

NOV 15

CELL PHONE RADIATION
A CANCER CONNECTION?

WHAT'S TOPS IN TVs?

NEW RATINGS INSIDE

ConsumerReports®

A Crying Shame

Seniors and their families
lose \$3 billion a year to con artists.
What can we do to stop them?



**Food
Packaging
Gimmicks,
Exposed**



**Winter
Driving
Alert**

The real truth
about all-wheel drive

NOVEMBER 2015
CONSUMERREPORTS.ORG

WANT EVEN MORE GREAT INFORMATION FROM CONSUMER REPORTS?

Get **immediate access** to all our
Ratings, tests and CR Best Buy
recommendations

JUST \$30 FOR AN ANNUAL SUBSCRIPTION AND YOU'LL GET...

24/7 ACCESS TO:

- ✔ **Latest product Ratings.** Plus reliability info on thousands of products.
- ✔ **Consumer Reports Mobile.*** Access to ConsumerReports.org on your mobile phone.
- ✔ **Build & Buy car-buying service.** Experience the easy way to buy a car AND save money.
- ✔ **New! Car Repair Pricing.** Find out how much that next car repair *should* cost.
- ✔ **Price & Shop.** Buy electronics and appliances from reliable online stores. Now includes local shopping, too.
- ✔ **Health info.** Stay healthy with current drug, insurance, and health equipment Ratings.

Subscribe today at www.ConsumerReports.org/cr/shopsmart514

ConsumerReports.org[®]

*Standard data and messaging rates apply. Check your carrier for accessibility.

CONTENTS

November 2015, Vol. 80 No. 11



LIES, SECRETS, AND SCAMS P. 28

SENIORS AND THEIR FAMILIES (such as the ones above) lose billions of dollars per year to the slick schemes of con artists. What will it take to stop them?

Blowin' in the Wind

Clearing your house and lawn of leaves and other debris will help you weather the season.

There are five things you should do right now. **RATINGS**

P. 13



Life Without Wrinkles

Pick the right laundry appliances to keep your clothes looking fresh and wrinkle-free. See our top choices for washers, dryers, and irons. **RATINGS**

P. 16



A Clean Sweep

When you vacuum, you want loads of power but not a lot of noise. Our exclusive tests will clear your path to the top choices. **RATINGS**

P. 22

That Empty Feeling

Marketing tricks mean shelves are full of boxes and bags that hold less product than consumers expect. Learn how to be a shrewd shopper.

P. 24



CONTENTS

November 2015, Vol. 80 No. 11



Have More Fun With Your TV

Follow our guide to the top ultra HD sets—so you can tell the hype from the truly hot stuff. **RATINGS**

P. 38

Medical Bill Sticker Shock

Consumers are being hit with costly unforeseen charges at the hospital or doctor's office. We tell you how to protect yourself.

P. 46

FEEDBACK

5 From the President: Breaking the Silence

Surprises from medical bills and con artists put your financial security at risk.

6 Your Tips for Better Rates and Better Service

Comments from our readers.

6 About the Cover

THE UPDATE

8 The Consumer Rights You're Giving Away

Many companies make you agree to go to arbitration in disputes.

9 Connect That Camera

Our experts answer questions about Wi-Fi photography, credit reports, and more.

9 Recalls & Updates

Shocking night-lights pose a risk.

10 Can You Hear Me Now?

Consumers deserve answers about cell-phone radiation safety.

12 The Hidden Cost of Cable

Consumers have little choice on cable-box rentals, but there are calls for change.

12 Get Involved

Take action to clear the air, and support food labeling.



ROAD REPORT

52 Get a Grip

Our exclusive all-wheel-drive testing yields surprising results you need to know.

RATINGS

57 The Truth About Tread Wear

Can you trust tires' tread-life warranties to hold up?

RATINGS

62 Sharpening the Edge

The redesigned Ford Edge midsize SUV deserves a "most improved" award.

RATINGS

63 Form Over Function

The Land Rover Discovery Sport seems promising until you get it on the road.

RATINGS

INDEX

66 A Year's Worth of Products

SELLING IT

67 Goofs and Gaffes

ABOUT CONSUMER REPORTS We are the world's largest independent, nonprofit, consumer-product-testing organization, based in Yonkers, N.Y. We survey millions of consumers about their experiences with products and services. We pay for all of the products we rate. We don't accept paid advertising. We don't accept free test samples from manufacturers. We do not allow our name or content to be used for any promotional purposes.

HOW TO REACH US Write to us at Consumer Reports, 101 Truman Ave., Yonkers, NY 10703-1057, Attn: Customer Service.

TO SEND A LETTER TO THE EDITOR Go to ConsumerReports.org/lettertoeditor.

NEWS TIPS AND STORY IDEAS Go to ConsumerReports.org/tips.

E-MAIL SUBMISSIONS For Selling It send to SellingIt@cro.consumer.org or call 800-666-5261. See page 67 for more details.

SUBSCRIPTION INFORMATION Go to ConsumerReports.org/magazine or call 800-666-5261. See page 65 for more details. **RATINGS** We rate products using these symbols:

● Excellent ● Very Good ○ Good ● Fair ● Poor

President and CEO
Marta L. Tellado

Executive Vice President
Ricardo A. Castro

Vice President, Brand, Product Strategy, and Integration
Leonora Wiener

Editor in Chief Diane Salvatore

Managing Editor Robert Tiernan

Editor at Large Sarah J. Robbins

Design Director Timothy LaPalme

Creative Director Melissa Paterno Plonchak

Art Directors Tammy Fernandez, Joseph Ulatowski

Photo Editors Emilie Harjes, Karen Shinbaum

Vice President, Magazine and Newsletter Products
Brent Diamond

Vice President, Integrated Content Creation
Liam McCormack

Vice President, Digital Jason Fox

Vice President, Communications Robert McEwen

Executive Director, Content Gwendolyn Bounds

Senior Director, Product Testing Mark Connelly

Electronics Glenn Derene, Content Director
Editors: Jerry Beilinson, Michael Gikas, Eileen McCooney, Terry Sullivan, Donna Tapellini, James Willcox
Product Testers: Maria Rerecich, Gerard Catapano, Testing Leads: Kerry Allen, Elias Arias, Claudio Ciaci, Charles Davidman, Richard Fisco, Dean Gallea, Joseph Lazzaro, Richard Sulin, Maurice Wynn

Money Margot Gilman, Content Lead
Editors: Jeffrey Blyskal, Catherine Fredman, Chris Horymski, Nikhil Hutheesing, Tod Marks, Tobie Stanger, Amanda Walker

Health & Food Ellen Kunes, Content Lead
Editors: Orly Avitzur, M.D.; Susan Byrne; Trisha Calvo; Lauren Cooper; Chris Hendel; Joel Keehn; Marvin M. Lipman, M.D.; Andrea Rock; Diane Umansky
Product Testers: Maxine Siegel, Testing Lead; Amy Keating, Ellen Klosz

Health Ratings Doris Peter, Director

Best Buy Drugs Lisa Gill, Deputy; Editors: Teresa Carr, Ginger Skinner, Steve Mitchell

Consumer Safety and Sustainability Urvasi Rangan, Executive Director; Doris Sullivan, Henry Akinleye

Home & Appliance Shax Riegler, Content Lead
Editors: Dan DiClerico, Mary Farrell, Kimberly Janeway, Celia Kuperszmid Lehrman, Ed Perratore
Product Testers: John Galeotafiore, James Nanni, Testing Leads; Peter Anzalone, John Banta, Susan Booth, Tara Casaregola, Lawrence Ciufo, Enrique de Paz, Bernard Deitrick, Cindy Fisher, Emilio Gonzalez, Edward Kippel, Ginny Lui, John McAloon, Joan Muratore, Joseph Pacella, Christopher Regan, Peter Sawchuk, Pat Slaven, Frank Spinelli, David Trezza, Michael Visconti

Cars Mark Rehtin, Content Lead
Editors: Jeffrey Bartlett, Jonathan Linkov, Gordon Hard Auto Test Center; Jake Fisher, Jennifer Stockburger, Directors; Product Testers: Mike Bloch, John Ibbotson, Chris Jones, Anita Lam, Emily Mathews, Tom Mutchler, Gene Petersen, Ryan Pszczolkowski, Mike Quincy, Gabe Shenhar, Shawn Sinclair, Joe Veselak, Seung Min "Mel" Yu

Consumer Engagement Testing Charu Ahuja, Director; Linda Greene, Adam Kaplan

Production Eric W. Norlander; Terri Kazin, Aileen McCluskey

Imaging Frank Collado, Mark Linder

Content Operations David Fox, Director; William Breglio, Wayne Lizardi, Anthony Terzo

Copy Noreen Browne, Alison France, Wendy Greenfield

Fact Checking Jane Healey; Kathleen Adams, Tracy Anderman, Sarah Goralski, Sharon Riley, David Schipper

Administration Decarris Bryant

External Relations Jen Shecter, Director

Statistics Michael Saccucci, Director; Keith Newsom-Stewart, Martin Romm, Yunxuan Chang

Survey Research Steven Witten, Director; Donato Vaccaro, Karen Jaffe

Consumer Insight Ed Farrell, Director; Andrew Vogel, Karen Hoffman, Robert Huerster, Dirk Klingner

Print Product Management Patricia McSorley, Associate Director

Purchasing Steven Schiavone, Associate Director

FROM THE PRESIDENT

Breaking the Silence

We'd all like to believe that our financial security couldn't be threatened by a simple phone call from a stranger or a planned medical procedure. Yet, as this month's stories on senior scams and surprise medical bills highlight, we're all vulnerable.

In "Lies, Secrets, and Scams," on page 28, we tackle the difficult subject of financial exploitation by strangers of people over 60, which costs those affected roughly \$3 billion per year by one estimate.

It's a crime on the rise—the number of incidents has increased at least 47 percent between 2012 and 2014, according to the Federal Trade Commission—and for those who have been impacted, it's often loaded with shame. The people we've profiled are heroes for speaking out, and they underscore that those scams could happen to any of us.

Financial hardship is not necessarily caused by con artists, as shown in "Medical Bill Sticker Shock," on page 46. Our recent survey found that a third of Americans with private insurance received a bill that their health plan did not fully cover, or did not cover at all. The cost of those surprise medical bills can be staggering, and the path to resolution is often painful. We're fighting to reform the broader billing system, but in the meantime we warn you of potentially costly scenarios and help you deal with them.

To protect consumers from scams, we're also pressing regulators to be vigilant about consumer fraud and impose steep fines on companies that falsely advertise. We have a campaign to end robocalls, and we target predatory products like reverse mortgages and payday loans.

We hope you share our resources—and speak out if you've been impacted. Together, we can put an end to these deceptive practices.



Marta L. Tellado,
President and CEO

Follow me on Twitter
[@MLTellado](https://twitter.com/MLTellado)

PROTECTING
CONSUMERS FROM
SCAMS IS A TOP
PRIORITY FOR US.
THIS IS WHY
WE PRESS
REGULATORS TO BE
VIGILANT ABOUT
CONSUMER FRAUD.

About the Cover

Ben Baker, an award-winning photographer and native of Australia, traveled to six states in seven days to produce the powerful portfolio of portraits you can find on pages 28 to 37 of our report "Lies, Secrets, and Scams." Those ordinary seniors and their family members took the brave step of telling their stories on the record to Consumer Reports. By going public, they are helping



law enforcement, advocacy groups, and other families to protect themselves, and they're working to reduce the incidents of those heartless and harmful crimes. Baker, who is close to his own grandparents, found the assignment illuminating. "These are people who were motivated to help their kids and grandkids out, and the friend or trusted person or government agency they thought was real just disappears. They did everything right their whole lives. They said, 'I'm not a dummy, I'm not stupid.' They were embarrassed, and yet they came forward and said, 'I just don't want this to happen to anyone else.'"

YOUR COMMENTS

Tips for Better Rates and Better Service

Nurses Stop Superbugs

The American Nurses Association (ANA) commends Consumer Reports for evaluating hospitals' effectiveness in preventing potentially deadly hospital infections ("How Your Hospital Can Make You Sick," September 2015). Nurses are continually working to develop strategies of care to prevent infections in collaboration with infection- and disease-prevention specialists. Hospitals would be wise to look to their nurses to design care to prevent infections and create solutions when a problem is discovered.

—*Pamela F. Cipriano, president, the American Nurses Association*

f *The hospital should be where you get better, not a place where you can't trust the staff not to safeguard you not to get sicker or even worse.*

—*Selissa Johnson, via Facebook*

In Praise of Agents

In "The Truth About Car Insurance" (September 2015), you suggested that consumers shop around to make sure they are not paying more than they have to. I was surprised you didn't mention the role of an independent insurance agency. My agent checks out the best prices from several different providers every year just before renewal time. One cannot afford to maintain loyalty to any provider; they simply will never be loyal in return.

—*Michael Tower, Phoenix*

t *I was reading this and thought ... "Consumer Reports is a form of 'regulator'—in the Adam Smith sense" #invisiblehand—@JoshLangner, via Twitter*

Customer-Service Fixer

Regarding "Your Call Is Important to Us" (September 2015), I'd like to suggest a tool I use: the Better Business Bureau. Over the last three years, I've filed complaints against Harbor Freight, TracFone, and the Department of Motor Vehicles. In each case, I did all I could to work within their systems to resolve the issue but got nowhere. After filing a complaint with the BBB, all were resolved within a few days.

—*Guy Petersen, Placerville, CA*

Keeping Kids Safe

The serious hot-car problem ("Temperatures Rising: Hot Cars & Little Kids Don't Mix," September 2015)—with the death of 44 children in the past year—appears to be increasing in frequency. The question arises, how might this be avoided? Child-seat baby reminders could be helpful, but a solution might be installing a relatively inexpensive thermostat that would activate the electric warning sound system of the automobile and partially or fully open the windows of the vehicle when the interior temperature reached 98 degrees.

—*Theodore R. Waugh, M.D., Ph.D., Claremont, NH*

SEND your letters for publication to ConsumerReports.org/lettertoeditor.

CLARIFICATIONS

• After our September issue went to press, the maker of the call-blocking device CPR Call-Blocker Protect + contacted us about our description of its product in our story "Rage Against Robocalls." We evaluated the CPR Call-Blocker Protect + alongside other products designed for an average consumer. However, the company pointed out that the product is a "whitelist"-only device (blocks all calls but allows users to program their phones to recognize and accept only known "safe" numbers) and, as such, targets people who are at high risk of being taken advantage of, including those with Alzheimer's disease. Based on our results, we feel that it should, indeed, perform well for those consumers. We did not test any of the CPR Call Blocker's other products.

• On page 34 of our September report "The Truth About Car Insurance," we erroneously reported that a family adding a teen driver to their policy would have seen only a 4 percent increase in annual premium if switching from Allstate to Auto Club. The correct increase is 51 percent. Four percent would be the increase if the couple started with Auto Club and stayed with that insurer after adding their teen.

FOLLOW US



Facebook.com/consumerreports
Facebook.com/crenespanol



Twitter.com/consumerreports
Twitter.com/crenespanol



YouTube.com/user/consumerreports



Instagram.com/consumerreports



Pinterest.com/consumerreports

GET MORE ONLINE

Every day, on ConsumerReports.org, you'll find news, videos, product reviews, and updates to the stories you see here in the magazine—including reader comments. Subscribers to our website also have complete access to our dynamic, detailed Ratings of more than 7,500 products. Here's what you'll find this month:



Stock up Especially timely right now, as the weather turns colder, are our Ratings of space heaters, humidifiers, snow blowers, and winter tires—particularly if you live in the Snow Belt. Check out our buying guides and updated Ratings at ConsumerReports.org.

GET THE APP

Check out our iPad app Look for videos of road tests and lab tests, plus extra features. Now included with your paid magazine subscription.

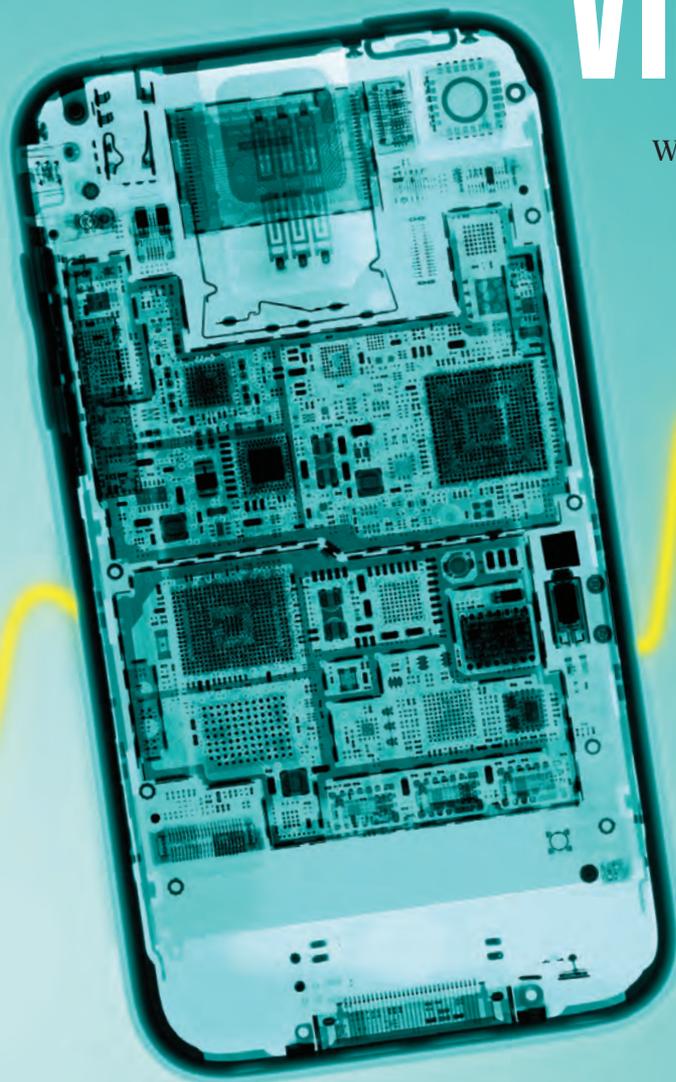
Go mobile You can use your smartphone to check our buying guides and Ratings of more than 7,500 products at m.consumerreports.org. Or download the app for your Android phone, iPad, or iPhone—it's free for subscribers of ConsumerReports.org.



The UPDATE

GOOD VIBRATIONS?

Radiation is part of our daily lives.
We've made our peace with some sources—
but the risk from cell phones
is still being debated. See page 10.



The Consumer Rights You're Giving Away

LAST YEAR A FIRESTORM erupted after General Mills, the maker of Bisquick, Cheerios, and other food brands, changed the legal terms on its website, requiring that all disputes related to the purchase or use of any of its products be resolved through mandatory arbitration. Legal experts and consumers were outraged that by downloading coupons or entering a company-sponsored sweepstakes or contest they could be waiving the right to sue. General Mills ended the practice days later, writing on its blog, "We've listened—and we're changing our legal terms back."

Sound outrageous? You probably do business with many firms that tuck forced arbitration clauses into their terms and conditions. They are in hundreds of millions of consumer contracts, according to the National Association of Consumer Advocates. Amazon, Groupon, Netflix, and Verizon are among the companies whose contracts have the clauses. They're in the fine print of terms for car loans and leases, credit cards, checking accounts, insurance, investing accounts, student loans, and even certain employment and nursing home agreements; you can be legally bound to forced arbitration by signing a contract or clicking "I agree" on a website. Once you do, if you eventually have a complaint against one of those companies, you will be obligated to take your dispute to an arbitration firm.

Businesses Have the Edge

Usually, if you are bound by a mandatory arbitration clause, the company picks the arbitrator, who is not required to have a legal background (although many do) and, unlike a judge, doesn't have to consider legal precedent. The decision is usually private, so other consumers in the same position won't know about the case. And there's little basis on which the decision can be appealed, says Daniel Blinn, a consumer law attorney in Rocky Hill, Conn.

Arbitration clauses often restrict you from pursuing any type of litigation outside of the arbitration, including a class-action lawsuit, where a group of similarly harmed individuals can sue a company. In class actions (as well as in certain other types of litigation) lawyers generally work for a portion of eventual winnings, so participants have no out-of-pocket costs, and the company does not get to pick the judge the way it gets to pick an arbitrator.

A series of Supreme Court decisions have backed mandatory arbitration. For example, in a 2013 ruling, the court found that a



company can use its arbitration agreement to stop class-action suits, even if the dispute involves a violation of federal antitrust laws. "The system is rigged against the consumer," says Paul Bland, executive director of the consumer-rights law firm Public Justice. "The purpose is to say that even if companies break state truth-in-advertising laws, or debt collection laws, or lemon laws, there is nothing consumers can do but arbitrate."

Arbitration Can Cost You

Proponents of mandatory arbitration say it benefits consumers. "Arbitration is a time-tested, cost-effective alternative to litigation," says Michael Clark, vice president of marketing and public relations for the American Arbitration Association, one of the nation's largest providers of arbitration and mediation services. But there is the potential cost of long-distance travel and filing fees. You may have to cover some of the arbitrator's charges—generally in the range of \$200 to \$300 per hour. A 2012 study by InsideCounsel, a publication for legal professionals, found that arbitration may cost more than a court hearing. But it can benefit companies, which might pay less in damages than they would in litigated cases.

A few arbitration clauses offer the option to resolve a dispute in small claims court. It's often less costly than arbitration, but the

amount you can win is capped, usually at \$2,500 to \$25,000, depending on the state. "Companies generally only go that route when they are trying to collect a debt from you, because it saves them the arbitrator's fee," Blinn says.

Protect Yourself

We believe that consumers should not be forced into arbitration. The Consumer Financial Protection Bureau should use its authority to stop forced arbitration in financial services, and Congress should enact legislation to make arbitration voluntary in other consumer contracts. In the meantime:

Look for exceptions. It's difficult to find a credit-card, mobile-phone, or checking-account agreement where arbitration isn't required, but some companies don't impose it. For example, midsized banks and credit unions are more likely to skip those clauses.

Try to opt out. Read contracts and terms of use in full to see whether you can opt out of arbitration, Blinn says. A few contracts, such as certain nursing home agreements, allow it.

Make some noise. "Companies think no one reads these clauses and that it's not an important issue to people," Bland says. "But the General Mills case clearly shows that when enough consumers strongly object to them, companies will reverse course."



ASK OUR EXPERTS

Q. Do I have to replace my still-great SLR in order to be able to post my photos to Facebook instantly?

A. Many people take photos and videos with smartphones to share quickly. But many like the better quality and features of an advanced camera, and most models that are more than two years old don't include built-in Wi-Fi. Don't want to shoot with a camera and phone? Try an Eyefi card, a wireless SD memory card that stores photos and connects to wireless devices. The cards are available in 4GB to 32GB capacities and cost \$30 to \$100.

Here's how they work: Once the Eyefi card in your camera is recognized by your smartphone, tablet, or computer, it will appear on the list of networks in the settings for those devices. Select it; once it's paired, it will automatically transfer copies of your photos and videos to your device, and you can share them from there.

Note that this type of SD card is compatible with many—but not all—older cameras, and it won't work with SLRs that store photos on CompactFlash cards. Find your model at eyefi.com/cameras, then watch a demo at ConsumerReports.org/cro/eyefi1115.

Q. How can I know whether there's a generic version of my prescription?

A. It usually takes several months after a generic drug is approved for it to become available in a pharmacy, according to CR Best Buy Drugs. Even after some drugs are approved as generic, there may be further delays to market because of behind-the-scenes efforts to keep them unavailable for

a little while longer. CRBestBuyDrugs.org lists common drugs and indicates whether a generic is available. Your pharmacy is your best source for additional information. You can also check a drug's status at accessdata.fda.gov/scripts/cder/drugsatfda/ or at daily.nlm.nih.gov.

Q. Can I get just one credit report or do I really need all three, as you have always recommended?

A. It may seem like a hassle, but you should get reports from the three biggest national bureaus. They don't collect exactly the same information, so getting only one report gives you an incomplete picture of your credit history. There may be errors that should be fixed and accounts that may have been opened by an identity thief. Get them from annualcreditreport.com.

Also be aware that requesting a copy of your credit report shouldn't ding your credit score—only multiple “hard inquiries” from loan applications will. If you're shopping for a mortgage or car loan and submitting multiple loan applications, those report requests are counted as only one inquiry if they take place within a 15- to 30-day shopping period.



WRITE

We have more than 140 in-house experts who research, test, and compare—so you don't have to! Send your questions to: ConsumerReports.org/askourexperts ... and watch this space for the answers.

RECALLS & UPDATES



NIGHT-LIGHT MAY CAUSE SHOCK

Ikea is recalling 359,000 Patrull night-lights because the plastic covering can detach and expose electrical components, posing a risk of electrical shock. They come in orange, pink, and white, and were sold at Ikea stores and its website from August 2013 to July 2015 for about \$4. If you have one of those night-lights, stop using it and call Ikea at 888-966-4532 or go to ikea-usa.com for a full refund.



TABLET COULD OVERHEAT

Nvidia Shield is recalling 83,000 tablet computers because the lithium-ion battery can overheat, posing a risk of fire. The computers were sold at GameStop stores and on various websites from July 2014 through July 2015 for between \$300 and \$400. Call Nvidia at 888-943-4196 or go to nvidia.com to receive a free replacement.

BOARDS POSE CUTTING RISK

ACCO Brands is recalling 3.3 million Quartet magnetic and dry-erase boards because sharp metal edges on the back can become exposed when the boards are removed from a wall mount, posing a laceration hazard.



The boards were sold at stores nationwide and online from January 2005 through December 2013 for between \$5 and \$10. Call the company at 800-611-6654 or go to quartet.com to get a caution label to apply to the board, which advises wearing heavy gloves when removing the board from a wall.

Can You Hear Me Now?

As the debate over cell-phone radiation heats up, consumers deserve answers to whether there's a cancer connection



DOES RADIATION FROM CELL PHONES cause brain cancer—or doesn't it?

Researchers investigating that question have gone back and forth over the years, a game of scientific pingpong that has divided the medical community and cell-phone users into two camps: those who think we should stop worrying so much about cell-phone radiation, and others who think that there's enough evidence to warrant some cautionary advice.

Most Americans fall squarely on the "don't worry" side. In a recent nationally representative Consumer Reports survey of 1,000 adults, only 5 percent said they were very concerned about the radiation from cell

phones, and less than half took steps to limit their exposure to it.

Many respected scientists join them. "We found no evidence of an increased risk of brain tumors or any other form of cancer" from cell-phone radiation, says John Boice Jr., Sc.D., president of the National Council on Radiation Protection & Measurements and a professor of medicine at the Vanderbilt University School of Medicine in Nashville, Tenn. "The worry should instead be in talking or texting with your cell phone while driving."

The U.S. government doesn't seem very troubled, either. The Food and Drug Administration says on its website that research

generally doesn't link cell phones to any health problem. And although the Federal Communications Commission requires manufacturers to include information in user manuals about cell-phone handling, that's often buried deep in the fine print.

But not everyone is unconcerned. In May 2015, a group of 190 independent scientists from 39 countries, who in total have written more than 2,000 papers on the topic, called on the United Nations, the World Health Organization, and national governments to develop stricter controls on cell-phone radiation. They point to growing research—as well as the classification of cell-phone radiation as a possible carcinogen in 2011 by the International Agency for Research on Cancer, part of the WHO—suggesting that the low levels of radiation from cell phones could have potentially cancer-causing effects.

"I think the overall evidence that wireless radiation might cause adverse health effects is now strong enough that it's almost unjustifiable for government agencies and scientists not to be alerting the public to the potential hazards," says David O. Carpenter, M.D., director of the Institute for Health and the Environment at the University at Albany in New York and one of the authors of the recent letter to the U.N. and WHO.

Some countries have taken steps to protect users, at least when it comes to children. For example, France, Russia, the U.K., and Zambia have either banned ads that promote phones' sale to or use by children, or issued cautions for use by children.

The city council of Berkeley, Calif., has also acted. In May 2015, it approved a "Right to Know" law that requires electronics retailers to notify consumers about the proper handling of cell phones. CTIA-The Wireless Association, a trade group, is now trying to block that law from going into effect, as it successfully did after San Francisco passed its own Right to Know law five years ago.

Of course, scientific seesawing like that doesn't provide a lot of clarity or confidence for the 90 percent of American adults and roughly 80 percent of teens who report having a cell phone. So how concerned should you be about cell-phone radiation? Consumer Reports' health and safety experts conducted a thorough review of the research and offer some guidance.

What Is Cell-Phone Radiation, Anyway?

Your phone sends radiofrequency, or RF, waves from its antenna to nearby cell towers, and receives RF waves to its antenna from

cell towers when you make a call or text or use data. The frequency of a cell phone's RF waves falls between those emitted by FM radios and those from microwave ovens, all of which are considered "non-ionizing" forms of radiation. That means that—unlike radiation from a nuclear explosion, a CT scan, or a standard X-ray—the radiation from your phone does not carry enough energy to directly break or alter your DNA, which is one way that cancer can occur. (FM radios and microwaves don't raise alarms, in part because they aren't held close to your head when in use and because microwave ovens have shielding that offers protection.)

How Could the Radiation From Cell Phones Cause Cancer?

At high power levels, RF waves can heat up water molecules (which is how microwave ovens work). Scientists used to focus their concerns on the possibility that such heating of human tissue, which is mostly water, might damage cells. In fact, the FCC's test of cell-phone emissions—which was set in 1996 and which all phones must pass before being allowed on the market—is based on that effect.

But most experts now aren't concerned about that possible tissue heating caused by RF waves. Instead, what's worrying some scientists are newer lab studies suggesting that exposure to cell-phone radiation can have biological effects without raising temperature.

In 2011, researchers at the National Institutes of Health showed that low-level radiation from an activated cell phone held close to a human head could change the way certain brain cells functioned, even without raising body temperature. The study did not prove that the effect on brain cells was dangerous, only that radiation from cell phones could have a direct effect on human tissue.

RF waves from cell phones have also been shown to produce "stress" proteins in human cells, according to research from Martin Blank, Ph.D., a special lecturer in the department of physiology and cellular biophysics at Columbia University and another signer of the recent letter to the WHO and U.N. "These proteins are used for protection," Blank says. "The cell is saying that RF is bad for me and it has to do something about it."

And just this year, a German study found that RF waves promoted the growth of brain tumors in mice, again at radiation levels supposedly too low to raise body temperature. The U.S. National Toxicology Program

is now running an animal study of its own, exposing rats and mice to low-dose radiation. Results are expected in 2016.

What Do Cancer Studies in Human Populations Show?

The research above describes some lab and animal studies that looked at how cell-phone radiation might cause cancer or affect the body in other ways. But we also reviewed studies that investigated whether cell phones increased brain-cancer risk in humans.

We focused on five large population studies, plus follow-ups to those studies, that investigated that question. Together the studies included more than a million people worldwide, comparing cell-phone users with nonusers.

Though some findings were reassuring, others do raise concerns. Specifically, three of the studies—one from Sweden, another from France, and a third that combined data from 13 countries—suggest a connection between heavy cell-phone use and gliomas, tumors that are usually cancerous and often deadly. One of those studies also hinted at a link between cell phones and acoustic neuromas (noncancerous tumors), and two studies hinted at meningiomas, a relatively common but usually not deadly brain tumor.

Though those findings are worrisome, none of the studies can prove a connection between cell phones and brain cancer, for several reasons. For one thing, cell-phone use in certain studies was self-reported, so it may not be accurate.

In addition, the findings might be influenced by the fact that the study subjects owned cell phones that were in some cases manufactured two decades ago. The way we use cell phones and the networks they're operated on have also changed since then. Last, cancer can develop slowly over decades, yet the studies have analyzed data over only about a five- to 20-year span.

Are Today's Phones Safer?

Cell-phone designs have changed a lot since the studies described above were completed. For example, the antennas—where most of the radiation from cell phones is emitted—are no longer located outside of phones near the top, closest to your brain when you talk, but are inside the phone, and they can be toward the bottom. As a result, the antenna may not be held against your head when you're on the phone. That's important because when it comes to cell-phone radiation, every millimeter counts: The strength of exposure drops dramatically as the distance

from your body increases.

Perhaps our best protection is that more people today use phones to text instead of talk, and headphones and earbuds are growing in popularity. On the other hand, it's also true that we use cell phones much more than we used to, so our overall exposure may be greater.

So Should I Stop Using My Cell Phone?

No, Consumer Reports does not think that's necessary. But we do have some concerns.

"The evidence so far doesn't prove that cell phones cause cancer, and we definitely need more and better research," says Michael Hansen, Ph.D., a senior scientist at Consumer Reports. "But we feel that the research does raise enough questions that taking some common-sense precautions when using your cell phone can make sense." Specifically, CR recommends these steps:

- Try to keep the phone away from your head and body. That is particularly important when the cellular signal is weak—when your phone has only one bar, for example—because phones may increase their power then to compensate.
- Text or video call when possible.
- When speaking, use the speaker phone on your device or a hands-free headset.
- Don't stow your phone in your pants or shirt pocket. Instead, carry it in a bag or use a belt clip.

A Call for Clarity

The substantial questions raised regarding cell phones deserve some clear answers:

- The Federal Communications Commission's cell-phone radiation test is based on the devices' possible effect on large adults, though research suggests that children's thinner skulls mean they may absorb more radiation.

Consumer Reports agrees with concerns raised by the American Academy of Pediatrics and the Government Accountability Office about the tests, and thinks that new tests should be developed that take into account the potential vulnerability of children.

- We think that cell-phone manufacturers should prominently display advice on steps that cell-phone users can take to reduce exposure to cell-phone radiation.

The Hidden Cost of Cable

Most households pay about \$230 per year for a set-top box. Seriously?

When it comes to cable, there are hard-to-see fees, and then there are those right out there in the open. That often clunky-looking set-top box that has taken up permanent residence near your TV? Sadly, it's not only ugly but also pricey. In fact, the typical American household pays a pretty significant rental fee—\$231, on average—just to keep theirs each year.

That's according to a report released this past July by two U.S. senators, Ed Markey, D-Mass., and Richard Blumenthal, D-Conn., who are concerned that cable companies have a monopoly on set-top boxes, forcing consumers to pay too much for them.

The politicians, members of the Senate

Committee on Commerce, Science, and Transportation, were moved to look into this pricing after Congress reversed a Federal Communications Commission ban on boxes with integrated security, which gave consumers the option of using a box that does not come from their cable company.

That ban, as well as the almost two-decade-old CableCard initiative, was designed to loosen the hold pay-TV companies had on those devices and give consumers lower-cost options. But in the end, few consumers took advantage of the move: Though 53 million CableCards shipped with cable-company boxes, fewer than 620,000 were

deployed in other retail products, such as TVs and TiVo DVRs with CableCard slots. So this past December, the ban was lifted as part of a satellite TV reauthorization bill.

Now, once again, the cable companies are acting as gatekeepers: According to the study, 99 percent of cable customers rent directly from their service providers, spending almost \$20 billion each year on rental fees.

“When Congress last year regrettably removed the requirement that cable-company services be compatible with set-top boxes purchased in the marketplace rather than rented directly from the provider, we doomed consumers to being captive to cable company rental fees forever,” Markey said in a joint statement issued by the legislators.

In an e-mail to Consumer Reports, Blumenthal added, “You can use hundreds of different devices to connect to the Internet but all too often only one to connect to your cable company. It's time for the FCC to put an end to this boondoggle and put in place common standards to make connecting a set-top box as easy as connecting any of the hundreds of other devices in our homes.”



ACT

The FCC is currently considering a proposal to give consumers more options when it comes to set-top boxes and the delivery of video content. Sign our petition to the FCC in support of greater competition at ConsumersUnion.org/cableboxes

GET INVOLVED

Actions You Can Take in November

CALL FOR CLEAN ENERGY

Air pollution from fossil-fuel power plants is linked to thousands of premature deaths and asthma attacks each year. New national standards—known as the Clean Power Plan—are putting power plants on a smarter path, reducing carbon emissions by 32 percent by 2030, compared with 2005 levels. Cleaner energy can help improve public health while also keeping your energy bills in check. But the fossil-fuel industry has promised to take the plan to court, and there are already bills in Congress that could block the plan. Go to ConsumersUnion.org/cleanpower to tell your lawmakers to support the plan.

FIGHT FOR FOOD LABELING

Poll after poll has made clear that at least 85 percent of consumers want labels on food containing genetically modified organisms, or GMOs. But in July, under pressure from the food industry, the House of Representatives voted to prohibit states from requiring GMO labels. Consumers deserve to know what's in their food—a right we've long fought for. The Senate is expected to vote later this year on whether this bad bill goes to the president. Check out ConsumersUnion.org/LabelGMOs to learn more about this topic and find out how you can get involved.

TROUBLE WITH BAD BANKS? TELL US

The Consumer Financial Protection Bureau recently ordered Citibank to refund \$700 million to the roughly 8 million customers affected by deceptive marketing and unfair billing of “add-on” services for debt protection and credit monitoring. This was the 10th time in four years the bureau has taken action against a firm for that type of illegal practice. Consumers who are eligible for a refund will be contacted by Citibank. Do you have a beef with your bank? Have you been swindled by a lender? We want to hear your struggles and to share them with the bureau. Tell us at DefendYourDollars.org/share_your_story.



Blowin' in the Wind

**Your leaf cleanup doesn't have to get you down.
Here's how to rise above it all.**

LAST WINTER MIGHT NOT be done with us yet. Spring rains over melted snow, bolstered by ample sunshine, helped trees grow especially lush this summer. And like death and taxes, you can count on those leaves falling. If you're flirting with the idea of letting nature take its course and enjoying a carpet of leaves all autumn, don't. Come spring you'll have an anemic lawn, thanks to the mold buildup. Ah, the joys of the four seasons.

But it is possible to take care of that autumn chore and still have time left over to sip apple cider and pick pumpkins. To help liberate you from excessive leaf labor, we have the latest in gas and electric leaf blowers. But our advice on how to manage it all works even if you use a good old-fashioned rake. Here's what to consider.

Do Your Prep Work

Set your mower's deck height to the lowest setting for one last cutting of the season before you start doing leaf work. Whether using a rake or blower, smoothing out your lawn with shorter grass makes for less resistance, which will make the chore go much faster.

And take a tip from the pros. Watch landscapers this time of year, and you'll often see them using tarps to move around piles of leaves. You can employ that time-saving strategy by using a 9x12-foot or larger polyethylene tarp. Spread it out flat and rake or blow the leaves directly onto it. A full tarp may be heavy and hard to handle. To make transport easier and to keep the tarp from spilling open, thread a rope through the grommets (you can knot the ends) or attach carabiners to the grommets.

Consider Shredding

Use your gas mower once more—to mow leaves. The mower chops them into little bits that serve as nutrient-rich compost for your lawn. Even if you bag the leaves, you'll fit more per bag given the smaller pieces. And you'll use up the last bit of gas in the tank before stowing the mower for the winter.

If the leaves are piled too high or are wet, even the beefiest walk-behind mower can stall—especially if the deck height is low. If you hear the engine straining,

slow down and tip back the mower to lift the blade out of the packed leaves; ease it back down slowly. You could also switch from bagging or mulching mode to side discharge. When you do put the mower away for the season, be sure to clean the deck and get the blade sharpened.

Choose Your Blower Type

The best gasoline-powered leaf blowers have the most power for loosening stuck leaves as well as rushing them along. Among gas-powered winners, the Jonsered B2126, \$160, packs a lot of power and comes with an optional flat-tip nozzle that helped lift stuck leaves in our tests.

But if you want to avoid heavy maintenance and noise, electric corded models rival gas blowers for most needs. And cordless models such as the Kobalt KHB400B and GreenWorks GBL80300, \$250 each, now keep up with their corded cousins at sweeping piles of leaves. One drawback is their brief 13-minute run time on a charge—followed by 30 minutes to charge the lithium-ion battery. But be sure to take care of the battery as advised. Here's how to help it last at least five years:

Keep it charged. If you leave a Li-Ion uncharged or almost empty for a long time, it might not recover. Many of the latest "smart" chargers will stop charging when the battery is fully charged, which prevents damage from overcharging.

Consider buying a backup. Having two or even three batteries (and maybe an extra charger) for a few tools means that you'll always have one ready. But one size might not fit all. With most outdoor gear, products of a given voltage use the same battery. For Craftsman in particular, however, check which tools take which batteries. Some of the brand's cordless products with the same voltage rating are made by different manufacturers and use different batteries.

Don't Break the Sound Barrier

Many municipalities prohibit unreasonable noise, such as a blower's droning, during certain hours—say, between 9 p.m. and 8 a.m. Some areas prohibit any blower louder than 70 decibels at 50 feet, and a few limit noise to 65 decibels (about as loud as a window air conditioner on high). And if it isn't illegal, still avoid running even the quietest blowers very early or late. Some gas blowers and all of the electrics in our tests met the 70-decibel limit, though only the quietest electrics came in at or below 65 decibels.

And protect your own ears, too. Wear hearing protection, especially if using a model that scored lower than Good at ear level in our noise tests.

You should also wear goggles and a dust mask. And, of course, while the blower is running, keep other people and pets far away from the area you're clearing.



Five Sensible Steps Not to Skip

HEATING SYSTEM. Getting your furnace or boiler inspected is easiest to schedule in the spring, when service companies are less busy. But if you haven't had it done this year, do it now. What if you don't: At the least, your system could run less efficiently, costing you more. At worst, it could break down—on a cold night.

WINDOWS. Many can be fixed quickly with caulk and nails. But if you're unsure, call a pro. What if you don't: In addition to resulting in higher heating bills, a poorly set or insulated window can let water into wall cavities, promoting mold growth.

WATER PIPES. Outside spigots must be shut off and drained; insulating covers are available that fit around them. Inside, water pipes should be covered with polyurethane-foam covers. Set the thermostat to at least 50° F to protect the

pipes, especially if you're away. What if you don't: Burst pipes can flood a house.

CHIMNEY. Even if you don't burn wood, your heating system probably has its own flue. It should be professionally checked—for nesting animals as well as residue buildup—and cleaned annually. What if you don't: Creosote in the buildup can ignite, and the fire can spread to the rest of the house.

GUTTERS. Clear gutters and downspouts of leaves and other debris. Leaf-blower attachments, hose adapters, and similar tools can do the job. Also consider gutter guards; some do-it-yourself products cost less than \$100. What if you don't: Backed-up rain and water trapped beneath melting ice, known as ice dams, can get into the house and drip down from ceilings and walls.

Ratings: Leaf Blowers to Clear the Decks

Scores in context: Of the 59 leaf blowers we tested, the highest scored 90; the lowest, 21. Listed below are the top-scoring models, in order of performance within their respective categories. Recommended models offer the best performance overall in our tough tests. Full Ratings are available at ConsumerReports.org.

CR Best Buy Recommended ● Excellent ● Very Good ○ Good ● Fair ● Poor

Recommended	Rank	BRAND & MODEL	PRICE	WEIGHT	OVERALL SCORE						
						Sweeping	Loosening	Vacuuming	Handling and Ease of Use	Noise at 50 Ft.	Noise at Ear

A. CORDED-ELECTRIC HANDHELD

<input checked="" type="checkbox"/>	1	Toro Ultra Plus 51621	\$100	9 lb.	82	●	●	●	●	●	●
<input checked="" type="checkbox"/>	2	Toro Ultra Blower Vac 51609	\$75	8 lb.	80	●	●	●	●	●	●
<input checked="" type="checkbox"/>	3	Toro Super Blower Vac 51602	\$60	7 lb.	78	●	●	●	●	●	●
<input checked="" type="checkbox"/>	4	Toro Rake and Vac 51574	\$55	7 lb.	77	●	●	●	●	●	●
<input checked="" type="checkbox"/>	5	Stihl BGE 61	\$110	7 lb.	75	●	●	NA	●	●	○

B. GASOLINE HANDHELD

<input checked="" type="checkbox"/>	1	Echo PB-255LN	\$200	10 lb.	80	●	●	NA	●	●	●
<input checked="" type="checkbox"/>	2	Husqvarna 125B	\$150	9 lb.	80	●	●	NA	●	●	●
<input checked="" type="checkbox"/>	3	Hitachi RB24EAP	\$140	9 lb.	80	●	●	NA	●	○	●
<input checked="" type="checkbox"/>	4	Jonsered B2126	\$160	9 lb.	80	●	●	NA	●	○	●
<input checked="" type="checkbox"/>	5	Husqvarna 125BVx	\$190	10 lb.	80	●	●	●	●	○	●
<input checked="" type="checkbox"/>	6	Stihl BG 56 C-E	\$170	9 lb.	79	●	●	NA	●	●	●
<input checked="" type="checkbox"/>	7	Stihl BG 55	\$150	9 lb.	79	●	●	NA	●	○	●
<input checked="" type="checkbox"/>	8	Echo PB-250LN	\$170	10 lb.	78	●	●	NA	●	●	●
<input checked="" type="checkbox"/>	9	Stihl BG 66L	\$230	10 lb.	75	●	●	NA	●	●	●

C. GASOLINE BACKPACK

<input checked="" type="checkbox"/>	1	Husqvarna 356BT	\$480	23 lb.	90	●	●	NA	●	●	●
<input checked="" type="checkbox"/>	2	Stihl BR 350	\$350	22 lb.	89	●	●	NA	●	●	●
<input checked="" type="checkbox"/>	3	Echo PB-500H	\$330	23 lb.	87	●	●	NA	●	○	●
<input checked="" type="checkbox"/>	4	Husqvarna 150BT	\$300	23 lb.	86	●	●	NA	●	○	●
<input checked="" type="checkbox"/>	5	Husqvarna 350BT	\$300	20 lb.	86	●	●	NA	●	○	●
<input checked="" type="checkbox"/>	6	Ryobi RY08420	\$200	18 lb.	85	●	●	NA	●	●	●
<input checked="" type="checkbox"/>	7	Stihl BR-200	\$280	13 lb.	80	●	●	NA	●	●	●

D. GASOLINE WHEELED

<input checked="" type="checkbox"/>	1	Little Wonder LB160H	\$800	117 lb.	86	●	●	NA	○	●	●
<input checked="" type="checkbox"/>	2	Billy Goat F601S	\$800	76 lb.	86	●	●	NA	○	●	●
<input checked="" type="checkbox"/>	3	Little Wonder C5	\$550	109 lb.	85	●	●	NA	●	●	●
<input checked="" type="checkbox"/>	4	Troy-Bilt TB672	\$400	78 lb.	84	●	●	NA	●	●	●
<input checked="" type="checkbox"/>	5	Powermate P-WB-163150	\$350	88 lb.	83	●	●	NA	●	○	●

E. BATTERY-POWERED HANDHELD

<input checked="" type="checkbox"/>	1	Kobalt KHB400B	\$250	9 lb.	74	●	●	NA	○	●	○
<input checked="" type="checkbox"/>	2	GreenWorks GBL80300	\$250	9 lb.	74	●	●	NA	●	●	○
<input checked="" type="checkbox"/>	3	EGO LB4801	\$180	8 lb.	72	●	●	NA	●	●	○



Pick the Right Leaf Blower

BEST FOR SMALL PROPERTIES

- **A2** Toro \$75 **CR Best Buy**
- **A4** Toro \$55 **CR Best Buy**
- **A5** Stihl \$110
- **E3** EGO \$180 **CR Best Buy**

Plug-in blowers weigh less, aren't as noisy, and don't require as much maintenance as gas models—but they're limited to the range of a 100-foot extension cord. Battery-powered units add to your range, but with run times of about 15 minutes at full power, you won't get that far. **A2** performed about as well as the top-rated **A1**, and you won't really miss the extras you get for the extra \$25. **A4** offers a lot of oomph in a lighter-weight model. **A5** is the quietest, though you can't vacuum leaves with it. **E3** is the lightest pick of the cordless models.

BEST FOR LARGER PROPERTIES

- **C1** Husqvarna \$480
- **C3** Echo \$330
- **C7** Stihl \$280
- **D1** Little Wonder \$800
- **D4** Troy-Bilt \$400

Backpack blowers shift weight from your arms to your shoulders, and wheeled blowers deliver the most power overall. **C1** did best among backpacks and was especially quiet at a distance. **C3** was a bit noisier at 50 feet but costs \$150 less. **C7** is cheaper still and fairly quiet. Best of all, it's the lightest in the category. Of wheeled models, **D1** remains the champ for overall power and has the best warranty, at five years, of the category. Consider quiet **D4** if your neighbors are a concern.

EASIEST TO MANEUVER

- **B1** Echo \$200
- **B3** Hitachi \$140 **CR Best Buy**
- **B5** Husqvarna \$190

Gas-powered handheld blowers pack power without the cord. **B1** packs the most power, though it's the heaviest of the recommended gas handhelds. It's also fairly quiet. **B3**, for \$60 less, is about as powerful, weighs noticeably less, and comes with a seven-year warranty. **B5**, though noisier at the ear, is the only pick with vacuuming capability.

LIFE WITHOUT WRINKLES

Laundry innovations promise to deliver better results faster. But which ones really work?

IRONING TO GET that crisp, fresh look may seem quaint in an era when casual Friday has morphed into casual every day. Closets with less cotton and more blends mean you don't need to iron as much, and studies have shown that about a quarter of all consumers iron only when absolutely necessary. So just how wrinkled does a garment have to be for you to get out the iron? Standards vary—all the way up to that slept-in look. But for those occasions when the wrinkles just can't be overlooked, an iron that produces plenty of steam will remove stubborn wrinkles faster. (You'll find the best ones on the facing page.) Plus we tested several products claimed to smooth out wrinkles without an iron.

And yet there's no escaping dirty laundry. The average family does around 300 loads per year. Manufacturers get that your life is hectic and offer ways to take the pain out of the laundry routine, for a price. A large-capacity washer and dryer let you do more laundry at once. The biggest we've tested hold about 28 pounds of laundry, or about 20 full-sized bath towels, and the smallest hold only about 12 pounds, or nine towels. Options that trim wash time by 15 to 20 minutes without sacrificing cleaning ability also prevent pileups. And a dryer with a moisture sensor rather than a thermostat will recognize more quickly when laundry is dry, allowing you to get back to your life outside the laundry room.

Rowenta Effective Comfort DW2070



An End to the Iron Age?

A hot, steamy iron can work wonders on rumpled garments, but what about steam dryers? That feature is meant to reduce wrinkles and odors. Our tests found that the steam doesn't eliminate wrinkles, though it can help remove more odors than dryers without steam. So we tested products that manufacturers claim banish wrinkles to find out whether any let you put away your iron.



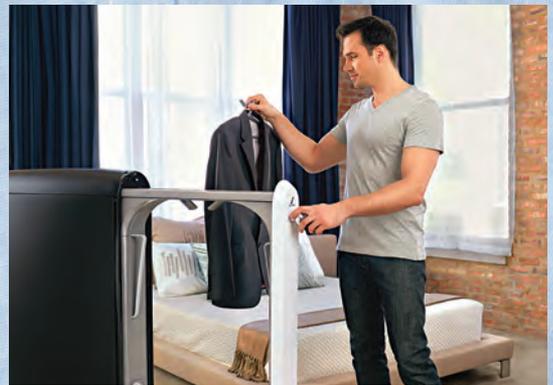
▲ STRAIGHT UP

We tested three fabric steamers on men's cotton shirts and cotton cloths. They reduced wrinkles, but none created that truly pressed look. Fabric steamers are best for quick touch-ups, delicates, and smoothing curtains without having to take them down. The heated pressing bar on the **\$65 Shark Press & Refresh GS500** (shown) made it the best at taming wrinkles and creating creases. The **\$35 Conair ExtremeSteam GS23** produced hotter—but less—steam than the other two. Its creasing attachment got the job done but was awkward to use. The **\$60 Steamfast SF-407** was the least impressive. Unlike the others, it sits on wheels, has a clothes hook on a telescoping pole, and has a hose for steaming. It provided the longest steam time, almost 90 minutes with one fill, but the hose and electrical cord reach is limited, so steaming hanging drapes would be tricky. And it was challenging to dewrinkle a shirt using the Steamfast's pressing pad and steam wand.



▲ JUST A SPRITZ

Downy Wrinkle Releaser Plus works as promised. Wrinkles fell from severely wrinkled garments—a laundry basket of cottons and blended fabrics. Clothes looked better than when we sprayed them with plain water although not as good as when we ironed them. Just spray Downy on garments until lightly damp. Then smooth and let dry, about 5 to 10 minutes, depending on fabric. Downy costs \$8 for 33 ounces.



▲ THINK INSIDE THE BOX

Wrinkles were smoothed out, odors were removed (or masked), and jeans returned to their original shape during the 10- to 15-minute treatment in the \$400 Swash. Whirlpool makes the Swash, which refreshes one garment at a time using heat and a pod that releases a lightly scented mist. The pods, made by Tide, cost \$7 for 12. At one pod per garment, that can add up. And don't toss your iron yet. The clips used to secure clothing inside the unit can make new wrinkles. As for stains, the box gets hot enough to set some, so don't Swash dirty or stained clothes.

LG says its Styler cabinet, in stores this fall, will get rid of wrinkles and odors from four garments at once. But at \$2,000, ironing may not be so bad after all.

Ratings: Irons With the Smoothest Moves

Of the 34 irons tested, the highest scored 95; the lowest, 34. Below are the top 10 irons in order of performance, including CR Best Buys, which combine excellent performance and value. For full Ratings, available to online subscribers, go to ConsumerReports.org.

☑ CR Best Buy ☑ Recommended

● Excellent ● Very Good ○ Good ● Fair ● Poor

Recommended	Rank	BRAND & MODEL	PRICE	OVERALL SCORE	TEST RESULTS		
					Steaming Rate	Ironing Fabric	Ease of Use
CONVENTIONAL STEAM IRONS							
☑	1	Rowenta Steamforce DW9280	\$140	95	●	●	●
☑	2	Panasonic NI-W950A	\$100	93	●	●	●
☑	3	Kenmore 80598	\$75	88	●	●	●
☑	4	T-Fal FV4495 Ultragl glide	\$45	88	●	●	●
☑	5	Singer Expert Finish EF	\$60	86	●	●	●
☑	6	Rowenta Effective Comfort DW2070	\$50	85	●	●	●
	7	Hamilton Beach Chrome Electronic 14955	\$50	83	●	●	○
	8	Rowenta Pro Master DW8080	\$90	83	●	●	●
	9	Black & Decker Xpress Steam Cord Reel ICR07X	\$45	83	●	●	○
	10	Hamilton Beach Retractable Cord 14881	\$40	80	●	●	●



DYNAMIC DUOS

Washer-dryer pairs are widely sold, but you may be sacrificing performance on one appliance or the other

IN THE DAYS when washers and dryers were usually hidden away in the basement, nobody cared whether they made a striking duo. But carrying baskets of laundry from one floor to another is cumbersome, so moving the appliances upstairs makes sense. And soon homeowners were creating trophy utility spaces—especially laundry rooms

designed to be as aesthetically pleasing as other areas of the house. So nowadays, even for these utilitarian appliances, looks matter more than ever and matching sets have become a must.

As for performance, the washer may be impressive, but the matching dryer can be brutal on fabrics and noisy, so we've highlighted the top pairs from our

tests. What's more, washers have gotten the bulk of the innovative new features, but dryers haven't changed as much in the past 10 years—so you might not need a new one. If you go for a matched pair, brace yourself: The best sets we've tested are expensive, from \$2,000 to \$3,000, because they have added cycles and features, and jumbo capacities.

Give Your Washer a Lift

PEDESTALS BOOST the height of front-loaders to make them more convenient and comfortable to use—you don't have to bend as much to reach inside. Now LG has turned the space, formerly a storage drawer, into a 1-cubic-foot washer for cleaning a few items. And to keep things speeding along, the \$700 miniwasher can be used while the front-loader is running.

Together they're known as Twin Wash and tap into the same water supply. The miniwasher can be paired with any LG front-loader made from 2009 on and has six cycles, and allows warm



and cold wash temps, and an extra rinse. Our tests of 2- and 4-pound loads found that the mini-washer doesn't offer the cleaning power of a front-loader. But it took only 40 minutes using the normal cycle. It's intended for lightly soiled items.

Washboards 2.0

OPEN THE LID of certain new Samsung high-efficiency top-loaders and you'll see a water jet and a built-in sink with ridges, a feature known as Activewash. It's on the

top-scoring Samsung WA52J8700AP, \$1,000.

Soaking a shirt or blouse helps to remove stains, and so do the ridges on the built-in sink. Rub the fabric for a minute or two against the ridges, working detergent or pretreatment solution into grubby stains. You don't have to be too aggressive because the garment then goes straight into the washer. The owner's manual warns that only clothes can be pre-washed in the built-in sink—it's not meant to clean shoes, food, or animals. Good to know.



Pairing Up

If you really have to have matching appliances, be sure to pick the right pair. Start with the washing machine: All of the models below made our top picks. Their matching dryers weren't necessarily at the top of the list, but they were still impressive and relatively quiet.



Samsung WF56H9100AG washer and DV56H9100EG dryer

FRONT-LOADERS AND DRYERS

- **Samsung** WF56H9110CW washer, \$1,450, and Samsung DV56H9100EW dryer, \$1,200; **gas:** DV56H9100GW, \$1,300
- **LG** WM8500HVA washer and LG DLEX8500V dryer, \$1,450 each; **gas:** DLGX8501V, \$1,550
- **Kenmore** Elite 41072 washer and Kenmore Elite 81072 dryer, \$1,000 each; **gas:** 91072, \$1,100
- **Maytag** Maxima MHW8100DC washer and Maytag Maxima MED8100DC, \$1,400 each; **gas:** MGD8100DC, \$1,500
- **Samsung** WF56H9100AG washer and Samsung DV56H9100EG dryer, \$1,200 each; **gas:** DV56H9100GG, \$1,300
- **Maytag** Maxima MHW5100DW washer and Maytag Maxima MED5100DW, \$950 each; **gas:** MGD5100DW, \$1,050

HIGH-EFFICIENCY TOP-LOADERS AND DRYERS

- **Samsung** WA48H7400AW washer, \$900, and Samsung DV48J7700EW dryer, \$800; **gas:** DV48J7700GW, \$900
- **Samsung** WA52J8700AP washer and Samsung DV52J8700EP dryer, \$1,000 each; **gas:** DV52J8700GP, \$1,100
- **Samsung** WA56H9000AP washer and Samsung DV56H9000EP dryer, \$1,100 each; **gas:** DV56H9000GP, \$1,200
- **Kenmore** 28132 washer and Kenmore 68132 dryer, \$800 each; **gas:** 79132, \$900
- **Whirlpool** Cabrio WTW8500DW washer and Whirlpool Cabrio WED8500DW dryer, \$1,000 each; **gas:** WGD8500DW, \$1,100

Keep Moisture at Bay

Our laundry experts recommend that you leave your front-loader's door ajar between loads to allow air to circulate and help prevent mold and funky odors from developing if water collects around the rubber door gasket. If you have young kids in the home, don't leave it open all the time. Instead dry the washer door gasket and detergent dispensers after use. And always keep laundry detergent pods out of the reach of children.



A1 Samsung

Top Washers

WASHERS \$1,000 AND UP

- **A1** Samsung \$1,450
- **A3** Kenmore \$1,000
- **B1** Samsung \$1,000
- **B3** Whirlpool \$1,000

A1 and A3 can be stacked, as can the other front-loaders in the Ratings. A1 held about 28 pounds of our laundry and was among the gentlest on fabrics. A3 fit about 25 pounds of laundry. Both are wider than usual and have time-saving options that trim about 15 minutes off full loads without affecting cleaning. B1 and B3 each fit about 26 pounds of our laundry. B1 has a SuperSpeed option that cuts wash time by about 15 to 20 minutes, and has the Activewash feature: a built-in sink and a modern take on the washboard. B3 is made in the U.S.



C1 Maytag

WASHERS LESS THAN \$1,000

- **C1** Maytag \$950
- **C7** LG \$800
- **D3** Kenmore \$800
- **D4** Samsung \$500

C1 is made in the U.S., stackable, and fast for a front-loader, but it's noisy. C7 is also stackable and relatively quiet. D3 fit about 26 pounds of our laundry and was faster than many. D4 costs the same as an agitator washer but offers much better overall performance and a larger capacity.

Ratings: Winning Washers Save Water, Add Capacity

Of the 97 washers tested, the highest scored 85; the lowest, 13. These high-scoring washers include recommended models. Larger capacities allow you do more laundry at once, which comes in handy because wash times have gotten longer over the past decade or so. Certain front-loaders take 90 minutes or longer, and high-efficiency top-loaders can take 60 to 85 minutes. Increasingly tough federal standards require better water efficiency—and less water results in longer cycles—yet cleaning is impressive. For full Ratings, available to online subscribers, go to ConsumerReports.org.

Recommended

● Excellent ● Very Good ○ Good ⊖ Fair ● Poor

Recommendation	Rank	BRAND & MODEL	PRICE	SCORE	TEST RESULTS						
					Washing Performance	Energy Efficiency	Water Efficiency	Capacity	Gentleness	Noise	Vibration

A. FRONT-LOADERS, \$1,000 AND UP

<input checked="" type="checkbox"/>	1	Samsung WF56H9110CW*	\$1,450	85	●	●	●	●	●	●	●	90
<input checked="" type="checkbox"/>	2	LG WM8500HVA*	\$1,450	83	●	●	●	●	●	●	●	90
<input checked="" type="checkbox"/>	3	Kenmore Elite 41072*	\$1,000	82	●	●	●	●	●	●	●	95
<input checked="" type="checkbox"/>	4	Maytag Maxima MHW8100DC	\$1,400	80	●	●	●	●	●	●	●	75
<input checked="" type="checkbox"/>	5	LG WM8000H[V]A*	\$1,450	80	●	●	●	●	●	●	●	100
<input checked="" type="checkbox"/>	6	Samsung WF56H9100AC*	\$1,200	80	●	●	●	●	●	●	●	85

B. HE TOP-LOADERS, \$1,000 AND UP

<input checked="" type="checkbox"/>	1	Samsung WA52J8700AP	\$1,000	73	●	●	●	●	○	●	●	75
<input checked="" type="checkbox"/>	2	Samsung WA56H9000AP	\$1,100	72	●	●	●	●	○	●	●	75
<input checked="" type="checkbox"/>	3	Whirlpool Cabrio WTW8500DW	\$1,000	71	●	●	●	●	●	●	●	80
<input checked="" type="checkbox"/>	4	Maytag Bravos MVWB855DW	\$1,050	71	●	●	●	●	○	●	●	80

C. FRONT-LOADERS, LESS THAN \$1,000

<input checked="" type="checkbox"/>	1	Maytag Maxima MHW5100DW	\$950	80	●	●	●	●	●	○	●	75
	2	Whirlpool Duet WFW87HEDW	\$950	78	●	●	●	●	●	○	●	70
	3	LG WM3570HVA	\$800	78	●	●	●	●	●	●	●	95
	4	Samsung WF42H5600AW (Lowe's)	\$700	78	●	●	●	●	●	●	●	100
	5	Samsung WF42H5000AW	\$720	78	●	●	●	●	●	○	●	80
	6	Whirlpool WFW72HEDW	\$800	77	●	●	●	●	●	○	○	65
	7	LG WM4270HWA	\$800	77	●	●	●	●	●	●	●	75

D. HE TOP-LOADERS, LESS THAN \$1,000

<input checked="" type="checkbox"/>	1	Samsung WA48H7400AP	\$900	75	●	●	●	●	○	●	●	75
<input checked="" type="checkbox"/>	2	Samsung WA52J8060AW	\$900	72	●	●	●	●	○	●	●	75
<input checked="" type="checkbox"/>	3	Kenmore 28132	\$800	71	●	●	●	●	○	●	●	60
	4	Samsung WA45H7000AW	\$500	70	●	●	●	●	●	●	●	80
	5	Maytag Bravos XL MVWB980BW	\$900	69	●	●	●	●	○	●	●	85
	6	Kenmore 26132	\$600	69	●	●	●	●	○	●	●	60

*Model is several inches wider than most washers.

Ratings: Dryers That Can Carry the Load

Of the 125 electric dryers tested, the highest scored 86; the lowest, 11. Below are high-scoring dryers, including models that made our recommended list and those that came close. Gas versions are shown in smaller type. For full Ratings, available to online subscribers, go to ConsumerReports.org.

Recommended ● Excellent ● Very Good ○ Good ● Fair ● Poor

Recommendation	Rank	BRAND & MODEL	PRICE	SCORE	FEATURES			
					Drying Performance	Capacity	Convenience	Noise

A. \$1,000 AND UP

<input checked="" type="checkbox"/>	1	Samsung DV56H9100EG Gas: Samsung DV56H9100GP	\$1,200	86	●	●	●	●
<input checked="" type="checkbox"/>	2	Samsung DV56H9000EP Gas: Samsung DV56H9000GP	\$1,100	84	●	●	●	●
<input checked="" type="checkbox"/>	3	LG DLEX8500V Gas: LG DLGX8501V	\$1,450	84	●	●	●	●
<input checked="" type="checkbox"/>	4	Samsung DV50F9A8EVP Gas: Samsung DV50F9A8GVP	\$1,100	80	●	●	●	●
<input checked="" type="checkbox"/>	5	Maytag Maxima MED8100DC Gas: Maytag Maxima MGD8100DC	\$1,400	80	●	●	●	●

B. LESS THAN \$1,000

	1	Samsung DV42H5600EW (Lowe's) Gas: Samsung DV42H5600GW (Lowe's)	\$900	79	●	●	●	●
	2	LG DLEX3570W Gas: LG DLGX3571W	\$800	78	●	●	●	●
	3	Kenmore 81382 Gas: Kenmore 91382	\$800	78	●	●	●	●
	4	LG DLE1001W Gas: LG DLG1002W	\$650	78	●	●	●	●

Delivery Do's & Don'ts

DO CHECK ALL DIMENSIONS. Even washers and dryers that are 27 inches wide can be taller or deeper than your old machines. That's important if there are cabinets or shelves over the washer or dryer, or if it needs to fit in a closet or behind doors. Many

large- and jumbo-capacity machines are 2 to 3 inches wider, which could add an additional 6 inches for the pair.

Do leave room behind machines. When measuring the space you have to work with, allow room behind the dryer for the vent and behind the washer for the water-line connections.

Do measure all doorways. The machines will need to fit through the front (or back) door into the house and any doorways or stairwells on the way to the laundry room.

Don't forget the pedestal. Tally the height of the machine plus pedestal, especially if you plan to install your appliances below cabinets or shelves.

Don't assume all washers and dryers can be stacked. Though most front-loaders we test can be stacked with a dryer, the actual height of the combined units can vary slightly depending on how the dryer attaches to the washer. So check with the salesperson or look online at the models' specs. With that height in mind, will you be able to reach the dryer controls and inside the drum?



A1 Samsung

Top Dryers

DRYERS

- **A1** Samsung \$1,200
- **A5** Maytag \$1,400
- **B1** Samsung \$900
- **B4** LG \$650

All have a steam option except for **B4**. **A1** has a jumbo capacity. It's 30 inches wide, 3 more than usual. **A5** is among the quietest tested. All dryers shown in the Ratings have a blocked-duct indicator, except for **A3**.

How Reliable Is That Washer?

We asked readers whether their machine broke. The table shows estimates of failure rates by the fourth year of ownership, by brand, for each type. LG and Samsung front-loaders are among the reliable brands, and GE and Frigidaire are among the more repair-prone. Speed Queen top-loaders are among the more reliable brands, and LG top-loaders are among the more repair-prone brands.

FRONT-LOADERS

LG	12%
Samsung	14%
Amana	15%
Kenmore	18%
Maytag	19%
Electrolux	20%
Whirlpool	21%
GE	24%
Frigidaire	25%

TOP-LOADERS

Speed Queen	9%
Roper	12%
Maytag	16%
Samsung	16%
Whirlpool	17%
Kenmore	19%
GE	19%
LG	23%

Results are based on Consumer Reports Annual Product Reliability Survey of more than 115,000 subscribers who bought new washers from 2010 to midyear 2014. Differences of fewer than 6 points aren't meaningful. Data are adjusted to eliminate differences linked solely to the age and use of the machine. Note that models within a brand may vary.



A CLEAN SWEEP

Looking for loads of power without splitting an eardrum or getting a hernia? Read on.

FANTASIZING about the perfect vacuum may be embarrassing to admit to—but not when you're talking to Consumer Reports. In fact, that dream machine, you've told us, not only does a bang-up job but also is easy to maneuver, is quieter than a Boeing landing in your backyard, and comes at a price that won't make you wince. We're about to make your dreams come true.

Some terrific choices include the \$130 Hoover WindTunnel T-Series Rewind Bagless UH70120 and \$200 Shark Navigator Lift-Away NV352; both are lightweight bagless uprights that were among the easiest to push, pull, and turn. And though vacuums with power have to make some noise, those two vacs, as well as the \$160 Eureka Boss SmartVac 4870 and \$200 Kenmore 31140, both bagged uprights, were reasonably quiet.

The models above have tight seals and dense filters for trapping in what the vacuums suck up. But we judged certain bagless uprights poor for emissions: They fared worst at keeping fine dirt particles from going back into the air—of particular concern for asthma and allergy sufferers. Among them are the \$130 Eureka Air-Speed Unlimited Rewind AS3030A, \$120 Dirt Devil Lift & Go UD70300B, and \$175 Hoover WindTunnel 3 UH72600.

Two brands are new to the vacuum-shopping scene yet familiar: Fuller Brush and Maytag. But none of the six models we tested from those brands made our recommended list.



C2 Kenmore Elite 21814

Should You Love the Vac You're With?

PAY LOTS for the Kirby Avalir or one of the Miele's we've tested and you expect to have it fixed if there's a problem, not to replace it. But even with a model for which you paid less than \$200, you want it to last. How to tell whether a problem is terminal? Here's our experts' advice:

Keep it healthy. Good airflow keeps any vacuum from working harder than it needs to. So replace the bag when it's no more than about half full; the same goes for a bagless vacuum's bin. And be sure to follow the owner's manual instructions for cleaning or replacing filters.

Easy fixes. Keeping the brush roll clean also helps your vacuum last. Hair or fur can wrap around the ends of the roll, where the bearings are. And the bristles wear down over time. Removing the roll to clean or replace it takes minutes. On most models, so does replacing a belt that has broken.

Risky business. If the vac's power cord

is frayed, chafed, or chewed, the temptation is to tape it up—but don't. It's an easy fix at a repair shop. The same goes for the hose to a canister's head: Have it repaired promptly because a live wire sometimes travels within the wand and hose.

Judgment calls. Many other parts can break, including attachments, the hose-attach connection, and switches for on-off, brush on-off, and handle release. Even if you get a free estimate from a repair shop, some repairs aren't worth it. In general, don't spend more than 50 percent of the cost of a new product on repairing an old one. And if an item has already broken down once before, replacement may make more sense.

The death rattle. Hearing grinding or knocking sounds when you just turned on the vacuum? On a high-end vac such as a Kirby, you might prefer to have the motor replaced. For any other vacuums, it's R.I.P.

Ratings: Vacuums With Real Pull

Scores in context: Of the 73 uprights tested, the highest scored 74; the lowest, 33. Of the 37 canisters, the highest scored 75; the lowest, 34. Below are the top-scoring models in order of performance. Recommended models offer top performance overall. CR Best Buys blend value and performance. For full Ratings, available to online subscribers, go to ConsumerReports.org.

CR Best Buy Recommended ● Excellent ● Very Good ○ Good ○ Fair ● Poor

Rec.	Rank	BRAND & MODEL	PRICE	OVERALL SCORE	TEST RESULTS							
					Carpet	Bare Floors	Tool Airflow	Noise	Emissions	Handling	Pet Hair	

A. BAGGED UPRIGHT

<input checked="" type="checkbox"/>	1	Kenmore Elite 31150	\$350	74	●	●	●	○	●	○	●
<input checked="" type="checkbox"/>	2	Miele Dynamic U1 Twist	\$450	72	●	●	●	●	●	○	●
<input checked="" type="checkbox"/>	3	Miele Dynamic U1 Cat & Dog	\$650	72	●	●	●	●	●	○	●
<input checked="" type="checkbox"/>	4	Kenmore 31140	\$200	71	●	●	●	○	●	○	●
<input checked="" type="checkbox"/>	5	Kenmore Progressive 31069	\$200	71	●	●	●	○	●	○	●
<input checked="" type="checkbox"/>	6	Hoover WindTunnel Max UH30600	\$180	70	●	●	●	○	●	○	●
<input checked="" type="checkbox"/>	7	Kirby Avalir	\$1,600	69	●	●	●	○	●	○	●
<input checked="" type="checkbox"/>	8	Eureka Boss SmartVac 4870 []	\$160	69	●	●	○	○	●	○	●
<input checked="" type="checkbox"/>	9	Miele Dynamic U1 Jazz	\$550	69	●	●	○	●	●	○	●
<input checked="" type="checkbox"/>	10	Hoover WindTunnel Anniversary U6485-900	\$230	67	●	●	●	○	●	○	●
<input checked="" type="checkbox"/>	11	Sebo Felix Premium	\$600	66	●	●	○	○	●	○	●
<input checked="" type="checkbox"/>	12	Hoover WindTunnel T-Series Pet UH30310	\$150	65	●	●	●	○	●	○	●
<input checked="" type="checkbox"/>	13	Hoover WindTunnel T-Series UH30300	\$140	65	●	●	●	○	●	○	●
<input checked="" type="checkbox"/>	14	Miele Dynamic U1 Auto Echo	\$750	65	●	○	○	○	●	○	●

B. BAGLESS UPRIGHT

<input checked="" type="checkbox"/>	1	Hoover WindTunnel T-Series Rewind Bagless UH70120	\$130	69	●	●	●	○	●	○	●
<input checked="" type="checkbox"/>	2	Dyson Ball Multi Floor	\$400	65	●	●	○	○	●	○	●
<input checked="" type="checkbox"/>	3	Dyson Cinetic Big Ball Animal	\$600	65	●	●	○	○	●	○	●
<input checked="" type="checkbox"/>	4	Shark Rotator Professional Lift-Away NV501	\$260	65	●	●	○	○	●	○	●
<input checked="" type="checkbox"/>	5	Shark Navigator Lift-Away NV352	\$200	63	●	●	○	○	●	○	●

C. BAGGED CANISTER

<input checked="" type="checkbox"/>	1	Miele Complete C3 Marin	\$1,100	75	●	●	●	●	●	○	●
<input checked="" type="checkbox"/>	2	Kenmore Elite 21814	\$500	74	●	●	●	○	●	○	●
<input checked="" type="checkbox"/>	3	Kenmore Progressive 21714	\$400	72	●	●	●	○	●	○	●
<input checked="" type="checkbox"/>	4	Panasonic MC-CG937	\$330	71	●	●	●	○	●	○	●
<input checked="" type="checkbox"/>	5	Kenmore Progressive 21614	\$300	70	●	●	●	○	●	○	●
<input checked="" type="checkbox"/>	6	Electrolux UltraOne EL7085A	\$1,000	69	○	●	●	○	●	○	●
<input checked="" type="checkbox"/>	7	Kenmore Progressive 21514	\$250	68	●	●	○	○	●	○	●
<input checked="" type="checkbox"/>	8	Panasonic MC-CG902	\$250	65	●	○	○	○	●	○	○

How we test vacuums. We base **Overall Score** primarily on cleaning, airflow, handling, noise, and emissions. To test deep cleaning, we lift embedded talc and sand from medium-pile carpet. We test a vacuum's ability to clean **Bare Floors** by vacuuming sand without dispersing it. To assess **Tool Airflow**, we measure through the hose with increasing amounts of wood flour. Our **Noise** test reflects decibel-meter measurements; we recommend hearing protection when models score Poor. **Emissions** is our measurement of the release of small particles while vacuuming. For **Handling**, we judge the ease of pushing, pulling, and carrying. For our **Pet Hair** test, we use long cat fur on medium-pile carpet. **Price** is approximate retail.

Pick the Right Vacuum

FULL-SIZED VACS

- **A1** Kenmore \$350
- **A6** Hoover \$180 CR Best Buy
- **B1** Hoover \$130 CR Best Buy
- **C5** Kenmore \$300 CR Best Buy
- Kenmore 22614 \$350 CR Best Buy

A1 and **A6**, both bagged uprights, were impressive at deep cleaning carpets, a vacuum's top job. The bagless-upright **B1** did best in this category, had lots of airflow for tools, and, like **A6**, is lightweight. Of canisters, the bagged **C5** and bagless Kenmore **22614** (not shown in Ratings) offer much for the price. All of our picks scored very good or better for emissions.



A1 Kenmore

Which Ones Will Go the Distance?

We asked readers whether their vacuums broke. The table shows the estimated percentages that failed within the first three years of ownership, by brand, for each type. Kirby and Shark are more reliable up-right brands. Panasonic is a more reliable canister brand; Dyson, a less reliable one.

UPRIGHTS	
Kirby	4%
Shark	6%
Dirt Devil	8%
Kenmore	8%
Bissell	9%
Hoover	11%
Eureka	11%
Riccar	12%
Oreck	12%
Simplicity	13%
Dyson	13%
Miele	15%
Electrolux	16%
CANISTERS	
Panasonic	7%
Miele	10%
Kenmore	11%
Electrolux	14%
Hoover	15%
Dyson	16%

Results based on Consumer Reports Annual Product Reliability Survey of more than 23,000 subscribers who bought new vacuums between 2010 and 2015. Differences of fewer than 6 points aren't meaningful. Data are adjusted to eliminate differences linked solely to the age of the vacuum. Models within a brand may vary.



That Empty Feeling

Have you ever felt duped when opening a bag of chips or a bottle of pills only to see a lot less product than you expected? Learn how to shop smarter.

Few things are more infuriating than tearing into a bag of chips to find that it's mostly filled with air, or digging into a "pint" of ice cream that—on closer inspection—is only 14 ounces. *How can they cheat us like this?* consumers often ask. *There oughta be a law!*

Technically, there is a law—the almost 50-year-old federal Fair Packaging and Labeling Act. It prohibits excessive "slack fill," or nonfunctional empty space that creates the illusion of more product through underfilling, overpackaging, or other tactics. But the law has loopholes. When we contacted the Food & Drug Administration to inquire about violations, and a recent citation it might have issued, the press officer referred us to a database in which we could find neither details of violations nor warnings to manufacturers.

California is one of a few states in which local officials are cracking down. In late August, StarKist agreed to settle a class-action lawsuit brought by Patrick Hendricks in U.S. District Court for the Northern District of California, accusing

them of underfilling various 5-ounce cans of chunk light and solid white tuna for more than five years. StarKist denied wrongdoing but has agreed to distribute \$8 million in cash and \$4 million in vouchers redeemable for their tuna products. (You can file a claim until Nov. 20; go to tunalawsuit.com.)

Larry Barlly, supervising deputy district attorney in Yolo County, Calif., told us that since 2009, 27 slack-fill cases have been settled in civil penalties against companies including Coty, CVS, Hershey, Johnson & Johnson, Mars, and Walgreens. As part of the settlements, the companies were also compelled to redesign their packaging.

Other cases are pending elsewhere. This past March, in New York, 100 consumers joined a class-action suit against Johnson & Johnson Consumer Companies and McNeil-PPC accusing the manufacturers of using disproportionately large bottles to house a small number of Motrin IB and Motrin PM capsules.

“Most every pharmaceutical issue is tied to regulatory matters, so any change to packaging materials (say, to a different-sized bottle) could mean expensive investments and time-consuming review and approval from the [FDA or another] agency,” said Jim Butschli, an editor at the trade publication Packaging World.

“You and I may be outraged, but there might be a function to the slack fill,” said food and drug lawyer Eric Greenberg.

When companies do start playing footsie with the packaging, you can bet it has to do with the bottom line. “If raw paper costs rise, you’ll see fewer and smaller sheets of paper towels,” says Edgar Dworsky, editor of the pro-consumer watchdog blog MousePrint.org, which looks at the fine print of advertising. “When peanuts are in short supply, a manufacturer will take out a few tablespoons from the jar to offset higher costs.”

So be vigilant when looking at packaging. Pay attention to the net contents more than the box or bag they’re housed in. Compare unit prices of various-sized brands and package sizes to see which sell for the lowest price per ounce, per quart, or per pound. To get you going in the right direction, we take a close look at some big packages and bold claims—and share what the companies’ customer-service representatives told us when we called, as any consumer would, to ask: “Where’s the rest?”



WT 7 OZ

Hershey's Giant Milk Chocolate

VS.

WT 6.8 OZ

Hershey's Giant Special Dark

Same 'Giant' Label, Different Size

When “large” doesn’t pack a punch, “marketers go bigger and bolder, and neutralize the competition,” said Mark Lang, Ph.D., professor of food marketing at Saint Joseph’s University. Hershey’s has its Extra Large (4.25 ounces), King (2.6), and Giant Special Dark chocolate bars (6.8, down from its original 8 ounces). And not all “giants” are created equal: The Giant milk chocolate version weighs in at a full 7 ounces. Why the difference? “It could be a marketing reason, but I really don’t know,” a rep said.

Lowering the Bar

Like other companies, Ivory has downsized; it shaved its standard bars from 4.5 to 4 ounces in 2012. But the iconic product has a smaller doppelganger. When you buy a 10-pack, you get the standard-sized soap cakes. Purchase a 3-pack, and the look-alike bars weigh in at only 3.1 ounces. Be sure to compare the cost of the soap on the price per pound (usually indicated on the unit-price label), not on the cost per bar.



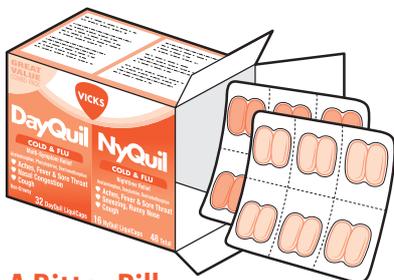


The Chips Are Down

Why is it that chip bags always seem to be so filled with air? “So the chips can move freely in the bag to avoid breakage,” said a rep for Snyder’s of Hanover. When we asked why the snack giant recently shrunk the size of its bag of tortilla chips from a pound to 12.5 ounces, the rep cited increased production costs. Fair enough, but the expectation that an unopened product will be only half-full can make spotting downsizing even trickier.

Less Fattening Ice Cream

“Larger package, two less bars, same price. Really?” wrote Jacquelyn Wood of Salem, N.H., when she sent us a photo of a 12- and 10-pack of Hood ice cream sandwiches, each which sold for \$5. According to a customer-service representative, the reason Hood shrunk its sandwich count last year was to be in sync with the industry standard. But why did the company make the box bigger in the process? For that, the rep had no answer.

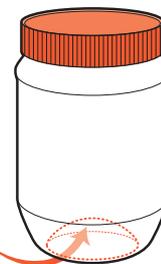


A Bitter Pill

We’ve received many snarky comments about outsized boxes and bottles of OTC drugs, but combination packs like this one from Vicks NyQuil/DayQuil are especially maddening: Only 24 caplets on two blister packs rattle inside a box that’s about 3¼x4¼x2 inches. “People assume the larger box is a better value,” said Lang of Saint Joseph’s University. “Shoppers make decisions heuristically—based on shortcuts using inferences and incomplete data. We can’t process everything.” A rep couldn’t explain the large packaging. “But if you’d like to see it in a smaller container, I’ll pass the information along,” she said.

Hot-Dogging It

This claim on a French’s mustard bottle seems to indicate that consumers will get 50 percent more for their money. But the smaller print shows that the difference between the 18-ounce bottle and the 12-ounce one is, well, just that. According to a customer rep, the label isn’t misleading because the word “free” doesn’t appear anywhere. “We do it mostly for the moms,” the rep said. “Back in the day, the mustard came only in 12-ouncers. We put 50 percent more in the bottle, so it would last all summer and you wouldn’t have to go out and buy another. Sorry for the confusion.”



Dimples Aren't Always Cute

One way we’ve seen peanut butter and mayonnaise makers conceal the fact that you are getting less—even though you are paying the same—is by retaining a container’s dimensions but crafting a dimple into the base. When we called Jif about downsizing, the customer-service rep confirmed that in 2012, Jif’s 18-ounce container shrunk to 16 ounces, as an alternative to a price increase. The most probable reason, the rep said, was the rising cost of peanuts.

↑
SHARE

Cracked open a container and found less than you'd bargained for? Post it on one of our social media accounts—or on yours, tagging us [@consumerreports](https://www.ConsumerReports.org)

Doubling Down on Double Stuffed

Secrets of Store Brands

Many juice giants have taken their refrigerated not-from-concentrate citrus juices down from a half-gallon, or 64 ounces, to 59 ounces. But some store brands, such as this Stop & Shop grapefruit juice, continue to offer the old size. Jim Wisner, a former retailer and president of Wisner Marketing Group, said retailers will occasionally delay downsizing for as long as several years after a big brand has led the way in order to show consumers that they offer a better value. The other advantage of store brands is that they're around 25 percent cheaper than the big names, on average, and in our taste tests many prove at least as good in quality.



Florida's Natural grapefruit juice **VS.** Stop & Shop grapefruit juice



When Suds Get Slippery

"I am very annoyed by the deceptive marketing practices of corporate America in today's world," wrote reader Ed McGuire of Syracuse, N.Y., who e-mailed us a photo of two different-sized bottles of All Free Clear—one 50 ounces and one 46.5 ounces—both sold at the same price. A company rep acknowledged that the laundry detergent bottle was reduced in size, attributing the decision in part to rising manufacturing, transportation, and packaging costs. However, we noticed that regular All liquid continues to come in the previous 50-ounce size. The lesson: Not all products are shrunk at the same time.

EACH YEAR, more than 40 billion Oreos are sold in more than 100 countries around the world—so many cookies that, if lined up, they'd circle the earth five times. Not bad for a confection quietly born in Manhattan a month before the Titanic sank, in 1912. The original cookie was packaged in bulk tins and sold by weight to grocers at 30 cents per pound. It has looked pretty much the same since 1953—12 flowers, 12 dots, and 12 dashes per side, and 90 ridges.

Times have changed. The Nabisco cookies are now baked in Fair Lawn, N.J.; the once-standard, 1-pound package size is now 14.3 ounces. What has grown is the number of Oreos on the market: more than 60 types and package sizes, from the classic sandwich cookie to Mini, Double Stuf, Triple Double (three cookies and two layers of cr me), Mega Stuf, and the newest addition, Thins. With no "typical" Oreo or package size, it can be tough to track your snack-food spending, not to mention your cookie calories.

When we called Oreo to ask the reason behind the brand extensions, we were told that the goal was to offer something for everyone: "We know that consumers

enjoy variety when it comes to snacking, so we continuously deliver surprising new tastes and twists on the classic cookie," said Janda Lukin, senior director for Oreo North America at Mondelez International, the global conglomerate that manages snack-food brands, including those of Nabisco (now part of Kraft Foods), maker of Oreos. "This helps Oreo stay relevant."

Harvard University marketing professor John T. Gourville takes another view. "The strategy of multiple offerings assures that Oreo commands more shelf space for its popular products," he said, "and, by extension, less for the brand's competitors."

The variety also helps boost the bottom line. As you'll see in the stack below, which compares the prices of key Oreos in the most common size sold at Walmart.com, the classic Oreo cookie is among the least expensive compared with some of its spin-offs. On a unit-price basis, the cheapest version is the Double Stuf; the priciest, the new Thins, which hit store shelves this past July and are marketed to adults who desire a "more sophisticated snacking experience." Clearly, that sophistication comes at a cost.



Lies, Secrets, AND Scams

SENIORS AND THEIR FAMILIES LOSE
BILLIONS OF DOLLARS EACH YEAR
TO HEARTLESS FRAUDSTERS.
HERE, LEARN HOW YOU CAN HELP.

To understand how Beth Baker, an independent, generally robust 87-year-old, got taken for \$65,000 in less than one week last year, it's important to know about her grandson, Will. Baker, a retired second-grade teacher living in National City, Calif., beams when she speaks of the 24-year-old, the eldest of her five grandkids. As a high school football player and later a U.S. Coast Guard Academy graduate, Will made his grandmother terribly proud. When, late last year, Will's wife delivered Baker's first great-grandchild, Baker was overjoyed. "Will is precious to me," Baker says.

So when a man phoned one morning last December from an unfamiliar number, the news he delivered hit her like a sledgehammer.

“He said my grandson was in Peru and was in trouble there,” Baker recalls. Then he put another man briefly on the line. Thinking it sounded like Will, Baker anxiously said into the phone, “Will?”

What Baker unwittingly did was provide the caller with her grandson’s actual name, which was swiftly woven into a story. The caller said that Will had been a guest at a wedding in Peru. While driving, he had been involved in an accident that injured a 7-year-old pedestrian. Then a caller claiming to be Will’s lawyer got on the line and said Will was in jail and needed money at once; there was no time to think or question. “And he said if I shared this story with anyone, there’d be trouble for my grandson,” Baker recalls.

Baker hadn’t seen Will for a while, but the tale seemed plausible to her.

So, shaken and scared, she followed the caller’s instructions without verifying the story with anyone in her family. She hung up, drove to her bank, withdrew \$5,000 from savings, and bought 10 \$500 Green Dot MoneyPak cards at a CVS and a Ralphs supermarket. The contact called back as promised, and Baker scratched the card backs and read him the numbers

beneath. That was all he needed to get an almost untraceable \$5,000 payment, ostensibly for Will’s legal fees.

The man called soon after to say the injured child had died. Will needed more money to avoid 10 to 20 years in prison. Again, the caller stressed urgency and secrecy. At his prompting, Baker withdrew \$11,000, bought more MoneyPak cards,

IN A RECENT STUDY, ABOUT 1 IN 20 SENIORS SAID THEY WERE FINANCIALLY ABUSED. IF A NEW DISEASE STRUCK THAT MANY OLDER AMERICANS, THE REPORT NOTED, A PUBLIC HEALTH CRISIS WOULD LIKELY BE DECLARED.

and waited for her phone to ring.

It did ring—again and again—each call detailing a new twist on Will’s story and yet another demand. Over five days Baker purchased 101 MoneyPak cards and sent \$65,000—almost all of her liquid savings.

Baker hardly slept. She was shaky and nervous. She skipped a visit to her husband, in nursing care at a home for

veterans. She lied to her son, Jim—Will’s father—about her activities. Once during a visit, Jim noticed that her thumbnail tip was black. He didn’t ask why for fear of embarrassing her. In retrospect, he says, he realized that “it was from scratching off all those Green Dot cards.”

When Baker applied at her local bank for a \$14,000 loan against her paid-off home, she attracted the attention of a manager. With patient prompting, Baker finally confessed. The banker told her she was being scammed. They called Jim to confirm that Will was safe. “I was so relieved,” Baker recalls.

Jim Baker reported the crime to the San Diego County district attorney’s Elder Abuse Unit and fired off an angry letter to Green Dot. He remembers the incident with bitterness. “It made my mother question her own sanity and worth,” he says. “At her age that’s hard to get back.”

A Crisis in the Making

Baker’s story may sound unbelievable. You may tell yourself it could never happen to you or anyone in your family. But don’t be so sure. Financial elder abuse—broadly defined as the illegal or improper use of the funds, property, or assets of people 60 and older by family, friends, neighbors, and strangers—is rising fast.

Estimates of the crime’s frequency vary. A 2010 survey of seniors by the nonprofit Investor Protection Trust projected that 1 in 5 seniors had been taken advantage of financially. A study last year in the *Journal of General Internal Medicine* found that 4.7 percent of Americans—about 1 in 20—reported that they had been financially exploited in their later years. The study provided perspective: If a new disease struck that same percentage of older Americans, researchers wrote, “a public health crisis would likely be declared.”

The Federal Trade Commission says that fraud complaints to its offices by individuals 60 and older rose at least 47 percent between 2012 and 2014. Seniors are the predominant victims of impostor schemes, in which criminals pose as government officials or other authority



LOVE AND FEAR

Scammers told Beth Baker to send money to rescue her grandson, Will (shown in photo frame).

Ordinary People, Outsized Courage

Seniors often fear reporting financial exploitation, so it remains mostly hidden. To warn others, these victims spoke out. Find out more at [ConsumerReports.org/elderscamsupdate](https://www.ConsumerReports.org/elderscamsupdate)

1. An unscrupulous financial adviser cheated **Phillip Deeb, 77**, of Bradenton, Fla. (pictured here with daughter Deneé), out of \$186,000 before law enforcement stepped in (see page 35).

2. In the hope of claiming a prize to share with family, **Edna Schmeets, 86**, of Harvey, N.D., lost \$297,000 to swindlers (see page 33). Here she poses with daughter Lisa.

3. A phony letter sent to **Father Michael Ortiz, 86**, of San Diego said he'd won a \$1.6 million sweepstakes. The retired Roman Catholic army chaplain was directed to transfer advance taxes to a bank account in South Carolina. Ortiz paid \$40,000 before he reported it to law enforcement. Apprehended, the crook ultimately pleaded guilty to felony elder financial abuse.

4. The **Rev. Al Cadenhead, 68**, of Matthews, N.C., relinquished almost \$16,000 in one day to an IRS imposter. The Baptist minister was threatened with jail if he didn't settle a purported tax bill immediately, using Green Dot MoneyPak cards for payment and keeping quiet to avoid further trouble.

5. A letter to **Wade Gardner, 62**, of Los Angeles, announced he could earn money evaluating retailers' customer service. After Gardner responded by phone, he was sent a \$3,000 bank check and told to deposit the check and send \$1,200 personal checks to two strangers. Both \$1,200 checks—and five of his other checks—bounced after the \$3,000 deposit didn't clear. Gardner paid almost \$250 in bounced-check fees but says he could have lost much more.

6. Thinking she was rescuing her grandson overseas, **Beth Baker, 87**, of National City, Calif. (pictured here with son Jim), lost \$65,000 to fraudsters before realizing she'd been conned (see page 28).

7. A contractor approached **Marjorie DeGrace, 77** (here with granddaughters Avianna, left, and Amanda), in her Wakefield, R.I., front yard and offered to pave her driveway for \$3 per square foot. The paver started without giving DeGrace time to vet him. She paid \$1,000 in cash and charged \$8,000 before her children called police. Her son later measured the driveway and determined an overcharge of \$3,600. The paver entered into a consent order to stop operating in Rhode Island and provide restitution or remediation to those who'd filed complaints, but DeGrace hasn't seen a dime.

8. **Louise Brown, 68**, a retired nurse from Richmond, Vt., met a man through a dating site who charmed her through e-mails and texts. Over six months, he persuaded her to send \$60,000 to cover business troubles abroad. The money hasn't been recovered.





3



6



8



figures and claim that money is owed. They also are hit hard by gambits involving prizes, sweepstakes, and gifts.

Older people's vulnerabilities—including isolation, loneliness, generally trusting natures, relative wealth, and in some cases declining mental capabilities—make them ideal quarry for con artists. Even those whose cognition is intact can be swayed if they're stressed or depressed, or recently have lost a loved one.

The amount lost to swindlers, whether they are strangers or even relatives, is huge, with estimates ranging from almost \$3 billion to more than \$30 billion

annually. And as baby boomers age, the pool of potential victims will expand, with assets ripe for the pickpocketing.

Mining for Marks

Among the factors that keep seniors from reporting scams are deep humiliation once they realize they've been had, and fear of reprisals from scammers who may have made threats to keep them silent. Many may be unaware that they've been scammed. A 2011 study conducted in New York state found that in one year, just 1 in 44 cases was actually reported.

"Victims are often deeply ashamed,"

says Elizabeth Loewy, former head of the Manhattan district attorney's Elder Abuse Unit and now general counsel at EverSafe, a fraud-monitoring service for seniors. "They worry that if they're viewed as vulnerable, they'll lose their independence."

In addition to the psychic trauma, the crime can affect seniors' health. A 2009 study of people 65 and older participating in the Chicago Health and Aging Project found that older people subjected to abuse or neglect, including financial exploitation, were hospitalized at a higher rate than those who weren't victims.

Many of the cons that seniors get taken

Anatomy of a Swindle

Lottery and sweepstakes scams have been around for years, but they still ensnare seniors and younger individuals, sometimes for hundreds of thousands of dollars. One of the biggest operates out of Jamaica and several other countries, including Canada, Costa Rica, and Israel. Here's how the so-called Jamaican lottery scam can trap seniors and rob them of their savings:



1 Creating the list. Scammers collect seniors' names from sources that include obituaries mentioning surviving relatives and legitimate mailing lists of people who've bought products widely sold to seniors. They also get names from list makers that operate bogus mass sweepstakes mailing centers and cater to scammers.

2 Testing the waters. A mass mailing, sometimes personalized to each victim, is sent. It may offer an attractive product or service, or mention that the

victim is eligible for a lottery or sweepstakes. The mail-in return forms ask for personal information such as phone numbers and whether the victim has a credit card. They may also ask for a small fee—say, \$20.

3 Homing in on 'suckers.' The scam may end there with the receipt of respondents' fees. Or the scammers may create a more refined "sweepstakes list" or "sucker list" of respondents. They may use those lists themselves or sell them to others. Listed names are worth up to \$6 each; the most valuable are older and alone, and often have a rural address.

4 Calling the 'winners.' A scammer, often from abroad, using a phone system that masks the call's origin, contacts a listed individual to announce that she has won a big prize. The catch: She has to pay fees or taxes up front—and keep the win a secret. The caller then directs the victim to wire or mail the funds to a third party's bank account.

5 Moving the money. The third party sometimes flies the cash to Jamaica to deliver directly to the scammer or has another person, a "mule," do it. Each participant takes a cut, often 10 percent.



6 Extracting more. After a victim sends money once, a scammer will call more often—several times a day—for money or just to talk. To develop a relationship, he'll probe the victim about her pets, hobbies, grandchildren, and other personal information. He may send her flowers or presents. The closer he gets to the victim, the more data he can extract, including Social Security and bank-account numbers. That information can be used to drain bank accounts and open credit cards in the victim's name.

7 Bearing down. When victims say they can't afford more, scammers suggest sources: reverse mortgages, cashed-in life-insurance policies, sales of property, cash advances on credit cards. A victim who balks will be told that her winnings are threatened; she may even be threatened with physical injury to herself or her family.

8 Creating an accomplice. Some victims are told that to redeem their winnings, they must accept checks from others and move funds to a third party. They unwittingly assist money launderers; some even become money-laundering conspirators themselves.

9 Blocking escape. Scammers have been known to track down victims who have changed their phone numbers. Posing as a concerned child, a scammer directs a local plumber to visit his mother for a service call and to then phone from the house. The mother may deny that she needs service, but if she lets the plumber make his call from her phone, the scammer can use caller ID to reconnect.



10 Donning white hats. Scammers sometimes pretend they're FBI agents, intent on helping victims recoup their lost funds. That service, of course, requires additional payments.

by are no different from those used against younger people. But criminals take pains to identify older people (see “Anatomy of a Swindle,” on the facing page). A clever scammer who gets a senior on the phone will quickly tease out personal information. “They might say they want to send the person free medical supplies or that they just want to verify their personal information,” says Hazel Heckers, a victim advocate at the Colorado Bureau of Investigation. “Either way, their Social Security number is requested.”

To create personal connections, they’ll use “mirroring” techniques. “They’ll say, ‘You’re a veteran? I’m a veteran!’” says Debbie Deem, an FBI victim specialist based in Los Angeles who works with victims of financial crimes, including seniors. The flattery and emotional grooming are similar to techniques she has seen used by sex traffickers luring young girls.

“It’s low-risk occupation,” says Jane Walsh, director of the Community Protection Division at the Boulder County district attorney’s office in Colorado. “Why would someone rob a bank when they can sit at home with a phone and call a bunch of seniors?”

An Emotional Appeal

Edna Schmeets, now 86, received a call in September 2011, the year after her husband died. A stranger claiming to be from an outfit called “American Cash Awards” announced to the Harvey, N.D., retired farm wife and homemaker that she had won a \$19 million prize. All she had to do was wire \$3,500 in advance fees and taxes to someone in Portage, Ohio. She shouldn’t tell anyone, the caller said, or she would lose the prize. To Schmeets, who had dreamed of providing a substantial inheritance to her four remaining children, eight grandchildren, and six great-grandchildren, the promise of a vast sum seemed a godsend. She complied.

“They’re good talkers,” Schmeets says now, puzzling over how the scammers reeled her in over 10 months. “They can just about hypnotize you over the phone.”

The caller, going by the alias Newton Bennett, then escalated his demands. Week

Build Your Own Safety Net

Staying involved in the community—and getting out and about—is the best prevention against elder financial abuse. Scammers use seniors’ isolation to their advantage. The Eldercare Locator, at eldercare.gov, can help you find a range of services in your community. Other tips for seniors and the people who care about them:

PROTECT YOURSELF

• Sign up for Nomorobo.

The free robocall interception service is available to customers with VoIP service from providers including Comcast and Time Warner Cable. CR testers recently found it to be very effective. Check at nomorobo.com to find out whether your phone service supports it. Or consider a whitelist call blocker, a device you attach to your phone to block all calls from numbers that you don’t program. If you happen to answer a call from an unknown number, don’t press to connect to a representative, even just to tell him to buzz off; you’ll only show that you’re a live person and generate more calls. Sign up for the National Do Not Call Registry (donotcall.gov or 888-382-1222); it won’t prevent crooks from calling, but it will limit legitimate telemarketing calls.

• **Opt out of commercial mail solicitations.** You can arrange for a ban of five years at a time with the Direct Marketing Association’s mail preference service (dmachoice.org). To eliminate unsolicited offers for credit, go to optoutprescreen.com.

• **Have someone help you pay bills.** Create a shared bank account with someone you trust. Then

arrange to transfer only enough money each month to pay the bills. Get to know officers and tellers at your local bank or credit union.

• Vet all contractors.

Never hire one without first checking with your state’s contractor licensing board and the local Better Business Bureau. Ask for proof of insurance and bonding. Don’t pay in full up front.

• Check a financial adviser’s credentials.

Find regulatory actions, violations, or complaints at brokercheck.finra.org.

• Arrange for limited account oversight.

See whether your financial institutions will send statements and alerts to a trusted person who has no access to your accounts, just to check for fraud. Or try EverSafe (eversafe.com), a paid Web-based service that consolidates all of your accounts in one place and checks for suspicious activity daily. It lets you arrange for someone else to receive the online statements without having access to your accounts. We tried the Essentials version, \$8, which generally worked as promised.

• Set up an emergency plan.

There may be a time when you aren’t able to control your own finances because of temporary hospitalization or permanent incapacity. Consider carefully to whom you give power of attorney. Don’t assume the person closest to you will do the best job; you might be better off giving it to someone more detached and financially secure. The power-of-attorney document can be drawn up with limits, such as assigning a relative or friend to monitor the

person with power of attorney, mandating a periodic written report of financial transactions, or assigning joint powers of attorney, which requires two signatures on every check.

• **Visit an elder-law attorney.** He or she can help set up a trust for one or all of your accounts. The arrangement can allow for you to control your money until the point at which you’re deemed to need help.

PROTECT A LOVED ONE

• Visit often, sometimes without advance notice.

Check for changes in behavior and for signs that the elderly person isn’t taking care of herself, including changes in hygiene and a fridge with little food.

• Set up a limited account.

If you’re concerned about your relative’s financial decision-making, set up a small account at a local bank for her. The account could, for instance, include a debit card and checking with a spending limit of, say, \$300.

• In an extreme case, file for guardianship or conservatorship.

That could require two exams: one, performed by a psychiatrist or neuropsychologist, to judge the elderly person’s cognitive abilities; and another, by a specially trained psychiatrist or psychologist, to determine whether the elderly person is being unduly influenced. To be unduly influenced doesn’t necessarily require cognitive impairment, says Bennett Blum, a forensic and geriatric psychiatrist based in Tucson, Ariz. Average exam costs, he says, range from \$1,725 to \$7,200 and are not covered by Medicare or other insurance.

by week, Schmeets eventually cashed in her investments and withdrew almost everything she had from savings. She borrowed against a life-insurance policy. She gave the scammers her credit-card number and personal identification number to provide more funds. She tried to get a loan on equipment from her family's 640-acre wheat and cattle farm. The local bank, now suspecting that fraud was afoot, refused.

Her daughter, Lisa, who lived about 2 hours away and visited her mom frequently, recalls that her mother was uncharacteristically secretive during that period. And Schmeets did something odd: She opened accounts in all three banks in her town and began shuttling money among them. Her children found out that the scammers had instructed Schmeets to receive and deposit checks from other victims, and send the money to a third party. Without her realizing it, Schmeets was being used by the scammers to launder money.

A banker in Harvey questioned Schmeets about her large transactions. "I don't remember what the heck I told him," Schmeets says, "but I didn't tell him the truth because I wasn't supposed to tell anybody."

The banker alerted Schmeets' son, Jeff, to his mother's strange behavior. Her children, who weren't named on their mother's account, immediately asked her

to stop. Then they told the local police. The case was eventually forwarded to the FBI, and an agent began an investigation. By the time Schmeets stopped her folly, she'd lost \$297,000.

"When the FBI got involved, it was like the spell broke," Lisa says of her mother's sudden awakening. "She was like, 'Oh my gosh.' And then she was really hard on herself. She'd really lost everything."

Altered Reality

Experts say it's not unusual for some victims to get duped repeatedly, betrayed not just by clever scammers but also by their own cognitive decline or emotional need. Jolene T. of California watched helplessly as her father, a retired plumber, and mother, a retired nurse, drained their life savings of \$200,000 and borrowed an additional \$50,000



Money Management and the Aging Brain

We're all apt to get a bit fuzzier at money math as we age. The decline of financial skills—counting money, understanding debt and loans, paying bills, having the judgment to make prudent financial decisions—may be an early marker of something more: mild cognitive impairment due to Alzheimer's disease.

In normal aging, cognitive abilities involving speed—learning new material, recalling facts, shifting attention—slow down, notes Bennett Blum, a forensic and geriatric psychiatrist in Tucson, Ariz. Other abilities, associated with language and reasoning, improve.

How an individual is affected depends on genetics, health, environment, physical activity, and other factors. And the decline may not be noticed for years if a senior functions well otherwise. "Someone who's not with the elder often won't even recognize it or might chalk it up to eccentricity," he says.

Only when a senior gets gulled into an unnecessary reverse mortgage or makes a bad investment decision—say, buying "gold" coins of questionable value—does the change make itself known. Stressful situations—often imposed by pushy telemarketers

and outright scammers—also can highlight the impairment.

Declining cognition and dementia are blamed for seniors' susceptibility to scams, but those with intact cognition also can get snookered, possibly because of other pressures that make them more vulnerable. Loss of a relative, family discord, financial worries, or an overdependence on another person—all can contribute, says Susan Bernatz, a forensic neuropsychologist in Marina Del Rey, Calif. "I've seen many cases involving people with full mental capacity whose trust and dependency were exploited for

another person's financial gain," she says.

Notably, cognitive decline affects financial decision-making differently among personality types. A study published in 2014 by researchers from DePaul University and Rush University Medical Center found that seniors who have an overinflated faith in their financial abilities could be more vulnerable than others to money scams. As their cognition wanes, the risk increases. What's more, the report said, getting stung once might not be enough to keep some overconfident types from being defrauded again.

'WHY WOULD SOMEONE ROB A BANK WHEN THEY CAN SIT AT HOME WITH A PHONE AND CALL A BUNCH OF SENIORS?' ASKS JANE WALSH, DEPUTY DISTRICT ATTORNEY, BOULDER COUNTY, COLO.

responding to multiple sweepstakes prize offers, including one for \$2.5 million from "Global International Sweepstakes." Jolene consulted her father's doctor, hoping he would declare her father incompetent so that she could take over his finances, but the doctor didn't see signs of cognitive decline. Legally her father was able to carry on.

"I'd be at the house, and he'd get a call," Jolene says. "They'd tell him to wire the money right away. He'd run out the door to send it, and I'd run after him. I still could not stop him.

"He was so deeply invested in it that he didn't want to believe it was a lie," she adds. "It became a kind of addiction."

"The victims I deal with would not call these scammers strangers," says Deem, the FBI victim specialist. "To these people, they're their friends."

To get through to victims and encourage them to stop, Deem tries to reveal the scams' contradictions. But even when the hustlers are unmasked, some lonely victims appear not to care that they're being duped. "A woman with Alzheimer's said to me, 'If you take this away from me, what will I have to live for?'" the FBI agent recalls. "Another one said, 'His voice is like a song to me.'"

A Violation of Trust

Whether hatched around the corner or halfway around the world, these schemes often depend on the establishment of trust. Phillip Deeb, a retired meat cutter in Bradenton, Fla., trusted Dennis Cline and thus lost his life savings.

In 2006, when Deeb was 68, he responded to a mailing promoting Medicare supplemental insurance. He was sent a list of local insurance agents and selected Cline to sell him the policy. Cline soon began courting Deeb, befriending him and inviting him to a holiday party. He persuaded the retiree to put

his entire \$186,000 lump-sum pension into an annuity and offered to prepare his taxes. "He seemed trustworthy," says Deeb, now 77. He admits he should have checked Cline's credentials.

In 2008 and 2009, the IRS sent Deeb notices for unpaid taxes. Cline said he would handle it. But in late 2011, the IRS put a lien on Deeb's accounts. Though Cline had asked Deeb and his wife, Mary Jane, to sign their tax forms, he hadn't filed the returns at all. Deeb owed the IRS \$20,000.

Around the same time, Deeb received a collections notice for cable television service he'd never ordered. Deeb's daughter, Deneé, and son, J.P., decided to investigate and found that Cline had used Deeb's Social Security number to arrange for the service in his own home. Suspicious, they dug deeper. They discovered that Cline had opened two more annuities. Over time, he'd gutted all three accounts, impersonating his client to gradually withdraw the funds by phone. To escape detection, he'd arranged for statements and checks to be sent to his or his father's home. The value of the annuities had dropped to zero.

Deeb's children alerted police. In November 2012, Cline was arrested, and a month later he was charged with scheming to defraud \$50,000 or more, a first-degree felony. Various delays caused the case to drag on for 14 months. The anxiety ate at the couple. Phil Deeb, recovering from surgery to his pancreas, had several panic attacks, and a few months after the case ended, he underwent open-heart surgery. "The doctor states it was due to the stress in his life," Deneé says.

Lisa Chittaro, the assistant state attorney who prosecuted the case, worried that the Deebes wouldn't live to see justice. "I've seen it happen," she says. "A defense attorney for this kind of case once told me, 'Delay is my friend.'"

Taking a Safety Show on the Road

Members of the Stop Senior Scams Acting Program, ages 60 to 97, travel to senior and community centers, churches, and synagogues to perform an education-based show. The troupe, based in Los Angeles, dramatizes a variety of senior scams, from fake diamonds sold by mail to bogus time-share offers. Founded in 2009 by



Director Adrienne Omansky educates seniors.

director Adrienne Omansky, the cast members are themselves victims or near-victims of such cons; they write the scripts based on their experiences. After their performances,

audience members often come up to the stage to share their own tales or stories of someone they know. "They tell us things they have not told their own families," Omansky says.

In one act, a scam ring "madam" instructs five gold diggers to follow up on obituaries by visiting rich widowers. Each visits her mark, pretending to be a friend of the deceased wife, and walks away with handfuls of cash, to the tune of Abba's "Money, Money, Money." In another skit, a woman pays \$3,000 to two fake talent agents. "Betty White, move over!" she says proudly while the con artists high-five each other behind her.

Cast member Bob Eddy, who almost fell for a "mystery shopper" scheme, says his experience in the troupe has taught him one big lesson: "Don't keep it a secret," he says. "Tell somebody. You're not the only one."



ACT

Petition the top phone companies to provide customers with free tools that are currently available to stop robocalls, which can be the origin of scams. Access Consumers Union's End Robocalls petition at:

[EndRobocalls.org](https://www.consumersunion.org/robocalls)

The Fight for Justice

In search of help, families report to local police, financial institutions, and numerous government agencies and not-for-profits (see “Where to Report Abuse,” on page 37). But investigations and prosecutions often fall short because of lack of training and coordination among various experts.

Investigators may be able to determine the origin of a phone call or the original IP address of an Internet operation, but by then the crooks have moved on. Paul Greenwood, San Diego deputy district attorney and head of the office’s Elder Abuse Unit, notes that although Green Dot changed the loading process of its cards earlier this year to make it impossible for scammers to redeem loaded funds remotely, criminals are using other cards in their place.

And resources stretch only so far. “The feds are more interested in a global picture, with a criminal network, lots of defendants, and millions of dollars,” Greenwood says. “If I brought them Beth Baker’s case, for \$65,000, they’d probably laugh at me.”

Yet dogged investigators can succeed. While looking into some suspicious money transfers through the mail, Brian Horne, a postal inspector based in Miami, and Frank Gasper, the FBI special agent in Bismarck, N.D., who was probing Edna Schmeets’ case, discovered that they were tracking the same person: Shannon O’Connor of Deerfield Beach, Fla., who was receiving large checks from Schmeets and at least three others.

Horne and Gasper teamed up and eventually paid O’Connor a visit. She was arrested and questioned. “Initially she told

a couple of stories,” Gasper recalls. “But after a 40-minute interview, she realized we knew what was happening.”

O’Connor cooperated, and the investigators pieced together the workings of a network of middlemen in the U.S. collecting huge sums of cash, much of it from seniors, and wiring or flying the funds to Jamaica. Working with Jamaican law enforcement, Horne and Gasper identified 32 conspirators in the U.S. and Jamaica. They estimated that the conspiracy had collected a total of \$5.5 million from at least 70 victims across the country.

Progress on Many Fronts

As difficult as such probes can be, elder-abuse experts say they’ve seen some progress in how the crime is perceived and handled. Last September, for instance, the Department of

Initiatives That Could Help Prevent Elder Fraud

At July’s White House Conference on Aging, President Barack Obama announced plans to train more prosecutors to combat elder abuse, including financial exploitation. The program is to be backed by the Department of Justice. That initiative—and possibly the first known utterance of the phrase “elder abuse” by a U.S. president—were viewed by some as evidence that the exploitation of older Americans is finally becoming part of the public discourse. But a problem with so many dimensions needs to be addressed on multiple levels.

All telecom companies should offer call-blocking technologies. The systems would enable their customers to help stop robo-calls that often generate scams. (Certain companies already offer call-blocking services for some Voice over Internet Protocol, or VoIP, services and landlines.) Recently, attorneys general in 44 states and the District of Columbia asked five major companies—AT&T, CenturyLink, Sprint, T-Mobile, and Verizon—to offer

the service. Consumers Union, the advocacy arm of Consumer Reports, has actively campaigned for the measure; more than 450,000 consumers have signed Consumers Union’s End Robocalls petition to the top phone companies to provide those tools to consumers at no charge. (Access the petition at EndRobocalls.org.)

States could pass new, targeted civil statutes. In all states, victims can sue known con artists in civil court for fraud, misappropriation, breach of fiduciary duty, and other causes of action. But a senior fleeced of \$20,000 by his accountant might not find a lawyer willing to file a suit over such a relatively small sum, says Jane Lee, director of the Financial Crime Resource Center at the National Center for Victims of Crime. But in the five states with elder-financial-exploitation civil laws—Arizona, California, Florida, Hawaii, and Oregon—victims who sue can recover attorney fees and get treble damages, among other benefits. If that innovation were copied nationwide, more victims



might seek justice in both civil and criminal courts, Lee says.

More physicians could be trained to spot the warning signs of abuse. That evaluation could become part of regular medical checkups. As with suspected child abuse, doctors should know where to report their concerns. (Currently, medical professionals who routinely work with the elderly are being trained in that skill through Baylor College of Medicine’s Elder Investment Fraud and Financial Exploitation Prevention Program.)

More elder-abuse task forces should be established. The

entities, composed of local and federal law-enforcement officers, prosecutors, financial institutions, adult protective services, and others involved in elder protection, would enable professionals in a community to share information more quickly, aiding in investigations and prosecutions. Page Ulrey, senior deputy prosecuting attorney for the King County, Wash., prosecuting attorney’s office, suggests that every state or county attorney’s office should have a dedicated elder-abuse prosecutor. “We’re so far behind in how we’re approaching this problem,” she says. “We’re not thinking of it as the paramount and pressing issue that it is.”

Justice launched a website (justice.gov/elderjustice) that includes a database of publicly filed documents used in elder-abuse, neglect, and exploitation cases so that prosecutors can share strategies.

Most statutes related to elder financial exploitation are at the state level, and several states have recently acted to beef up those laws. Maine added financial exploitation to its definition of elder abuse. Ohio is considering a bill to require financial institutions and their employees observing suspected elder abuse be “mandated reporters” to law enforcement; almost all states offer immunity from liability to those who report the crime.

Missouri recently allowed stock brokerages suspecting elder fraud to refuse to process a senior’s trade request or transaction for up to 10 days. New York is considering a similar bill for banks.

Financial institutions have begun training personnel to identify and report signs of elder fraud. Wells Fargo Advisors, the megabank’s brokerage arm, now trains all of its employees to be mandated reporters. Businesses have sprung up with products to help prevent the abuse (see “Build Your Own Safety Net,” on page 33).

Improved coordination with foreign countries has helped. Jamaica, a known hotbed for lottery scams, passed a law in March 2013 to make it easier to prosecute scammers. Shortly after, Sanjay Ashani Williams, 25, a “lead list” seller from Montego Bay, Jamaica, flew to Charlotte, N.C. There was an arrest warrant out for

him, and he was apprehended. One of his victims was Edna Schmeets.

The Power of Speaking Out

A powerful tool in the arsenal of elder-abuse prevention is awareness.

Publicity—such as the 2009 conviction of Anthony Marshall for stealing millions from the estate of his mother, philanthropist Brooke Astor—is making elder fraud more visible. Numerous government agencies and not-for-profits offer educational websites and literature. But seniors themselves may be the most powerful teachers. When they bravely tell their stories, peers listen (see “Acting Out for Justice,” on page 35).

In late April, in federal court in Bismarck, Edna Schmeets took the stand to testify about suffering at the hands of the lottery schemers. She knew she would see Sanjay Williams face to face. “She was concerned about her safety,” Lisa recalls. “But she was a champ.”

Righting the Wrongs

Elder-fraud cases are sometimes resolved, but victims don’t always get their due. In January 2014 Dennis Cline was convicted of defrauding \$50,000 or more. He went to prison and was ordered to pay \$94,442 in restitution to Phillip and Mary Jane Deeb. But the Florida Department of Corrections says Cline is behind in payments to the Deebes since his February release. To make ends meet, Phil Deeb—who had lost his life savings in the fraud—had to return to the Publix meat counter. Then he became too sick to work. “It breaks down your body,” Deebes says of the experience. “You become sicker than you were.”

Edna Schmeets didn’t get her money back, which leaves her bitter. But in May, she learned that Sanjay Williams had been found guilty of conspiracy to commit wire fraud or mail fraud, conspiracy to commit money laundering, and 35 counts of wire fraud. Sentencing is scheduled for early October. He faces a potential 40 years in prison.

Greenwood says the Beth Baker investigation is ongoing. Baker doesn’t expect that she’ll get her money back, and she’s

fortunate that her loss didn’t jeopardize her retirement. Like Schmeets, she now has her children’s names on her bank accounts and lets them periodically check her transactions. She says she’s satisfied if her words help protect others.

“These people are willing to take the stand in a public forum and talk about something embarrassing in order to help bring people to justice and stop the fraud,” says Assistant U.S. Attorney Clare Hochhalter, the lead prosecutor against Sanjay Williams in North Dakota. “They are heroes to us.”

“I don’t feel like a hero,” Baker says. “But I’m thankful if I can keep somebody else from being fooled.”

Where to Report Abuse

AARP’s scams and fraud page

(member.aarp.org/money/scams-fraud) offers information on the latest frauds against older people.

Consumer Financial Protection Bureau’s Office of Financial Protection for Older Americans (consumerfinance.gov/older-americans) receives and investigates consumer fraud complaints specifically related to mortgages, credit cards, banks, loans, and more.

Financial Fraud Enforcement Task Force’s stopfraud.gov/report.html is a first stop when reporting a scam. The site also has numerous resources for seniors and family members.

National Adult Protective Services Association (napsa-now.org/get-help/help-in-your-area) has a national map with links to abuse-reporting hotlines by state.

National Center on Elder Abuse (ncea.aoa.gov; click on Stop Abuse) has state directories of help lines and elder-abuse-prevention resources in all 50 states and the District of Columbia.

Senate Special Committee on Aging toll-free hotline (855-303-9470) can refer victims and families to resources for assistance. Or go to aging.senate.gov/fraud-hotline.

For more resources, go to ConsumerReports.org/elderscamupdate



SHARE

Have you, a friend, or a family member been the victim of an elder scam to steal money or property? Did you or the person you know fight back? Share the story with us on our Facebook page:

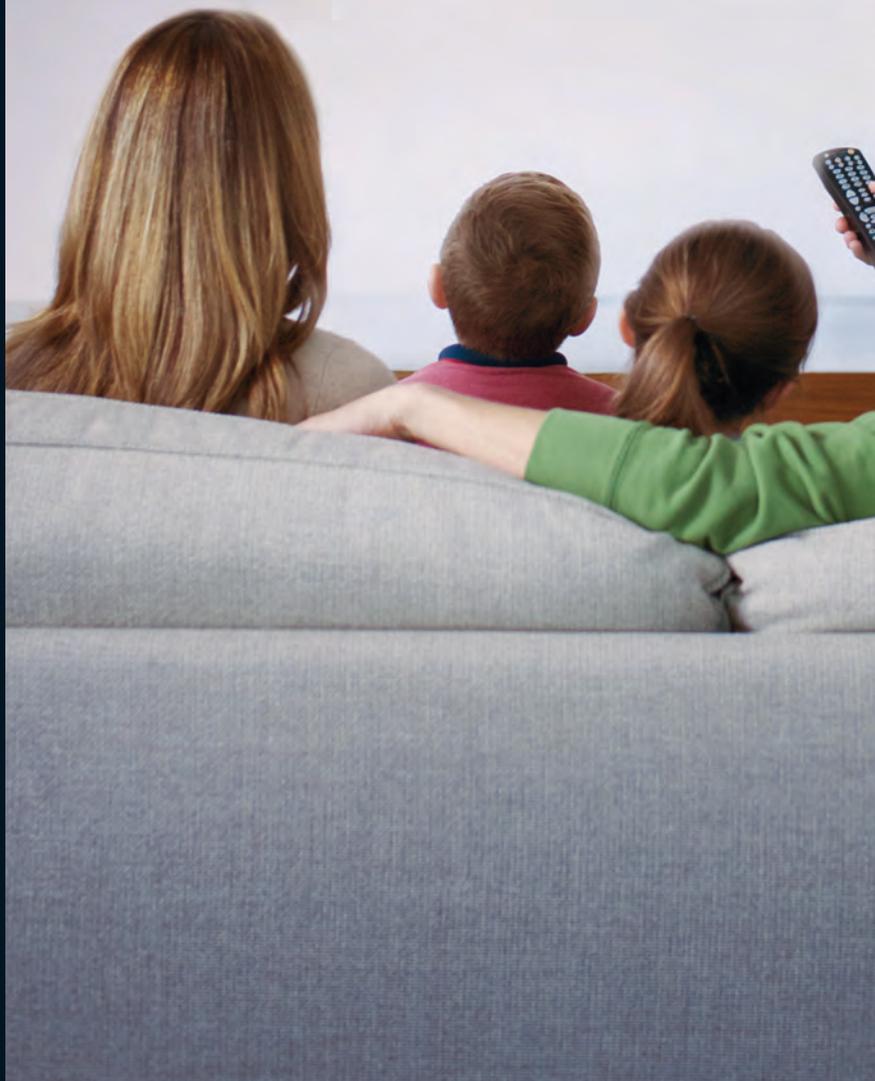
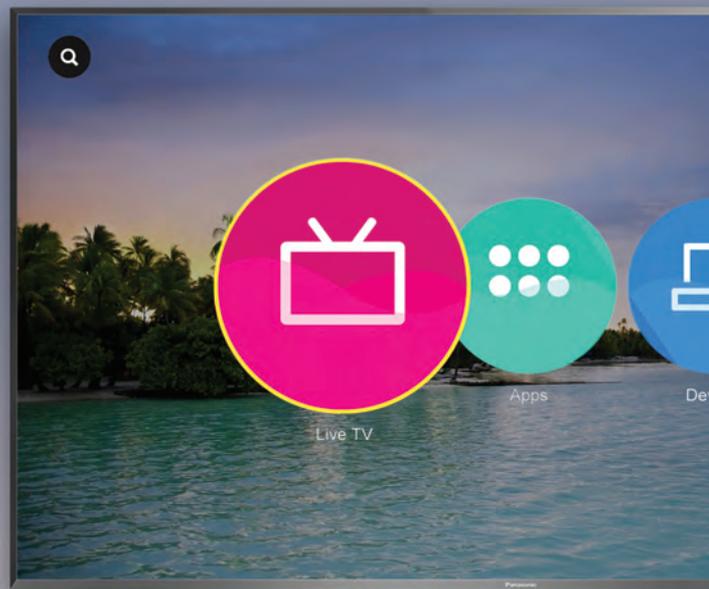
facebook.com/ConsumerReports

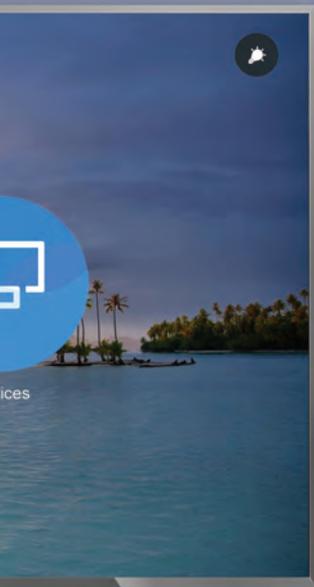


Have More Fun With Your TV

With so many options, buying a TV can be challenging. Tune in to this step-by-step guide to make the right choice.

I T'S A STRANGE TIME to be shopping for a television. The technology is halfway through its evolution from high-definition past to ultra high-definition future (more on that later). For some shoppers, the best strategy may be to wait and see how it all shakes out. But there are also plenty of good reasons to spring for a new set now. Maybe you just upgraded from a cramped apartment to a spacious new home, and your peewee TV seems lost in the living room. Or maybe you'd like a screen in the kitchen to watch those cooking shows. Then again, maybe your 5-year-old set just gave up the ghost and now you have an excuse to get something modern. Our advice is to ignore all the hoopla and focus on finding something that truly fits your needs.





GO BIG

Sometimes the widely hyped “next big thing” in TV tech turns out to be a painful waste of money, which is why a lot of 3D glasses are hibernating in drawers right now. But you rarely regret investing in screen size. If you have the room for it, a mega-television inspires maximum awe for your dollar and showcases your favorite movies, TV shows, and games in all of their high-def glory.

As you’d expect, bigger TVs take a bigger bite out of your budget, especially when the screen gets into the stratosphere of 65 inches and larger. But prices have in fact been falling. You can still spend upward of \$3,000 for a loaded flagship model from a major brand, but you’ll also find 60-inch sets with top-notch picture quality starting at about \$900. In our latest TV Ratings, which include at least 40 sets with screens 60 inches or larger (see page 43), more than half cost \$1,500 or less.

Of course, “big” is relative. In some rooms, a 70-inch set looks impressive; in others, it just seems menacingly large. But thin-bezel designs and super-slim depths common in many new models make them far less imposing.

When it comes to the right TV size, there are no hard-and-fast rules; personal preference and even visual acuity come into the picture, so to speak. But there are general guidelines. To figure out the size that’s best for you, use one of the many online calculators or apply the following simple guidelines.

With a 1080p set, pretty much standard for high-def resolution right now, measure the distance in feet between your couch and where you’d like to place the TV. Then divide that number by 1.5 and multiply the result by 12 to determine the size of the optimal set in inches (measured diagonally). If you’re going to sit 8 feet from the set, for example, you should shop for a model that’s no bigger than 60 inches.

With UHD TVs, which have higher-resolution screens with more densely packed pixels, you can go even larger.

The goal is to create a comfortable,

immersive viewing experience. You don’t want to be so close that you can’t see the whole picture or so far back that you miss the high-def detail you just paid for. Ideally, that Discovery Channel documentary on lions should fill your field of vision.

In terms of screen technology, the decision pretty much has been made for you, which may come as a relief to confused consumers. Manufacturers no longer make plasma sets, and OLED TVs, which combine the deep blacks and unlimited viewing angles of plasma sets with the thinness and energy efficiency of LCD TVs, are prohibitively pricey.

So the average buyer will almost certainly be purchasing an LCD set. Just don’t confuse so-called LED TVs with OLED sets; LED TVs are just LCDs with LED backlights. The downside to LCDs, however, is that many models have fairly narrow viewing angles, so the picture can look washed out or hazy if you’re seated too far to the side of a room instead of directly in front of the screen. Don’t rely on the manufacturer’s viewing-angle claims of 170° or better. Consult our Ratings and spot-check TVs while in a store by stepping off to each side and viewing from above and below the center of the screen to assess the picture quality from various positions.

GO SMALL

Giant-screen TVs are great for a living room or basement home theater, but you probably don’t want to shoehorn a 65-inch set into a bedroom or tiny apartment. You can find plenty of TVs at 32 inches and smaller without skimping on features or picture quality.

Start by thinking about what content you’ll be watching. If you’re looking for a bedroom TV for talks shows or nightly reruns of “Seinfeld,” a basic set may do. But if you plan to stream movies and TV shows from Amazon Prime or Netflix, a smart TV with built-in Internet access may be a better choice. Don’t pay too much more for that access, though, because you can add a streaming media

Tricky TV Terms Translated

Ever look at a box on a shelf or an advertisement and wonder what the heck all of those buzzwords really mean? We cut through the marketing jargon to reveal what's meaningful and what's misleading.

HIGH DYNAMIC RANGE (HDR)

Think of HDR as contrast on steroids. Some new TVs feature the technology, which can produce more vivid pictures by increasing the difference between the darkest and brightest parts of the image on the screen. But standards are still evolving, and there's little HDR content available.

FULL-ARRAY LED BACKLIGHT WITH LOCAL DIMMING

That's an LCD TV that has a backlight with LEDs across the entire panel, not just on the edges, as in most sets. The LEDs can be divided into "zones" that are brightened or dimmed independently. That may help improve contrast and black levels, a challenge for LCD sets. But it can sometimes cause halos to appear around bright objects.

802.11AC DUAL-BAND WI-FI

That lets you know the TV supports AC—the latest version of Wi-Fi—and that it can operate on two bands, 2.4GHz and 5GHz, if you have a dual-band router.

QUANTUM DOTS

Those are microscopic crystals, usually placed on a film in an LCD TV. When illuminated by an LED backlight, they glow, producing rich, vibrant colors. With quantum dots and the right content, TVs have the potential to display a wider range of hues.

LED TV

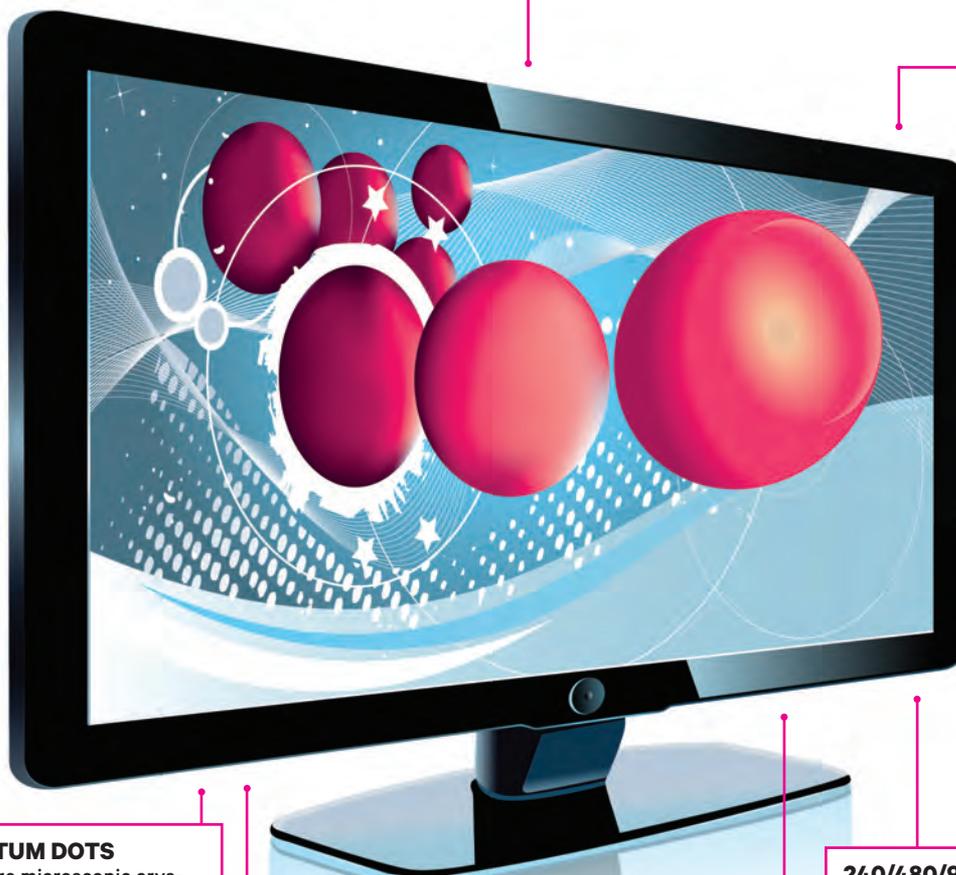
Most so-called LED sets these days are really LCD TVs that use an LED rather than a fluorescent backlight. The main advantages are a thinner design and better energy efficiency.

SCALING ENGINE

Sounds important, right? Well, it is. It refers to a TV's upscaling process, which takes regular HD programs and bumps them up to the 4K resolution of a UHD screen. The TV analyzes the image, then creates new pixels and adds them to the picture. When done well, it looks great. When it's done poorly, you'll wonder why everyone's so jazzed up about UHD.

240/480/960HZ REFRESH RATES

Most TVs have a refresh rate of 60Hz or 120Hz, which tells you how many images are flashed onscreen each second. LCD TVs have a tendency to blur during fast-motion scenes, and 120Hz sets usually have less trouble with that than 60Hz sets. But manufacturers are now playing games to boost the numbers, flashing the backlight or inserting black frames into the video stream to claim faster refresh rates. Each brand has its own name for the trickery; we're seeing Vizio sets with "Clear Action 360," LG TVs with "TruMotion 480," Samsung sets with "Motion Rate 240," and Sonys with "Motionflow XR 960." Ignore those artificially inflated numbers. Instead, check out our Ratings score to see how well a TV does at reducing motion blur.



player for as little as \$35 if your TV has an extra HDMI input.

You can get 1080p on even the smallest screen sizes, but it's not necessary. Many viewers will be just as happy with a 720p model. At normal viewing distances, you won't notice the dip in detail and resolution. (But if the TV is doubling as a computer monitor, go with the higher resolution. It will produce clearer, easier-to-read text and more detailed images.)

The viewing angle is just as important with a small TV as a large one, especially when the set isn't placed directly in front of your bed, chair, or sofa. Most of the smaller models we've tested have fairly narrow angles, but there are a few stand-outs that will let you get a clear view of Jimmy Fallon's hijinks even if you're sacked out on the side of the room.

Relatively few TVs this size have 120Hz refresh rates (see "Tricky TV Terms Translated" on the facing page), but don't sweat it. Here again, it's hard to detect a difference at normal viewing distances.

Many small TVs will let you down in audio quality. Few in our Ratings do a bang-up job there. But if the dialog is intelligible, even so-so sound from the built-in speakers may be sufficient for newscasts and sitcoms. If you watch a lot of concerts, movies, or action-oriented fare, you may want to consider adding a sound bar speaker. Many of them have Bluetooth, so they can be used to play music from a phone or tablet as well.

Don't forget about the TV's connections, too. Smaller sets generally have only one or two HDMI inputs, the most common way to connect Blu-ray players, cable boxes, game systems, and other devices. Make sure your set has enough for all of the high-def sources you use. If it doesn't, you may need to spend another \$30 to \$80 on a separate HDMI switcher. You may also want to think about a USB slot for playing songs and displaying photos stored on a flash drive, or a headphone jack for listening to late-night programs when your partner is trying to sleep.

What you get is a good deal: Expect to pay about \$230 to \$300 for a basic 32-inch



Rage Against Remote Controls

ALMOST HALF OF US have four or more remotes cluttering our TV stands or coffee-tables, according to a survey by Wakefield Research and Logitech, one of the biggest manufacturers of universal remote controls. Many of us think that's three too many, and we're slowly going mad trying to keep track of which one to use for channels, inputs, sound, and the program guide. In fact, remote-control rage may well overtake road rage in our tech-heavy lives. But there are some alternatives:

Program your TV/cable remote. Almost all cable-TV remotes, and some that come with TVs, offer a degree of programmability. At the very least, you should be able to turn on your cable box and TV, change channels, and adjust volume levels with just one of those devices. Many people prefer the cable remote so that they can access program guides and DVR recording. But that remote can often be hard to program, and a TV remote is still needed for any Internet features, switching inputs, changing aspect ratios, and selecting sound options. A cable remote may not be able to operate a streaming player, either.

Get a universal remote control. An all-in-one device can help you bring your gear under the rule of a single thumb. But most of the decent ones are pricey—\$80 to \$200 or more—and many require you to download device codes using your

computer, especially when creating "macros" that manage several operations with the push of a button. Under its Harmony brand, Logitech offers models from about \$50 to \$350. To be safe, keep your old remotes; you may need them if the universal model stops working.

Use your phone or tablet. A few TV brands offer free downloadable apps that let phones and tablets act as basic remotes for smart TVs, but they usually don't have all of the features you need to operate multiple devices. Some manufacturers of third-party apps claim they have universal capability. But not all phones have the IR (infrared) technology used to control some devices, so you may have to buy hardware such as a box that communicates with your phone via Wi-Fi and your TV via IR signals. What's more, the touch screens on smartphones don't have the tactile response of real buttons.

Go Luddite. Sometimes you've just got to admit you've lost the battle. If that's the case, buy yourself a remote caddy to house all of your controllers in one place. Most slip over the arm of a sofa or chair and have pockets for four to 10 devices. (Some have additional pockets for eyeglasses or reading material.) Many are weighted. A few even have flat surfaces for a snack or drink—and you'll probably need one of those.

set from a major brand and as little as \$160 from a lesser-known manufacturer. A smaller set can be had for even less.

GO FRUGAL

You can get a great set of any size without spending a fortune, especially if you forgo some of the bells and whistles that drive up the price. In fact, the secret to choosing a budget TV isn't deciding what you want, but what you're willing to give up. Here are a few suggestions:

Stay in the second dimension. Three years ago, 3D was the rage. Now? Not so much. In fact, some manufacturers, including Vizio, don't even offer 3D-capable sets. Unless you're a die-hard 3D-movie fan, skip that feature—and the 3D Blu-ray player. That will save you money on 3D glasses, too.

Be fine with flat. Curved screens are another specious trend. Some people find them visually attractive. But our testing

shows they do little to enhance picture quality. And when mounted, they don't sit flat against the wall.

Don't pay a premium for pixels. Prices for UHD sets continue to drop, but we think most budget-conscious buyers would be just as happy with a 1080p TV. For one thing, viewers often have a hard time seeing the greater picture detail, which UHD sets provide, from normal distances. You won't find a lot of native 4K content, either. Many things about UHD sets are still being finalized (see "Before You Buy a UHD TV, Read This" on page 44), and they still command a hefty premium over regular HD TVs, although prices will almost certainly fall soon. For now, a top-performing 1080p set is still a smart choice for most people unless you're buying a huge TV and have a huge budget.

Skip the 'smart' set. If you want to keep your spending in check, prioritize picture quality over Internet connectivity. We like smart TVs that can stream

video, but that can add \$100 or more to the price. By contrast, a streaming media player provides similar functionality at a cost of about \$35 to \$100.

Save on speed. Some sets have refresh rates of 120Hz to 240Hz, which can help reduce blurring motion during fast scenes. But for many viewers, especially those who don't watch a lot of sports, a regular 60Hz set is good enough. Our tests have found that some 120Hz models perform no better than 60Hz sets. If you decide you simply can't live without a fast refresh rate, check the motion-blur test scores in our Ratings and find a model judged at least Good overall.

Count your inputs. Many budget TVs have only one or two HDMI inputs, which can be a major drawback if you have a lot of gear to connect, such as a cable box, Blu-ray player, streaming media player, and game console. We recommend that you choose a model with at least three HDMI inputs unless you'll be connecting your devices to a home-theater receiver.

What's Your TV's IQ?

LIKE CAT VIDEOS and Kardashians, smart TVs seem to be everywhere. According to the market-monitoring firm Quixel Research, close to 60 percent of the TVs sold this year will be in that category, the first time sales of Internet TVs have outpaced those of unconnected sets.

All smart TVs can access online content, such as streaming video services like Amazon Prime and

Netflix. Basic smart TVs may be limited to the most popular ones; others offer a wide assortment of apps. Many have full Web browsers, and some more sophisticated TVs can respond to voice commands, make program recommendations, and let you view content on your smart phone.

There's no single smart TV standard. Here's a quick look at the options from four top brands:

LG's webOS 2.0 (shown) is among our favorites. Its main menu features a row of colorful tiles layered across the bottom of the home screen, so you can still see whatever you're watching. An amusing animation gets you started, and the customizable home page lets you add, reorder, or delete app cards to match your preference. The whole system is fast and responsive, and LG's Nintendo Wii-like point-and-click Magic Remote is great.

Originally developed for smartphones and watches, **Samsung's** Tizen system also has a row of colorful tiles arranged across the bottom. You can quickly access recently used apps and channels, search, or browse the Web. You need to touch the pointer button on Samsung's own motion-activated point-and-click remote to engage the onscreen cursor, so you're less likely to activate it accidentally.

Sony uses Android TV, successor to the failed Google TV. Compared with the sleeker smart TVs from LG and Samsung, Android TV seems overcomplicated. The setup is clunkier—you need a Google account—and firmware updates take longer than they do for the other TVs we tested. Also, you can't reorder the menu so that favorite apps come first. On the plus side, the voice recognition performs well, and the system supports Google Cast for sending content from a phone or tablet.

Panasonic has tapped Mozilla's Firefox as its smart TV's operating system. A visual improvement over the older Viera Connect platform, this one works similarly, though the bubble-style icons for main activities are less complicated. The system has fewer total apps, but the main ones are there. We liked the universal search that includes streaming, live TV, and personal content.





A1 Samsung



B7 LG

Ratings: The Biggest TVs on the Market

How do you choose the ideal set for your home? Start by taking a look at our Ratings, divided up by screen size. Of the almost 80 models below, the highest scored 81, the lowest, 45. For a blend of value and performance, check out the CR Best Buys. And keep in mind that prices may have changed, perhaps even significantly, since the Ratings were compiled. For full Ratings, available to online subscribers, go to ConsumerReports.org.

CR Best Buy Recommended

● Excellent ● Very Good ○ Good ● Fair ● Poor

Recommendation	BRAND & MODEL	PRICE	SCORE	TEST RESULTS				SPECS		
				HD Picture Quality	Ultra HD Performance	Viewing Angle	Sound Quality	TV Resolution Type	Smart TV	Screen Size (in.)

Recommendation	BRAND & MODEL	PRICE	SCORE	TEST RESULTS				SPECS		
				HD Picture Quality	Ultra HD Performance	Viewing Angle	Sound Quality	TV Resolution Type	Smart TV	Screen Size (in.)

A. 60-INCH AND LARGER TVs

<input checked="" type="checkbox"/>	1	Samsung UN65JS9500	\$4,500	81	●	●	○	●	Ultra HD	•	65
<input checked="" type="checkbox"/>	2	Sony Bravia XBR-65X930C	\$4,000	79	●	●	○	●	Ultra HD	•	65
<input checked="" type="checkbox"/>	3	Samsung UN65JS9000	\$3,500	76	●	●	○	●	Ultra HD	•	65
<input checked="" type="checkbox"/>	4	LG 65UF9500	\$3,000	75	●	●	○	●	Ultra HD	•	65
<input checked="" type="checkbox"/>	5	Samsung UN65JS8500	\$3,000	75	●	●	○	●	Ultra HD	•	65
<input checked="" type="checkbox"/>	6	Samsung UN60JU7100	\$1,800	72	●	●	○	○	Ultra HD	•	60
<input checked="" type="checkbox"/>	7	Samsung UN60JU6500	\$1,600	71	●	●	○	○	Ultra HD	•	60
<input checked="" type="checkbox"/>	8	Sony Bravia XBR-65X850C	\$2,500	71	●	○	○	○	Ultra HD	•	65
<input checked="" type="checkbox"/>	9	LG 65UF8500	\$2,300	70	●	○	○	○	Ultra HD	•	65
<input checked="" type="checkbox"/>	10	LG 60UF7700	\$1,600	70	●	○	○	○	Ultra HD	•	60
<input checked="" type="checkbox"/>	11	Samsung UN65J6300	\$1,600	68	●	NA	○	○	HDTV	•	65
<input checked="" type="checkbox"/>	12	LG 65LF6300	\$1,400	67	●	NA	○	○	HDTV	•	65
<input checked="" type="checkbox"/>	13	Panasonic Viera TC-60CX650U	\$1,700	66	●	●	○	○	Ultra HD	•	60
<input checked="" type="checkbox"/>	14	LG 60LF6100	\$900	65	●	NA	○	○	HDTV	•	60
	15	LG 70UF7700	\$3,000	64	●	○	○	○	Ultra HD	•	70
	16	Sharp Aquos LC-65LE654U	\$1,000	64	●	NA	○	○	HDTV	•	65

B. 55- TO 59-INCH TVs

<input checked="" type="checkbox"/>	1	LG 55EG9600	\$4,500	78	●	○	○	○	Ultra HD OLED	•	55
<input checked="" type="checkbox"/>	2	Samsung UN55JS8500	\$2,000	74	●	●	○	○	Ultra HD	•	55
<input checked="" type="checkbox"/>	3	LG 55EC9300	\$2,300	73	●	NA	○	○	HDTV OLED	•	55
<input checked="" type="checkbox"/>	4	Samsung UN55JU7500	\$1,600	73	●	●	○	○	Ultra HD	•	55
<input checked="" type="checkbox"/>	5	Panasonic Viera TC-55CX650U	\$1,400	70	●	○	○	○	Ultra HD	•	55
<input checked="" type="checkbox"/>	6	Samsung UN55JU6700	\$1,300	68	●	●	○	○	Ultra HD	•	55
<input checked="" type="checkbox"/>	7	LG 55LF6300	\$800	68	●	NA	○	○	HDTV	•	55
<input checked="" type="checkbox"/>	8	LG 55UF7600	\$1,200	68	●	○	○	○	Ultra HD	•	55
<input checked="" type="checkbox"/>	9	LG 55LF6000	\$650	67	●	NA	○	○	HDTV	•	55
<input checked="" type="checkbox"/>	10	Vizio M55-C2	\$950	65	●	○	○	○	Ultra HD	•	55
	11	Vizio E55-C2	\$600	63	●	NA	○	○	HDTV	•	55
	12	Sharp Aquos LC-55LE653U	\$600	63	●	NA	○	○	HDTV	•	55
	13	Insignia NS-55D420NA16	\$500	62	●	NA	○	○	HDTV	•	55
	14	Magnavox 55ME345V	\$550	60	●	NA	○	○	HDTV	•	55
	15	TCL 55FS3700	\$620	59	●	NA	○	○	HDTV	•	55
	16	Insignia NS-55DR420NA16	\$580	59	●	NA	○	○	HDTV	•	55

Ratings: TVs in the Most Popular Sizes

CR Best Buy
 Recommended

Excellent
 Very Good
 Good
 Fair
 Poor

Recommendation	BRAND & MODEL	PRICE	SCORE	TEST RESULTS				SPECS	
				HD Picture Quality	Ultra HD Performance	Viewing Angle	Sound Quality	TV Resolution Type	Smart TV Screen Size (in.)

Recommendation	BRAND & MODEL	PRICE	SCORE	TEST RESULTS				SPECS	
				HD Picture Quality	Ultra HD Performance	Viewing Angle	Sound Quality	TV Resolution Type	Smart TV Screen Size (in.)

C. 46- TO 52-INCH TVs

<input checked="" type="checkbox"/>	1	Samsung UN48J6300	\$690	74	<input checked="" type="radio"/>	NA	<input type="radio"/>	<input type="radio"/>	HDTV	<input type="radio"/>	48
<input checked="" type="checkbox"/>	2	Samsung UN48J5500	\$700	70	<input checked="" type="radio"/>	NA	<input type="radio"/>	<input type="radio"/>	HDTV	<input type="radio"/>	48
<input checked="" type="checkbox"/>	3	Samsung UN50JU7100	\$1,200	69	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	Ultra HD	<input type="radio"/>	50
<input checked="" type="checkbox"/>	4	Samsung UN50J6200	\$700	69	<input checked="" type="radio"/>	NA	<input type="radio"/>	<input type="radio"/>	HDTV	<input type="radio"/>	50
<input checked="" type="checkbox"/>	5	Samsung UN50JU6500	\$900	68	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	Ultra HD	<input type="radio"/>	50
<input checked="" type="checkbox"/>	6	Samsung UN48JU6700	\$1,000	68	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	Ultra HD	<input type="radio"/>	48
<input checked="" type="checkbox"/>	7	Panasonic Viera TC-50CX600U	\$1,050	68	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	Ultra HD	<input type="radio"/>	50
<input checked="" type="checkbox"/>	8	LG 50LF6100	\$550	65	<input checked="" type="radio"/>	NA	<input type="radio"/>	<input type="radio"/>	HDTV	<input type="radio"/>	50
	9	Sony Bravia XBR-49X830C	\$1,000	64	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	Ultra HD	<input type="radio"/>	49
	10	Emerson LF461EM4	\$300	62	<input checked="" type="radio"/>	NA	<input type="radio"/>	<input type="radio"/>	HDTV	<input type="radio"/>	46
	11	Insignia NS- 50D420NA16	\$380	62	<input checked="" type="radio"/>	NA	<input type="radio"/>	<input type="radio"/>	HDTV	<input type="radio"/>	50
	12	TCL 48FS3700	\$400	61	<input checked="" type="radio"/>	NA	<input type="radio"/>	<input type="radio"/>	HDTV	<input type="radio"/>	48
	13	Vizio E50-C1	\$530	59	<input checked="" type="radio"/>	NA	<input type="radio"/>	<input type="radio"/>	HDTV	<input type="radio"/>	50
	14	TCL 50FS3850	\$510	55	<input checked="" type="radio"/>	NA	<input type="radio"/>	<input type="radio"/>	HDTV	<input type="radio"/>	50
	15	Sharp Aquos LC-50LB371U	\$500	54	<input checked="" type="radio"/>	NA	<input type="radio"/>	<input type="radio"/>	HDTV	<input type="radio"/>	50
	16	Westinghouse DWM48FY1	\$350	49	<input type="radio"/>	NA	<input type="radio"/>	<input checked="" type="radio"/>	HDTV	<input type="radio"/>	48
	17	Haier 50E3500	\$450	45	<input type="radio"/>	NA	<input type="radio"/>	<input checked="" type="radio"/>	HDTV	<input type="radio"/>	50

D. 39- TO 43-INCH TVs

<input checked="" type="checkbox"/>	1	Samsung UN40JU7100	\$1,100	72	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	Ultra HD	<input type="radio"/>	40
<input checked="" type="checkbox"/>	2	LG 43UF7600	\$900	69	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	Ultra HD	<input type="radio"/>	43
<input checked="" type="checkbox"/>	3	Samsung UN40JU7500	\$1,300	69	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	Ultra HD	<input type="radio"/>	40
<input checked="" type="checkbox"/>	4	LG 42LF5800	\$430	68	<input checked="" type="radio"/>	NA	<input checked="" type="radio"/>	<input type="radio"/>	HDTV	<input type="radio"/>	42
<input checked="" type="checkbox"/>	5	LG 43LF6300	\$550	68	<input checked="" type="radio"/>	NA	<input checked="" type="radio"/>	<input type="radio"/>	HDTV	<input type="radio"/>	43
<input checked="" type="checkbox"/>	6	Samsung UN40J6200	\$500	68	<input checked="" type="radio"/>	NA	<input type="radio"/>	<input type="radio"/>	HDTV	<input type="radio"/>	40
<input checked="" type="checkbox"/>	7	Sony Bravia KDL-40R510C	\$450	65	<input checked="" type="radio"/>	NA	<input type="radio"/>	<input type="radio"/>	HDTV	<input type="radio"/>	40
	8	Vizio E40-C2	\$350	64	<input checked="" type="radio"/>	NA	<input checked="" type="radio"/>	<input type="radio"/>	HDTV	<input type="radio"/>	40
	9	Sony Bravia XBR-43X830C	\$800	64	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	Ultra HD	<input type="radio"/>	43
	10	Sharp Aquos LC-43LE653U	\$380	63	<input checked="" type="radio"/>	NA	<input type="radio"/>	<input type="radio"/>	HDTV	<input type="radio"/>	43
	11	Vizio E43-C2	\$390	62	<input checked="" type="radio"/>	NA	<input checked="" type="radio"/>	<input type="radio"/>	HDTV	<input type="radio"/>	43
	12	Magnavox 43ME345V	\$350	62	<input checked="" type="radio"/>	NA	<input checked="" type="radio"/>	<input type="radio"/>	HDTV	<input type="radio"/>	43
	13	JVC EM43RF5	\$380	61	<input checked="" type="radio"/>	NA	<input type="radio"/>	<input type="radio"/>	HDTV	<input type="radio"/>	43
	14	Magnavox 40ME325V	\$310	60	<input checked="" type="radio"/>	NA	<input type="radio"/>	<input type="radio"/>	HDTV	<input type="radio"/>	40
	15	JVC EM40NF5	\$300	59	<input checked="" type="radio"/>	NA	<input type="radio"/>	<input type="radio"/>	HDTV	<input type="radio"/>	40
	16	Insignia NS-39D220NA16	\$240	59	<input checked="" type="radio"/>	NA	<input type="radio"/>	<input type="radio"/>	HDTV	<input type="radio"/>	39
	17	Sharp Aquos LC-43UB30U	\$600	58	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Ultra HD	<input type="radio"/>	43

Before You Buy a UHD TV, Read This

THESE DAYS, most manufacturers spotlight Ultra HD TVs—which can display greater detail than regular 1080p sets—as the premium models in their lineup. Almost all of them are LED LCD models, though LG offers a few UHD OLED sets. Here are three compelling reasons it may pay to wait before buying one:

1. YOU'LL STILL PAY A

PREMIUM. Prices have fallen in

the past eight months, but some big-screen flagship models still sell for \$3,000 to \$4,000—and OLEDs for many thousands more. We expect significant price drops by this time next year.

2. THERE'S NOT A LOT OF

4K CONTENT. To date, only a trickle of movies and programs—primarily from streaming services such as Amazon, M-Go, and Netflix—have taken advantage

of the greater picture detail. But expect to see the first 4K UHD Blu-ray players and discs later this year, and a lot more ultra-high-def streaming options in 2016.

3. STANDARDS ARE STILL

EVOLVING. Some UHD features, such as high dynamic range (HDR) and a wider range of color, have yet to reach their full majesty. And some new TVs claim HDR capability. But we think it



makes sense to wait until all of the standards—for TVs, streaming media, and Blu-ray discs—are nailed down to ensure that your TV can take full advantage of them.

Ratings: TVs That Are Perfect Petites

☑ CR Best Buy ☑ Recommended

● Excellent ● Very Good ○ Good ◐ Fair ● Poor

Recommendation	BRAND & MODEL	PRICE	SCORE	TEST RESULTS				SPECS	
				HD Picture Quality	Ultra HD Performance	Viewing Angle	Sound Quality	TV Resolution Type	Smart TV Screen Size (in.)

Recommendation	BRAND & MODEL	PRICE	SCORE	TEST RESULTS				SPECS	
				HD Picture Quality	Ultra HD Performance	Viewing Angle	Sound Quality	TV Resolution Type	Smart TV Screen Size (in.)

E. 32-INCH TVs

☑	1	LG 32LF5600	\$270	68	● NA ● ○	HDTV	32
☑	2	Samsung UN32J5500	\$350	66	● NA ○ ◐	HDTV	32
	3	Samsung UN32J4000	\$240	63	◐ NA ◐ ◐	HDTV	32
	4	Samsung UN32J5003	\$250	62	◐ NA ○ ◐	HDTV	32
	5	Magnavox 32ME305V	\$235	62	◐ NA ◐ ◐	HDTV	32
	6	Vizio E32-C1	\$260	61	◐ NA ◐ ◐	HDTV	32

F. 29-INCH AND SMALLER TVs

☑	1	LG 22LF4520	\$170	65	● NA ● ◐	HDTV	22
☑	2	Samsung UN28H4000	\$200	63	◐ NA ◐ ◐	HDTV	28
☑	3	LG 24LF4520	\$165	61	● NA ◐ ◐	HDTV	24
☑	4	Vizio E28h-C1	\$200	58	◐ NA ◐ ◐	HDTV	28
☑	5	Vizio D28h-C1	\$180	58	● NA ◐ ◐	HDTV	28
	6	Insignia NS-28D220NA16	160	52	○ NA ◐ ◐	HDTV	28

Sonic Solutions: Get Your TV's Sound Up to Snuff

THE TRADE-OFF for the super-slim design of modern TVs is that many have less-than-stellar sound quality. As our Ratings show, only a handful—all larger models—scored a Very Good or better in that regard. Most sets were judged only Good, and many fell short of even that humdrum score.

Good sound quality is perfectly fine for routine programming, but for concerts, movie soundtracks, and TV dramas, you might want richer, fuller audio. One quick—and often inexpensive—fix is a sound bar speaker.

Most sound bars are thin, slender enclosures that can be mounted on a wall or placed above or below the TV. Some come with a separate subwoofer (often a wireless model). There are also pedestal-style sound bases that can serve as a TV stand. (Check the TV's weight to make sure the base can support it.)

You can pay as little as \$100 for a sound bar or as much as \$1,000. Here are three great choices at various prices:



▲ SMART SPLURGE SONOS PLAYBAR, \$700

This sound bar (see above) has ambition. It works as a Wi-Fi speaker for your TV and part of a multiroom network when paired with other Sonos speakers. It can also be used as the center-channel speaker in a full-blown, albeit pricey, one-room multichannel surround-sound system. In addition to providing TV sound, the Playbar can stream audio from other devices or connect directly with several Internet-based music services. It can even turn your phone or tablet into a remote control via a downloadable app.

BARGAIN CHOICE

SHARP HT-SB602, \$250

Got a monster-sized TV with wimpy sound? Pump up the volume with this 2.1-channel sound bar designed for sets 60 inches or larger. The sound quality is very good overall, and the speaker has Bluetooth with near field communication for use with mobile devices.

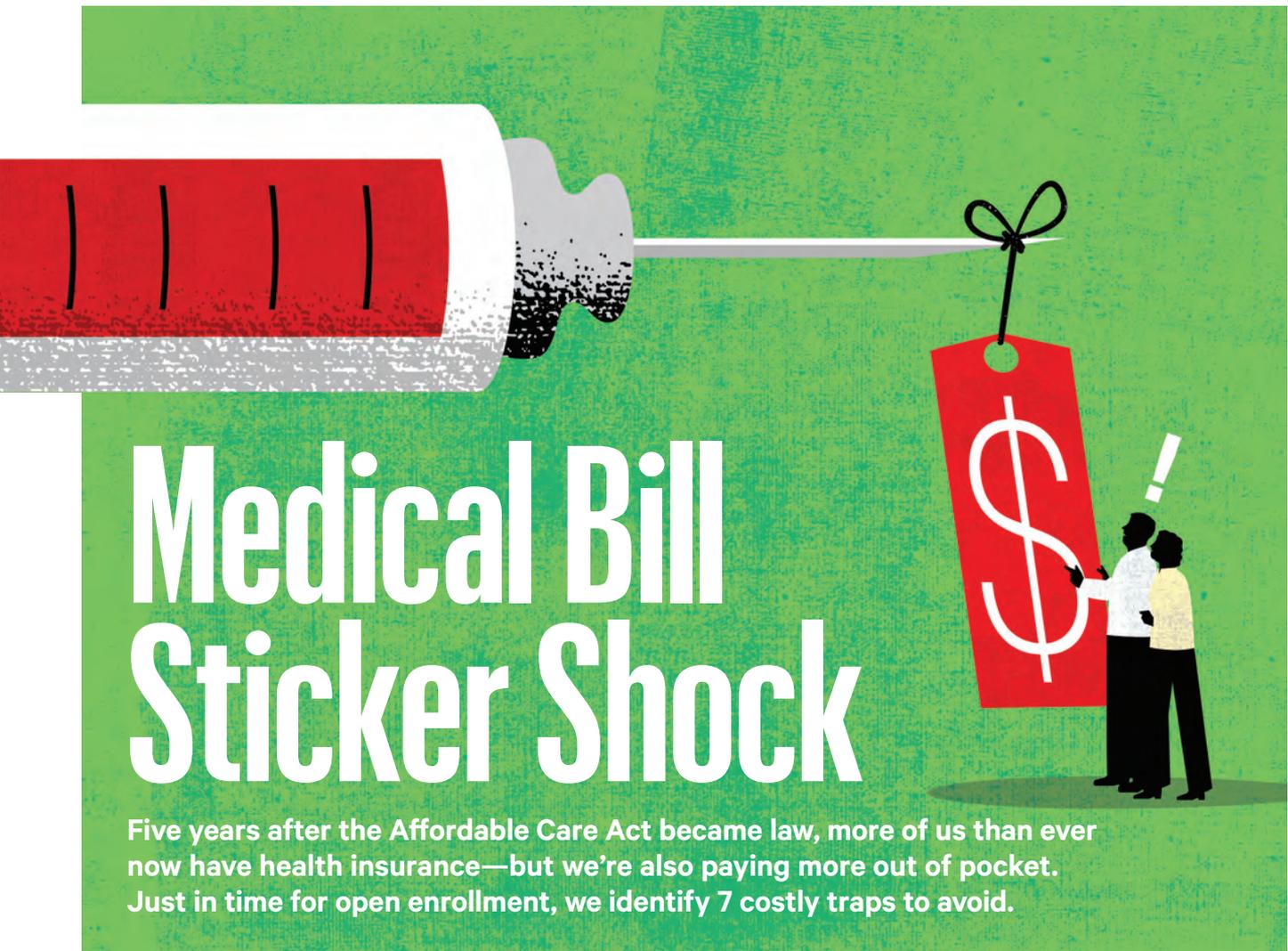
SWEET SPOT

SAMSUNG HW-J6500, \$550

Okay, you went ahead and bought that curved TV and the sound isn't as lustrous as the look. This Wi-Fi model from Samsung will match the TV's curves. It comes with a wireless subwoofer, it taps into your home network with a wired or Wi-Fi connection, and it mates with certain Samsung TVs via Bluetooth. It can access streaming music services and become part of a multiroom sound system when paired with other Samsung wireless speakers.



You'll find shopping tips, detailed info about the top brands, and more at ConsumerReports.org/cro/tvs/buying-guide.htm



Medical Bill Sticker Shock

Five years after the Affordable Care Act became law, more of us than ever now have health insurance—but we're also paying more out of pocket. Just in time for open enrollment, we identify 7 costly traps to avoid.

BEFORE LISA BEACH, an assistant vice president for an Austin, Texas, credit union, had surgery for severe back pain two years ago, she did everything she could think of to make sure she wouldn't have to pay a lot out of pocket.

"I wanted to know the names of anyone who would have any kind of involvement in my surgery," she says. Then she ran the names by her insurance company, Aetna, to make sure the care would be covered.

In spite of her diligence, she received a \$1,050 bill for services provided by an out-of-network doctor who, it turns out, wasn't even in the hospital during her surgery. That doctor had simply provided specialized equipment used during the operation.

Aetna refused Beach's appeal, she says,

so she went straight to the equipment provider. They agreed to drop the bill to \$700—but only if she paid that day. She handed over the last \$522 in her flexible spending account but still gets bills for the remaining \$178.

"I thought I did everything right, only to find out some information wasn't disclosed to me," Beach says.

Beach's experience is all too common. A 2015 Consumer Reports survey of 2,200 Americans found that most with private insurance don't know where to turn with complaints about their health insurance, and almost a third had received a medical bill for which they had to foot more of the cost than they had expected. Many of those people ended up paying the bill in full.

"These problems are happening much

more frequently," says Blake Hutson, who heads Consumer Reports' health insurance advocacy efforts. "We're expected to pay a larger and larger share of our health care costs, and getting hit with harsh penalties if, even unknowingly, we see providers outside of our network," Hutson says.

That's true not just for people who buy insurance on their own through state or federal marketplaces but for those covered through their jobs. Even people on Medicare face shocks if they don't understand the details of their plans—something that happens easily.

How can you troubleshoot the increasingly tricky health insurance system? We've pinpointed seven situations that can cause medical bill sticker shock—and have advice on how to handle each.

1 Your insurance company pays the surgeon for your knee replacement—but you’re on the hook for the anesthesiologist’s bill.

Problem You ended up seeing an “out-of-network” provider. Your insurance company has a list of doctors you’re supposed to get all of your care from, and the anesthesiologist wasn’t one of them. Though that scenario often happens with anesthesiologists, the provider could also be an assistant surgeon or someone you never even met in person, such as the radiologist who reads an MRI or a pathologist who analyzes the results of a biopsy.

How to prevent this shocker If you’re preparing for a nonemergency procedure—such as a joint replacement or having a baby—ask the person who handles your surgeon’s billing for a complete list of the anesthesiologists, assistant surgeons, and everyone else who could conceivably be part of your medical team. Call your insurance company to determine whether all of those people are in your plan’s network. Make sure you tell them the exact name of the plan that’s on your insurance card, because insurers often have multiple plans, each with a different network of providers. If anyone on your list is not, ask the surgeon whether he or she can use network providers instead. If that’s not possible, contact the non-network providers to determine how much you will have to cover so that you’re not in for a surprise later. Or consider finding another surgeon who will use only in-network providers.

If it happens to you anyway Tell the providers and your insurer that you didn’t realize the procedure would involve doctors outside of your network. Some physicians may accept the insurance payment and forgive the balance, or the insurer and non-network doctor may negotiate a fee, leaving you with a smaller balance. If you have a plan that you bought on your own through a state or federal marketplace, contact your state health insurance department. Some states have rules for such plans, limiting how much you have to pay for out-of-network care.



2 The rheumatologist that you saw billed \$1,500 for your visit, but insurance covered only \$1,000—and you have to pay the balance.

Problem You’re a victim of “balance billing,” another way that going out-of-network can cost you. In that situation, your insurer allows you to use out-of-network providers but pays only the discounted rate that they’ve negotiated with in-network providers, leaving you with the balance. And that cost can be substantial, because the fees insurers set with in-network providers can be hundreds or even thousands of dollars less than what doctors charge directly.

How to prevent this shocker See providers in your plan’s network whenever possible. Call doctors and your insurance

company—before your visit or procedure—to make sure that they are still in the network. (The insurer’s online directory could be out of date.) If you decide to go out of network, call your insurer to confirm what your share will be. Most plans, by the way, have exceptions for problems that can’t be handled by an in-network provider. Talk with your insurer if you think that applies to your situation.

If it happens to you anyway If you saw a doctor in your plan’s network, don’t pay the bill. Instead, tell the provider and your insurer that they’ve made a mistake. If the doctor was out of your network, explain your situation to the doctor. You might be able to get him or her to forgive the bill, negotiate a lower fee, or offer a payment plan that makes the bill more manageable.

3 You broke your leg, and your ER visit resulted in a hefty bill.

Problem This particularly nasty version of balance billing happens if the hospital you went to or the doctors who saw you in the ER are out of network. After all, in an emergency you may not have time to find an in-network provider. The Affordable Care Act has partially, but not fully, addressed the problem: It now requires insurance to cover ER care—but only at the rate paid to in-network providers. So if your ER doc is out of network, which they often are, you may be responsible for the difference.

How to prevent this shocker If you live close to several hospitals, call your insurer now—before you actually need an ER—to find out which are in your network and employ network ER physicians. Then, in an emergency, try to go to one of those (in your own car, if it’s safe; ambulances often aren’t covered). Reserve ERs for true emergencies. If your regular doctor could handle the problem, go there instead. Urgent care centers can also be options, but check with your insurer to make sure you’ll be covered.

If it happens to you anyway Contact the insurer and the doctor and explain that you didn’t have a choice because you needed emergency care. In some cases, the non-network doctor will accept the insurance payment, or the insurer and the doctor will negotiate an acceptable fee. In addition, call your state’s insurance department to see whether it has passed a law that prevents balance billing in the ER. If it has, don’t pay the bill, and lodge a complaint with the insurer.



4 You go to an in-network provider—but your insurer won't pay at all, leaving you with the whole bill.

Problem Your health plan probably has a high deductible that you haven't yet met. High-deductible plans can seem attractive because they often have low monthly premiums. And more Americans now have that kind of coverage because insurers and employers are trying to shift a greater portion of health care costs to consumers. But many people who sign up for high-deductible plans don't realize exactly how much they have to pay before insurance kicks in. The law currently caps total out-of-pocket spending at \$6,850 for individuals and \$13,700 for families.

How to prevent this shocker The next time you sign up for insurance, whether through work or on your own from a federal or state marketplace, think hard about whether you really want a high-deductible plan. (For the factors to consider and more advice on how to pick the right health plan for you and your family, see "Shop Smart for the Right Health Insurance," on page 50.)

If it happens to you anyway Call the insurer and ask whether you have reached your deductible, or check your insurer's website for a tool that helps you track your expenses. If you've met the deductible, let the doctor and insurance company know. If not, check to make sure you're being billed at the lower negotiated rate, not the out-of-network rate.

5 You assumed Medicare would cover your doctor visit, but no such luck.

Problem You may have Medicare Advantage, not traditional Medicare. With traditional Medicare, you can usually visit any doctor and hospital you like as long as they accept Medicare—something almost all health care providers do. But when first enrolling in Medicare, you may have signed up for a Medicare Advantage plan thinking it was the same as traditional Medicare, perhaps in response to a pitch you received in the mail or on the phone. Medicare Advantage plans—which are run by private insurance companies such as Aetna or Cigna, not by the federal government—offer some advantages (see "How to Compare Plans," on page 50). But they do require people to use a specified network of providers. So if you signed up for Medicare Advantage and then see a provider outside of your network, you could be stuck with the bill.

How to prevent this shocker If you're not sure whether you have Medicare Advantage or traditional Medicare, check your insurance card. It probably won't say "Medicare Advantage" but might list a plan name, such as "Secure Horizons." If you're still not sure, call 800-633-4227 and ask which one you have. If you have Medicare Advantage, stick with network providers if possible. If you're not satisfied with your Medicare Advantage plan, you can switch plans or enroll in traditional Medicare during the annual enrollment period. For 2016 coverage, that period runs from Nov. 1, 2015, to Jan. 31, 2016. (See "Shop Smart for the Right Health Insurance," on page 50, for more on traditional Medicare vs. Medicare Advantage plans.)

If it happens to you anyway Find out whether your plan allows exceptions for visits to non-network providers and whether you qualify for the exception in this case. Contact the non-network provider and ask whether it is willing to accept the insurance payment and forgive the balance. Many are willing to do that, at least once.

6 You saw your doctor for a basic, 5-minute visit and were billed for a procedure.

Problem You may be the victim of a fraudulent practice known as “upcoding.” Every service performed by a health care provider has a code attached to it that’s used for billing private or public insurers (Medicare and Medicaid). Upcoding occurs when the provider submits a billing code for a higher-paying service than what actually took place. For example, if your child has an earache, your doctor can often ease the pain by simply removing built-up earwax. But some doctors have been known to bill the procedure as “outpatient surgery,” allowing them to get paid at a higher rate.

How to prevent this shocker It’s hard to prevent, unless you ask your doctor how he or she will be coding your visit or procedure—which is neither practical nor, usually, necessary. But if you have a history of that kind of problem with your health care provider, consider

asking to put the office staff on notice that you’re watching.

If it happens to you anyway Check the Explanation of Benefits (EOB) form that you should get from your insurer after every doctor visit. If the charges on it seem unreasonably high, ask the doctor’s billing department to explain why a certain code was used. It could be an honest mistake, or there may be a valid reason for the code. For example, the doctor removed a mole during an office visit—a procedure you consider simple but may have been more complicated than you thought—and a provider can legitimately bill for it at a higher rate. If you’re not satisfied with the doctor’s explanation and suspect fraud, contact your insurance company, Medicare, or Medicaid, or your state insurance department. And check past bills for a pattern of upcoding. Illegal upcoding costs consumers millions of dollars in increased premiums and misspent tax dollars for Medicare and Medicaid payments.

7 The medication you take every day has suddenly shot up in price.

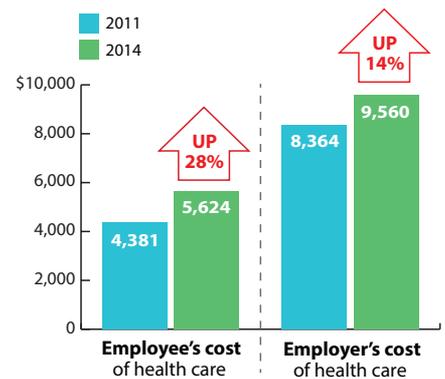
Problem Your plan could have updated its “formulary”—the list of drugs that your insurer routinely covers—and your medication is no longer on it. Most private health plans can adjust their formularies at any time; Medicare can do that only during the open enrollment period. Plans update their lists for many reasons: They negotiated a better deal with the drug company, new research shows the medication isn’t as safe or effective as thought, or a generic (and cheaper) version of the drug hit the market that is just as safe and effective.

How to prevent this shocker Before choosing a health plan, check its formulary to see which drugs are covered. That’s essential if you have a chronic condition, such as diabetes or rheumatoid arthritis, that requires you to regularly take medications. You’ll get the lowest out-of-pocket costs when you buy the coverage plan’s “preferred” generic drugs, usually called “Tier 1.” A drug that isn’t listed on the formulary will often have the highest out-of-pocket cost and, in some cases, may not be covered at all. If you’re dissatisfied with your plan’s formulary, look for a better one at health insurance sign-up time. In addition, when your doctor writes a prescription, ask how much it costs and whether it’s covered by your insurance. And always ask whether a low-cost generic is available.

If it happens to you anyway If you find that the drug’s price is much higher than you expected when you pick up your prescription, ask your doctor or pharmacist whether a similar drug covered by your plan will work. It may be as simple as switching to a generic. If no other drug is appropriate, ask for an exception from your insurer. You should also shop around. Consumer Reports’ secret shoppers have found that doing so can save you hundreds of dollars. Costco, in particular, often has low drug prices, even for nonmembers. Last, try negotiating with the pharmacist. Our shoppers found that they could get discounts by asking, “Is this the lowest possible price you can offer?”

Costs Are Rising—Especially Yours

If you get insurance at work, your employer probably still pays for more of your health care than you do. But your share of those costs—in what you contribute toward your premium and in out-of-pocket costs such as deductibles and co-pays—is rising fast.



Source: 19th Annual Towers Watson/National Business Group on Health Employer Survey on Purchasing Value in Health Care. Costs for 2014 are projected.



ACT

Consumer Reports is working to protect consumers from surprise medical bills in several ways:

- In New York, we helped pass a landmark law to prevent balance billing in hospital emergency rooms, and we’re working on similar laws in states throughout the nation. You can join our efforts to stop surprise medical bills, share your billing story, and find out what’s going on in your state by going to EndSurpriseMedicalBills.org
- In California, we worked with the California Department of Insurance and the University of California, San Francisco on a tool that helps consumers there see what they might pay for health care and compare providers on quality. To try the tool, go to ConsumerReports.org/CAHealthcareCompare

SHOP SMART FOR THE RIGHT HEALTH INSURANCE

If You're Insured Through Your Job or Buy It Yourself ...

ENROLL ON TIME Open enrollment for plans bought through a state or federal marketplace starts Nov. 1, 2015, and runs until Jan. 31, 2016. If you miss that deadline, you can't get insurance for the rest of the year unless you or your spouse experiences a major life event, such as changing jobs or having a baby. Most employers offer health insurance sign-up in the fall.

DON'T AUTO-RENEW Reconsidering your options every year may be a hassle, but it's something you should do. Premiums go up, or down, from year to year, so the most affordable choice last year may not be the same this year. You may also have developed new health care needs that don't play well with your current provider network or drug formulary (the list of drugs that your insurance usually covers). And if you have a marketplace plan and your income has changed, your subsidy may be too low (depriving you of savings) or too high (which could cost you at tax time).

BE WARY OF LOW-COST PLANS You may be tempted by a plan with a low monthly premium. But those "deals" can cost you big in the long run, mainly because they often come with high deductibles—the amount you have to pay before insurance kicks in. They are almost always the wrong choice if you have a chronic disease such as diabetes or you take expensive medications such as Sovaldi, a drug used to treat hepatitis C that can cost \$1,000 per pill. But low premium plans may make sense if you're generally healthy and don't tend to need much beyond an occasional visit to the doctor. If you decide to take the lowest cost plan, make sure that you have enough money in the bank to cover the deductible, if you need a lot of expensive care at once.

KNOW YOUR PROVIDERS If you're considering a health maintenance organization (HMO), you must stick with in-network

providers except for emergencies. Go outside that network, and you'll have to pay the whole bill. Preferred provider organizations (PPOs) have larger networks and allow you to get care from out-of-network providers, though even they have "preferred" providers who charge less to members. See someone not on that list, and you're often responsible for the difference between what the provider bills and insurance pays.

If You're on Medicare ...

SIGN UP RIGHT Enrolling in Medicare Part A, which covers hospital inpatient care, is straightforward: Do it right before or after you turn 65, even if you still work and get insurance through your employer. That's because you don't have to pay a premium for Part A, so it won't cost you a dime. Things get more complicated with Medicare Part B, which covers

doctor services and outpatient hospital care. Sign up too early, and you could pay for insurance you don't need. Sign up too late, and you face a permanent increase in your Part B premium of 10 percent for every year you should have been enrolled but weren't. If you're retired or will retire at 65, sign up for Part B when you enroll in Part A. If you still work, delay Part B if you get insurance from your job or your spouse's job and it has more than 20 employees. If it's smaller, sign up for Part B right away: Your employer's plan covers you only after Medicare pays its share.

DON'T CONFUSE MEDICARE ADVANTAGE AND MEDIGAP PLANS Traditional Medicare allows you to go to almost any doctor or hospital in the U.S.—but you are still responsible for 20 percent of most outpatient care. That can add up, especially if you need costly treatments such

as outpatient chemotherapy. To cover them, you can use Medigap or Medicare Advantage: private plans that supplement or replace your traditional coverage.

Under Medigap, Medicare pays its share of the bill, then forwards the rest to your Medigap plan. It can be a good choice if you want the freedom of going to any provider you like. You pay about \$150 to \$200 per month above your premium, and you still need to enroll in Medicare Part D—which covers drugs and costs about \$30 per month—because Medigap does not include that.

Medicare Advantage provides the same services as traditional Medicare, includes drug coverage, and allows you to deal with just one insurer. But you must receive care from providers within the plan's network, and you may have to pay an additional \$100 or more per month.

How to Compare Plans

NOT ALL HEALTH INSURANCE PLANS ARE CREATED EQUAL, but trying to compare the plans can be complicated. To help with that, Consumer Reports teamed with the National Committee for Quality Assurance, a nonprofit organization that rates plans based on member satisfaction and overall quality, to identify the insurance companies that offer better plans—as well as those that aren't as good. The charts below list insurers (those used by employers as well as those offering Medicare Advantage plans) by the percentage of their plans that got top scores in the NCCA ratings. Go to ncca.org/ratings to get details on specific plans. For Medicare Advantage plans, you can also go to medicare.gov, which gives the government's star ratings for health plan quality. Look for a plan with 4 stars or more.

PRIVATE PLANS FROM NCCA	
HEALTH INSURER	PERCENTAGE OF PLANS WITH A TOP RATING
Kaiser Foundation Health Plans	80% (8 of 10 plans)
Independent brands	63% (64 of 101 plans)
Blue Cross and Blue Shield	44% (27 of 61 plans)
Anthem	33% (7 of 21 plans)
CIGNA HealthCare	18% (15 of 85 plans)
Aetna	6% (5 of 82 plans)
Humana	4% (1 of 23 plans)
UnitedHealthcare Corporation	3% (3 of 108 plans)

MEDICARE ADVANTAGE PLANS FROM NCCA	
HEALTH INSURER	PERCENTAGE OF PLANS WITH A TOP RATING
Kaiser Foundation Health Plans	89% (8 of 9 plans)
Blue Cross and Blue Shield	38% (15 of 39 plans)
Independent brands	35% (45 of 129 plans)
Humana	29% (8 of 28 plans)
Aetna*	19% (7 of 36 plans)
UnitedHealthcare Corporation	14% (9 of 66 plans)
CIGNA HealthCare	8% (1 of 12 plans)
Molina Healthcare	0% (0 of 6 plans)

*Thirty-four Aetna plans combine their quality data. For this analysis, those plans were counted as one; if counted separately, 60 percent of Aetna plans would have a top rating.

Road

REPORT



CRUNCH TIME

Winter weather can make travel a white-knuckle ride. Our exclusive testing of tires and all-wheel-drive vehicles clears a path for you to make the best decisions on equipping your car for safety and performance in the worst of ice and snow.

GET A GRIP

Automakers have long boasted that all-wheel drive is all you need to get your car through winter's fury. Our exclusive tests tell a different story.

FORTY-ONE PERCENT of all weather-related car crashes on U.S. roads are due to conditions involving snow, sleet, ice, and slush. That's pretty sobering when you consider that those conditions usually exist during just a few months of the year. Accidents caused by winter weather result in 150,000 injuries and 2,000 deaths each year, on average, according to a study by the Federal Highway Administration.

Little wonder, then, that car manufacturers trumpet all-wheel drive as a safety shield against inclement conditions. Consumers are inundated with that marketing message, and all-wheel drive is perceived as a must-have for many car buyers. It's a key reason SUVs are now the top-selling segment of the auto market.

But can all-wheel drive really save you when the weather turns ugly? It provides some benefit, but it may be insufficient to get you through a grueling storm.

All-wheel drive is about getting your car moving from a dead stop—not about

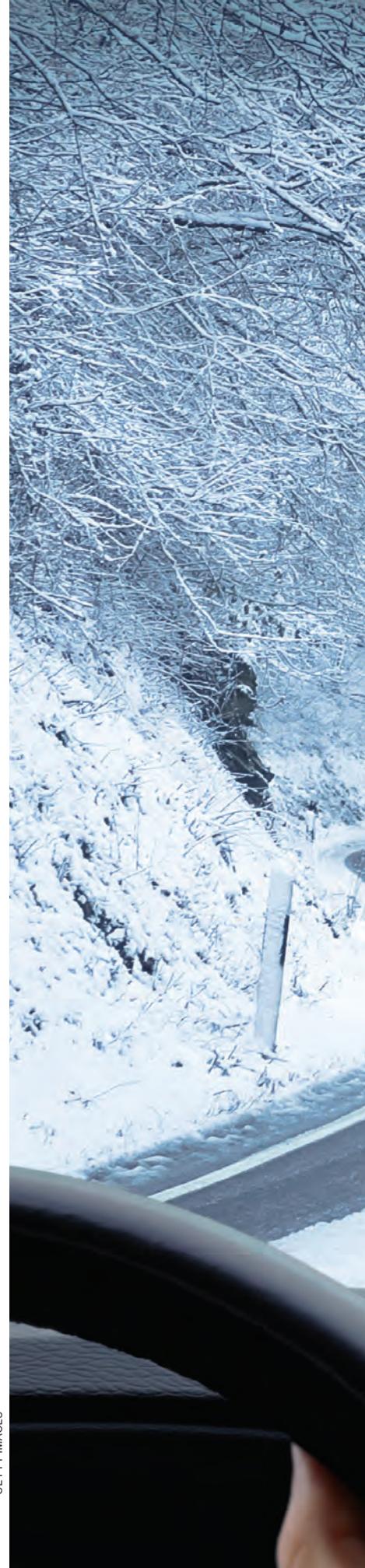
braking or steering—and you should be aware of its limitations.

Through weeks of driving in snowy, unplowed conditions at Consumer Reports' 327-acre test center in Connecticut, we found that all-wheel drive didn't aid in braking or in certain cornering situations. Our evaluations conclusively showed that using winter tires matters more than having all-wheel drive in many situations, and that the difference on snow and ice can be significant.

We realize that swapping and storing tires twice per year is a nuisance. And in places where street plowing is thorough, you can probably get by with all-season tires that are in good condition.

All-wheel drive is far better than two-wheel drive when it comes to driving on slick surfaces where you need serious traction to get going, such as a snowy uphill driveway. But our tests found that all-wheel drive by itself won't help if you're heading too fast toward a sudden sharp curve on a snowy night.

That's an important point for people who overestimate the capability of their



GETTY IMAGES



ROAD REPORT - GET A GRIP

HONDA CR-V
It took almost 700 feet to stop from 60 mph in the snow on all-season tires.



all-wheel-drive vehicle. We've all seen them, zipping past us in blizzards with their illusory cloak of invincibility.

Don't be one of those guys—unless you want to risk a crash or find yourself stranded far from civilization.

Our test-track observations lead us to advise that using snow tires provides the best grip and assurance for going, stopping, and cornering no matter what you drive: all-wheel drive, front-drive, or rear-drive. And buying winter tires for a front-drive car will cost far less than the

several-thousand-dollar premium you'll pay for all-wheel drive.

Enhancements like electronic stability control—standard on every new car since 2012—also help two-wheel-drive vehicles maintain control, at least up to a point.

What did our tests show? We conducted braking tests in an all-wheel-drive 2015 Honda CR-V, the best-selling compact crossover, with its original all-season tires, then with winter tires. The differences in stopping distances were considerable (see the chart below).

On a different day under different snow conditions, we did braking tests pitting the CR-V against a Toyota Camry, both rolling on new winter tires. The front-drive Camry did just as well as the AWD Honda, both stopping from 60 mph in about 300 feet.

As for handling, we found that some of the all-wheel-drive vehicles in our fleet struggled to stay on course when equipped with all-season tires—even in the hands of our professional drivers. A couple of the vehicles even plowed straight through corners and off the track.

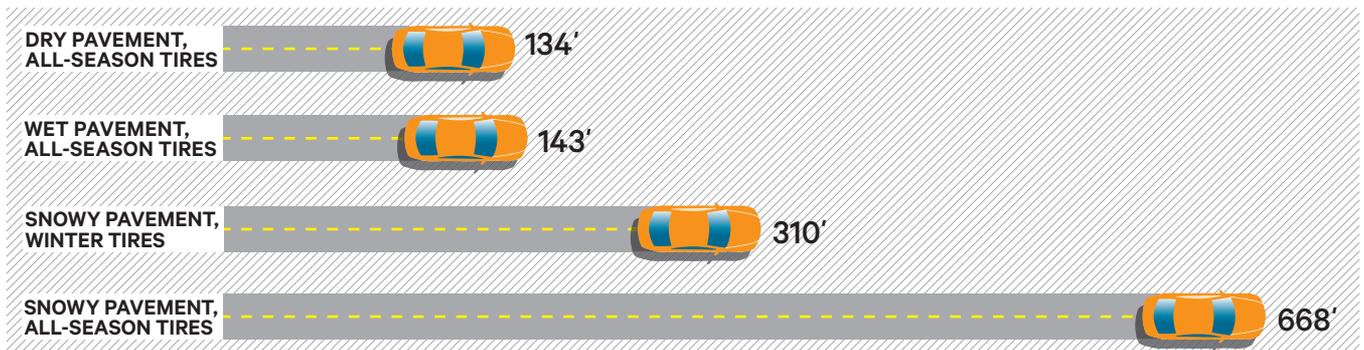
If you live in a place that gets frequent snow storms, an all-wheel-drive vehicle with winter tires will be very capable. And some AWD systems function better than others in terms of helping drivers get traction. (See our tests of compact SUVs on the facing page.)

But most AWD drivers don't think of adding winter tires. According to our survey of 54,295 subscribers who drove AWD or 4WD vehicles in the snow for more than six days last winter, less than 15 percent equipped their vehicles with winter tires. The rest kept rolling on their all-season tires and took their chances.

At Consumer Reports, we strongly recommend buying four winter tires for whatever vehicle you drive. For our winter-tire buying guide, see page 57.

Tale of the Tape: Winter Tires Rule

With dry- and wet-pavement brake-test results for our all-wheel-drive 2015 Honda CR-V in hand, we then checked how well the vehicle stopped in the snow. We used its original all-season tires, then a set of winter tires. All stops were from 60 mph.



Which Small SUV Fares Best in the Snow?



SNOWY SUBIE
The Forester did best in our evaluations on an unplowed course.



► SUBARU FORESTER

It started, stopped, and cornered the way people expect an AWD car to drive. We could feel the power being directed to all four wheels at different times to help stay on course. It felt well-balanced and allowed us to make midcorner adjustments without losing traction. Stability control wasn't overbearing but helped when needed.



► HONDA CR-V

The CR-V mostly felt like a front-wheel-drive car. It required more driver input, and would initially continue straight rather than steer through a corner. But it could be persuaded to rotate by lifting quickly off the throttle and giving it a stab of steering input. The stability-control system prevented the SUV from spinning out, but ultimately it inspired less confidence.



► TOYOTA RAV4

When it came to traction on unplowed roads, the Toyota AWD system often didn't respond to steering, braking, and throttle inputs, plowing straight through curves. An AWD Lock feature sends equal torque to the front and rear wheels but disengages at 25 mph. The only solution that really worked was to slow down to a crawl before reaching a corner.

WITH OUR CONNECTICUT auto-test center in winter's frigid grip, we piloted three top-selling compact SUVs around various sections of our track to see how they performed when driven on snow with standard all-season tires.

Vehicles reflect a complete system; their tires, stability control, and AWD setup determine how well they perform in snow.

We did straight-line acceleration and braking trials with a 2015 Honda CR-V, Subaru Forester, and Toyota RAV4. We also climbed a steep hill covered with fresh snow, and drove the SUVs around our unplowed handling course.

We found that not all all-wheel-drive systems are created equal. Our judgments reflect our actual experience, but because there are variables in snow texture and density, consistent, repeatable tests were difficult to create.

Caveats aside, our drivers' assessments were surprisingly uniform. All of

them agreed that the Subaru did markedly better than the Honda and Toyota at accelerating and hill climbing.

The Forester's drive system allows a certain amount of wheel slip while climbing, which helped the SUV maintain momentum in a pinch. The CR-V and RAV4 feel less responsive to a foot on the gas pedal.

When it came to staying on course while rounding curves, we also found pronounced differences among the vehicles, with the Subaru the leader.

When the cars were equipped with standard all-season tires, braking distances were similar—basically tripling the distance of dry-pavement stops from 60 mph.



To see how we put small SUVs through their paces in the snow, go to ConsumerReports.org/video.

Truth in Advertising? We Put Commercials to the Test



SUBARU 'DELIVERY TRUCK'

This commercial—pulled from what appears to be a viral video—shows the one strength of all-wheel drive: getting a vehicle going from a dead stop. And in this case, helping someone else get going as well. In that sense, the ad is accurate.



AUDI 'SKI JUMP'

An Audi sedan climbs a 35° ski jump in Finland. Unmentioned are its spiked snow tires and big chain to keep the car from sliding back down the jump. Without those assists, it couldn't make the climb nor could it descend the ramp.

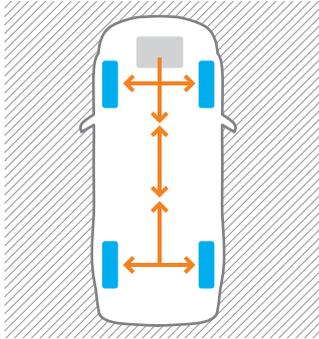


DODGE 'IT'S JUST SNOW'

"Without all-wheel drive, it's the end of the world" is the tag line in the snowpocalypse portrayed. But the truth is that AWD vehicles without winter tires have the same traction problems as a typical car when it comes to stopping or cornering in the snow.

What's the Difference Among Drive Systems?

There's a clear distinction between all-wheel drive and four-wheel drive, although the terms are mistakenly used interchangeably. Follow this guide to understand how all of the systems work.

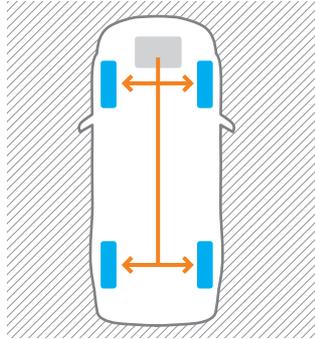


All-Wheel Drive

All-wheel drive is a lighter-duty system used for cars and car-based SUVs. AWD systems operate continuously, and they automatically vary power delivery to the front and rear wheels when needed. Some systems remain in front- or rear-wheel-drive mode until slip is detected, then power is routed to all four wheels. Other systems send power to all four wheels continuously.

Good for Seamless acceleration in slippery conditions. Needs no driver intervention to engage.

Drawbacks Can't improve braking or cornering performance in snow; lacks heavy-towing ability; lacks a low range for slow-crawl situations; fuel economy suffers; and there's a price premium compared with front-drive cars.

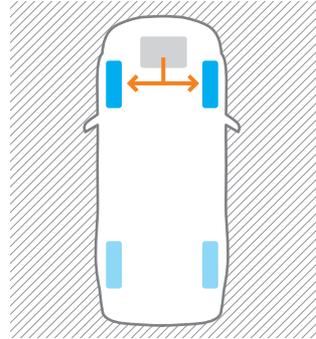


Four-Wheel Drive

This refers to the heavy-duty drivetrain components found in pickup trucks and truck-based SUVs. The truck usually sends power to the rear wheels, and the driver engages four-wheel drive with a dashboard knob or button, which sends power in equal proportion to the front and rear axles. Most current SUVs and some pickups have a permanent or "auto" 4WD mode.

Good for Grunt work like hauling a boat trailer up a launch ramp. Most systems have a low range and locking differentials for extreme terrain.

Drawbacks Can't improve braking or cornering performance in snow; driving in locked 4WD mode on clear roads can damage the driveline; and there's a wider turning circle in 4WD mode.

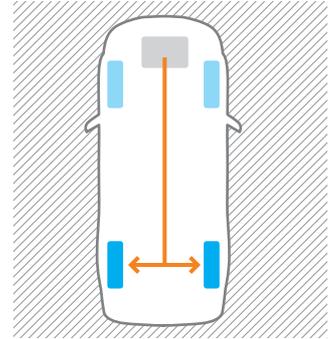


Front-Wheel Drive

Used in most cars, minivans, and wagons, front-wheel-drive systems send engine power to the two front wheels. The drive shaft doesn't extend to the rear of the car, leaving more room for rear-seat and trunk space. Traction control limits wheel spin in certain inclement conditions.

Good for Good traction in most driving situations. And it doesn't carry the price premium of all-wheel drive. It's also better than rear-wheel drive on slippery roads because there's more weight on the front wheels, which propel and steer the car.

Drawbacks If the road is too snowy or icy, the front wheels will slip and you'll be stuck. Winter tires are recommended for snowy conditions.



Rear-Wheel Drive

This system places less demand on the front wheels, freeing them to be used primarily for steering. It's often used in basic pickups and traditional truck-based SUVs that are designed to handle towing and other chores. Traction control can help improve the performance of those vehicles as well. Rear-wheel drive is also the preferred setup for sports cars and high-performance sedans because of its contribution to ideal weight distribution, which aids in handling.

Good for Handling balance and cornering in dry conditions.

Drawbacks If the road is too snowy or icy, the rear wheels will slip and you'll get stuck. Rear-drive cars tend to spin out in snowy or icy conditions. Winter tires are recommended.

Stormy Weather: Readers Speak Out

OUR 2015 AUTO SURVEY asked subscribers to rate their vehicles' performance in snowy conditions. The results revealed that some AWD and 4WD systems are better than others.

Sixty-nine to 92 percent of owners thought their 4WD and AWD SUVs and wagons were "very good" at snow performance.

At right are the 10 best and worst SUVs and wagons for winter driving based on 47,982 subscriber ratings. All respondents had driven their vehicles without changing to winter tires on at least six snowy days during the winter of 2014-2015. The rankings are based on 2012 to 2015 models that have at least two model years' worth of data. You can find more surveyed vehicles ranked at ConsumerReports.org.



BEST SUVs/WAGONS IN SNOW (best listed first)

- Subaru Outback (shown)
- Subaru XV Crosstrek
- Subaru Forester
- Audi Q5
- Chevy Suburban/GMC Yukon XL
- Jeep Wrangler
- Chevy Tahoe/GMC Yukon
- Jeep Grand Cherokee
- Toyota 4Runner
- Ford Expedition



WORST SUVs/WAGONS IN SNOW (worst listed first)

- Nissan Juke (shown)
- Nissan Rogue
- Hyundai Tucson
- Nissan Pathfinder
- Kia Sorento
- Infiniti JX/QX60
- Acura RDX
- Cadillac SRX
- Mazda CX-9
- Mazda CX-5



THE TRUTH ABOUT TREAD WEAR

**Our exclusive tire tests give you a reliable
read on how many miles you can really expect**

The amount of tread on a tire is critical in determining how well it will vacate water to maintain contact with the road in the rain. If your tires wear out quickly, your safety may be at risk.

Our research tells us that when people shop for tires, their primary considerations are price, availability, and tread wear. Prices are easy to find. But until now, consumers had to rely on the government's tread-wear ratings or mileage warranty claims from manufacturers—if available—to judge how well tires would wear.

That's why Consumer Reports tests two tires per model over six months of driving 16,000 miles on public roads through the scrub

grass of West Texas. In the past, we scored tread wear on our standard five-point scale. Now we list projected mileage based on how tires wear in our tests.

See our tread-life mileage with the rest of our Ratings scores on the following pages.

Of course, there's more to a good tire than long life. But longevity is a key to whether a tire you're considering is a good deal.

Noteworthy in the findings is that almost half of the 47 all-season and performance all-season tires could last at least 65,000 miles; a half dozen could top 85,000 miles or more. And there's a wallet-friendly surprise: Tires with the longest life don't necessarily cost the most.

The 100,000-mile
Pirelli P4 Four
Seasons Plus.

Do Tire-Tread Warranties Wear Thin?

MANY REPLACEMENT TIRES, especially the all-season ones that come standard on a car, minivan, or SUV, have a prorated mileage warranty. It's based on how long the tread on a tire is expected to last. For the tires we tested, it was usually between 40,000 and 90,000 miles.

But those warranties often don't offer the consumer much payback if the tires wear out prematurely. The warranty is sometimes more of a marketing boast than a useful measure of longevity.

Why is that? Well, if tires wear out before the warranty mileage is used up, you'll probably get only a fractional credit representing the miles the tires didn't cover. And that's good only toward the purchase of identical or comparable tires from the same manufacturer—which you may not want. You can't use it to get better tires or tires from another brand.

Here's where the math really doesn't add up: The credit can be applied to a manufacturer's suggested retail price for a new tire or to a dealer's price. And that price is often high relative to the frequent discounts offered by many retailers. In fact, you may be able to buy new, discounted tires for less than the price of warranty replacements.

On top of that, restrictions to get your



prorated credit abound. Your tires may have to show even wear across the tread or the dealer's off. You may also have to show receipts that verify you had the tires rotated at the prescribed intervals, usually every 5,000 miles, since they were new.

The tires also have to be worn out, which is defined as having a tread depth of only about $\frac{2}{32}$ inch. Tires that are worn out will perform poorly on wet roads and could pose a safety risk.

Our controlled tread-life tests cut through the marketing mumbo-jumbo to tell you how many miles your tires will last before becoming worn out. Of course, your actual experience will vary according to the vehicle you drive, how and where you drive, and other factors.

Putting Tires to the Test

Based on our testing, we found that most tires should live up to their mileage warranty claims. Three Michelin models met or exceeded their tread-wear claim and also did well in our performance tests. The longest-wearing was the Pirelli P4 Four Seasons Plus, which could last about 100,000 miles.

Models that our test projects will fall short of their tread-wear claim by 15,000 miles or more include the Continental TrueContact and PureContact (H, V), Sumitomo HTR Enhance L/X (T, H, V), Kumho Solus TA71 and TA11, Firestone Precision Touring, and Bridgestone Serenity Plus. That said, most of those tires should still have very good tread life despite potentially overoptimistic mileage claims.

But we project that the Nokian Entyre 2.0 could wear out after a mere 35,000 miles, despite its 80,000-mile warranty.

The Writing on the Wall

Tires have a wealth of information encoded on their sidewalls. When replacing them, we recommend staying with the size and speed rating of your car's original tires. Consult your owner's manual for additional information.

Size. On the tire at right, "215" is the cross-section width in millimeters; 60 is the ratio of sidewall height to its width (60 percent); R indicates radial-ply construction; and 16 is the wheel rim's diameter in inches.

Load index. Shorthand for the weight each tire can carry safely. The 94 here means 1,477 pounds per tire—pretty typical for a mid-sized car tire. That's the maximum tire load at the maximum pressure.

Speed rating. A letter denoting the tire's maximum speed when carrying the load defined by the load index—and not how fast you should drive! Standard all-seasons are usually rated S (112 mph) or T (118 mph). Climbing up the scale are the letters H (130 mph), V (149 mph), ZR (149+ mph), W (168 mph), and Y (186 mph).

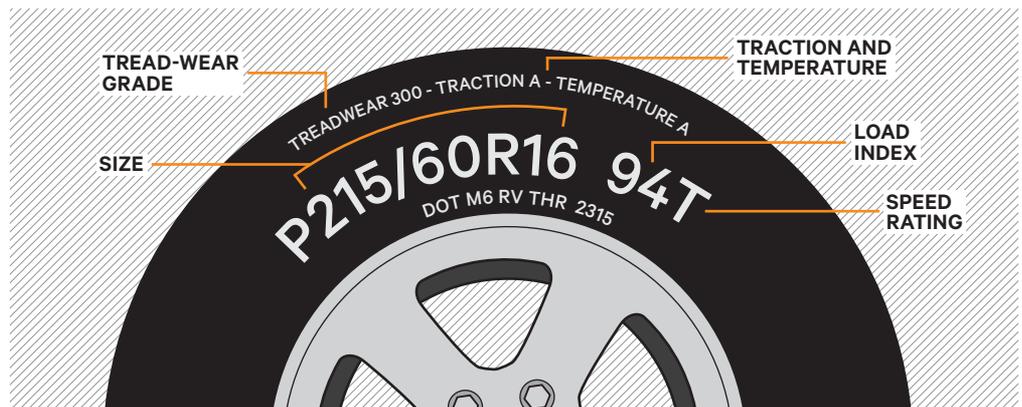
Winter tires may carry the letter Q (99 mph) or higher.

Tread-wear grade. A government-required number that indicates a tire's expected wear. A grade of 300 denotes a tire that will wear

three times as well as a tire graded 100. But the numbers are assigned by tire manufacturers, not an independent third party.

Traction and temperature scores. Those scores denote

a tire's wet-stopping ability and temperature resistance. For traction, AA is best, C is worst. For temperature resistance, scores range from A (best) to C.



ROAD REPORT - TREAD WEAR

Ratings: Tires for Everyday Use and Performance

All-season tires offer long tread life, a quiet ride, and good handling. Performance tires allow higher speeds and provide better cornering grip. On the next page, we also provide Ratings for winter tires.

Recommended

● Excellent ● Very Good ○ Good ◐ Fair ● Poor

Rec.	Rank	BRAND & MODEL	PRICE	SCORE	THREE-SEASON DRIVING				WINTER DRIVING		COMFORT		OTHER	
					Dry Braking	Wet Braking	Handling	Hydroplaning	Snow Traction	Ice Braking	Ride	Noise	Rolling Resistance	Tread Life, Miles

A. ALL-SEASON (T-RATED)

<input checked="" type="checkbox"/>	1	Michelin Defender	\$118	70	●	○	●	●	○	○	●	●	90,000
	2	Continental TrueContact	\$106	68	●	○	●	●	○	○	●	●	60,000
	3	General Altimax RT43	\$91	66	●	○	○	●	○	○	●	●	65,000
<input checked="" type="checkbox"/>	4	Pirelli P4 Four Seasons Plus	\$100	66	●	○	○	●	○	○	●	●	100,000
	5	Goodyear Assurance TripleTred All-Season	\$121	62	●	○	●	○	○	○	○	○	80,000
	6	Kumho Solus TA11	\$108	62	●	○	○	●	○	○	○	●	55,000
	7	Cooper CS5 Grand Touring	\$92	62	●	○	○	●	○	○	○	●	70,000
	8	Yokohama Avid Ascend	\$93	60	●	○	○	○	○	○	○	○	90,000
	9	BFGoodrich Advantage T/A	\$102	58	●	○	○	○	○	○	○	○	75,000
	10	Uniroyal Tiger Paw Touring	\$90	56	●	○	○	○	○	○	○	○	65,000
	11	Sumitomo HTR Enhance L/X	\$78	56	●	○	○	○	○	○	○	○	70,000
	12	Toyo Extensa A/S	\$80	54	●	○	○	○	○	○	○	○	60,000
	13	Firestone Precision Touring	\$94	54	●	○	○	○	○	○	○	○	55,000
	14	Firestone FR710	\$98	52	●	○	○	○	○	○	○	○	55,000
	15	GT Radial Champiro VP1	\$64	50	●	○	○	○	○	○	○	○	45,000

B. PERFORMANCE ALL-SEASON (H-RATED)

	1	Continental PureContact	\$113	70	●	○	○	○	○	○	○	○	55,000
<input checked="" type="checkbox"/>	2	Pirelli Cinturato P7 All Season Plus	\$106	70	●	○	○	○	○	○	○	○	70,000
<input checked="" type="checkbox"/>	3	Michelin Premier A/S	\$136	70	●	○	○	○	○	○	○	○	85,000
	4	Goodyear Assurance Fuel Max	\$98	68	●	○	○	○	○	○	○	○	60,000
	5	General Altimax RT43	\$92	68	●	○	○	○	○	○	○	○	65,000
	6	Nokian Entyre 2.0	\$139	68	●	○	○	○	○	○	○	○	35,000
	7	Nexen N5000 Plus	\$131	66	●	○	○	○	○	○	○	○	75,000
	8	Cooper CS5 Ultra Touring	\$89	64	●	○	○	○	○	○	○	○	60,000
	9	Dunlop SP Sport 7000 A/S	\$106	64	●	○	○	○	○	○	○	○	65,000
	10	Kumho Solus TA31	\$115	64	●	○	○	○	○	○	○	○	55,000
	11	Toyo Versado Noir	\$96	60	●	○	○	○	○	○	○	○	65,000
	12	Uniroyal Tiger Paw Touring	\$90	60	●	○	○	○	○	○	○	○	60,000
	13	BFGoodrich Advantage T/A	\$100	58	●	○	○	○	○	○	○	○	65,000
	14	Sumitomo HTR Enhance L/X	\$80	58	●	○	○	○	○	○	○	○	55,000
	15	Falken Ziex ZE950 A/S	\$115	56	●	○	○	○	○	○	○	○	55,000
	16	GT Radial Champiro VP1	\$77	52	●	○	○	○	○	○	○	○	50,000

Guide to the Ratings: Overall Score for the three classes of all-season tires considered 14 criteria, with the most weight given to braking, handling, and hydroplaning resistance. Winter-tire scores emphasize snow traction and braking on ice. **Dry** and **Wet Braking** are from 60 mph. **Handling** includes performance in our avoidance maneuver, cornering on our dry and wet skid pad, and subjective steering feel. **Hydroplaning** is resistance to skimming in standing water. **Snow Traction** reflects the distance needed to accelerate from 5 to 20 mph on moderately packed snow. **Ice Braking** reflects stops from 10 mph. **Rolling Resistance**, which affects fuel economy, is measured by an outside lab. **Tread Life** is a projection based on wear over 16,000 miles of mixed driving, and excludes winter tires. **All-Season and Performance All-Season tire recommendations:** Best balance of long tread life and mostly good all-weather performance within category. **Winter tire recommendations:** Best for severe winter conditions.

Safe-Driving Savvy



IF YOU LIVE IN A COLD CLIMATE, it's wise to prepare your car for the elements before the white

stuff starts falling. If you'll be driving on snow, mount winter tires on all four wheels. No matter which tires you have, make sure they have plenty of tread. Carry a winter survival kit that includes work gloves, a blanket, sand (it works as a traction aid), a collapsible shovel, and a snow brush. Here are other tips:

Clear off snow and ice from your vehicle. Do that while warming up your car and running the defroster on full-hot. Brush off all the snow, including from the roof. Use a brush, not a scraper, or you'll damage your paint job. Scrape ice from the windows and lights to allow full visibility.

Know your brakes. Allow for longer braking distances when driving in snow or on icy roads, sometimes as much as two or three times more than on dry pavement. That means braking sooner than you would in dry conditions.

In an emergency braking situation, if your car has antilock brakes, press the pedal firmly and hold it down. If you have an older car not equipped with ABS, you may need to pump the brakes to avoid locking up the wheels.

One thing at a time. Expecting a vehicle to do two maneuvers at once—such as braking while turning—can reduce your tires' grip on the road, causing you to lose control of the car. When approaching a slippery corner, first apply the brakes to slow down, then make the turn.

No false moves. Any sudden action while turning—hard braking, hitting the gas, shifting gears—can throw a car off balance. Drive as if you had a cup of hot coffee in your lap.

Correct a slide. If the back end of your car starts sliding out, turn your steering wheel in the direction of the slide. But don't overcorrect, because that can cause a spin. And hitting the brakes will make things worse.

Turn off traction control. Occasionally turning off stability or traction control can actually help on snowy hills. Even though the wheels may spin, switching off the system can help maintain needed momentum. Just don't forget to turn it back on once you're back on level ground.

ROAD REPORT - TREAD WEAR

Ratings: Tires for High Performance and Snow

Rec. Rank	BRAND & MODEL	PRICE	SCORE	THREE-SEASON DRIVING				WINTER DRIVING		COMFORT		OTHER	
				Dry Braking	Wet Braking	Handling	Hydroplaning	Snow Traction	Ice Braking	Ride	Noise	Rolling Resistance	Tread Life, Miles
	1 Continental PureContact	\$111	70	●	●	●	●	●	●	●	●	●	55,000
✓	2 Michelin Premier A/S	\$141	70	●	●	●	●	●	●	●	●	○	80,000
✓	3 Pirelli Cinturato P7 All Season Plus	\$110	70	●	○	○	●	●	●	●	●	●	65,000
	4 General Altimax RT43	\$94	68	●	○	●	●	○	●	●	●	●	55,000
	5 Goodyear Eagle Sport All-Season	\$116	64	●	○	●	●	○	●	○	○	●	70,000
	6 Goodyear Assurance ComforTred Touring	\$117	62	●	●	○	●	●	●	●	●	●	75,000
	7 Yokohama Avid Ascend	\$98	62	●	●	○	●	○	●	●	●	○	85,000
	8 Cooper CS5 Ultra Touring	\$93	60	●	○	●	●	○	●	●	●	●	50,000
	9 Kumho Solus TA71	\$131	60	●	○	●	●	○	●	●	●	●	40,000
	10 Bridgestone DriveGuard	\$126	60	●	●	○	●	○	●	○	○	○	50,000
	11 Bridgestone Turanza Serenity Plus	\$128	60	●	○	○	●	●	●	●	●	○	60,000
	12 Goodyear Assurance TripleTred All-Season	\$125	58	●	○	○	●	○	●	○	○	○	85,000
	13 BFGoodrich Advantage T/A	\$104	56	●	●	○	●	○	●	○	○	○	60,000
	14 Falken Ziex ZE950 A/S	\$119	56	●	○	○	●	○	●	○	○	○	55,000
	15 Uniroyal Tiger Paw Touring	\$94	56	●	○	○	●	○	●	○	○	○	60,000
	16 Sumitomo HTR Enhance L/X	\$83	52	●	●	○	●	●	●	●	●	○	55,000

D. WINTER

✓	1 Michelin X-Ice XI3	\$117	70	○	●	●	●	●	●	●	●	●	-
✓	2 Nokian Hakkapeliitta R2	\$135	70	○	●	●	●	●	●	●	●	●	-
✓	3 Bridgestone Blizzak WS80	\$112	66	○	●	●	●	●	●	●	●	○	-
	4 Cooper Weather-Master WSC	\$92	64	○	●	●	●	●	●	●	●	○	-
	5 Toyo Observe G3-ICE	\$173	64	○	●	●	○	●	●	●	●	○	-
✓	6 Continental WinterContact SI	\$136	64	○	●	●	●	●	●	●	●	○	-
	7 General Altimax Arctic	\$90	64	○	●	○	○	●	●	●	●	○	-
	8 Dunlop Winter Maxx	\$103	64	○	●	●	●	●	●	○	○	○	-
	9 Nokian WR G3	\$169	64	○	○	○	●	○	○	●	●	○	-
	10 Vredestein WinTrac Xtreme S	\$149	62	○	○	●	○	○	○	●	●	○	-
	11 Hankook Winter i*Pike RS	\$120	62	○	●	○	○	●	●	●	●	○	-
	12 Falken HS449 EuroWinter	\$115	62	○	○	○	○	○	○	○	○	○	-
	13 Nexen WinGuard Winspike	\$135	62	○	●	○	○	○	○	○	○	○	-
	14 Pirelli Winter Carving Edge	\$116	60	○	●	○	○	○	○	○	○	○	-
	15 Uniroyal Tiger Paw Ice & Snow II	\$106	60	○	○	○	○	○	○	○	○	○	-
	16 Yokohama Ice Guard iG52c	\$98	60	○	●	○	○	○	○	○	○	○	-
	17 Cooper WM-SA2	\$97	58	○	○	○	○	○	○	○	○	○	-
	18 GT Radial Champiro Ice Pro	\$91	58	○	○	○	○	○	○	○	○	○	-
	19 BFGoodrich Winter Slalom KSI	\$112	56	○	●	○	○	○	○	○	○	○	-
	20 Toyo Observe Gsi-5	\$113	54	○	○	○	○	○	○	○	○	○	-
	21 Firestone WinterForce	\$84	50	○	○	○	○	○	○	○	○	○	-

Stretching Tire Life



KEEP THE PRESSURE UP.

Maintaining correct inflation pressure is important for maximizing tire life and keeping you safe. Check at

least once per month—when tires are cold—and before long trips. Underinflation can affect handling and build excess heat within the tire, leading to failure. You can find the correct pressure on a label in the car, usually on the driver's doorjamb. But it's not the "max. pressure" found on the tire itself.

Straighten out. Have alignment checked for all four wheels at the intervals spelled out in the owner's manual, after any serious pothole bump, and when installing new tires. Improper alignment can shorten tire life.

Rotate regularly. For even wear, tires should be rotated as specified in the owner's manual or new-tire warranty guidelines, usually every 5,000 to 8,000 miles.

Skip the donuts. If you like to squeal your tires on takeoff and grind them on curves, what you're hearing is rubber getting left on the road. If you want your tires to last, take it easy, especially on bad roads, and try to avoid potholes and broken pavement.

Don't go bald. Tread depth is measured from the top of the tread to the deepest groove. Tread-wear bars at the bottom of the groove appear flush with the tread when there's 2/32 inch remaining. That's when the tire is legally worn out in most places. But we recommend shopping well before then, when 4/32 inch remains. A quarter inserted upside down in a tread groove can serve as a gauge. If the top of Washington's head is visible above the tread, it's time to shop for tires.

Quick change. The extra slits and pliable rubber that make winter tires so exemplary at handling ice and snow are the same things that make them wear down more quickly on cleared roads. Be sure to remove winter tires as soon as the threat of inclement weather passes, so that you can get as many winters out of those tires as possible.



READ

To find out more about our tire tests, go to [ConsumerReports.org/cro/tires](https://www.ConsumerReports.org/cro/tires)

ConsumerReports® Build & Buy™ Car Buying Service

Save time and money with the **Consumer Reports Build & Buy Car Buying Service**. Compare multiple dealers online and know what you should pay before visiting a dealership.



**Negotiation-free
guaranteed savings
off MSRP***



**Transparent
car buying
process**



**Consumer Reports
recommendation for
qualified vehicles**



**Nationwide
network of
dealers**

Buyers have
saved an average of
\$2,990
off MSRP**



See your savings!

www.ConsumerReports.org/cr/carsavings614ss

* Guaranteed Savings not available in all states. In these states, a "Target Price" is presented, which reflects a market-based example of what you can reasonably expect to pay for a vehicle with your desired options. Savings is guaranteed by the dealer and not Consumer Reports or TrueCar. Guaranteed Savings may not be available on select models or trims. See site for details.

** Between 4/1/14 and 6/30/14, the average estimated savings off MSRP presented by TrueCar Certified Dealers to users of the Consumer Reports Build & Buy Car Buying Service based on users who configured virtual vehicles and subsequently purchased a new vehicle of the same make and model listed on the certificate from Certified Dealers, was \$2,990 including applicable vehicle specific manufacturer incentives. Your actual savings may vary based on multiple factors including the vehicle you select, region, dealer, and applicable vehicle specific manufacturer incentives which are subject to change. The Manufacturer's Suggested Retail Price ("MSRP") is determined by the manufacturer, and may not reflect the price at which vehicles are generally sold in the dealer's trade area as not all vehicles are sold at MSRP. Each dealer sets its own pricing. Your actual purchase price is negotiated between you and the dealer. Neither TrueCar nor Consumer Reports brokers, sells or leases motor vehicles. Service not available in Canada.

Sharpening the Edge

FORD HAS BEEN ON A ROLL of late in creating appealing cars, such as the Focus, Fusion, and Mustang. Its latest vehicle launch—the redesigned Edge five-seat crossover—displays refinement and sophistication in its driving dynamics and its upscale cabin that befits a prestige-branded model. With its newfound handling agility, ride comfort, quietness, and overall premium feel, the Edge catapults to the upper ranks of our Ratings of midsize SUVs.



Ford Edge

82

WHO DOESN'T LOVE a tale of a downtrodden team coming up from the doldrums to become a champion?

Today's turnaround tale: the Ford Edge. Although widely sold, it was an anonymous, underwhelming crossover that stirred few souls.

But clearly the Edge has been transformed with the redesign, which bows grandly with significant improvements. As a result, it is one of our top-rated midsize crossovers.

The secret sauce for the Edge's new success lies in the platform it shares with the Ford Fusion sedan—another model that punches above its weight class. The Fusion's chassis provides sublime handling and cornering feel and a class-above ride. Those points carry over to the Edge.

The Edge's handling is reminiscent of an Audi Q5, while also providing ride comfort approaching a Lexus RX. For those unfamiliar with suspension engineering, this is an almost impossible feat.

The Edge feels taut and sporty, with a steering feel that is athletic on a country road and yet light and easy to operate when parking or maneuvering through tight quarters. On the open road, the suspension delivers ride comfort that isolates you from the worst of the road's jostles and bumps. Throughout, the Edge remains solid and steady.

Underhood is a turbo 2.0-liter four-cylinder that produces straight-line acceleration without the hesitation found in many turbos. By the stopwatch, the Edge is a bit slower than its rivals, but by the seat of the pants, its

response and smoothness is on par with a V6. But the turbo has a greater thirst for fuel than expected—given its EcoBoost tech and related marketing—at 21 mpg overall in our tests.

A traditional 3.5-liter V6 is available, but its rough character and similar gulping of gasoline make it the least desirable of the Edge's optional engines. A twin-turbo 2.7-liter V6 brings some serious hustle, but it can be had only with the Sport trim line. A capable six-speed transmission is paired with all three engines.

Inside, our SEL trim's styling is restrained and formal, with soft-touch surfaces, chrome door latches, and clever conveniences. The Titanium version is more plush and has more supportive seats.

The broad hood, deep dashboard, and thick, steeply raked windshield pillars give the Edge some larger-than-life proportions from behind the wheel. Shorter drivers struggled to get the proper seat settings to reach the pedals, and large drivers felt restricted by the seat bolsters. Thick roof pillars challenge rearward visibility, so you'll want the optional blind-spot monitor and rear cross-traffic alert systems.

The generous second row offers abundant leg, knee, and head room, and the seats provide good support. The power liftgate whirs open to expose ample cargo space, with a flat load floor. Roomy quarters, front to back, provide family-sized accommodations.

The Edge has bright, easy-to-read gauges. But the climate controls are tightly packed and mounted inconveniently low. The MyFord Touch



TESTED VEHICLE

HIGHS	Ride, handling, quietness, rear seat and cargo room, access, luxury amenities in high-end versions
LOWS	Visibility, MyFord Touch controls, acceleration
POWERTRAIN	245-hp, 2.0-liter turbo 4-cyl.; six-speed automatic; all-wheel drive
FUEL	21 mpg
PRICE	\$28,995-\$40,990



ALTHOUGH NOT FLASHY, the interior has a restrained, practical elegance.

infotainment system is frustrating, with small fonts, tightly clustered touch-screen buttons, and unintuitive functions. The next-gen Sync 3 infotainment system is due to arrive in the 2016 model year, and it promises more intuitive operation without sacrificing features.

If you want surface-level glitz, this business-like Ford SUV might appear less impressive than its main competitor, the showy Nissan Murano, which has flashier exterior styling. But if you want a more rewarding driving experience from a crossover, in this case Ford has the, ahem, advantage.

Form Over Function

LAND ROVER'S NEW DISCOVERY SPORT looks good, like a scaled-down version of the luxurious Range Rover. But don't be fooled. Beneath its posh, proper English exterior is an ill-mannered pretender. And though it may be the lowest-priced Land Rover, the real discovery is that this compact luxury crossover nonetheless carries a regal price tag—almost \$50,000. Although it is among the priciest of its peers, this SUV finishes at the bottom of the pack.

Land Rover Discovery Sport

58 **WINSTON CHURCHILL** said the British are “the only people who like to be told how bad things are.” In that case, they're about to get an earful about the Land Rover Discovery Sport.

The SUV faces a steep climb to meet established compact luxury models such as the Acura RDX, Audi Q5, and BMW X3 on equal footing.

And though bearing the crest and warrant of the British royal family is a cool branding touch, it gets you only so far around the country club forecourt.

We paid almost \$50,000 for our midtrim HSE, making it one of the costliest crossovers in the category. Skipping our early release model's extra-cost paint and decorative trim options could shave off a couple grand, but this SUV would be overpriced no matter what.

At first blush things look promising. Though hardly opulent, the interior is as tidy as Lord Grantham's drawing room. Drivers will find plenty of space, easy access, and good sight lines to the sides and rear. The rear seats are unusually spacious and comfortable for a vehicle of this size. A giant fixed panoramic roof lets in a lot of light, but it doesn't tilt or slide open. A cramped third row of seats is available for an additional \$1,750.

But it doesn't take long behind the wheel for the Cool Britannia vibe to wear off. The

nine-speed automatic transmission's inept shifting, combined with the four-cylinder engine's erratic turbo boost, creates a frustrating and inconsistent driving experience.

Tromp on the gas pedal, and the slow-witted transmission clings to the taller gears far too long, denying you the quick getaway you asked for—until a sudden downshift delivers a jarring kick in the trousers, accompanied by rudely noisy engine revs. Although the gearbox is designed to save fuel, the vehicle was thirstier than the RDX or X3; we averaged 21 mpg.

The Sport also isn't all that sporty to drive. It lumbers and leans around corners. On a winding road, your abdominals get a workout keeping your torso in the seat. Pushed hard, the electronic stability control ultimately kept the Land Rover on course in our emergency-handling tests, but the car was quite sloppy, first running wide, then displaying the onset of a tailslide.

The Discovery Sport's ride falls short of luxury-level expectations as well. The suspension feels brittle, with every pavement rut and ripple reverberating through the body structure. That's irritating in any car, let alone a luxury crossover.

Land Rovers are known for their go-anywhere tenacity. The Disco lacks the low-range gearbox of a true off-roader, but with a bit of struggle it managed to clamber its way up our steep



TESTED VEHICLE

HIGHS	Access, rear seat comfort, off-road capability
LOWS	Ride, handling, transmission, power delivery, controls, headlights, value
POWERTRAIN	240-hp, 2.0-liter turbo 4-cyl.; nine-speed automatic; all-wheel drive
FUEL	21 mpg
PRICE	\$38,065-\$46,565

off-road rock slope. That's thanks to the help of electronic modes designed for mud, ruts, or sand, part of a Terrain Response system that all Land Rovers possess.

And if you're facing a whoa-this-is-really-steep ravine or gully, hill-descent control lets you stay off the brakes, allowing the vehicle to automatically crawl down the scary stuff.

Those are challenges that other light-duty SUVs wouldn't have the capability to surmount. But let's face it, most Sports will discover a parking spot at the mall before blazing a trail.

Niceties in our car included heated seats fore and aft, a heated steering wheel, a push-button start, navigation, and a rear camera. The infotainment system is operated by a too-small touch screen that's mounted too far away, and system response can be frustratingly slow and glitchy.

As for safety gear, our Discovery Sport featured forward-collision warning with automatic braking, and lane-departure warning. But the available blind-spot warning and surround-view camera systems are bundled in a \$1,900 option package, an annoying upsell for a modern so-called luxury crossover.

The Discovery Sport's few advantages aren't enough to lift it out of the cellar. There are many better compact luxury SUVs out there.



ROAD TESTS

Ratings: Midsize and Luxury SUVs Let You Ride in Style

Scores in context: Recommended models excelled in the overall road-test score and had average or better predicted reliability. They also performed adequately in government or insurance-industry crash tests, if tested. For full Ratings, available to online subscribers, go to ConsumerReports.org.

Recommended

● Better ← → Worse ●

Rec.	Rank	MAKE & MODEL	PRICE	RELIABILITY	SCORE	TEST RESULTS										
						As Tested	Predicted	Road Test	Overall MPG	Acceleration, 0-60 MPH, Sec.	Dry Braking, 60-0 MPH, Ft.	AM Speed, MPH	Routine Handling	Ride/Noise	Driving Position	Seat Comfort, Front/Rear
<input checked="" type="checkbox"/>	1	Toyota Highlander Hybrid Limited	\$50,875	●	85	25	8.3	138	49.0	○	●/●	●	●/●	●	40.5	7
	2	Kia Sorento EX (V6)	\$37,915	New	84	21	7.4	131	49.5	●	●/●	●	●/●	●	37.5	7
<input checked="" type="checkbox"/>	3	Toyota Highlander XLE (V6)	\$38,941	●	84	20	7.5	134	50.5	○	●/●	●	●/●	●	40.5	8
<input checked="" type="checkbox"/>	4	Dodge Durango Limited (V6)	\$43,525	○	83	18	8.3	134	48.0	○	●/●	●	●/●	●	44.0	7
	5	Ford Edge SEL (2.0 EcoBoost)	\$39,755	New	82	21	8.8	132	51.5	●	●/●	○	●/●	○	39.0	5
	6	Jeep Grand Cherokee Limited (diesel)	\$49,780	●	82	24	8.6	132	50.5	○	●/●	●	●/●	●	36.5	5
<input checked="" type="checkbox"/>	7	Hyundai Santa Fe SE (V6)	\$36,290	○	81	20	7.6	133	51.0	○	●/●	●	●/●	●	40.5	7
	8	Jeep Grand Cherokee Limited (V6)	\$41,375	●	78	18	8.0	134	50.0	○	●/●	●	●/●	●	36.5	5
<input checked="" type="checkbox"/>	9	Chevrolet Traverse LT	\$39,920	●	77	16	7.9	141	50.0	●	●/●	●	●/●	●	48.5	8
	10	Mazda CX-9 Grand Touring	\$38,615	●	77	16	8.2	137	48.5	●	●/●	●	●/●	●	37.5	7
	11	Nissan Murano SL	\$42,065	New	77	21	7.7	131	50.5	○	●/●	○	●/●	●	33.5	5
<input checked="" type="checkbox"/>	12	Hyundai Santa Fe Sport (4-cyl.)	\$28,370	○	73	23	9.7	132	50.5	○	●/○	●	●/●	●	35.5	5
	13	Ford Explorer XLT (V6)	\$39,275	○	67	18	7.9	135	49.5	○	●/●	○	●/●	●	42.0	7

Why certain models are not recommended. The Ford Edge, Kia Sorento, and Nissan Murano are too new for us to have reliability data. The Ford Explorer scored too low to recommend. The Jeep Grand Cherokee has much-below-average reliability. The Mazda CX-9 scored a Poor in the IIHS small-overlap crash test.

LUXURY COMPACT SUVs

	1	Porsche Macan S	\$63,290	New	85	19	6.4	130	51.0	●	○/●	●	●/●	○	29.0	5
<input checked="" type="checkbox"/>	2	BMW X3 xDrive28i (2.0T)	\$44,595	○	82	23	7.3	130	53.0	●	○/●	●	●/●	○	33.0	5
<input checked="" type="checkbox"/>	3	Mercedes-Benz GLK350*	\$44,995	●	79	21	6.1	130	50.0	●	○/●	●	●/●	●	32.0	5
<input checked="" type="checkbox"/>	4	Audi Q5 Premium Plus (2.0T)	\$41,075	○	78	21	7.9	130	52.0	●	○/●	●	●/●	○	32.0	5
<input checked="" type="checkbox"/>	5	Acura RDX	\$38,990	○	75	22	6.6	132	51.0	○	○/●	●	●/●	○	31.5	5
	6	Lexus NX 200t	\$43,284	New	74	24	7.5	132	49.5	●	○/●	○	●/●	○	28.5	5
	7	Lexus NX 300h	\$51,224	New	71	29	8.9	136	49.5	●	○/○	○	●/●	○	28.5	5
<input checked="" type="checkbox"/>	8	Volvo XC60 T6	\$42,245	○	71	17	7.4	132	52.5	●	○/●	●	●/○	○	32.5	5
	9	Lincoln MKC Reserve	\$46,485	New	71	19	7.8	125	54.0	○	○/●	○	●/○	●	30.5	5
	10	Cadillac SRX Luxury	\$43,085	○	67	18	7.1	135	52.5	●	○/●	○	●/●	●	28.5	5
	11	Land Rover Discovery Sport HSE	\$49,895	New	58	21	8.6	136	50.5	○	●/○	●	●/●	○	33.0	7

*Mercedes GLK is being replaced with new GLC for 2016.

Why certain models are not recommended. The Land Rover Discovery Sport, Lexus NX, Lincoln MKC, and Porsche Macan are too new for us to have reliability data. The Cadillac SRX and Land Rover Discovery Sport scored too low to recommend.



Customer Care

You can call us about your subscription at 800-666-5261.

Or write to us:

Consumer Reports Customer Care
P.O. Box 2109, Harlan, IA 51593-0298
Please include or copy address label from issue.
(Allow four to six weeks for processing.)

Visit us online: ConsumerReports.org/magazine

Use our website to:

Renew or pay for your current subscription
Give a gift subscription • Change your address
Report a delivery problem • Cancel your subscription

Save Time, Paper, and Postage Provide us your e-mail address at ConsumerReports.org/magazine2. We'll update you about Consumer Reports products and services.

Price In U.S., \$5.99 per issue, special issues \$6.99. In Canada, \$6.99 CAN per issue, special issues \$7.99 CAN (Goods and Services Tax included, GST #127047702). All other countries add \$10 per year to the U.S. price for shipping and handling.

Back Issues Single copies of previous 24 issues, \$7.95 each; previous two Buying Guides, \$14.49 each (includes shipping and handling). Please send payment to Consumer Reports, Attn: Customer Care, 101 Truman Ave., Yonkers, NY 10703-1057. Other ways to get Consumer Reports on the go: Google Play, iPad, Kindle, Next Issue, Nook, and Zinio.

Permissions Reproduction of Consumer Reports in whole or in part is forbidden without prior written permission (and is never permitted for advertising purposes). Address requests to CR Permissions Dept., 101 Truman Ave., Yonkers, NY 10703-1057.

Mailing Lists We exchange or rent our print customer postal mailing list so that it can be provided to other publications, companies, and nonprofit organizations that offer products or services through direct mail. If you wish to have your name deleted from our list, please send your address label with a request for deletion from outside use to Consumer Reports, P.O. Box 2109, Harlan, IA 51593-0298. We do not exchange or rent customers' e-mail addresses. You can review our complete privacy policy regarding Consumer Reports information products, services, and programs at ConsumerReports.org/privacy. If you participate in our advocacy activities, please see our Consumers Union Advocacy Privacy Policy at ConsumersUnion.org/about/privacy.htm regarding how your information is used and shared with our affiliate, the Consumers Union Action Fund.

Consumer Reports (ISSN 0010-7174) is published monthly, except twice in December, by Consumers Union of U.S., Inc., 101 Truman Ave., Yonkers, NY 10703-1057. Periodicals postage paid at Yonkers, NY, and at other mailing offices; Canadian postage, at Mississauga, Ontario (Canadian publications registration number 2665247, agreement number 40015148). Title Consumer Reports is a federally registered trademark in the U.S. Patent Office. Contents of this issue copyright © 2015 by Consumers Union of U.S., Inc. All rights reserved under international and Pan-American copyright conventions.

Violations of CR's No Commercial Use Policy Our Ratings and reports may not be used in advertising. No other commercial use, including any use on the Internet, is permitted without our express written permission. Report any apparent violation at ConsumerReports.org/NoCommercialUse or by mail to Consumer Reports, External Relations, 101 Truman Ave., Yonkers, NY 10703-1057.

Voting Paid subscribers may become voting members of CR by written request by sending in a nomination for the board of directors, or by voting in the annual election of CR's directors; ballots are sent to paid subscribers.

Contributions are tax deductible in accordance with the law as Consumer Reports is a 501(c)(3) nonprofit organization. Persons who contribute \$10 to \$99 become Friends Circle Members. Contributors of \$100 to \$999 become Leadership Circle Members, and those who contribute \$1000 or more become President's Circle Members. Donations of commonly traded securities or real estate will be accepted and immediately converted to cash. For information or to make a donation, please write to CR Foundation, 101 Truman Ave., Yonkers, NY 10703-1057 or e-mail epitaro@consumer.org.

Planned Giving Bequests (please remember CR in your will) and Charitable Gift Annuities can help support CR's programs. For information, write to CR Fundraising, 101 Truman Ave., Yonkers, NY 10703-1057.

Consumer Reports' Staff operates under contract between Consumer Reports and The News Guild of New York Local 31003, CWA.

POSTMASTER Send address changes to Consumer Reports, P.O. Box 2109, Harlan, IA 51593-0298. If the post office alerts us that your magazines are undeliverable, we have no further obligation to fulfill your magazines unless we have a corrected address within two years.

CANADA POST If copies are undeliverable, return to Consumer Reports, P.O. Box 1051, STN MAIN, Fort Erie ON L2A 6C7.



Consumer Reports is a member of Consumers International, a federation of more than 220 consumer organizations from more than 115 countries working to protect and empower consumers throughout the world. For information, go to consumersinternational.org.

Please remember CR in your will

For information on how to leave a bequest and become a Legacy Leader, please contact: Ed Pitaro at 914-378-2647 or epitaro@consumer.org.

Great for You Great for Us

You receive income for life through our Consumer Reports Charitable Gift Annuity™ program. With a donation of \$10,000 or more to Consumer Reports, you will receive very favorable, fixed rate annuity payments for your lifetime(s) that are unaffected by economic downturns.

We receive funding to help us test products and services and inform consumers with our unbiased reports. Your contribution helps us to maintain our no-advertising policies.



Single Life	Yearly Rate
62	4.5%
73	5.5
81	7.0
90	9.0

Two Lives	Yearly Rate
76/73	5.0%
83/80	6.0

Contact us for additional rates and deferred annuity information.

Your **charitable donation** is eligible for certain **tax benefits** and a portion of your annuity payments may be tax free. In addition, you will receive a lifetime subscription to Consumer Reports.

For more information, please return the no-obligation slip or call Ed Pitaro for a confidential personal benefits profile: **914-378-2647**

This is not legal advice. Any prospective donor should seek the advice of a qualified estate and/or tax professional to determine the consequences of his/her gift.

Tell me more about the Consumer Reports Charitable Gift Annuity™

Name(s) _____

Address _____

City/State/ZIP _____

Date(s) of Birth _____

E-mail _____ Telephone _____

I am thinking of donating _____ to establish my Consumer Reports Charitable Gift Annuity.™

Mail to: Ed Pitaro • Consumer Reports • 101 Truman Avenue • Yonkers, NY • 10703 or e-mail to epitaro@consumer.org or fax to: 914-378-2916

1115AFF

INDEX

A

- Air conditioners Jul 15, 18
- Airfares Jun 15, 31
- Airline baggage restrictions Jun 15, 31
- American-made products Jul 15, 13; Jul 15, 24
- Arsenic in rice Jan 15, 41
- ATV safety regulations Feb 15, 8
- Audio equipment May 15, 21

AUTOMOBILE RATINGS:

- Acura TLX Feb 15, 54
- Audi Q3 May 15, 54
- BMW 3 Series Feb 15, 54
- BMW X3 Jan 15, 52
- Cadillac Escalade Jul 15, 55
- Chevrolet Colorado Aug 15, 57
- Chevrolet Malibu Dec 14, 66
- Chevrolet Trax Oct 15, 59
- Chrysler 200 Dec 14, 66
- Dodge Challenger Aug 15, 58
- Ford Edge Nov 15, 62
- Ford F-150 Aug 15, 56
- Ford Mustang Aug 15, 58
- Ford Transit Connect Mar 15, 54
- Honda Accord Dec 14, 66
- Honda CR-V May 15, 54
- Honda Fit Mar 15, 54
- Honda HR-V Oct 15, 58
- Hyundai Sonata Dec 14, 66
- Jeep Renegade Oct 15, 59
- Kia Sorento Jul 15, 55
- Land Rover Discovery Sport Nov 15, 62
- Lexus NX Sep 15, 58
- Lincoln MKC Jan 15, 52
- Lincoln Navigator Jul 15, 55
- Mercedes-Benz C300 Feb 15, 54
- Mercedes-Benz GLA250 May 15, 54
- Nissan Murano Jul 15, 55
- Porsche Macan S Jan 15, 52
- Subaru Legacy Dec 14, 66
- Subaru Outback Mar 15, 54
- Toyota Camry Dec 14, 66
- Volkswagen Golf Mar 15, 54
- Volvo V60 Cross Country Sep 15, 59

AUTOMOBILES & AUTO EQUIPMENT:

- 200,000-mile cars Jun 15, 52
- repair costs Jun 15, 54
- American revival Apr 15, 13
- American-made Jul 15, 52
- batteries, Duracell Platinum Mar 15, 58
- best & worst for 2015 Apr 15, 14; Oct 15, 53
- best value new cars for 2015 Feb 15, 50
- bike racks, SeaSucker Talon Mar 15, 58
- BMW i3 Jun 15, 59
- BMW i8 Jan 15, 55
- body panels, aluminum Mar 15, 59
- buy or not? Apr 15, 19
- Chevrolet Camaro 2016 redesign Aug 15, 59
- child safety seats Sep 15, 30
- coming in 2015 Apr 15, 13
- deals, summer Aug 15, 64
- driving, winter Dec 14, 70; Nov 15, 62
- engines, direct-injection Feb 15, 59
- family vehicles Sep 15, 52
- Ford F-150 Jan 15, 52
- Ford Mustang Jan 15, 56
- fuel economy Apr 15, 17
- green, costs Apr 15, 17
- gripes Dec 14, 59
- hacking Jun 15, 60
- headlights
 - cleaning, toothpaste for May 15, 11
 - new technology Jul 15, 60
- Honda CR-V Feb 15, 57
- Honda Fit Dec 14, 65
- infotainment systems Apr 15, 27
- Apple CarPlay Feb 15, 57
- Google Android Auto Jan 15, 59
- insurance, rate setting Sep 15, 28
- keyless-entry systems Jan 15, 59
- leasing May 15, 58
- luxury cars Feb 15, 58
- Lincoln MKC Jan 15, 55
- maintenance
 - cold weather Dec 14, 71
 - rip-offs Jan 15, 59
- manufacturers Apr 15, 12
- Mazda CX-3 Oct 15, 57
- motorcycles, reliability May 15, 52
- new for 2016 Oct 15, 50
- oil consumption Aug 15, 61
- owner satisfaction Jan 15, 47
- Porsche Macan S Jan 15, 55
- profiles, 2015 Apr 15, 31
- Ratings, 2015 Apr 15, 66
- recalls & technical service bulletins Apr 15, 25
- handling Jan 15, 56
- reliability Dec 14, 60; Apr 15, 87
- rental cars, recalls and May 15, 60

safety

- features Apr 15, 22
- rear seat Sep 15, 9
- security systems, volume Dec 14, 66
- sedans May 15, 60
- luxury compact Jan 15, 55
- service satisfaction survey Mar 15, 52
- Subaru Outback Dec 14, 65
- SUVs
 - luxury Jan 15, 52
 - small Oct 15, 56
 - Tesla Model S P85D Oct 15, 60
 - tips Mar 15, 9
 - tires Apr 15, 18
 - Michelin Premiere A/S Dec 14, 65
 - pressure, cold weather Jan 15, 59
 - tread wear Nov 15, 57
 - winter Dec 14, 70
- top picks for 2015 Apr 15, 8
- used cars Apr 15, 80
- under \$10,000 Jun 15, 56
- certified preowned Jun 15, 55
- necessary features Jun 15, 58
- reliability Apr 15, 62
- Volkswagen Golf Feb 15, 57

B-D

- Banks & financial institutions, Walmart Jan 15, 24
- Bathroom remodeling Sep 15, 38
- Batteries, AA Mar 15, 20
- Beef
 - ground, safety Oct 15, 26
 - tenderized, safety labeling Aug 15, 8
- Bird feeders, protecting from squirrels Mar 15, 8
- Blood glucose monitors May 15, 48
- Blood pressure monitors May 15, 48
- Blu-ray players Dec 14, 26
- Cabinets, kitchen Aug 15, 34
- Camcorders Dec 14, 41
- Cameras, digital Dec 14, 38; Jun 15, 49; Nov 15, 9
- Caramel coloring, safety Sep 15, 8
- Chips, snack Sep 15, 44
- Cleaning, holiday Dec 14, 9
- Cleaning products, labeling May 15, 8
- EPA Safer Choice May 15, 7
- Clothes dryers
 - fire prevention Nov 15, 8
 - fire prevention Jan 15, 8
- Coffee consumption Dec 14, 19
- Computers
 - laptops Dec 14, 35; Sep 15, 48
 - printers Dec 14, 37
 - software, security Jul 15, 46
 - tablet Dec 14, 33; May 15, 50
- Consumer action
 - advertising, deceptive, YouTube Aug 15, 8
 - airline prices Oct 15, 9
 - auto loans Mar 15, 8
 - able TV problems May 15, 11
 - cost Nov 15, 12
 - call blocking Jun 15, 8
 - cell phones
 - kill switches Dec 14, 8
 - radiation Nov 15, 10
 - third-party fees Mar 15, 8
 - Consumer Financial Protection Bureau, Congressional weakening of Oct 15, 9
 - consumer rights Nov 15, 8
 - Consumers Union Mar 15, 8
 - credit reports Mar 15, 8; Nov 15, 9
 - credit scores, medical bills and Jan 15, 8
 - detergent pod safety Jun 15, 8
 - financial adviser legislation Jul 15, 8
 - food safety May 15, 11
 - labeling, country-of-origin Sep 15, 9
 - meat and antibiotics Jul 15, 8
 - medical bills, protesting Aug 15, 8; Nov 15, 46
 - mobile 911 standards Dec 14, 8
 - National Highway Traffic Safety Administration funding Sep 15, 9
 - nicotine, liquid, childproof packaging Jan 15, 8
 - reverse mortgages Sep 15, 9
 - unfair lending practices Jul 15, 8
 - window coverings, child safety Jan 15, 8
- Consumer heroism
 - cable rates, seniors protesting Jan 15, 8
 - chicken, Perdue, growing conditions Mar 15, 8
 - medical bill errors Jun 15, 8
 - Medicare Fraud Strike Force Oct 15, 8
 - robocalls Aug 15, 8
 - sustainable ranching Dec 14, 8
- Consumer victories, telecommunications, Lifeline phone discounts Sep 15, 9
- Consumers Union Safe Patient Project Oct 15, 9
- Cooktops Aug 15, 40
- Corn chips, GMOs in, claims Dec 14, 22
- Counterfeit products Jul 15, 32
- Countertops

bathroom

- features Sep 15, 38
- kitchen Aug 15, 32
- Credit cards Aug 15, 13
- benefits of Aug 15, 13
- security Jul 15, 21
- Jan 15, 12
- Credit scores Jan 15, 12
- CT scans, unnecessary Mar 15, 36
- Currency, electronic, bitcoin May 15, 12
- Customer service Sep 15, 10
- Deals, broken Jun 15, 9
- Dishwashers Aug 15, 46
- Donation-with-purchase Dec 14, 12
- Drugs
 - anti-aging Aug 15, 16
 - antibiotics, misuse Aug 15, 20
 - discount Dec 14, 20
 - Mucinex Fast-Max recall Jul 15, 21
 - over-the-counter, labeling Feb 15, 12
 - prescription Nov 15, 9

E-G

- E-book readers Dec 14, 34
- Electronics, shopping for Dec 14, 47
- E-mail gripes and tips Mar 15, 10
- End-of-life options Dec 14, 48
- Energy costs Oct 15, 38
- cutting Oct 15, 44
- Energy Star program Oct 15, 42
- Everyday products Jan 15, 26
- Exercise equipment Feb 15, 46
- Fabric care, Downy Wrinkle Releaser Plus May 15, 20
- Fast products Feb 15, 38
- Flooring, kitchen Aug 15, 36
- Food
 - fads Jun 15, 14
 - GMOs in Mar 15, 12
 - labeling Feb 15, 9
 - produce, pesticide safety May 15, 29
- 401(k) plans Oct 15, 13
- Furniture, outdoor Jun 15, 38
- Garbage disposal odor removal May 15, 43
- Generators Oct 15, 16
- Gluten-free foods Jan 15, 36
- Grills, gas Jun 15, 40
- Brinkmann Patio 810-6230-S, Don't Buy Jul 15, 49

H-K

- Headphones Dec 14, 42; Oct 15, 24
- Health insurance Dec 14, 6
- COBRA and Medicare Mar 15, 9
- Heating, patio Jun 15, 40
- Helmets, bicycle Jun 15, 46
- Herbicide, homemade Aug 15, 8
- Home improvements Mar 15, 22; Mar 15, 34; Nov 15, 13
- Home repairs, financing Mar 15, 36
- Home selling mistakes Mar 15, 32
- Hospitals
 - infections at Sep 15, 22; Oct 15, 5
 - patient respect & safety Feb 15, 32
- Humidifiers Jan 15, 21
- Insect repellents Jul 15, 34
- Internet
 - Net neutrality rules May 15, 11
 - privacy Feb 15, 10
 - service Aug 15, 48
- Investments, peer-to-peer Feb 15, 10
- Irons Nov 15, 16
- Juicers Jan 15, 43
- Kitchen appliances Dec 14, 56
- shopping for Aug 15, 39
- Kitchen remodeling Aug 15, 27
- one-stop shopping Aug 15, 30

L-P

- Laundry detergents Sep 15, 18
- Lawn care May 15, 33
- Lawn mowers & tractors May 15, 36
- Leaf blowers Nov 15, 13
- Lightbulbs Jan 15, 45; Oct 15, 45
- Listeria Jun 15, 9
- Loans
 - mortgages
 - Consumer Financial Protection Bureau online tool May 15, 11
 - refinancing Mar 15, 35
 - peer-to-peer Feb 15, 10
 - student May 15, 12
 - Longevity, savings and Aug 15, 10
 - Magazine subscription scams Jun 15, 9
 - Mattresses May 15, 16
 - Media & music players, streaming Dec 14, 30
 - Money tips Jan 15, 9
 - Outdoor remodeling Jun 15, 36
 - Outlet stores Dec 14, 15
 - Package delivery gripes Dec 14, 7

- Packaging Nov 15, 24
- Paints & stains
 - exterior Jun 15, 38
 - interior Mar 15, 28
 - labeling claims Sep 15, 8
- Photography, smartphone Jul 15, 22
- Pricing, unit May 15, 7; May 15, 10

R-S

- Radiation Nov 15, 7
- Ranges Aug 15, 40
- Real estate agents, dirty tricks Mar 15, 35
- Recycling tips May 15, 13
- Refrigerators Aug 15, 43
- icemakers, servicing Jul 15, 9
- Robocalls Sep 15, 14
- Scams
 - celebrity "click-bait" Mar 15, 21
 - contractor May 15, 20
 - phishing by text message Oct 15, 12
 - senior-targeted Feb 15, 8; Nov 15, 28
 - travel club Feb 15, 20
- Shopping
 - holiday Dec 14, 22
 - online or not? Jul 15, 10
- Shrimp Jun 15, 16
- antibiotics in Aug 15, 9
- Sinks & faucets
 - bathroom Sep 15, 38
 - kitchen Aug 15, 35
- Smoke & carbon monoxide
 - alarms, Kidde, recall Dec 14, 22
 - Snacks & snacking Sep 15, 44
 - Snow blowers Jan 15, 18
 - Snow shovels Jan 15, 18
 - Solar power Oct 15, 40
- Speakers
 - outdoor Jun 15, 42
 - sound bars Dec 14, 31
- Stores
 - Bed Bath & Beyond, return policy Aug 15, 9
 - supermarkets May 15, 20
- Student discounts Oct 15, 10
- Sunscreens Jul 15, 38
- Surgery, outpatient Jan 15, 22

T

- Taxes
 - gripes Jan 15, 7
 - health care reform and Feb 15, 14
 - last-minute saving tips Feb 15, 14
 - preparations Feb 15, 14
- Technical support Jul 15, 46
- Telephone services, cellular Feb 15, 23
- AT&T data plan throttling Feb 15, 8
- Telephones
 - cellular, unlocking Jan 15, 9
 - smart Dec 14, 45; Feb 15, 28
 - Apple iPhone 6 Jul 15, 49
 - navigation apps Oct 15, 34
 - Samsung Galaxy S line Jul 15, 49
 - for seniors Sep 15, 13
- Television Aug 15, 48
- mergers, Comcast-Time Warner Jul 15, 8
- Time Warner Cable on Demand, misleading offers Dec 14, 9
- Television sets Dec 14, 25
- buying tips Nov 15, 38
- large Feb 15, 16
- quick shopping and setup Feb 15, 18
- Toilet paper Oct 15, 20
- Toilets Mar 15, 26; Sep 15, 38
- Trans fats, new FDA regulations on Oct 15, 9
- Travel
 - insurance, AmEx Travel May 15, 9
 - tips
 - flying Dec 14, 6
- Tree tools Oct 15, 18
- Trimmers, string May 15, 42
- Tuna, mercury in Jun 15, 11

V-Y

- Vaccines Oct 15, 12
- Vacuum cleaners Mar 15, 44; Nov 15, 22
- robotic Jul 15, 48
- Video streaming Aug 15, 48
- account sharing Aug 15, 16
- choosing Sep 15, 13
- Warehouse clubs, Costco
 - CEO W. Craig Jelinek Dec 14, 10
- Washing machines Mar 15, 47; Nov 15, 16
- balance problems Feb 15, 9
- Watches, smart Dec 14, 46; Aug 15, 18
- Water conservation Jul 15, 14
- Weeds Jun 15, 12
- Wine consumption Dec 14, 19
- Yard decorations, inflatable Dec 14, 21

Suddenly Not So Hungry

A few misplaced letters on these packages, sent in by readers, make a world of difference to a food product's appeal.

Side Dish for Carnivores

"I wonder how many vegetarians it takes to flavor this can of beans," wondered Valerie Marshall of Fort Bragg, Calif.



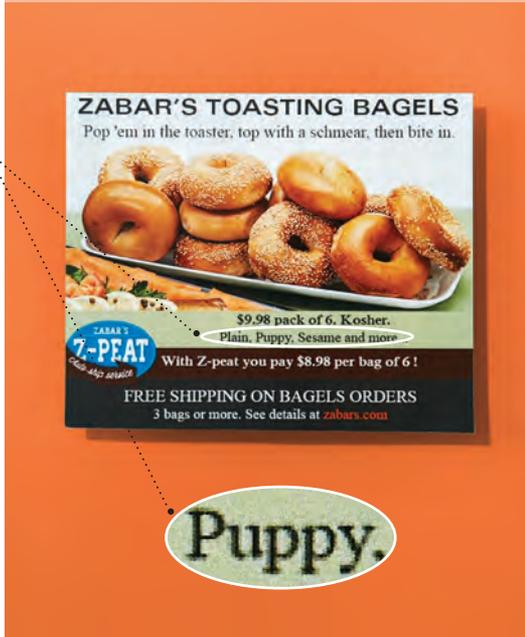
Goodies but Oldies

"I thought these tasted a little stale," Judy Hegg of Alexandria, Minn., wrote of this box of cookies, which apparently expired more than a century ago.



Bagels From the Pound?

The typo in this ad suggests a new bagel flavor that may offend pet lovers. Or, offered Bruce Alter of Fairfax Station, Va., it's for "those hungover mornings when you need a little hair of the dog that bit you."



Distant Cousin

This package, sent in by Michele Mantynen of El Cerrito, Calif., boasts that the tomatoes inside are the "Best of Italy." But the fine print reveals that they were actually grown in Mexico.



SHOW US THE GAFFES! Send us the goofs and glitches you find. Submit them for publication to SellingIt@cro.consumer.org or Selling It, Consumer Reports, 101 Truman Ave., Yonkers, NY 10703.

ConsumerReports® Build & Buy™ Car Buying Service

Car buying should be transparent.

See what others in your area paid for the car you want,
so you know when you're getting a good deal.



**Negotiation-free
guaranteed savings
off MSRP***



**Pricing data for
each vehicle**



**Consumer Reports
recommendation for
qualified vehicles**



**Nationwide network
of dealers**



Don't overpay.

www.ConsumerReports.org/cr/carbuying

* Guaranteed Savings not available in all states. In these states, a "Target Price" is presented, which reflects a market-based example of what you can reasonably expect to pay for a vehicle with your desired options. Savings is guaranteed by the dealer and not Consumer Reports or TrueCar. Guaranteed Savings may not be available on select models or trims. See site for details.

** Between 4/1/14 and 6/30/14, the average estimated savings off MSRP presented by TrueCar Certified Dealers to users of the Build & Buy Car Buying Service based on users who configured virtual vehicles and subsequently purchased a new vehicle of the same make and model listed on the certificate from Certified Dealers, was \$2,990 including applicable vehicle specific manufacturer incentives. Your actual savings may vary based on multiple factors including the vehicle you select, region, dealer, and applicable vehicle specific manufacturer incentives which are subject to change. The Manufacturer's Suggested Retail Price ("MSRP") is determined by the manufacturer, and may not reflect the price at which vehicles are generally sold in the dealer's trade area as not all vehicles are sold at MSRP. Each dealer sets its own pricing. Neither TrueCar nor Consumer Reports brokers, sells or leases motor vehicles.

IN THIS SPECIAL SECTION

34a
Irons

34c
Vacuums

34b
Washers

34d
Autos

34b
Dryers

34d
Contact Info

34c
TVs

CR Best Buy Products with this icon offer the best combination of performance and price. All are recommended.

Recommended Models with this designation perform well and stand out for reasons we note.

How to Use the Canada Extra Section

Every month, Canada Extra provides Canadian pricing and availability information about products tested for that issue. The Ratings in this section are based on this month's reports, but they narrow your choices to the products that are sold in Canada.

You can use this section in either of two ways: Start with the main report, read about the products that interest you, and turn to this section to find whether they're sold—and for what price—in Canada. Or start here, find products sold in Canada whose price and overall score appear promising, and read more about them in the main report and full Ratings chart; page numbers appear with each Canadian report. (For some products, the Canadian model designation differs slightly from the one used in the U.S.)

In most cases, the prices we list here are

the approximate retail in Canadian dollars; manufacturers' list prices are indicated by an asterisk (*). Check marks identify CR Best Buys or recommended products in the U.S. Ratings. "NA" in a chart means that information wasn't available from the manufacturer. We include, in the Contact Info list on page 34D, the manufacturer's phone number and Web address in Canada so that you can call or go online to get information on a model you can't find in the stores. (Many products that aren't available in Canadian stores can be bought online.)

We appreciate your support, but we don't take it for granted. Please write to CanadaExtra@cu.consumer.org and tell us what you think. We can't reply to every e-mail message or implement every suggestion, but with your help we'll try to keep growing to serve your needs.

Irons

Seven of the top 10 irons are available, including five of the recommended models. **Report and Ratings, pages 16-17**

Rec. Rank	BRAND & MODEL	PRICE	SCORE
-----------	---------------	-------	-------

CONVENTIONAL STEAM

<input checked="" type="checkbox"/>	1	Rowenta Steamforce DW9280	\$180	95
<input checked="" type="checkbox"/>	2	Panasonic NI-W950	\$150	93
<input checked="" type="checkbox"/>	4	T-Fal FV4495 Ultraglide	\$70	88
<input checked="" type="checkbox"/>	5	Singer Expert Finish EF	\$100	86
<input checked="" type="checkbox"/>	6	Rowenta Effective Comfort DW2070	\$65	85
	7	Hamilton Beach Chrome Electronic 14955	\$60	83
	8	Rowenta Pro Master DW8080	\$160	83

Washers

Seventeen of the high-scoring tested washers are available, including eight of the recommended models.

Report and Ratings, pages 18-21

Rec. Rank	BRAND & MODEL	PRICE	SCORE
-----------	---------------	-------	-------

A. FRONT-LOADERS, \$1,500 AND UP

<input checked="" type="checkbox"/>	4	Maytag Maxima MHW8100DC	\$1,500	80
<input checked="" type="checkbox"/>	5	LG WM8000H[V]A	\$1,700	80
<input checked="" type="checkbox"/>	6	Samsung WF56H9100AG	\$1,600	80

B. HE TOP-LOADERS, \$1,200 AND UP

<input checked="" type="checkbox"/>	1	Samsung WA52J8700AP	\$1,400	73
<input checked="" type="checkbox"/>	2	Samsung WA56H9000AP	\$1,600	72
<input checked="" type="checkbox"/>	3	Whirlpool Cabrio WTW8500DW	\$1,200	71
<input checked="" type="checkbox"/>	4	Maytag Bravos MVWB855DW	\$1,350	71

Rec. Rank	BRAND & MODEL	PRICE	SCORE
-----------	---------------	-------	-------

C. FRONT-LOADERS, LESS THAN \$1,500

<input checked="" type="checkbox"/>	1	Maytag Maxima MHW5100DW	\$1,400	80
	2	Whirlpool Duet WFW88HEAW	\$1,400	78
	3	LG WM3570HVA	\$1,400	78
	4	Samsung WF42H5600AP	\$1,000	78
	5	Samsung WF42H5000AW	\$900	78
	6	Whirlpool WFW72HEDW	\$900	77
	7	LG WM4270HWA	\$1,370	77

D. HE TOP-LOADERS, LESS THAN \$1,200

	4	Samsung WA45H7000AW	\$850	70
	5	Maytag Bravos XL MVWB980BW	\$1,150	69
	6	Kenmore 26132	\$1,050	69

Dryers

Six of the high-scoring tested dryers are available, including four of the recommended models.

Report and Ratings, pages 18-21

Rec. Rank	BRAND & MODEL	PRICE	SCORE
-----------	---------------	-------	-------

A.

<input checked="" type="checkbox"/>	1	Samsung DV56H9100EG	\$1,600	86
<input checked="" type="checkbox"/>	2	Samsung DV56H9000EP	\$1,600	84
<input checked="" type="checkbox"/>	4	Samsung DV50F9A8EVP	\$1,200	80
<input checked="" type="checkbox"/>	5	Maytag Maxima YMED8100DC	\$1,500	80

Rec. Rank	BRAND & MODEL	PRICE	SCORE
-----------	---------------	-------	-------

B.

	1	Samsung DV42H5600EP	\$1,000	79
	2	LG DLEX3570W	\$1,300	78

TVs

Forty-five of the tested TVs are available, including 33 of the recommended models. **Report and Ratings, pages 38-45**

Rec. Rank	BRAND & MODEL	PRICE	SCORE
-----------	---------------	-------	-------

A. 60-INCH AND LARGER

<input checked="" type="checkbox"/>	1	Samsung UN65JS9500	\$6,000	81
<input checked="" type="checkbox"/>	2	Sony Bravia XBR-65X930C	\$5,000	79
<input checked="" type="checkbox"/>	3	Samsung UN65JS9000	\$4,700	76
<input checked="" type="checkbox"/>	4	LG 65UF9500	\$5,000	75
<input checked="" type="checkbox"/>	5	Samsung UN65JS8500	\$4,000	75
<input checked="" type="checkbox"/>	6	Samsung UN60JU7100	\$3,250	72
<input checked="" type="checkbox"/>	7	Samsung UN60JU6500	\$2,500	71
<input checked="" type="checkbox"/>	8	Sony Bravia XBR-65X850C	\$3,300	71
<input checked="" type="checkbox"/>	9	LG 65UF8500	\$3,500	70
<input checked="" type="checkbox"/>	10	LG 60UF7700	\$2,570	70
<input checked="" type="checkbox"/>	11	Samsung UN65J6300	\$2,300	68
<input checked="" type="checkbox"/>	12	LG 65LF6300	\$1,800	67
<input checked="" type="checkbox"/>	13	Panasonic Viera TC-60CX650U	\$2,300	66
	15	LG 70UF7700	\$4,500	64

B. 55- TO 59-INCH

<input checked="" type="checkbox"/>	2	Samsung UN55JS8500	\$2,700	74
<input checked="" type="checkbox"/>	3	LG 55EC9300	\$3,500	73
<input checked="" type="checkbox"/>	4	Samsung UN55JU7500	\$2,700	73
<input checked="" type="checkbox"/>	5	Panasonic Viera TC-55CX650U	\$2,000	70
<input checked="" type="checkbox"/>	6	Samsung UN55JU6700	\$2,100	68
<input checked="" type="checkbox"/>	7	LG 55LF6300	\$1,400	68
<input checked="" type="checkbox"/>	10	Vizio M55-C2	\$1,170	65

C. 46- TO 52-INCH

<input checked="" type="checkbox"/>	1	Samsung UN48J6300	\$1,100	74
<input checked="" type="checkbox"/>	2	Samsung UN48J5500	\$900	70

Rec. Rank	BRAND & MODEL	PRICE	SCORE
-----------	---------------	-------	-------

C. 46- TO 52-INCH continued

<input checked="" type="checkbox"/>	3	Samsung UN50JU7100	\$1,800	69
<input checked="" type="checkbox"/>	4	Samsung UN50J6200	\$1,080	69
<input checked="" type="checkbox"/>	5	Samsung UN50JU6500	\$1,625	68
<input checked="" type="checkbox"/>	6	Samsung UN48JU6700	\$1,600	68
<input checked="" type="checkbox"/>	7	Panasonic Viera TC-50CX600U	\$1,500	68
	9	Sony Bravia XBR-49X830C	\$1,700	64
	11	Insignia NS-50D420NA16	\$600	62
	13	Vizio E50-C1	\$690	59

D. 39- TO 43-INCH

<input checked="" type="checkbox"/>	5	LG 43LF6300	\$750	68
<input checked="" type="checkbox"/>	6	Samsung UN40J6200	\$750	68
	8	Vizio E40-C2	\$470	64
	9	Sony Bravia XBR-43X830C	\$1,400	64
	11	Vizio E43-C2	\$510	62
	16	Insignia NS-39D220NA16	\$330	59

E. 32-INCH

<input checked="" type="checkbox"/>	2	Samsung UN32J5500	\$480	66
	3	Samsung UN32J4000	\$280	63
	4	Samsung UN32J5003	\$380	62
	6	Vizio E32-C1	\$330	61

F. 29-INCH AND SMALLER

<input checked="" type="checkbox"/>	1	LG 22LF4520	\$200	65
<input checked="" type="checkbox"/>	2	Samsung UN28H4000	\$280	63
<input checked="" type="checkbox"/>	3	LG 24LF4520	\$220	61
	6	Insignia NS-28D220NA16	\$200	52

Vacuums

Five of the top-scoring vacuums are available. **Report and Ratings, pages 22-23**

Rec. Rank	BRAND & MODEL	PRICE	SCORE
-----------	---------------	-------	-------

A. BAGGED UPRIGHT

<input checked="" type="checkbox"/>	8	Eureka Boss Smart Vac 4870MZ	\$230	69
-------------------------------------	---	------------------------------	-------	----

B. BAGLESS UPRIGHT

<input checked="" type="checkbox"/>	5	Shark Navigator Lift-Away NV352	\$180	63
-------------------------------------	---	---------------------------------	-------	----

Rec. Rank	BRAND & MODEL	PRICE	SCORE
-----------	---------------	-------	-------

C. BAGGED CANISTER

<input checked="" type="checkbox"/>	5	Kenmore Progressive 23206	\$400	70
<input checked="" type="checkbox"/>	7	Kenmore Progressive 23204	\$350	68
<input checked="" type="checkbox"/>	8	Panasonic MC-CG902	\$250	65

Autos

Both of the tested vehicles are available in Canada. Listed within category. **Report and Ratings, pages 62-64**

MAKE & MODEL	PRICE RANGE	ACCELERATION (SEC.)				FUEL ECONOMY (LITERS PER 100 KM)		
		0-50 KM/H	0-100 KM/H	80-100 KM/H	500 METERS	CITY DRIVING	HIGHWAY DRIVING	OVERALL
MIDSIZED SUV								
Ford Edge	\$31,999-\$45,199	3.3	9.3	3.9	19.3	16.7	7.6	11.1
LUXURY COMPACT SUV								
Land Rover Discovery Sport	\$41,490-\$49,990	3.7	9.2	4.6	19.3	16.5	8.4	11.5

Contact Info

How to reach manufacturers in Canada.

Hamilton Beach
800-267-2826
hamiltonbeach.ca

LG
888-542-2623
lg.ca

Samsung
800-726-7864
samsung.ca

T-Fal
800-418-3325
t-fal.ca

Insignia
866-237-8289
bestbuy.ca

Maytag
800-688-2002
maytag.ca

Singer
800-474-6437
singerco.com

Vizio
855-833-3221
vizio.ca

Kenmore
Contact nearest Sears
sears.ca

Panasonic
800-561-5505
panasonic.ca

Sony
888-289-7669
store.sony.ca

Whirlpool
800-807-6777
whirlpoolappliances.ca

Rowenta
rowenta.ca