	•	•			12/12
✓ Apple HomePod	59	\$300	⬆️	⬇️	⬆️	Siri	Mono		•	•	•			12/12

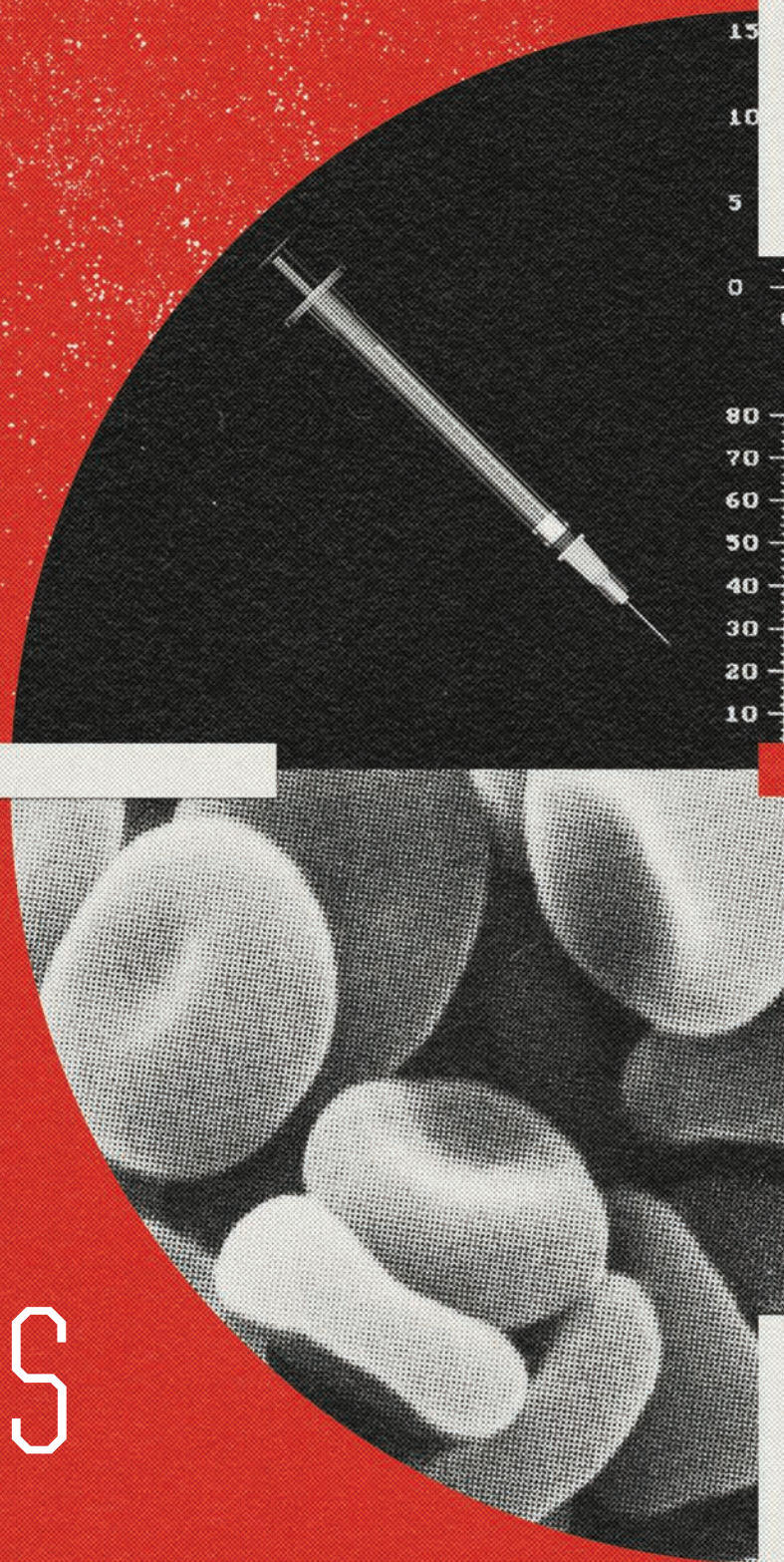
HOW WE TEST: We assess all products except smart locks and smart speakers for **Smart IQ**, our unique comparative measure of each product's smart features. For **security cameras** and **video doorbells**, we also test **Video quality** and **Response time** and evaluate **Data privacy**, reviewing privacy policies,

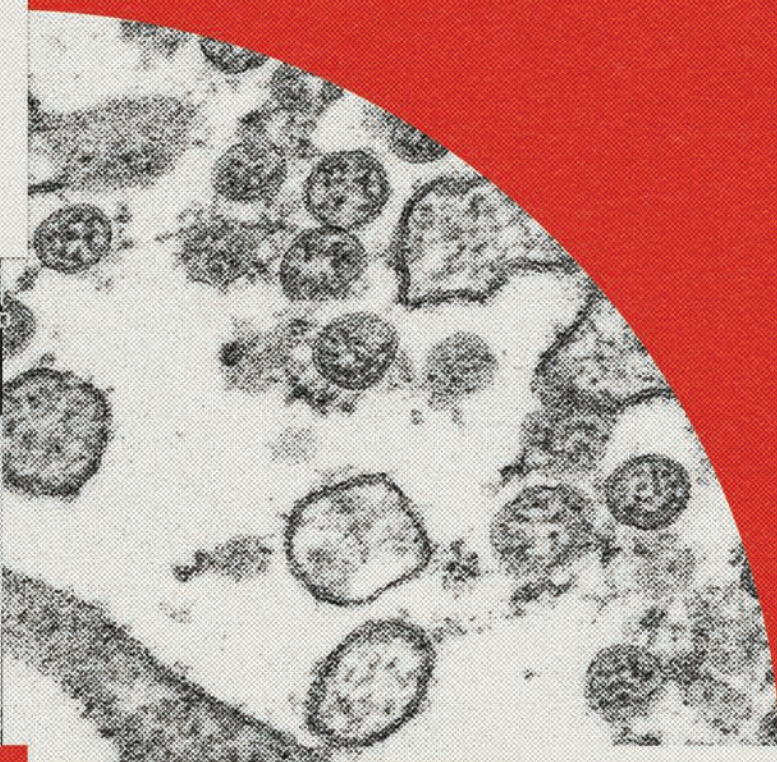
terms of service, and more to determine whether manufacturers collect, use, or sell your data. To look at **Data security**, we use specialized tools to determine what security measures the product employs to keep your data safe. **Smart thermostats** undergo tests for **Manual operation**, to make sure it's easy to

adjust settings and programs, and **Automation**, to see how well each model learns your routines and makes changes on its own. For **smart locks**, we evaluate features for **Ease of remote access**, **Convenience**, and **Security add-ons**. Locks also undergo **Connectivity** tests to assess ease of setup and connecting

to other smart devices. **WiFi-capable smart locks** receive additional testing for **Kick-ins as sold**, **Kick-ins reinforced** with a box strike plate, **Drilling**, and **Picking**. For **smart speakers**, we test **Sound quality** and evaluate **Versatility** (the presence or absence of useful features) and **Ease of use**.

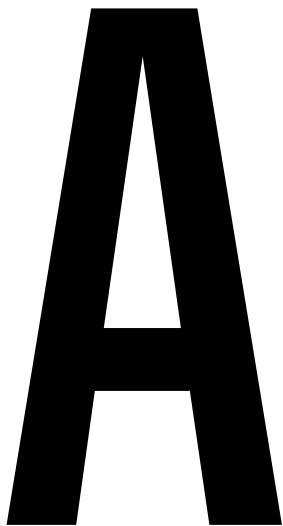
WHY DIABETES + COVID-19 IS SO DANGEROUS





People with diabetes—and those who are at risk for it—are far more likely to experience severe complications if they become ill with the coronavirus. Here's what you need to know now.

**BY LISA L. GILL AND
RACHEL RABKIN PEACHMAN**



AFTER CONTRACTING COVID-19, Olga Chalfant's father, Michael, almost died—not because the virus shut down his lungs but because his diabetes raged out of control. While in the COVID-19 unit at a New York City hospital, the 74-year-old Russian émigré's blood glucose spiked to dangerous levels. The blood glucose fluctuations became even more severe after he was sent home, says Chalfant, who translated for her father when he was ill.

"That's the COVID effect," says Ruth Horowitz, MD, chief of the division of endocrinology and metabolism at the Greater Baltimore Medical Center, who was not involved in Chalfant's father's care but has managed the complex cascade of symptoms that develop in many patients with both diabetes and COVID-19.

For Cody Wessel, 36, the pandemic triggered a diabetes crisis of another sort: Several months after being laid off in March, the St. Louis resident lost his health insurance, compelling him to start a GoFundMe campaign to raise the \$1,600 per month that he estimates he needs for his insulin and supplies.

And Maria León, 54, found herself overwhelmed when she received a diabetes diagnosis in May, as the

pandemic was exploding in her community of East Los Angeles. Getting a handle on the various drugs and tests she suddenly needed was hard enough, but concerns about exposure to the virus when she left her house made it hard for her to exercise or find the affordable, healthy produce she needed to stick to a diabetes-healthy diet.

Living with diabetes—a disease that interferes with the body's production of insulin, a hormone needed to process the glucose, or sugar, in food—has always been complicated. It requires changing exercise and dietary habits, frequently testing blood glucose levels, and sometimes taking insulin or other medication. Without those steps, uncontrolled blood glucose levels can lead to heart disease, nerve damage, blindness, kidney disease, and more.

But as the experiences of Chalfant's father, Wessel, and León show, the arrival of the coronavirus has multiplied those challenges. As a result, many of the estimated 34 million Americans with diabetes (about 1 in 10 people) and 88 million with prediabetes (about 1 in 3 adults) may now be fighting for their lives in more ways than one.

COVID-19 Complications

"There are some things that are very unique to diabetes and COVID," Horowitz says.

For one thing, having diabetes—especially if blood glucose levels are

uncontrolled—significantly ups the risks of COVID-19 complications, even death. A Centers for Disease Control and Prevention analysis of 2,681 people under age 65 who died with COVID-19 found that almost half of them also had diabetes.

Doctors are also seeing an increase in insulin resistance—an inability to use insulin to absorb glucose—in patients with diabetes and COVID-19, causing blood glucose levels to skyrocket. In addition, doctors are reporting cases of first-time ketoacidosis—a diabetes complication in which the body breaks down fat instead of glucose for energy, resulting in a potentially fatal buildup of acids in the blood.

Another cause for concern: COVID-19 and the steroids sometimes used to treat it can cause dangerously high blood sugar levels, says Brenda Swanson-Bearman, DNP, a nurse practitioner and assistant professor at the Rangos School of Health Sciences at Duquesne University in Pittsburgh. Chalfant suspects that contributed to her father's soaring blood glucose levels while he was sick.

Emerging research even suggests that COVID-19 may trigger diabetes in some people who don't yet have the disease. "COVID-19 has had a profound and unprecedented impact on glycemic control in many patients with and without a known history of diabetes," says Joshua Miller, MD, medical director of diabetes care at Stony Brook Medicine in New York. "Insulin requirements [with COVID-19] are through the roof with many patients."

What's more, diabetes often goes hand in hand with other health concerns that make it more difficult to battle COVID-19, such as obesity, heart disease, and kidney disease, many of which can impair blood flow. That's a problem, says Arti Thangudu, MD, an endocrinologist at Complete

Black and Hispanic people are more likely than white people to say the pandemic has made it harder for them to pay for diabetes medications and supplies.

CONSUMER REPORTS JUNE 2020 SURVEY

Medicine in San Antonio, because “when you’re trying to heal an infection [like COVID-19], you need all the good healing properties that flow through the blood.”

Diabetes rates are especially high in Black, Hispanic, and Indigenous people—one of the likely reasons these groups have been disproportionately affected by COVID-19. Their COVID-19 mortality rate is more than three times that for whites of the same age, according to an analysis by APM Research Lab.

People of color also face more obstacles when trying to manage diabetes. Take the results of a new Consumer Reports survey of 2,911 people who have diabetes or live with someone who does. It found that Hispanic people report challenges finding healthy food more often than white people do. And Black and Hispanic people say the pandemic has made it harder to pay for diabetes medications and supplies, such as glucose monitors and test strips.

No surprise, then, that CR’s survey found that Black and Hispanic people with prediabetes or diabetes are far more apt than white people to say they’re extremely concerned about falling ill with COVID-19.

All too often, says Andrew Boulton, MD, president of the International Diabetes Federation, “wealthy means healthy.” Put simply, groups and communities with more resources are likely to have better medical care and to be better able to stay on top of their health.

This confluence of crises—the pandemic, the coronavirus-diabetes connection, and healthcare inequities—has made solving the problems in diabetes care more urgent than ever.

While solutions to some of these issues remain in the future, several strategies, described on the following pages, can help right now.

THE TRUTH ABOUT PREDIABETES



JIM EDHOLM, 78, was briefly stumped when his doctor told him he was borderline diabetic. But the North Andover, Mass., resident then realized he’d been less active in the prior three months and had been eating lots of sweets—“mostly cookies.”

Just over a third of American adults have prediabetes, according to the Centers for Disease Control and Prevention. That means their body does not respond normally to the hormone insulin.

Prediabetes hikes the risk of not only diabetes but also heart disease and stroke. Yet many people with prediabetes don’t know they have it, in part because it often has no obvious symptoms.

Even when people learn they have prediabetes, many—especially Blacks and Hispanics, who are already more likely to develop the condition—may receive little treatment.

“Lots of people came to our clinic and were told they had prediabetes but not given education around what that means,” says Leonor Corsino, MD,

an endocrinologist at the Duke University School of Medicine in Durham, N.C., who also focuses on diabetes prevention in her local Hispanic community.

And the pandemic has made it harder to rein in the problem: Thirty-four percent of people in CR’s survey say it’s now harder to get the exercise that can help keep blood sugar in check.

WHAT TO DO


Have an annual diabetes screening if you’re older than 40 and overweight.

If you’re told you have prediabetes, the American Diabetes Association recommends losing weight and doing moderate exercise—such as 150 minutes a week of brisk walking.

When lifestyle changes alone don’t work, medication might. The ADA recommends the generic drug metformin, especially for very overweight people younger than 60.

As for Edholm, 30-minute daily walks and avoiding added sugars did the trick. “I’ve found I don’t feel right if I don’t walk nearly every day,” he says, “and I no longer crave sugar.”

MANAGING DIABETES DURING THE PANDEMIC



WEAR A MASK. Wash your hands. Social distance. Those now-familiar tips for avoiding COVID-19 are especially important for people with diabetes, says Leonor Corsino, MD, at the Duke University School of Medicine. Controlling diabetes is also more crucial than ever: People with high blood glucose levels are more likely to need mechanical ventilation or to die.

But the pandemic has made managing diabetes—type 1, which typically emerges early in life, and type 2, which usually develops in adulthood—more difficult. Hasa Kingo, a 35-year-old lawyer in New York City, says that sheltering in place last spring while juggling child care and managing the stress of living in what was then the coronavirus epicenter made exercising problematic, causing

32% of people say COVID-19 has made it harder for them or a family member to go to the doctor for diabetes-related care.

CONSUMER REPORTS JUNE 2020 SURVEY

his blood sugar levels to fluctuate.

If you face similar challenges, experts have identified three key steps to take.

Get meds and supplies delivered. “If you don’t have to go out, please stay home,” Corsino says. Instead of going to the drugstore, arrange for 90-day prescriptions and home delivery. Doug Hoey, CEO of the National Community Pharmacists Association, says almost all independent pharmacies offer this and curbside pickup. Some CVS, Walgreens, and Walmart stores have drive-thru pickup as well—and may ship free.


Be sure to move. Thirty-four percent of people in CR’s survey said the pandemic made it more challenging to exercise. Although being outdoors is generally safe if you wear a mask and socially distance while around others, not everyone has access. Diabetes educators suggest setting up a workout area at home. No weights? Consider doing a body-weight workout (think pushups). For cardio, try a Zoom exercise class or a free YouTube workout video, or move to a dance or sports video game, such as Zumba Fitness.

Keep healthcare appointments. Almost a third of people in CR’s survey said COVID-19 made it harder for them to go to doctors’ appointments for care. In some cases, this was because of concerns about leaving the house.

For many people, telehealth provided a solution. But for others, especially some Blacks and Hispanics, the crisis revealed a substantial digital divide, Corsino says—a lack of computer equipment or internet access. “A lot of our minority patients unfortunately couldn’t see a provider even though telehealth was available,” she says.

Experts now stress the importance of continuing to get care during the crisis. And providers have learned a lot about preventing the spread of COVID-19 in healthcare settings. “Most institutions have a very strict protocol for patients opting to see them in person,” Corsino says. Call your doctor’s office to get details.

THE HIGH COST OF DIABETES CARE





CODY WESSEL OF ST. LOUIS, who set up a GoFundMe campaign to pay for his insulin after losing his job and insurance, found some help at a clinic that offered sliding fees, and he's glad for it. But, he says, "we shouldn't have to beg giant pharmaceutical corporations for discounts, and I shouldn't have to go online and ask for money from strangers just to live."

Insulin, which everyone with type 1 diabetes and some with type 2 must use, once cost just a few dollars a week. But with the development of faster, slower,

and longer-acting insulins in the 1980s, drug companies began charging more. The average list price for insulin—what someone without insurance or on a high-deductible plan might pay—is now almost \$100 per standard unit in the U.S., compared with about \$7 in Australia and \$9 in France, according to an October 2020 report from the RAND Corporation.

That presents difficulties: About 1 in 5 people who have diabetes or live with someone who does said they found it challenging to pay for their diabetes medication and supplies,

according to CR's survey. Supplies may be a particular burden, even among those with insurance: Twenty percent said they pay for supplies mostly or entirely out of their own pocket. And about a quarter of people who use a continuous glucose monitor or a glucose meter plus test strips said they had difficulty affording them at some point.

Those expenses can add up. Privately insured people with type 1 diabetes pay an average of \$1,310 out of pocket each year for diabetes care, according to an analysis in JAMA Internal Medicine.

The pandemic has posed particular

5 DIABETES DIET MYTHS, BUSTED



MYTH YOU CAN NEVER HAVE CARBS OR SUGARS AGAIN

TRUTH In general, “the biggest driver of blood sugar is how much carbohydrate you’re eating, so cutting back on starches and sugars is probably the best way to help control blood sugar,” says William Yancy, MD, associate professor of medicine at Duke University School of Medicine in Durham, N.C. But that doesn’t mean avoiding carbs altogether. Limit refined carbs, such as foods with added sugars and white flour. Many have a high glycemic index (GI), which means they can cause blood sugar spikes. Studies show that replacing high-GI carbs with low-GI items can improve blood sugar control. In fact, low-GI, unrefined carbs, such as legumes, whole grains, and vegetables, are terrific choices for people with diabetes, and they may lower the risk for type 2 diabetes in the first place. It’s also okay to have cake, a cookie, or ice cream

once in a while, even though they contain sugar. Sugar-free treats are an option but may be higher in carbs than the foods they’re intended to replace, so they could raise blood sugar—especially if you think “sugar free” means it’s okay to eat more, says dietitian Kim Pierce, a diabetes educator at the Cleveland Clinic.



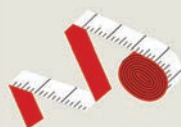
MYTH YOU HAVE TO FOLLOW ONE SPECIAL DIET

TRUTH There’s no one-size-fits-all plan. A 2019 American Diabetes Association consensus report reviewed eight diets—including low-carb, low-fat, Mediterranean, and paleo—and found that they all can help people prevent or manage diabetes. It turns out a good diabetes diet is simply one with a variety of nutrient-rich whole foods, realistic portions, and limited processed foods. Keep those guidelines in mind and you can eat right and still accommodate your personal preferences and traditions (even an occasional pizza night).



MYTH YOU SHOULD EAT DIABETES ‘MEDICAL’ FOODS

TRUTH It depends. “Diabetes” foods, such as shakes and bars marketed to keep blood sugar steady, can help in the short term because they’re nutritionally balanced and portion-controlled, says Elisabetta Politi, a dietitian and diabetes educator at Duke Health. But they’re certainly not a necessary part of your diet. And these products are often highly processed, so if you consume them, keep it to a minimum.



MYTH YOU NEED TO LOSE A LOT OF WEIGHT

TRUTH Not necessarily. Dropping just 5 percent of your weight improves blood sugar, Yancy says, especially if you’re also exercising and following a healthy diet. Losing more can confer

bigger benefits: In a study of 867 people with type 2 diabetes, those who shed at least 10 percent of their weight in their first year were more than twice as likely to achieve normal blood sugar levels without medication within five years.



MYTH FRUIT IS OFF-LIMITS

TRUTH Feel free to enjoy an orange or a bowl of berries. The sugars in fruit may be chemically the same as added sugars in soda and candy, but they’re released slowly into the bloodstream, so they don’t cause rapid blood sugar increases. Fruit is also full of nutrients and may have diabetes-protective benefits. In a 2017 study, those who had fruit each day were 12 percent less likely to develop diabetes. For people who already had diabetes, eating fruit at least three times weekly cut the likelihood of diabetes complications, such as heart disease and vision problems, by 10 to 26 percent. —Jennifer Cook

financial challenges to Black and Hispanic people, according to CR's survey. They were twice as likely as whites to say that the crisis has made it more difficult to afford diabetes meds and supplies. One possible reason: While 95 percent of whites said they were insured, only 87 percent of Blacks and 78 percent of Hispanics said the same.

But some financial help is on the way. Last year, after executives from three drugmakers were called before Congress, the companies began offering certain low-cost options, says Alvin Powers, MD, director of the Vanderbilt Diabetes Center at Vanderbilt University Medical Center in Nashville, Tenn.

For instance, Eli Lilly now has a \$35 copay program that covers more than a dozen insulins for many uninsured and insured people. Novo Nordisk offers a \$99 program for the branded versions of Fiasp, Levemir, Novolin, NovoLog, NovoLog Mix 70/30, and Tresiba, and, for those insured through an employer, discounted copays for Tresiba, Xultophy, and certain other insulins.

If you buy your own insurance or get it through work, Sanofi eliminates or sharply cuts copays for Adlyxin, Apidra, Lantus, Soliqua 100/33, and Toujeo. For those without coverage, it has set a \$99 monthly price for Admelog, Apidra, Lantus, and Toujeo.

If you're uninsured and below a certain income level, you may qualify for free insulin or other diabetes meds and supplies through drug company

assistance programs. Check NeedyMeds (needymeds.org) for information.

But most discount programs last only 12 or 24 months. "We still need a long-term solution," Powers says.

One fix in 2021 might come from updated federal guidelines, at least for people with high-deductible plans offered by their employers. The change allows those plans to cover diabetes drugs and care before people meet their deductible.

In addition, many Medicare Part D and Medicare Advantage drug plans will offer insulin for no more than a \$35 copay for the 2021 plan year.

States are also acting. Colorado, Connecticut, Delaware, Illinois, Maine, Minnesota, New Hampshire, Minnesota, New Mexico, New York, Utah, Vermont, Virginia, Washington, and West Virginia have passed laws that limit insulin costs to consumers, with caps anywhere from \$25 to \$100.

Some insurers and pharmacies are taking steps, too. For some people enrolled in Cigna insurance plans through Express Scripts, monthly out-of-pocket costs for insulin and certain other drugs are now \$25 or less. And starting in January 2021, CVS Health will offer a plan with no copays for insulin, says spokesman Trey Hollern—if your health insurer signs up for it. And you can get several generic noninsulin drugs, such as metformin and glimepiride, starting at just \$4 at Walmart and \$5 at Walgreens.

For supplies, Walmart sells test strips and monitors at prices comparable to a typical insurance copay. Check the Cheap Insulin Foundation's website (cheapinsulin.org) and NeedyMeds for discounts. For example, Cheap Insulin says Costco offers a Dexcom monitoring system under its Costco Member Prescription Program. Or you can apply directly with Dexcom for discounts.

Clinics, such as the one Wessel turned to, can sometimes also help. Look for one at findahealthcenter.hrsa.gov.

"We shouldn't have to beg giant pharmaceutical corporations for discounts and ... ask for money from strangers just to live."

CODY WESSEL, DIABETES PATIENT

WHEN DIABETES DEVICES FAIL



PAMELA, A 64-YEAR-OLD from Arkansas, began using an insulin pump to manage her diabetes in 2013. Both she and her husband, Gary, were trained to use the pump, made by Medtronic, and, according to a lawsuit later filed against the company, Gary often helped set up his wife's device. So it was not unusual that one night in January 2016, Gary filled the pump's reservoir with insulin and changed its infusion set, which connects the reservoir to the body via a thin plastic tube. (CR is not using their last name to protect their privacy.)

But Pamela and Gary didn't know that the infusion set had a flaw that in some cases could cause the pump to deliver too much insulin—something that the lawsuit alleged happened to Pamela that night. Her blood sugar levels then plummeted, and the next day Gary found Pamela in a coma. Attempts to revive her failed; she died a week later.

According to court documents, when Gary obtained readings from his wife's pump she had "received in an 18-hour period a dose of insulin that should have been delivered over 5 to 6 days."

Unlike Pamela and Gary, Medtronic knew about the infusion set's risk but claimed the issue stemmed from

user error. Yet in June 2013, Medtronic had issued an Urgent Medical Device Safety Notification, two months before Pamela started using her pump, saying that the problem “may cause loss of consciousness or death.”

But, the lawsuit claims, Medtronic did not notify Pamela of that possibility when she bought her device. And the Food and Drug Administration, which regulates medical devices, issued no public statement to follow up on Medtronic's letter. An internal July 2013 FDA memo concluded that it was not needed because Medtronic "appears to

have properly informed the public.”

Kevin Haverty, a lawyer for Gary, said the case was resolved out of court in 2018, but he could not provide details.

Medtronic also did not comment on the case but told CR that “patient safety is [the company’s] highest priority.”

While innovations from manufacturers over the past 10 years have made it easier for people with diabetes to control glucose levels, malfunctions or design flaws can have deadly consequences.

In fact, diabetes devices account for more adverse event reports—

including malfunctions, injuries, and deaths—than any other category of medical devices submitted to the FDA, according to a Consumer Reports investigation.

The FDA says 25 million to 30 million Americans use diabetes devices, and the large numbers of reported incidents reflect “this high volume of use.”

But Madris Kinard, a former FDA analyst who now runs Device Events—a company that aggregates adverse event reports submitted to an FDA database called MAUDE (Manufacturer and User Facility Device Experience)—says that can’t fully explain why “these numbers outdistance any other device, by far.”

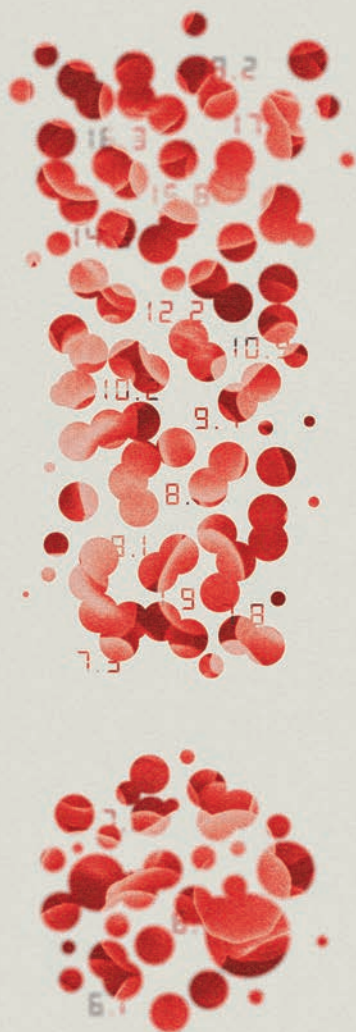
Hundreds of Deaths

CR analyzed recent reports to MAUDE, using Device Events, and found that from January 2019 to July 2020, almost 400 deaths and 66,000 injuries were linked to pumps, infusion sets, glucose monitors, and test strips.

Devices from Abbott Laboratories, Dexcom, Medtronic, Tandem Diabetes Care, and several other companies were cited. But no one product stood out, perhaps because the devices are often used in combination and require continual user involvement, and because diabetes is a complicated disease. “It’s so easy, when you’re using more than one device, to blame the other device, or to blame the user,” Kinard says.

Adverse event reports, which can be made by consumers, healthcare providers, or manufacturers, can't on their own prove that a device caused an injury or a death. MAUDE, which is meant to alert the FDA and manufacturers to potential red flags, offers valuable information but is notoriously unwieldy to navigate and has many inconsistencies. And CR found that reports to the database can languish for years.

“The system is not set up to manage the reporting of all the issues and problems,” says Anna McCollister, a



health technology consultant who is a member of two FDA diabetes advisory committees. “We’re not tracking device stability and accuracy. We’re tracking people who die or almost die because of inaccurate devices.”

Dangerous Delays

Between June 2013 and May 2014, Medtronic received 750 complaints related to the same infusion set linked to Pamela’s death, according to a deposition referenced in the Arkansas family’s lawsuit. But by January 2016, when Pamela died, the problem had not been corrected.

Further, the lawsuit alleges that it took Medtronic until August 2016 to obtain FDA clearance for a redesign. And it was not until September 2017—more than four years after the hazard was identified—that Medtronic issued a major recall for all infusion sets made before the redesign.

Medtronic tells CR that it has “rigorous quality systems and reporting standards based on FDA and global regulatory requirements.” The company adds that it investigates all reported problems and performs “a risk assessment to determine whether further action is appropriate.”

CR found other examples of the FDA and manufacturers appearing to respond slowly to reported problems.

After the 2012 death of a Texas man linked in court documents to a malfunctioning FreeStyle glucose meter and test strips, it took two years for the FDA and Abbott, the manufacturer, to pull the defective products from the market. During that time, the MAUDE database shows, numerous reports were linked to these products, including emergency hospitalizations and at least one death.

Abbott says that “the health and safety of our customers are our highest priority” and that the company’s quality control system “is regularly audited by the FDA.”

“We’re not tracking device stability and accuracy. We’re tracking people who die or almost die because of inaccurate devices.”

ANNA MCCOLLISTER,
HEALTH TECHNOLOGY CONSULTANT

In another example, in 2013 the FDA sent a warning letter to Dexcom citing potential problems with its G4 Platinum continuous glucose meter and failures to adequately report adverse events linked to the device. And in the following year, at least 409 injuries and 10 deaths citing the G4 were reported to MAUDE. Yet Dexcom didn’t issue a recall until 2016. The company declined to comment.

Part of the problem is that FDA staffers are overwhelmed, Kinard says. “When I left the FDA six years ago, there were around 70,000 [device] adverse event reports per month coming in,” she says. “Now, we’re over 100,000 reports per month.”

The FDA says that the agency takes these reports seriously and that they are “just one important post-market surveillance tool.”

But technology can now track incidents in real time, McCollister says, pointing to the ability of some diabetes devices to aggregate data and communicate electronically with patients and providers. “Congress would need to fund it, but I don’t think we should pretend that we’re doing real adverse-event tracking and reporting, because we’re not,” she says.

The FDA says it supports using new interconnected technologies to track device performance more efficiently.

Still, McCollister says the FDA and companies must act more swiftly, and though devices have improved, “we still have a long way to go.”

How to Protect Yourself

To safeguard yourself, our experts suggest the following.

Check out the device before you buy it. “I always present all of my demo pumps to each person so they can touch it,” says Alyson Blum, PharmD, a diabetes education specialist at Providence Sacred Heart Medical Center in Spokane, Wash. “There are some pumps that are inherently more intuitive than others,” and there are pros and cons to each.

Beware of inconsistencies with glucose meters. Unlike continuous monitors, which read glucose levels via a sensor under the skin, glucose meters require pricking a finger with a needle and squeezing a drop of blood onto a test strip. While the meters are vital, they are often inconsistent. “We take results with a grain of salt,” says Davida Kruger, a nurse practitioner at the Henry Ford Health System in Detroit. To improve accuracy, she says, wash and dry hands before testing, store test strips in a closed vial, and don’t use old strips. She also says high altitude and temperature or humidity changes can affect readings, as can the user being dehydrated or anemic.

Track recalls. To make sure you don’t miss a recall or notification from the FDA, sign up for alerts at www.fda.gov/medical-devices/medical-device-safety. And be sure the device is registered to your current address.

Investigate problems immediately. If you’re having difficulty with a device, “don’t assume it’s a fluke, or just you or your imagination,” says Diana Zuckerman, president of the National Center for Health Research. Call your healthcare provider or the device manufacturer, which usually has a 24-hour customer service line.

Report problems. That includes to manufacturers and the FDA. To report adverse events, use MedWatch: www.accessdata.fda.gov/scripts/medwatch/index.cfm.



LEARNING TO CELEBRATE BLACKNESS WITH PHOTOGRAPHY

These tips from Black pro photographers helped me understand how to capture the beauty of every skin tone—including my own.

by **David Leon Morgan**

IN A CONVERSATION on Facebook, a friend of mine, who is white, noted that he did not see his racial identity as part of himself when growing up. His parents encouraged a “colorblind” point of view. I’ve heard this often—the phrase “I don’t see color” is articulated as a source of pride. It wasn’t until I read my friend’s message that I was taken aback by my own self-reflection. I don’t remember a time when I wasn’t hyperaware of my Blackness. The experience of being colorblind in the context of race is a privilege and one that I can likely never know. My



TO REFLECT, TO EXPRESS, TO VALIDATE

Photographer Aundre Larrow (left) captures fellow photographer Noemie Tshinanga's thoughtful pose and expression. Author David Leon Morgan (above) offers a creative self-portrait. Story, light, and details all play a critical role in each photo's impact. As Larrow shares, "We need to make sure that all of us have the ability to photograph the people that are around us, and make them feel beautiful, valued, [and] important."

Blackness is omnipresent. It is with me while browsing in a store, navigating the New York City dating scene (a roller coaster we do not have time to go on here), or reading a classic novel.

Paradoxically, though omnipresent, my Blackness can still feel undervalued, with its particularities not fully seen—even to myself. The desire to understand that paradox is part of what led me to pick up a secondhand digital camera. With it, I began to ask: Where did my identity fit among the spectrum of human experiences? Where was my hue among the rainbow

that tethers the Black diaspora together? And once discovered, how can I use the camera to honor them both?

Any camera, from one on a smartphone to an SLR, can be a powerful tool of internal and external exploration. It presents all of us with the opportunity to illuminate a story that affirms and articulates. Yet who is telling that story, what story they're telling, and how they're telling it have a complex and sometimes painful history. Disparaging and racist portrayals mar visual references

that I and other people of color can cull from.

Luckily, the past can teach and inspire greater levels of thoughtfulness and intention when photographing individuals of color today—opening our eyes to not just better represent various skin tones but also respect and celebrate them. To that end, I spoke with three Black professional photographers with expertise in portraiture to gather tips and techniques anyone can use to strengthen their skills behind the camera, especially when photographing portraits of individuals of color.

LIGHT IN ACTION

Sun rays play peek-a-boo in Aundre Larrow's photograph of a child on a bicycle (right); window light hugs Noemie Tshinanga's portrait of two people (below).



Before You Photograph

LISTEN WITH INTENTION

Think of a time when someone genuinely listened to you. Such active listening is helpful when photographing anyone, no matter what race or ethnicity, because it can make space for captures that reflect their uniqueness. In a sense, portrait photography is a dialogue between photographer and subject. As with any good conversation, sometimes you can learn more if you listen before speaking.

"I will give instructions, but I'm really taking their lead," says portrait photographer Delwin Kamara, whose

work has appeared in *Interview* and *Wonderland* magazines. "Whatever they feel is right, I'm going to capture it."

Unfortunately, "for too long," says Aundre Larrow, whose work has appeared in *The New York Times* and *People* magazine, "people haven't been listening to people of color." The results in the realm of photography can be tone-deaf and inaccurate images that prioritize a photographer's opinion of a person over who that person may actually be.

For thoughtful portraiture, get to know your subjects if you can. How are they feeling? What are their insecurities? What can you gather about their personality? Digging deep, even briefly, can reveal subtleties that may subvert internal bias.

It can expand creative possibilities,

too, inspiring props, location, and styling.

Not doing a planned photo shoot? If there isn't time for one-on-one dialogue, respectfully observing the subtleties of your subjects can lend itself well to evocative shots. This unobtrusive style of listening, where the photographer follows the movements of a subject while providing minimal direct input, is a focus of photographer Noemie Tshinanga, who has worked with brands like Spotify and Fast Company.

Whether photographing celebrities, friends, or loved ones, close observation "introduces the narrative of the nuances in our life and our lifestyle," she says. From styling hair to laughing with friends, powerful stories are told in daily activities. "We as Black people, our existence, and what we do is interesting and fascinating and dope enough to be captured."

While You Photograph

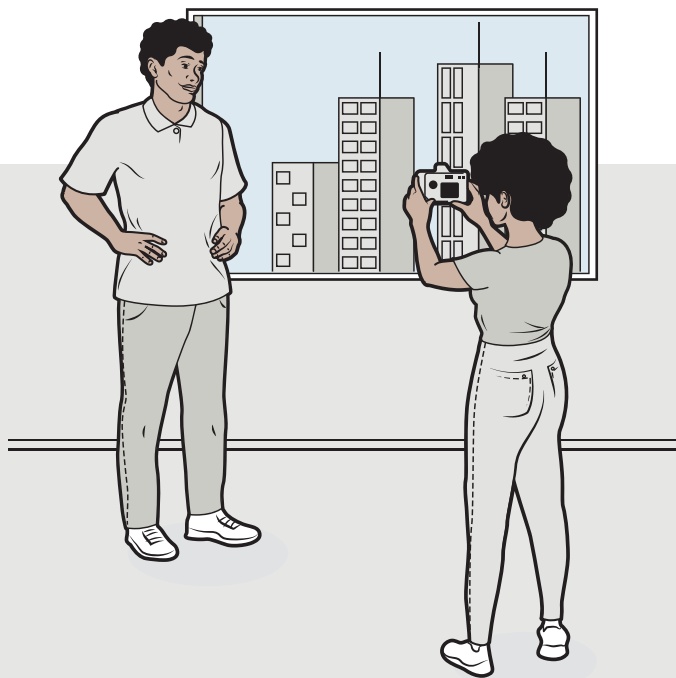
EXPERIMENT WITH LIGHT

Complementing your subject's uniqueness are light and shadow, which dance differently across varied skin tones and hair colors. When shooting, Larrow suggests walking around your subjects to see how the light hits them differently along their face. This may reveal particularly beautiful angles to capture, and areas where the light is too bright or where details like hair texture are lost.

Whether using sunlight or an artificial light source, like a lamp, Tshinanga encourages placing the light in front of your subject, not behind. And when shooting outside, consider times of day where the sun is most flattering for a variety of skin tones. That's typically early in the morning or when the sun is setting, Kamara says.

Extreme sunlight, which causes deep shadows, can be most prominent in the middle of the afternoon and not as flattering for portraits. When photographing people during that time of day, Larrow uses a shaded area, like an awning or garage. "Everything behind them has the light of the garage, which is less than the light of outside," he says. This minimizes extremes of deep shadows and super-bright highlights.

Still, for individuals with features like dark, textured hair, this technique may diminish detail, particularly if you're aiming to photograph them directly facing the camera. In response, adjust the visual story: Larrow suggests turning your subject at an angle. Observe where the light illuminates aspects of the hair and face that you can then capture in your frame. To introduce more light into broader shadow areas, consider using a bounce card like white poster board, which introduces light from one source into a darker area.



Try These Quick Portrait Tips

IF YOU'RE IN SUNLIGHT that's casting dark shadows, find shade, like under a tree or an awning, for more even lighting. Make sure any light source, such as a window or lamp, is in front of or beside your subjects, and level with them.

PAY ATTENTION TO THE BACKGROUND. Some backgrounds, like a field of flowers, can complement, while others, such as another person's arm unintentionally in the frame, can take away from your photo's intent. If there's something distracting from your subjects and the story you're creating with them, see if they can block it or if you can turn to remove it from what you're capturing. Some portrait modes on newer smartphone models may also offer a convenient way to blur the background in your frame and make your subjects stand out in a portrait.

IF PHOTOGRAPHING WITH THE CAMERA APP IN IOS, tap on the screen to focus on your subject's face, then slide your finger up or down to adjust the exposure (the overall brightness

or darkness) of your image. For those who want to try different poses and angles while keeping the same exposure level, newer versions of iOS allow you to tap and hold to engage a feature called AF/AE Lock. Some Android devices have similar controls to manually adjust exposure settings. For instance, with the Samsung Galaxy S10, you can tap on the subject in the Camera app, then adjust the exposure using a sliding bar that pops up.

PAY PARTICULAR ATTENTION TO EXPOSURE when photographing a group with varied skin tones. Try to ensure that individuals with darker skin tones are not underexposed. If they're by a window or lamp, consider placing individuals with darker skin nearest the light source.

HOLD YOUR PHONE OR CAMERA WITH BOTH HANDS to minimize camera shake.

SHOOT FIRST AND EDIT LATER. Avoid in-camera filters that may alter your subject's skin tone. You can add them when editing later if you need to.

After You Photograph

EDIT WITH DETAILS IN MIND

The click of your camera or tap on your phone is one part of the photography experience. Selection and editing are key, too.

After shooting, reflect: Is there a single image or a few that especially connect to your original intent and your subject's story? Impactful details are often what make a portrait great, but sometimes they are not as visible as desired. Are any missing in your subject's hair and face?

Desktop and mobile apps with photo editing capabilities can help retrieve hidden details. The costs vary,

but many of them, like Instagram, Microsoft Photo Editor, and GIMP, are free and allow you to crop, rotate, and adjust the brightness, saturation, and hues within your image. VSCO is another editing tool that offers free editing options, in addition to a paid membership that, for \$20 per year, includes add-ons such as educational content. The Creative Cloud Photography plan from Adobe starts at \$10 per month and includes Photoshop and Photoshop Lightroom, both of which are popular among dedicated photographers.

Skin tones typically fall within a spectrum of oranges and reds, Tshinanga says. While reviewing and editing your photos, look closely at your subject's skin tone. Is there a tint or color cast that may not be accurate?

If so, some apps allow you to adjust colors individually. Larrow's favorite feature in the Lightroom App is called Color Mix. He says it allows him to change three things: hue, saturation, and luminance. Think of hue as the tone of a color ("Green can get more bluish-green to yellowish-green," Larrow says), while saturation is the color's deepness, and luminance affects its brightness or darkness.

Focusing your eye on your subject's skin tone while adjusting the colors of your overall image with a tool like Color Mix can help ensure accuracy in representation. Similar tools to explore include Saturation and Color in Instagram; Skin Tone in VSCO; and Shadows, Contrast, Saturation, and Tint in the iOS Photos app.

TEXTURE AND PATTERNS

They're key details illuminated in these portraits by Aundre Larrow (below) and Delwin Kamara (right).





NEWS & EXPERT
ADVICE TO
KEEP YOU
AHEAD OF
THE CURVE™

ROAD REPORT

DASHBOARD DECODER

What Does This
Icon Mean?



- A. LOW FUEL
- B. FILL UP ON LEFT SIDE
- C. TURN LEFT FOR GAS
- D. RETURN FUEL NOZZLE TO PUMP

ANSWER: B. You probably recognized the symbol, which appears near the fuel gauge in a car's instrument cluster. But did you know that the directional arrow indicates which side of the vehicle the fuel filler port is on? That makes it easy to approach gas pumps correctly and is especially useful when you're driving a car that you might not be familiar with, such as a rental.

FIRST DRIVE

2021 Toyota Sienna



The all-new 2021 Sienna minivan comes exclusively as a hybrid with a four-cylinder engine and two electric motors to produce 245 hp. All-wheel drive is available on all trims, and FCW, AEB with pedestrian detection, BSW, and other safety systems come standard. The EPA estimates 33 mpg combined.

CR's take: Our preproduction rental* from Toyota rode comfortably, and its handling proved to be responsive. Plus, the hybrid power and available AWD are a winning combo. Available options, including hands-free sliding side doors and seven USB ports, add to the appeal.

THE VITAL STATISTIC

\$4,600

Average amount EV owners save on maintenance costs and repairs over the life of their vehicle, compared with owners of conventional cars.

Source: CR Electric Vehicle Ownership Costs study (CR.org/levcosts).

RECALL



Ford Cars,
Trucks, and Vans

Ford is recalling more than 620,000 model year 2020 vehicles because a faulty electrical connection may cause their backup cameras to occasionally go blank or show a distorted image while in use, increasing the risk of a crash. The vehicles involved are the Ford F-150, Ranger, and Super Duty trucks; Ford Edge, Escape, Expedition, and Explorer SUVs; Lincoln Corsair and Nautilus SUVs; Ford Mustang coupes and convertibles; and Ford Transit vans.

WHAT TO DO: Dealerships will replace the backup cameras free of charge. For more information, owners can call Ford at 866-436-7332. Ford's number for this recall is 20C19.

TIP FROM THE TEST TRACK

Protect Kids From Seat Belt Hazards



The feature that tightens a seat belt strap to hold a child car seat in place can, in rare cases, pose a strangling or suffocation hazard if a child becomes

entangled in the belt. Be sure the car-seat harness is snug enough to prevent a child from reaching any seat belt straps, and buckle unused belts and put them in

"locked" mode by pulling shoulder straps out completely and slowly releasing them. Explain to older children that playing with a belt could potentially trap them.

The New Cars You Can Count On

Want a dependable new car, SUV, minivan, or truck? Our exclusive reliability data can steer you toward trouble-free brands and models, and away from those that end up in the shop.

by Jon Linkov

EVEN UNDER THE best of circumstances, you want your car to be there when you need it—not broken down on the side of the road. Today, with many people avoiding public transportation and reluctant to go to a mechanic because of COVID-19, auto reliability may be an even higher priority.

Our 2020 Auto Reliability Surveys, based on feedback from CR members on about 329,000 vehicles, reveal the models and brands you can count on. (For a full explanation of our methodology, see “Reliability Predictions,” starting on page 56.) Use the charts and data on the following pages to find a new car, SUV, minivan, or truck that’s in it for the long haul.

Brand Highlights

The charts drill deep into our reliability data, but here are some noteworthy findings from this year’s surveys.

Mazda moved up a notch from last

year into the top spot as the most reliable automaker. Key to its success: conservative redesigns, and reliable components and platforms shared across its model lineup.

Toyota moved up one spot to second position this year, also due in part to its measured approach to redesigns. Only the RAV4, which was redesigned in 2019, has some fuel system and transmission problems.

Lexus tumbled from first place to third but maintains its perch among the top three most reliable brands.

Buick soared 14 places to the No. 4 position this year, largely because it off-loaded its previously problematic Regal sedan and TourX wagon.

Tesla Model Y owners reported numerous build-quality issues, including body panels that fit so poorly the hatch couldn’t be closed. Paint problems were common; one owner reported dust, debris, and even human hair trapped in the paint. On the bright side, the Model 3 remained at average

predicted reliability this year.

Audi’s A4 sedan (and similar A5 coupe and convertible) continues to have outstanding reliability, and the A6 sedan improved to average in its second year. But some owners of the Q8 SUV reported blank display screens, software problems, and drive system issues; the Q3 SUV, redesigned in 2019, is below average; and the E-Tron EV has had drive system electrical failures and power equipment problems.

Porsche’s new 2020 Taycan EV impressed us on the track and is loaded with new equipment and tech. But due to new data showing problems with similar EVs, we have downgraded our reliability prediction and withdrawn our recommendation.

Kia’s SUVs are reliable, but the automaker’s sedans and hatchbacks are trouble-prone, resulting in a drop of six places this year. The new transmission in the Forte and Soul has been problematic, and the Niro EV had issues with its electric motor.

MODELS THAT WON-OR LOST-THEIR RECOMMENDED STATUS THIS YEAR

To be recommended by CR, a vehicle must be reliable, safe, and satisfying. The following models gained or lost their recommended status this year because of their predicted reliability rating. For comments from manufacturers that lost recommendations, go to [CR.org/lose-recommendation0121](https://www.consumerreports.org/lose-recommendation0121).



↑ NEWLY RECOMMENDED MODELS
Audi A6, BMW 3 Series, BMW 5 Series, BMW X5, BMW X7, Cadillac XT5, GMC Acadia, Infiniti Q50, Jeep Gladiator, Mini Countryman, Volvo S60

↓ NO LONGER RECOMMENDED MODELS

Audi E-Tron, Audi Q3, BMW X3, Ford Ranger, Genesis G70, Infiniti QX50, Kia Forte, Kia Niro EV, Kia Soul, Mini Cooper, Nissan Rogue Sport, Porsche Taycan, Subaru Ascent, Tesla Model S, Volkswagen GTI, Volvo XC60

Problem-Prone Models

THESE CARS, TRUCKS, and SUVs were among the most problem-prone 1- to 3-year-old models in each of 17 key areas and systems over the previous 12 months, based on survey

responses from owners. The percentage of affected vehicles is indicated for each model. These trouble spots are weighted based on severity and compared with the average

vehicle of the same age when calculating overall reliability. Major mechanical issues are weighted much more than other areas, such as noises and leaks or in-car electronics.

1. BODY HARDWARE

2020 Tesla Model Y 9%
Just a few months after the Tesla Model Y debut, numerous owners reported issues with door panels not lining up correctly or protruding from the car, and large gaps. Some owners reported they were unable to properly close the tailgate and were forced to leave it unlatched.

2. PAINT & TRIM

2020 Tesla Model Y 9%
Owners reported improperly installed weather stripping and trim, mismatched paint on body panels, and even dust, debris, and human hair stuck in the paint.

3. ELECTRICAL SYSTEM

2018 Jeep Compass 4%
Some owners reported battery and starter problems.

4. EMISSIONS/ FUEL SYSTEM

2018 Volkswagen Atlas 6%
Atlas owners reported broken emission control devices and fuel pump problems.

5. EXHAUST SYSTEM

2018 Volkswagen Atlas 3%
Atlas owners reported needing the catalytic converter replaced.

6. STEERING/ SUSPENSION

2018 Jeep Wrangler 13%
Owners reported steering linkage problems that led to steering-wheel vibration. There were also related reports of uneven tire wear and poor alignment.

7. POWER EQUIPMENT

2020 Lincoln Corsair 10%
Windshield wiper rain sensors reportedly stopped working on brand-new Corsairs.

8. DRIVE SYSTEM

2019 Audi Q8 6%
Some Audi owners reported electrical failures with the drive system.



9. IN-CAR ELECTRONICS

2019 BMW X5 12%

Multiple owners reported issues with infotainment screens freezing and going blank, upside-down onscreen images, and a buggy interface.

10. CLIMATE SYSTEM

2018 Honda Civic 4%

Several Civic owners reported their A/C compressor and/or condenser failed.

11. TRANSMISSION MINOR

2018 Chevrolet Traverse 8%

Traverse owners reported jerky shifting and a transmission that didn't immediately engage when a gear was selected.

12. TRANSMISSION MAJOR

2019 Kia Forte 8%
Kia's first CVT went into the 2019 Kia Forte and soon after the 2020 Kia

Soul. Owners reported that the transmission required replacement, sometimes before 5,000 miles.

13. NOISES & LEAKS

2019 Volkswagen Jetta 6%

Rattles from behind the sunroof and from a loose fuel line were common complaints. One owner reported having water pour into the passenger footwell due to an incorrectly installed windshield seal.

14. BRAKES

2018 Kia Stinger 8%

Stinger owners reported that a fuse blew in the master cylinder vacuum booster, as well as pulsation and vibration due to warped rotors.

15. ENGINE MAJOR

2018 Ford Expedition 4%

Reports included issues with camshaft phasers and timing tensioners that required major engine work and downtime.

16. ENGINE MINOR

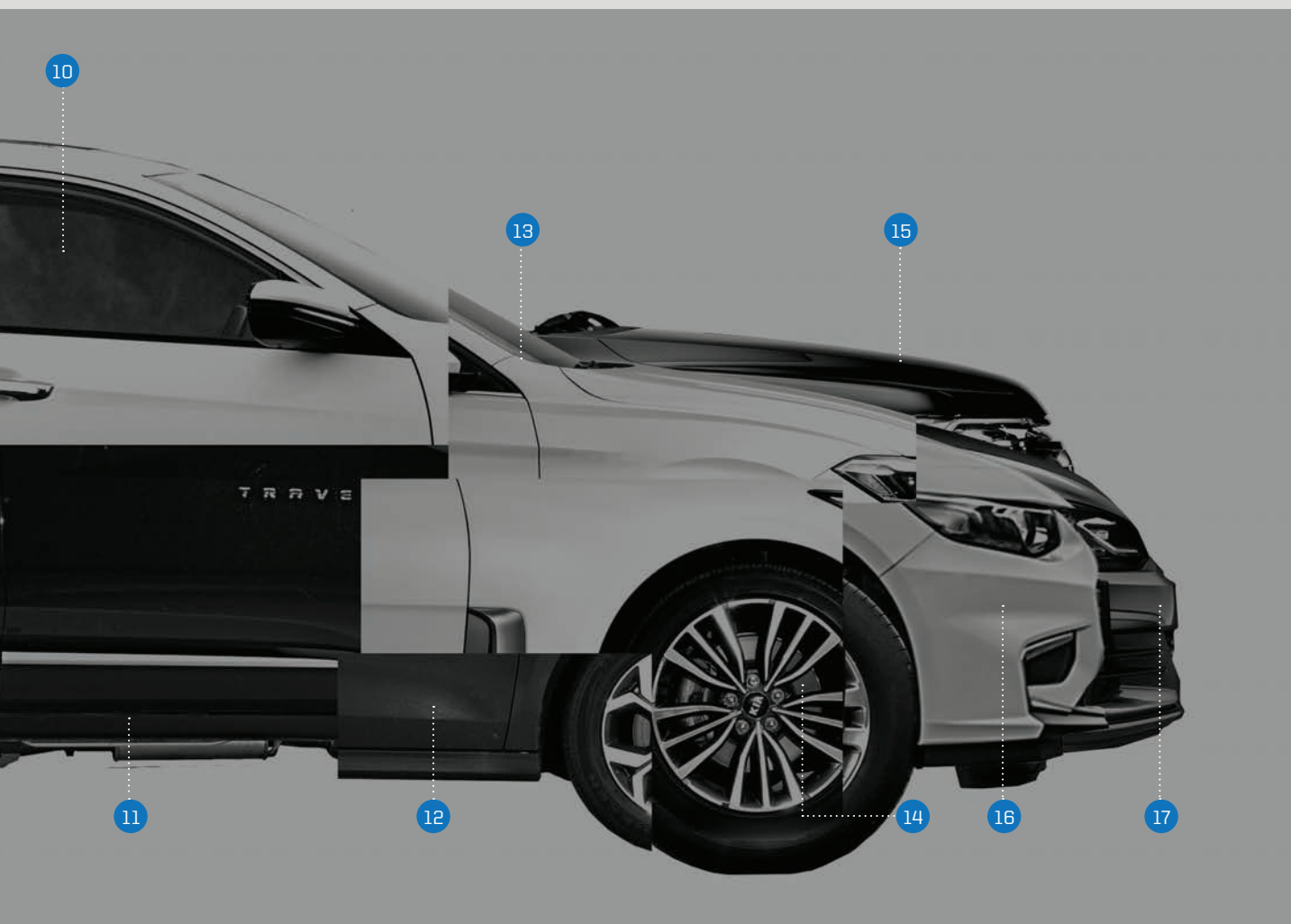
2018 Chevrolet Malibu 5%

Multiple Malibu owners reported that the engine computer prevented them from exceeding 55 mph.

17. ENGINE COOLING

2019 Volkswagen GTI 4%

Among GTI owners with problems, one told us the water pump completely failed at just 10,000 miles, dumping coolant all over their driveway.

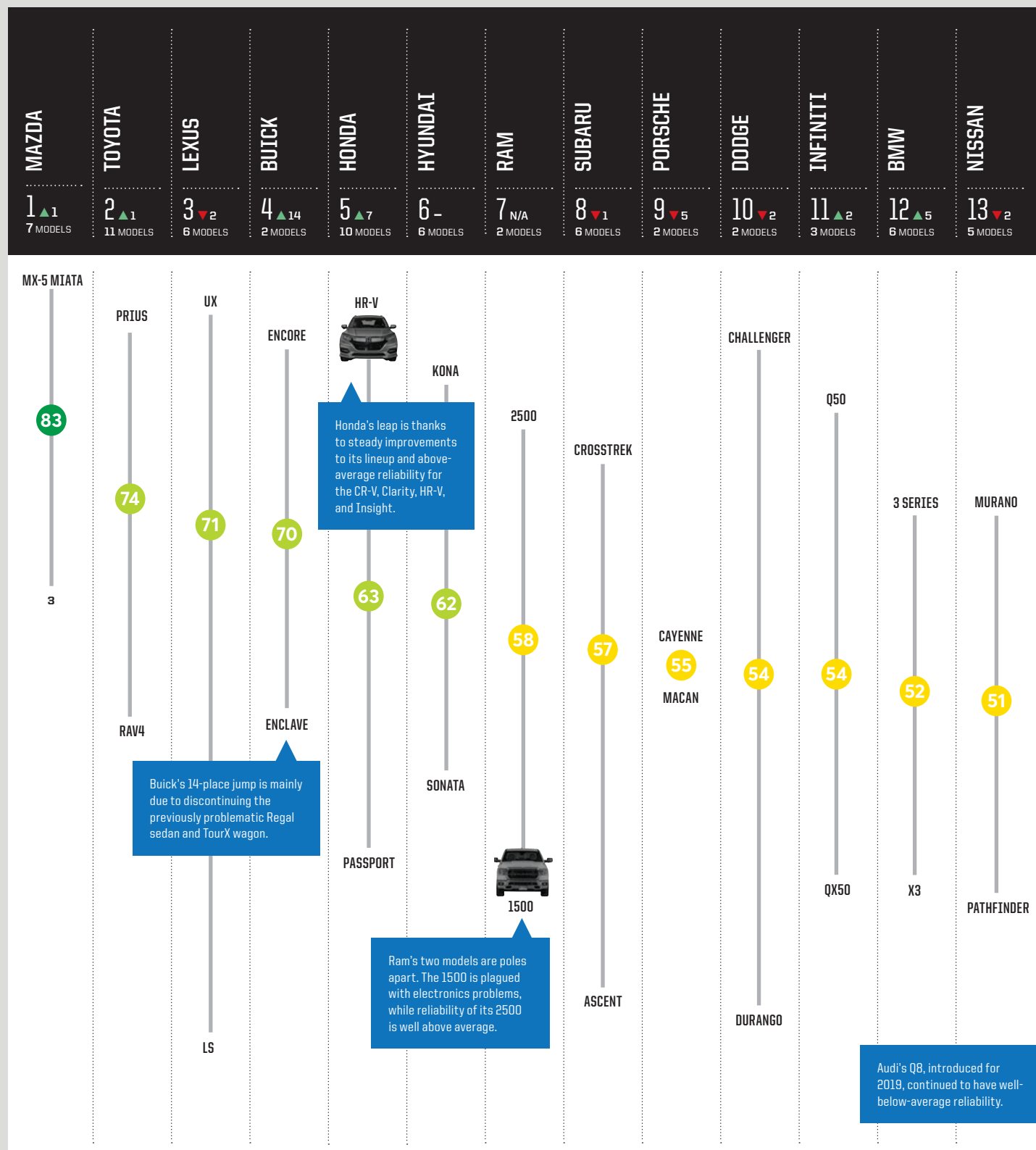


How the Brands Stack Up

FEW BRANDS DELIVER consistently reliable vehicles across all of their models. But a brand's reliability ranking, along with its top- and bottom-performing models,

can suggest your chances of running into trouble. CR's brand-level rankings are based on the average predicted reliability score of all the vehicles in a brand's

model lineup currently offered for sale. Our predicted reliability score (represented by the circled numbers in the chart) is calculated on a scale of 0 to 100 points, with the



average rating falling between 41 and 60 points. For a brand to be ranked, we must have sufficient survey data for two or more models. We haven't ranked Acura,

Alfa Romeo, Chrysler, Fiat, Genesis, Jaguar, Land Rover, Maserati, and Mitsubishi either because we have insufficient data or the brand makes too few models.

KEY

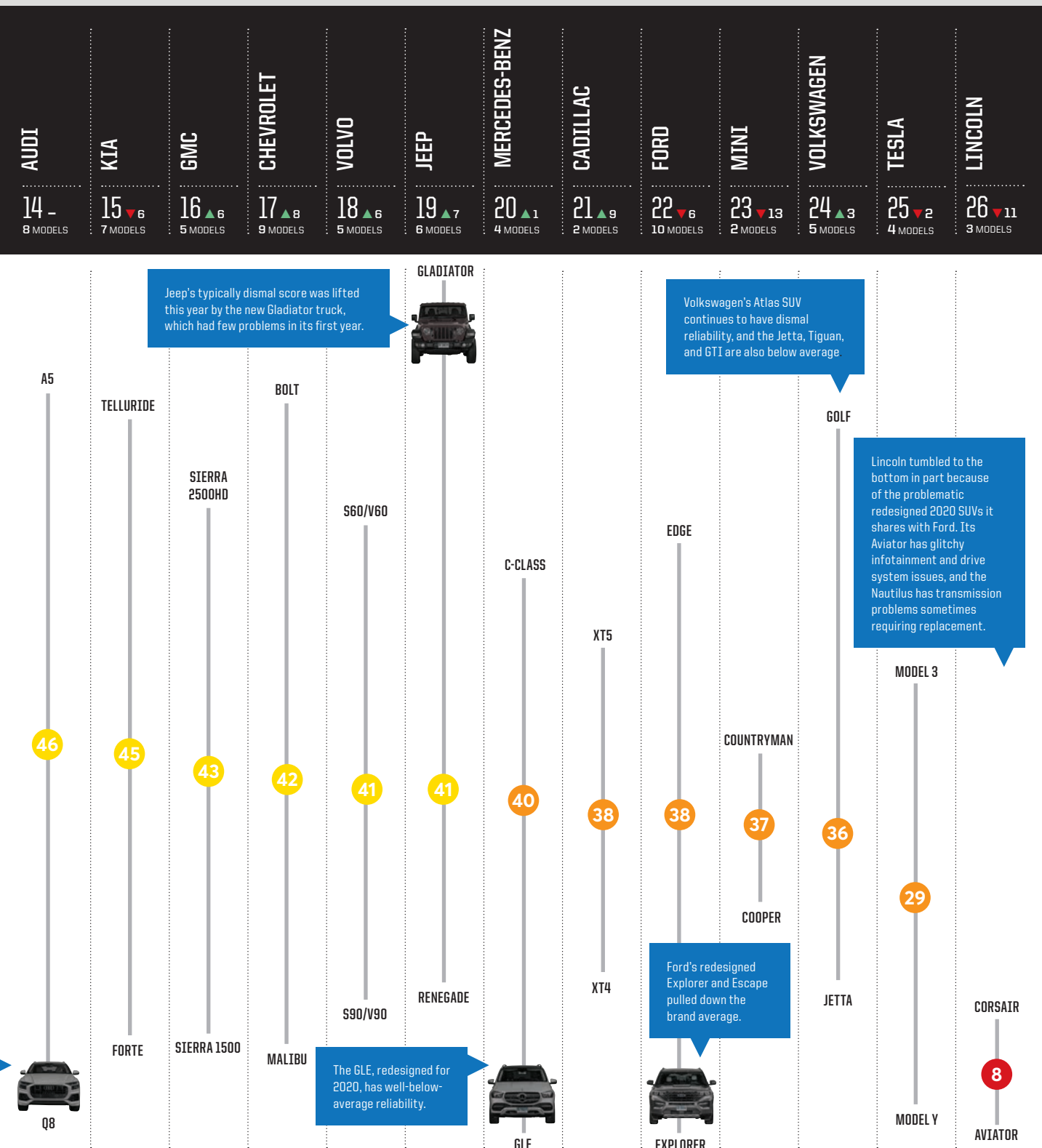
Rank — 1 ▲ 1 — Rank change from last year
7 MODELS
Number of models with survey data

BEST MODEL

83 Brand Average
WORST MODEL



ROAD REPORT



Reliability Predictions

EVERY YEAR CR asks its members about problems they've had with their cars, minivans, SUVs, and trucks in any of 17 trouble areas during the previous

12 months. We use their responses to calculate reliability ratings for every major mainstream vehicle.

Our predictions for the 2021 models below are based

on each model's overall reliability for the past three years. One or two years of data are used if the model was redesigned in 2020 or 2019. Scores are based on a

2021 MODELS

SUBCOMPACT SUVs

Mazda CX-30	95
Honda HR-V	90
Mazda CX-3	87
Hyundai Kona	87
Subaru Crosstrek	78
Chevrolet Trax	41
Nissan Rogue Sport	33
Ford EcoSport	28
Jeep Renegade	19

COMPACT SUVs

Mazda CX-5	85
Kia Sportage	81
Hyundai Tucson	78
Subaru Forester	77
Honda CR-V	73
Chevrolet Equinox	57
GMC Terrain	57
Toyota RAV4	49
Volkswagen Tiguan	31
Jeep Cherokee	31
Jeep Compass	21
Ford Escape	10

MIDSIZE/LARGE SUVs

Kia Telluride	83
Toyota 4Runner	81
Nissan Murano	72
Mazda CX-9	70
Ford Edge	69

Toyota Highlander	69
Hyundai Palisade	65
Subaru Outback	60
Jeep Grand Cherokee	48
Honda Pilot	47
Ford Expedition	46
Chevrolet Blazer	39
Honda Passport	34
Chevrolet Traverse	32
Nissan Pathfinder	29
Jeep Wrangler	27
Volkswagen Atlas	19
Subaru Ascent	18
Dodge Durango	16
Ford Explorer	1

LUXURY COMPACT SUVs

Lexus UX	95
Lexus NX	91
Buick Encore	91
BMW X1	66
Volvo XC40	66
Audi Q5	58
Cadillac XT5	57
Porsche Macan	54
Mercedes-Benz GLC	50
Mini Countryman	45
Acura RDX	34
Infiniti QX50	31
BMW X3	31
Audi Q3	30
Volvo XC60	28
Cadillac XT4	20
Lincoln Corsair	14
Tesla Model Y	5

LUXURY MIDSIZE/LARGE SUVs

Lexus GX	90
Lexus RX	74
Porsche Cayenne	55
Buick Enclave	50
Infiniti QX60	46
GMC Acadia	46
BMW X5	46
Tesla Model X	31
Volvo XC90	26
Audi E-Tron	12
Lincoln Nautilus	9
Audi Q8	8
Lincoln Aviator	2
Mercedes-Benz GLE	1

COMPACT HYBRIDS/ELECTRIC CARS

Toyota Prius	93
Toyota Prius Prime	88
Honda Insight	86
Chevrolet Bolt	85
Kia Niro	54
Hyundai Kona Electric	54
Nissan Leaf	54
Hyundai Ioniq	47
Kia Niro EV	18

COMPACT CARS

Toyota Corolla	90
Volkswagen Golf	82
Mazda 3	64
Honda Civic	60
Toyota Corolla Hatchback	58

Subaru Impreza	52
Volkswagen Jetta	19
Kia Soul	18
Kia Forte	13

MIDSIZE/LARGE CARS

Honda Clarity	85
Toyota Camry	83
Mazda 6	80
Nissan Altima	69
Toyota Avalon	60
Honda Accord	59
Subaru Legacy	59
Ford Fusion	56
Hyundai Sonata	43
Chevrolet Malibu	12

LUXURY COMPACT CARS

Audi A4	86
Infiniti Q50	84
BMW 3 Series	72
Volvo S60	71
Mercedes-Benz C-Class	65
Tesla Model 3	53
Audi A3	50
Kia Stinger	46
Genesis G70	37

LUXURY MIDSIZE CARS

Lexus ES	65
BMW 5 Series	45
Mercedes-Benz E-Class	43
Audi A6	42
Volvo S90	17

ULTRA-LUXURY CARS

Tesla Model S	26
Lexus LS	13

SPORTS/SPORTY CARS

Mazda MX-5 Miata	98
Dodge Challenger	91
Audi A5	86
BMW 2 Series	53
Ford Mustang	53
Volkswagen GTI	29
Mini Cooper	28

MINIVANS

Honda Odyssey	35
Chrysler Pacifica	34

COMPACT PICKUPS

Jeep Gladiator	99
Honda Ridgeline	62
Toyota Tacoma	58
Ford Ranger	29
Chevrolet Colorado	26
GMC Canyon	26

FULL-SIZED PICKUPS

Ram 2500	82
Toyota Tundra	80
Chevrolet Silverado 2500HD	73
GMC Sierra 2500HD	73
Ford F-250	48
Ford F-350	42
Ram 1500	34
Chevrolet Silverado 1500	13
GMC Sierra 1500	13

scale of 0 to 100. A score of 41 to 60 is considered average.

The predictions for all-new and redesigned 2021 models are based on our judgment of the brand's reliability history, the

previous generation's history, and that of other models the vehicle shares components with. 2021 models with an asterisk (*) are new or redesigned.

ALL-NEW & REDESIGNED 2021 MODELS

COMPACT SUVs

Kia Seltos*	↓
Mitsubishi Eclipse Cross	↓
Mitsubishi Outlander	↓
Mitsubishi Outlander Sport	↓
Nissan Rogue*	↓
Toyota RAV4 Prime*	↓
Chevrolet Trailblazer*	↓
Ford Bronco Sport*	↓
Volkswagen ID.4*	↓
Volkswagen Taos*	↓
Fiat 500X	↓

MIDSIZED SUVs

Hyundai Santa Fe	↑
Toyota Venza*	↑
Kia Sorento*	↓
Ford Bronco*	↓
Volkswagen Atlas Cross Sport	↓

LARGE SUVs

Toyota Sequoia	↑
Chevrolet Suburban*	↓
Chevrolet Tahoe*	↓
GMC Yukon*	↓
GMC Yukon XL*	↓
Nissan Armada	↓

LUXURY COMPACT SUVs

BMW X2	↑
BMW X4	↓
Buick Encore GX	↓
Buick Envision*	↓
Ford Mustang Mach E*	↓
Jaguar E-Pace	↓
Jaguar I-Pace	↓
Mercedes-Benz EQC*	↓
Mercedes-Benz GLA*	↓
Mercedes-Benz GLB	↓
Alfa Romeo Stelvio	↓
Land Rover Discovery Sport	↓
Land Rover Range Rover Evoque	↓
Land Rover Range Rover Velar	↓
Maserati Levante	↓

LUXURY MIDSIZED SUVs

Acura MDX*	↓
Audi Q7	↓
BMW X6	↓
Genesis GV80*	↓
Jaguar F-Pace	↓
Cadillac XT6	↓
Land Rover Defender	↓
Land Rover Discovery	↓
Land Rover Range Rover	↓
Land Rover Range Rover Sport	↓

LUXURY LARGE SUVs

Lexus LX	↑
Toyota Land Cruiser	↑
BMW X7	↓
Infiniti QX80	↓

Lincoln Navigator	↓
Cadillac Escalade*	↓
Mercedes-Benz GLS	↓

SUBCOMPACT CARS

Chevrolet Spark	↓
Hyundai Accent	↓
Hyundai Venue	↓
Kia Rio	↓
Mitsubishi Mirage	↓
Nissan Versa	↓

COMPACT CARS

Toyota C-HR	↑
Hyundai Elantra*	↓
Nissan Kicks	↓
Nissan Sentra	↓
Fiat 500L	↓

MIDSIZED CARS

Kia K5*	↓
Toyota Mirai*	↓
Volkswagen Passat	↓

LARGE CARS

Chrysler 300	↑
Dodge Charger	↑
Nissan Maxima	↑
Kia Cadenza	↓
Kia K900	↓

LUXURY COMPACT CARS

Acura ILX	↓
Acura TLX*	↓
BMW 2 Series Gran Coupe	↓
BMW i3	↓
Lexus IS*	↓
Volkswagen Arteon	↓
Cadillac CT4	↓
Mercedes-Benz A-Class	↓
Mercedes-Benz CLA	↓
Polestar 2*	↓
Alfa Romeo Giulia	↓

LUXURY MIDSIZED CARS

Audi A7	↓
Cadillac CT5	↓
Genesis G80*	↓
Jaguar XF	↓
Mercedes-Benz CLS	↓
Maserati Ghibli	↓

ULTRA-LUXURY CARS

BMW 7 Series	↓
Porsche Panamera	↓
Audi A8	↓
Genesis G90	↓
Mercedes-Benz S-Class*	↓
Porsche Taycan	↓

SPORTS/SPORTY CARS

Hyundai Veloster	↑
Lexus RC	↑
Subaru BRZ	↑

Toyota 86	↑
Audi TT	↓
BMW 4 Series*	↓
BMW 8 Series	↓
BMW Z4	↓
Nissan Z	↓
Porsche 718 Boxster	↓
Porsche 718 Cayman	↓
Porsche 911	↓
Toyota Supra	↓
Chevrolet Camaro	↓
Chevrolet Corvette	↓
Subaru WRX/STi	↓

MINIVANS

Toyota Sienna*	↑
Kia Sedona	↓
Chrysler Voyager	↓

PICKUP TRUCKS

Nissan Frontier	↓
Ford F-150*	↓
Nissan Titan	↓



Tesla's Problematic Pricey Option



THE FEATURES OF Tesla's \$10,000 Full Self-Driving Capability option might be cutting edge, but the name gives the false impression that it makes the car truly self-driving. After evaluating it on local roads and at our test track*, we think consumers should be wary about buying this pricey package. "The Full Self-Driving Capability suite requires significant driver attention to avoid safety risks, and several features don't provide real benefits," says Jake Fisher, CR's senior director of auto testing.

Three of the features we evaluated—Autopark, Auto Lane Change, and Summon—have improved over time. But some newer features, noted below, raised significant concerns about safety and usefulness. "Tesla continues to add and modify features in the package, and we will evaluate them as they become available," Fisher says. Tesla didn't return our calls for comment.

SMART SUMMON

WHAT IT PROMISES:

This feature is designed to allow your car to drive to you or a location of your choosing in a private parking lot or driveway. Tesla says it will "navigate more complex environments and parking spaces, maneuvering around objects as necessary to come find you in a parking lot."

WHAT WE FOUND:

The system was unreliable. It sometimes took overly complicated routes to reach us. It also got stuck on an incline, then deactivated completely. It sometimes navigated the wrong side of parking lot driving lanes and didn't always stop at stop signs in the lot. All of that could confuse other drivers and pose a hazard to pedestrians.

NAVIGATE ON AUTOPILOT

WHAT IT PROMISES:

Tesla says this function will guide your car on the highway from "on-ramp to off-ramp, including suggesting lane changes, navigating interchanges, automatically engaging the turn signal, and taking the correct exit." A destination must be programmed into the navigation system for this function to work.

WHAT WE FOUND:

The system can do all of those things, but we found that it performed inconsistently and raised serious safety concerns. It frequently moved into the passing lane, cutting off a swiftly approaching car, and remained in the passing lane for long periods of time. It would also disengage at times for no apparent reason.

TRAFFIC LIGHT AND STOP SIGN CONTROL

WHAT IT PROMISES:

To identify stop signs and traffic lights, and slow the car to a stop on approach, with the driver's active supervision. This feature brings the Tesla to a complete stop at all traffic lights, even green ones, unless the driver overrides the system or the vehicle is following another car.

WHAT WE FOUND:

We noted several problems with this system, including that it defies logic to stop at a green light. The car also stopped well before or after a stop sign at times, slammed on the brakes for yield signs even when it was safe to merge, and stopped at every exit while going around a traffic circle. All of these could compromise safety.

ILLUSTRATION: MATTHEW HOLLISTER



ROAD TEST

EXCLUSIVE RATINGS & REVIEWS
BASED ON TESTING AT CR'S
327-ACRE AUTO TEST CENTER



LARGE SUVs

Chevrolet Tahoe

Big, Versatile, and Powerful

58

OVERALL SCORE

ROAD-TEST SCORE 73

HIGHS Ride, quietness, controls, interior room, seat comfort

LOWES Gear selector, fuel economy, agility, braking, high step-in, tall hood lessens visibility

POWERTRAIN 355-hp, 5.3-liter V8 engine; 10-speed automatic transmission; four-wheel drive

FUEL 17 mpg on regular fuel

PRICE
\$48,000-\$72,600 base price range
\$63,650 as tested

CHEVROLET SHIFTED THE 2021 Tahoe to an independent rear suspension, gave it new high-tech features and connectivity, and made it roomier. The result is a three-row SUV that's well-suited for a large family—especially one that needs to tow a trailer.

The 5.3-liter V8 engine delivers ample, instantaneous power, and the smooth-shifting 10-speed automatic transmission works well with the engine.

While the standard suspension absorbs bumps and rough pavement very effectively, at highway speeds the Tahoe feels a bit buoyant. The Premier version is more composed thanks to its advanced adaptive suspension. Handling has improved, but there's notable body roll in corners and braking distances are long, even for a large SUV.

It's a climb to get into this big

vehicle, though the running boards help. The interior is stunningly quiet, like a hushed luxury sedan. The front seat is wide and supportive. The two middle-row captain's chairs are spacious, and the third seat can easily fit adults. We're not fans of the push-button gear selector, but other controls are large and easy to use. The infotainment screen is quick to react and a cinch to navigate, with clear, vivid graphics.

The Tahoe's unusually tall hood compromises forward visibility, which is particularly concerning in high-pedestrian urban areas. Drivers are also forced to rely on cameras and sensors for parking maneuvers. AEB and FCW are standard, but BSW, LKA, and LDW are optional. The optional BSW, along with below-average predicted reliability, hurts the Tahoe's Overall Score, preventing us from recommending it.

MIDSIZE SEDANS

Kia K5

Pleasant and Practical

73

OVERALL SCORE

ROAD-TEST SCORE 82

HIGHS Controls, fuel economy, interior room, braking

LOWES Hesitation from a rolling stop, access, no power seat on the LX5

POWERTRAIN 180-hp, 1.6-liter 4-cylinder turbocharged engine; 8-speed automatic transmission; front-wheel drive

FUEL 32 mpg on regular fuel

PRICE
\$23,490-\$30,490 base price range
\$25,610 as tested

KIA'S NEW 2021 K5—striking in its design and competitively priced—replaces the Optima midsize sedan. The new model shares much of its underpinnings with the Hyundai Sonata. But unlike the Sonata, the K5 is available with all-wheel drive, and we think it has a more comfortable ride.

The new sedan handled securely on our test track when pushed to its limits, which should give a driver confidence when swerving to avoid obstacles. But the car is rather uninspiring on winding back roads, and it hesitates when accelerating from a standstill.

The standard 1.6-liter turbo four-cylinder delivers robust power and impressive fuel economy. Its 32 mpg overall ties the Toyota Camry LE for the most efficient nonhybrid car in the class.

A low-slung stance means

the K5 can be difficult to get in and out of, but drivers and passengers will appreciate how roomy it is once they're inside. There's good outward visibility, the dashboard and controls have a traditional layout, and we found the infotainment system easy to use. Although the K5 did a good job subduing most road and wind noise, the engine gets noisy even during mild acceleration.

Be careful which trim level and options you choose. You have to opt for the GT-Line trim or above to get a more supportive power seat with lumbar adjustment, and for some reason you get wireless Android Auto or Apple CarPlay only with the smaller 8-inch touch screen.

FCW, AEB, LKA, and a rear-seat reminder come standard, but BSW isn't available on the base LX. It's standard on all higher trims.



LUXURY COMPACT SUVs

Mercedes-Benz GLA

Updated and Improved

60

OVERALL
SCORE

ROAD-TEST SCORE 74
HIGHS Acceleration, handling, fuel economy, fit and finish

LOWS Controls, rear and side visibility

POWERTRAIN 221-hp, 2.0-liter 4-cylinder turbocharged engine; 8-speed dual-clutch automatic transmission; all-wheel drive

FUEL 27 mpg on premium fuel

PRICE
\$36,230–\$47,550 base price range
\$43,475 as tested

JUST LIKE OTHER automakers, Mercedes-Benz has expanded its SUV offerings and now sells two entry-level SUVs. The redesigned GLA uses the same platform as the GLB. But while it's a major improvement over the flawed first-generation model, the GLA's Overall Score is hurt by its worse-than-average predicted reliability, which prevents us from recommending it.

The GLA's turbo engine delivers strong acceleration and impressive fuel economy. But we occasionally felt hesitation followed by a surge of power when accelerating after slowing down, such as at a yield sign. Our testers found the ride to be on the firm side, but it's far better than on the previous GLA. The responsive steering and restrained body lean made the GLA rewarding to drive.

Mercedes' recent entry-level cars have much nicer interiors

than their predecessors, and the GLA is no exception. The high-grade materials and generous soft-touch surfaces wouldn't feel out of place in a more expensive model. The front seats are very supportive, and even with the sleek roofline it's easy to get into the rear seat.

The infotainment system is overly complex and distracting to use. It's rich with features, but the convoluted menu structure and sensitive touchpads make the system challenging to use while driving. And visibility to the sides and rear is compromised by wide roof pillars, short side windows, and a small rear window, which forces the driver to constantly check the mirrors and backup camera.

We like that FCW, AEB with pedestrian detection, and BSW are standard.

ELECTRIC VEHICLES

Tesla Model Y

Advanced Tech, Rough Ride

50

OVERALL
SCORE

ROAD-TEST SCORE 90
HIGHS Handling, acceleration, braking, seat comfort, doesn't consume gas, no emissions

LOWS Ride, controls, limited range, long charging time, no true BSW

POWERTRAIN 384 hp combined from two electric motors; 1-speed direct drive; all-wheel drive

RANGE 316 miles (EPA)

PRICE
\$49,990–\$59,990 base price range
\$61,190 as tested

THE MODEL Y is essentially a taller SUV version of Tesla's Model 3, sharing key underpinnings, equipment, and features. We found it to be quick, agile, and roomy, but it has the same flaws as the 3. It isn't uncommon for first-year reliability on new vehicles to be below average, but the Model Y's is well below average.

The Y is quick, darting from 0 to 60 mph in just 4.7 seconds in a smooth and thrilling burst of power. The Long Range battery AWD model we tested has an EPA-rated driving range of 316 miles, and it takes 10 hours to replenish on a 240-volt outlet, similar to what an electric clothes dryer uses.

Handling is more akin to a sports car, with the quick steering and taut suspension that allow for poised cornering. But like the Model 3's ride, the Model Y's is too stiff and, as a result, transmits almost

every road imperfection into the cabin.

The front seat is comfortable, and the rear seat is significantly better than the Model 3's, thanks to lots of headroom and improved leg support.

The interior has some nice matte wood and suede, but it's offset by irregular panel gaps and rough edges. There's a minimalist look and feel to the Y, with no traditional gauges in front of the driver and an over-reliance on the 15-inch touch screen to access and control almost every car function. Even adjusting the side mirrors, steering wheel, and airflow from the dash vents requires interaction with the large center screen.

FCW, AEB with pedestrian detection, LDW, and LKA come standard. Tesla's BSW system, which shows an image of the Model Y and surrounding vehicles on the center screen, is inadequate.

Ratings ➤ **An Emphasis on Efficiency** Three redesigned models we feature this month show welcome gains in fuel economy, while the fourth is pure electric.

Make + Model		Overall Score	Survey Results		Road-Test Results														Advanced Safety				
			Predicted reliability	Owner satisfaction	Road-test score	Overall mpg/MPGe	Seat comfort, front/rear	Usability	Noise	Ride	Fit + finish	Routine handling	Avoidance-maneuver speed, mph	Acceleration, 0-60 mph, sec.	Dry braking, 60-0 mph, ft.	Suitcases + duffels/ Cargo volume, cu. ft.	FCW	AEB, city	AEB, pedestrian	AEB, highway	BSW		
SEDANS \$25,000–\$35,000																							
✓	Toyota Camry 2.5L	88	⬆	⬆	86	32	⬆ / ⬆	⬆	⬆	⬆	⬆	⬆	53.5	8.0	126	3+1	S	S	S	S	0		
✓	Subaru Legacy 2.5L	84	⬆	⬆	89	28	⬆ / ⬆	⬆	⬆	⬆	⬆	⬆	54.5	8.9	131	4+1	S	S	S	S	0		
✓	Honda Accord 1.5T	84	⬆	⬆	89	31	⬆ / ⬆	⬆	⬆	⬆	⬆	⬆	54.5	7.7	135	4+1	S	S	S	S	0		
✓	Mazda6 2.5L	83	⬆	⬆	79	28	⬆ / ⬆	⬆	⬆	⬆	⬆	⬆	54.0	9.2	133	3+2	S	S	S	S	S		
✓	Nissan Altima 2.5L	79	⬆	⬆	81	31	⬆ / ⬆	⬆	⬆	⬆	⬆	⬆	53.5	7.6	131	4+0	S	S	0	S	0		
✓	Kia K5 1.6T	73	⬆	⬆	82	32	⬆ / ⬆	⬆	⬆	⬆	⬆	⬆	53.5	7.7	130	3+2	S	S	S	S	0		
✓	Volkswagen Passat 2.0T	72	⬆	⬆	77	28	⬆ / ⬆	⬆	⬆	⬆	⬆	⬆	52.0	7.9	130	3+1	S	S	S	S	S		
✓	Hyundai Sonata 2.5L	71	⬆	⬆	81	31	⬆ / ⬆	⬆	⬆	⬆	⬆	⬆	56.0	7.5	127	3+2	S	S	S	S	0		
SUVs \$35,000–\$45,000																							
✓	Lexus UX250h 2.0H	81	⬆	⬆	71	37	⬆ / ⬆	⬆	⬆	⬆	⬆	⬆	54.0	8.8	137	18.0	S	S	S	S	S		
✓	BMW X1 2.0T	73	⬆	⬆	74	26	⬆ / ⬆	⬆	⬆	⬆	⬆	⬆	53.0	7.9	134	27.0	S	S	S	–	–		
✓	Volvo XC40 2.0T	73	⬆	⬆	71	24	⬆ / ⬆	⬆	⬆	⬆	⬆	⬆	54.0	7.3	132	25.5	S	S	S	S	S		
✓	Mini Cooper Countryman 2.0T	72	⬆	⬆	82	25	⬆ / ⬆	⬆	⬆	⬆	⬆	⬆	53.0	8.3	120	23.5	S	S	S	–	–		
	Mercedes-Benz GLB250 2.0T	64	⬆	⬆	81	26	⬆ / ⬆	⬆	⬆	⬆	⬆	⬆	54.5	6.8	125	28.5	S	S	S	S	S		
	Audi Q3 2.0T	63	⬆	⬆	84	23	⬆ / ⬆	⬆	⬆	⬆	⬆	⬆	52.5	7.8	126	24.5	S	S	S	S	0		
	Mercedes-Benz GLA250 2.0T	60	⬆	⬆	74	27	⬆ / ⬆	⬆	⬆	⬆	⬆	⬆	54.0	6.8	133	26.5	S	S	S	S	S		
	Cadillac XT4 2.0T	52	⬆	⬆	78	23	⬆ / ⬆	⬆	⬆	⬆	⬆	⬆	55.0	7.6	128	26.5	S	S	S	0	0		
3-ROW SUVs \$55,000–\$75,000																							
✓	Ford Expedition MAX 3.5T	69	⬆	⬆	73	16	⬆ / ⬆	⬆	⬆	⬆	⬆	⬆	47.0	7.3	143	66.0	S	S	S	S	S		
✓	Toyota Sequoia 5.7L	68	⬆	⬆	60	15	⬆ / ⬆	⬆	⬆	⬆	⬆	⬆	47.0	7.1	146	61.0	S	S	S	S	S		
	Chevrolet Tahoe 5.3L	58	⬆	⬆	73	17	⬆ / ⬆	⬆	⬆	⬆	⬆	⬆	49.0	7.8	145	58.5	S	S	S	0	0		
	Nissan Armada 5.6L	53	⬆	⬆	69	14	⬆ / ⬆	⬆	⬆	⬆	⬆	⬆	51.0	6.7	133	46.5	S	S	–	S	0		
ELECTRIC VEHICLES																							
✓	Tesla Model 3 E	78	⬆	⬆	82	130	⬆ / ⬆	⬆	⬆	⬆	⬆	⬆	55.0	5.3	133	2+2	S	S	S	S	–		
	Tesla Model X E	65	⬆	⬆	83	87	⬆ / ⬆	⬆	⬆	⬆	⬆	⬆	53.5	4.9	127	2+2	S	S	S	S	–		
	Jaguar I-Pace E	59	⬆	⬆	82	76	⬆ / ⬆	⬆	⬆	⬆	⬆	⬆	52.0	4.3	136	25.5	S	S	S	0	0		
	Audi E-Tron E	54	⬆	⬆	90	74	⬆ / ⬆	⬆	⬆	⬆	⬆	⬆	49.5	6.3	131	28.0	S	S	S	S	S		
	Tesla Model Y E	50	⬆	⬆	90	121	⬆ / ⬆	⬆	⬆	⬆	⬆	⬆	54.5	4.7	121	25.0	S	S	S	S	–		
>	Digital and All Access members can find the latest, complete ratings at CR.org/cars . When you're ready to buy, configure the vehicle and find the best price in your area by clicking the green "View Pricing Information" button on the model's dedicated page.																						

HOW WE TEST: Recommended models did well in our **Overall Score**, which factors in **Road-Test Results**, **Predicted reliability**, **Owner satisfaction**, and **Advanced**

Safety, which includes crash-test results and the availability of crash-prevention features, such as forward collision warning, automatic emergency braking,

pedestrian detection, and blind spot warning. A dash (–) means no such safety system is offered; 0 means it's available but not as standard equipment; S means

it's standard on all trims. We deduct points if a model's gear selector lacks fail-safes. Digital or All Access members can go to [CR.org/cars](https://www.cars.com) for complete ratings.

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These Screwups Are So Last Year

We're ready to turn the page on these 2020 fails

Maybe It Wasn't the 'Best Year Ever'

There's a reason this 2020 planner ended up on the clearance rack.

Submitted by Mary Kalafut, Lake Zurich, IL



Just How Dry Is It?

The perfect bottle of bubbly if you're feeling indecisive.

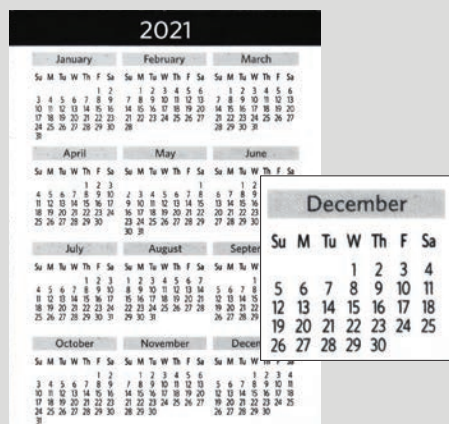
Submitted by Susan Rooks, via email



Say Goodbye to Next New Year's Eve

Whoever made this calendar dropped the ball.

Submitted by Elizabeth Lenhart, New Cumberland, PA



Is That Really Me in the Mirror?

New year, new you? Sometimes the person looking back at you isn't quite what you expect.

Submitted by Raymond Dube, via email



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Be on the lookout for goofs and glitches like these. Share them with us—by email at SellingIt@cro.consumer.org or by mail to Selling It, Consumer Reports, 101 Truman Ave., Yonkers, NY 10703—and we might publish yours. Please include key information, such as the publication's name and date.

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