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JUNE 2013 | CONSUMERREPORTS.ORG

Consumer Reports

Best Buys of Summer



Gas grills
Lawn mowers
Paints & stains
Sports stores
Ice cream
Convertibles



Plus Where to park your money now PAGE 15

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▶ Savings this issue

\$600

Buy a Weber Spirit SP-320 **gas grill** instead of a Vermont Castings Signature and save this much.

\$110

Try a Philips A19 LED 10.5W **bulb** instead of an incandescent, and over the course of its lifetime you'll pocket this much in savings.

\$30

Buy Behr Premium Flat Plus Ultra **exterior paint** instead of Sherwin-Williams Duration Flat and save this much per gallon.

Coming in July

Annual kitchen issue, including our exclusive Ratings of refrigerators, ranges, cooktops, wall ovens, dishwashers, and more. Plus health care and airlines.

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Who we are

Consumer Reports

is the world's largest independent consumer-product-testing organization. We also survey millions of consumers about their experiences with products and services. We're based in Yonkers, N.Y., and are a nonprofit organization.

What we do We buy all of the products we rate. **What we don't do** We don't accept paid advertising; we get our money mainly through subscriptions and donations. We don't accept free test samples from manufacturers. And we don't allow our name or content to be used for any promotional purposes.

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• To send a letter to the editor, go to ConsumerReports.org/lettertoeditor.
• For news tips and story ideas, go to ConsumerReports.org/tips.
• E-mail submissions for Selling It to SellingIt@cro.consumer.org.
• For subscription information, go to ConsumerReports.org/magazine or call 800-666-5261. See page 60 for more details.

Ratings We rate products using these symbols:

● Excellent ● Very good ○ Good ● Fair ● Poor

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

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

✓ Recommended car These tested well, are reliable, and performed adequately if crash-tested or included in a federal rollover test.

✗ Don't Buy We label products with this icon when we judge them to be safety risks or to have serious performance problems.

ON YOUR MIND

Another trendsetter

The information in "Trendsetting Cars That Got Things Rolling" (Up Front, April 2013) is interesting, but I would challenge that Subaru was the first car company to raise the ride height and create a 4WD SUV-like car. AMC Eagle vehicles introduced in 1979 started the "sport-utility" or crossover SUV category. They're still quite popular in the snowbelt.

—James Medlock Cibola, TX

Editor's note The Eagle, though significant, didn't influence the market as Subaru did. Maybe it was just 15 years ahead of its time.

What is the car on your April cover, right below your logo?

—Lee Tetwiler Paola, KS

Editor's note It's a Tesla Model S.

"10 Easy Steps to the Best Deal" (April 2013) should have included another one: Save for your car. Build up a car fund and pay all or a significant part in cash. A big reason our



country is in poor shape is that people buy cars they can't afford.

—Greg Owens Apex, NC

Say 'ahhhhhh'

We're disappointed that "Save Your Life," in the March 2013 issue, dissuades most people

from routine oral-cancer screenings. They're not intended to be a stand-alone procedure, but performed as part of a patient's regular dental exam, usually for no extra fee. These visual and tactile exams can result in earlier diagnosis of oral cancer and also other oral diseases. For additional information, go to mouthhealthy.org or aaomf.org.

—Robert A. Faiella, D.M.D., president, American Dental Association, and Paul D. Freedman, D.D.S., president, American Academy of Oral and Maxillofacial Pathology

Editor's note Our article focused on low-risk individuals. It's reasonable that dentists screen high-risk patients during regular exams. Sadly,

much of the population doesn't have access to dental care, routine or otherwise, so many Americans at high risk for oral cancer won't have access to this screening approach.

Clarification An article in the May 2013 issue reported that in our tests, nine supplements with vitamin D and calcium exceeded California's Proposition 65 limits on lead for reproductive risk. Proposition 65 does not prohibit sale of such products but typically requires a label warning that the product contains a chemical known to cause birth defects or other reproductive harm. The nine products had no warning labels. We have since learned that a settlement with the state Attorney General permits those companies latitude in how they calculate lead levels that would otherwise trigger such warnings, and thus no labels are required. Still, Consumer Reports continues to believe that it is better to choose products with lower lead levels.

SEND YOUR LETTERS TO
ConsumerReports.org/lettertoeditor.

Ask our experts

Q I use disinfectant spray in the bathroom to kill bacteria and other germs. Do bacteria build up resistance to disinfectants like they develop resistance to antibiotics?

—John Huxhold Manchester, MO

They might. Alcohol, chlorine bleach, and hydrogen peroxide kill many germs and evaporate quickly and completely. Newer cleaners containing chemicals such as the antiseptic benzalkonium chloride and the antibacterial compound triclosan tend to persist on surfaces. That may allow bacteria to develop resistance to those agents just as they become resistant to antibiotics. We recommend simple detergents and water for most cleaning, and the old standbys when disinfection is necessary.

Q I have health care coverage, but I get offers in the mail for accidental death and dismemberment policies and for additional hospital coverage, which would pay regardless of whether my regular insurance paid. Are they useful?

—Betsy Lyman Boyertown, PA

These so-called fixed-benefit indemnity plans aren't necessary if you have adequate health insurance and are no substitute for it. In general, the plans are not as good a deal as regular health insurance, usually paying out 60 percent or less of the total premiums they collect. (By contrast, health plans must pay out at least 80 percent of premiums for health care expenses or else refund the difference to



BACK TO BASICS Use simple detergents, not antibacterial cleansers, for most cleanups.

their customers.) If you want to cover unreimbursed expenses, consider putting whatever you would have paid for the indemnity plan into a savings account.

Q My electric water heater had a six-year warranty and is now nine years old. A plumber told me to replace it before I have a problem such as a leak because it may be a major one that floods my finished basement. Do you agree?

—Michael Lah Portland, CT

Our experts say yes, given your basement and the fact that your unit is three years past the warranty. For many, though, it's a tough

call. The warranty period is just an estimate of the heater's life span. How long it actually lasts depends on factors including water quality, the amount of hot water you use, and how well you have maintained it. If you end up replacing your water heater, consider a hybrid electric model that uses a heat pump to preheat the water. Those units can save up to 60 percent in energy costs over a typical resistive heater. But they are more expensive up front and generally taller, and they require a floor drain.

SEND YOUR QUESTIONS TO
ConsumerReports.org/askourexperts.

This page highlights efforts of Consumers Union, the policy and action arm of Consumer Reports, to improve the marketplace.

■ TAKING ACTION

A life's mission

In 2003 Kim Witczak's husband, Woody, took his own life. He'd been taking a prescription medicine whose side effect of suicidal thoughts wasn't fully disclosed by the drug company. Since then, Witczak, a Minneapolis marketing consultant, has been advocating for drug safety, disclosure of drug trials, stronger oversight of medical devices, and curbs on direct-to-consumer drug ads. In February she organized a conference (co-sponsored by Consumers Union) with consumer advocates, academics, and journalists to tackle misleading marketing of drugs and medical devices, medical research



that's biased by industry ties, and more. To read more or get involved, go to Consumers Union's website at SafePatientProject.org.

■ FROM OUR PRESIDENT

Food fights

Since our first issue in 1936, when we investigated bacteria in milk, we've helped expose food hazards that can sicken and kill. The dangers today may be different but they are no less critical, and the U.S. government still fails to fully ensure the safety of our food.



Ninety-eight percent of imported food isn't inspected; pathogens such as salmonella are still a problem; potential carcinogens like arsenic and pesticides remain factors in the food supply; and each year one out of six people in the U.S. get a foodborne illness.

Consumer Reports has a unique ability to identify safety hazards, quantify them with testing, and fight for solutions through regulation and marketplace pressure. Today, for example, the government requires screening for campylobacter in chicken after our tests of broilers repeatedly found that harmful pathogen.

Sustainable solutions

To expand our efforts, last summer we launched the Consumer Reports Food Safety and Sustainability Center. Already our work on food labeling and on arsenic in foods has prompted government action.

The center's expanded testing program lets us work for systemic ways to change practices that create food-safety problems. For example, our investigation of ground turkey (see page 46) found that turkeys raised without antibiotics contained significantly less antibiotic-resistant bacteria than conventional turkey.

We're fighting the practice of routinely feeding antibiotics to animals, whether to promote growth or because they're kept in crowded operations rather than cleaner, safer systems. The resulting "superbugs" can end up in the meat you and I eat and make it more difficult to treat infections.

The center is supported by grants and individuals, and we hope you'll join them. A generous donor will match your tax-deductible gift made by June 30. Please send a check to Consumer Reports Foundation, 101 Truman Ave., Yonkers, NY 10703, noting "Food Safety" in the check's memo. Or donate at ConsumerReports.org/safefood. Thank you.

Jim Guest
JIM GUEST
President



\$84 million

Drugmakers spent that amount on marketing their products in the nation's capital in 2011. A new report by researchers at George Washington University on pharmaceutical gifts and advertising in Washington, D.C., considers whether the money influences doctors' prescribing choices to the detriment of patients; drug reps appear to have treated some doctors to meals as often as once a week.

■ ON THE RECORD

"The Department of Justice will not hesitate to pursue any person whose criminal conduct risks the safety of Americans who have done nothing more than eat a peanut butter and jelly sandwich."

—STUART F. DELERY, DEPARTMENT OF JUSTICE, in a Feb. 21 press release on the indictment of four peanut-company officials charged with conspiring to defraud and mislead customers. An outbreak of salmonella in 2008 that sickened at least 714 people was traced to peanut butter from the Peanut Corporation of America.

Data, set, go

Here's a site you could explore for hours: Consumer.data.gov is a gateway to thousands of federal and state databases, as well as a slew of tools and apps. The goal is "to increase public access" to government data. Check bike-crash stats for North Carolina, find alternative-fuel stations across the country, or locate earthquake activity around the world. Developers are invited to create apps, produce mashups, and help make the data useful for everyone.



Up front



Apple is tops for tech support

IN OUR LATEST reader survey of computer technical support, Apple bested its own scores from last year's survey and walloped other brand-name computer manufacturers. It scored far higher than the other biggies for the elements that make for successful online and phone support: ease of contacting staff, clarity of advice, technical knowledge, patience, and time for follow-up.

Satisfaction with Apple's in-house technical support service, the Genius Bar, rated as high as support provided by phone or online. Whatever way readers asked for tech help—by phone (the most common way), online, or in person—Ap-

ple was also able to solve more than 80 percent of their computer problems. Independent shops that make custom computers came closest to Apple, with relatively high scores for phone support and problem solving.

Among makers of Windows-based computers, Dell was better than others at solving problems. As for the rest of the pack, Asus did better at satisfying readers than it did last year. The Acer/Gateway/eMachines group did worse, and its reader score was significantly lower than that of all other rated companies.

Clearly, there's room for improvement in tech support: 24 to 40 percent of respondents who sought phone or online help from makers of Windows-based computers said the staff's patience, knowledge, or clarity was fair at best.

On the whole, computers in better working condition were associated with significantly higher reader scores and problem-resolution rates. Based on our readers' responses, if your computer is in poor condition, it's better to confer on the phone or via live chat than simply to seek information on a website. For more on the performance of computers made by those companies, see "Laptops" (March 2013).

Ratings

In order of reader score. Better ← → Worse

Manufacturer	Reader score	Survey results		
		Phone support	Online support	Problems solved
	0	100		
Apple	86	● ●	● ●	82%
Local independents	78	●	—	71
Lenovo	63	●	●	54
Asus	62	—	●	46
Dell	60	●	●	61
Toshiba	59	●	●	48
HP/Compaq	58	●	●	53
Acer/Gateway/eMachines	51	●	●	37

Ratings, from the Consumer Reports National Research Center, are based on responses from 6,313 owners of desktop, laptop, and netbook computers. Reader score reflects overall satisfaction with manufacturer support. 100 means that respondents were completely satisfied; 80, very satisfied, on average; 60, fairly well satisfied; 40, somewhat dissatisfied. Reader score differences of fewer than 6 points aren't meaningful; problems solved differences of fewer than 10 points aren't meaningful. A dash (—) indicates insufficient data.

■ CLOSE-UP

Best in-store help

Apple's in-store Genius Bar rated significantly higher overall than Staples' EasyTech or Best Buy's Geek Squad, perhaps in part because its staff services only Apple products. In-store support from local independent retail shops, as a group, satisfied readers almost as well as the Genius Bar. The Genius Bar solved 88 percent of readers' computer problems; independents, 87 percent; EasyTech, 73 percent; and Geek Squad, 70 percent.



Just desserts: Frozen yogurt and ice cream

IN TASTING 12 VANILLA frozen yogurts and nine butter-pecan ice creams, our experts found some very tasty choices, including three CR Best Buys. They also noted a few hot trends in frozen desserts:

- Sizes vary. Blue Bell is the only tested product still sold in a half-gallon tub. For the best deal, check package sizes and compare prices per ounce.
- Descriptions are changing. Breyers calls some products “frozen dairy dessert.” They don’t meet the government standard for ice cream. For more definitions, see Talk the Talk on the facing page.
- Greek frozen yogurt is coming on strong. You’ll find more of it in stores, but none of the four we tested was very good.

The Ratings list nutrition figures and

scores for the Very Good products and name the also-rans, which include some big brands. Nutrition scores are based on a range of numbers that include fat, calcium, calories, and sugars.

Taste. The best frozen yogurts have a slightly eggy taste, a bit like vanilla custard. Häagen-Dazs tastes of real vanilla and has a slight fresh-dairy flavor; Blue Bunny has a touch of sour-dairy flavor. Although TCBY is very good overall, it feels a bit gummy and slick in the mouth.

The also-rans tend to have more flaws, including a foamy or airy texture or slight bitterness. The Greek frozen yogurts are less sweet than most of the others, with a big sour-dairy flavor.

Among the butter-pecan ice creams,

Häagen-Dazs, Great Value, and Blue Bunny taste rich and have pieces of flavorful roasted nuts. Per serving, Häagen-Dazs had more nuts by weight than the others. It tastes more like a high-quality vanilla nut than a butter pecan; in the others, the ice cream has an appropriate butterscotch taste. Friendly’s and Turkey Hill have slightly bitter nut pieces. The also-ran butter pecans taste as though they have artificial flavors, and they’re gummy.

Nutrition. Most of the frozen yogurts rated Very Good for nutrition. They tend to have less fat, fewer calories, and more calcium than ice cream. (Häagen-Dazs vanilla is highest in calories but is also the most dense.) The Greek frozen yogurts contain 6 to 9 grams of protein compared with 2 to 4 grams in the regular frozen yogurts.

Most of the ice creams rated Good for nutrition. The exception, Häagen-Dazs, rated Poor: A mere half-cup has 300 calories and 10 grams of saturated fat.

Bottom line. Frozen yogurt fans might like Blue Bunny or TCBY Classic, which provide slightly better nutrition than Häagen-Dazs and cost far less. Fans of butter-pecan ice cream should try Great Value (Walmart), which is about one-fourth the price of Häagen-Dazs and (if this can be said about ice cream) is more healthful. Keep in mind that an official half-cup serving of these frozen desserts is almost mythical.

Top vanillas and chocolates

Four ice creams from earlier tests remain

Excellent: Ben & Jerry’s Vanilla, Häagen-Dazs Vanilla Bean, Ben & Jerry’s Chocolate, and Häagen-Dazs Chocolate. All are quite dense and full-flavored. The vanilla is complex; the chocolate, of high quality.

Does Best Buy live up to its name?

In an aggressive move, consumer electronics and appliance giant Best Buy has implemented a permanent price-match policy, vowing to meet the published prices of not only local walk-in competitors—a common policy—but also 19 e-tailers. The list: Amazon, Apple, BH Photovideo, Buy.com, Crutchfield, Dell, Frys, HHGregg, HP, Home Depot, Lowe’s, Newegg, Office Depot, Office Max, Sears, Staples, Target, Tigerdirect, and Walmart. (Target has a similar guarantee covering fewer Internet merchants.)

Such offers are designed to limit “showrooming,” in which buyers eye goods in stores but buy online. Nowadays it’s easy

for smart-phone owners to check prices across a broad range of merchants right from the showroom floor. Might the new policy eat into Best Buy’s profits? According to spokesman Jeff Shelman, that was initially a “big concern” for chief executive officer Hubert Jole. But to date, the impact has been minimal, Shelman says.

Will Ander, senior partner with retail industry consultant McMillanDoolittle in Chicago, says Best Buy’s initiative will score public-relations points because it plants in consumers’ minds the notion, real or imagined, that the company is the low-price leader. In practice, Ander says, just a small percentage of consumers usually take



advantage of price-match opportunities.

The price match doesn’t pertain to special orders, mobile phones sold with service contracts, or floor models. It doesn’t apply to products you choose to pay off over time. And you can buy only one identical item per price



✓ CR Best Buy ✓ Recommended

● Excellent ● Very good ○ Good ● Fair ● Poor

Ratings Ice cream

Very good products only

From 21 tested.

Rec.	Product	Cost	Calories	Fat (g)	Sugars (g)	Nutrition
VANILLA FROZEN YOGURT ^①						
✓	Häagen-Dazs	\$1.25	180	2.5	22	○
✓	Blue Bunny	0.33	100	2.5	15	●
✓	TCBY Classic	0.37	110	2.5	15	●
BUTTER-PECAN ICE CREAM ^②						
✓	Häagen-Dazs	\$1.12	300	22	17	●
✓	Great Value (Walmart)	0.27	160	10	13	○
✓	Blue Bunny Premium	0.35	150	9	13	○
✓	Blue Bell	0.42	180	11	14	○
✓	Friendly's	0.30	150	9	13	○
✓	Turkey Hill	0.33	160	10	11	○

^① **Rated Good:** Healthy Choice Greek, Trader Joe's Greek Fat Free, Dreyer's/Edy's Slow Churned Yogurt Blends Fat Free, Turkey Hill, Dreyer's/Edy's Slow Churned Yogurt Blends, Blue Bell Lowfat Country, Stonyfield Organic Gotta Have, Adonia by Ciao Bella Greek, Stonyfield Organic Oikos Non Fat Greek. ^② **Rated Good:** Dreyer's/Edy's Grand, Breyers, Dreyer's/Edy's Slow Churned.

TALK THE TALK

What's that icy treat?

Ice cream. It's a mix of dairy ingredients, sweeteners, and flavors, often with stabilizers and emulsifiers. By federal law, it must generally be at least 10 percent milkfat by weight (8 percent with a mix-in) and weigh at least 4.5 pounds per gallon. Light has at least one-third fewer calories or half the fat of the full-fat version. Low-fat has 3 grams of fat or less per serving. "Premium" is a marketing term, with no federal definition. But premium ice cream tends to contain more fat and less air than others.

Frozen yogurt. It tends to have less fat and fewer calories than ice cream. Unlike regular yogurt, frozen is not subject to an official government "standard of identity." Some frozen yogurts contain live and active bacteria (look for an "LAC" seal), which may provide health benefits.

Sherbet. It's pasteurized, weighs at least 6 pounds per gallon, and has less fat than ice cream (1 to 2 percent). Total milk solids (no cream allowed) are 2 to 5 percent by weight. If fruit is included, a certain level of acidity is required. FYI, the word comes from "sharbat," Arabic for "drink."

Sorbet. Sherbet minus dairy ingredients.

Gelato. It has an intense flavor and is served semi-frozen. Italian-style gelato is denser than ice cream, with less air. Typically, gelato has more milk than cream and contains sweeteners, egg yolks, and flavoring, according to the International Dairy Foods Association.

Water ice (aka Italian ice). It has no milk ingredients and no egg ingredients other than egg white. It has a flaky texture, is often fat-free, and tends to be lowest in calories among frozen desserts.

CLAIM CHECK

Winbot does windows

The claim. With the new Winbot, "you can clean your windows, glass doors, mirrors, and more with just the touch of a button." In one pass, Winbot runs a pad moistened with cleaning solution over glass, squeegees it, and dries it. The device holds on by suction and uses two anti-slip treads to move around. You can direct it with a remote control. We tested two models bought directly from the manufacturer: the W710 (\$350) and the W730 (\$400),



with technology that lets it work on frameless windows and doors.

The check. We ran the Winbots on windows of different sizes, on a whiteboard where we'd drawn a grid, and on tilted windows that mimicked a skylight. And we also ran the W730 on a frameless glass door.

Bottom line. Winbot does windows, but not perfectly. Although it cleaned fingerprints, dust, and streaks, it didn't handle heavy stains, and it sometimes missed a spot. Flat surfaces such as glass tables and tilted windows caused the Winbot to fail. And it took almost 30 seconds to clean a square foot of window compared with our elbow-grease time of about 8 seconds. But if you have high windows that are hard to clean safely, a Winbot could make sense. Bear in mind that if you have frameless glass, you'll want the W730, which cleaned those edges well.

match, so if you score a bargain on a GPS unit, you can't pick up a bunch for family and friends. Nor does the guarantee apply to goods sold by outside stores or individuals on sites such as Amazon and Walmart. Our reporter's quick check showed that many TVs are available on Amazon exclusively through such marketplace merchants. He did find a good deal on Amazon for a Blu-ray player that sold for \$20 more at Best Buy; in that case, the price match paid off.

Another plus: If Best Buy drops an item's price within 15 days of purchase, it will refund the difference. So it makes sense to monitor store flyers after you seal the deal.

Where to buy electronics

In our Ratings of electronics stores and websites, BestBuy.com has rated lower than the websites of Amazon, BH Photovideo, and Newegg. Walk-in electronics chains are probably still the best option when you can't wait for, say, a thumb drive or printer ink. We've found that independent stores tend to get high marks for service; warehouse clubs are praised for prices, though selection is subpar. Costco has an especially good return policy.

CLAIM CHECK

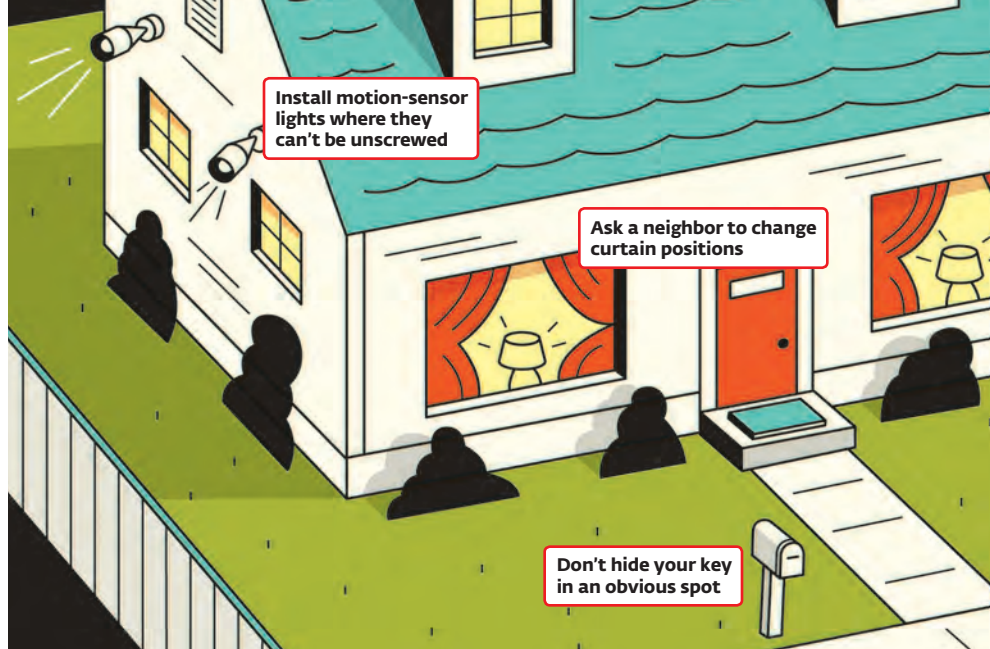
A paper to keep fruits fresh

The claim. One sheet of this biodegradable paper “keeps fruits and veggies fresh 2-4x longer, naturally! It’s like a dryer sheet for produce!” The paper’s maker, Fenugreen, suggests that the product can help stem a worldwide waste of food. A pack of eight sheets costs \$5.95.

The check. We placed separate batches of strawberries and blueberries into the plastic containers in which they were sold and into airtight Snapware. Then we added FreshPaper to one of each test sample and not the other, and placed the papered and nonpapered fruits in separate refrigerators. We also left strawberries out on a counter in their original container, with and without FreshPaper. (Don’t try this at home: Berries should be stored at 40°F or below.) Then we waited.

Bottom line. Reusable airtight containers seem like a better way to save the world. FreshPaper helped in only one of our scenarios: Used with strawberries stored in their original containers and placed in the fridge, it staved off mold for at least two weeks, by which point those without FreshPaper had grown fuzzy. The countertop strawberries were quickly fuzzy whether they had FreshPaper or not; the airtight-container fruits were inedible (though mold-free) either way after three weeks.

Fenugreen claims the product contains no major allergens, but it does include fenugreek, a legume that is like a peanut and can have similar allergens, according to a recent study. People with peanut allergies may need to think twice about eating products touched by FreshPaper.



Going away? Keep burglars at bay

ONE FAMILY, two burglary tales. Mom and Dad return from a day at the beach to find a window near their front door smashed and cash removed. The window didn’t need to be smashed; they’d left the door unlocked. Fast forward, and their daughter returns from a weekend at the lake to find a rock heaved through a sun-room door and her jewelry removed. She hadn’t turned on the home-alarm system. As the ubiquitous ad says, we’re only human. But burglars succeed too often because of obvious mistakes. There are clear steps to limit risk when you’re away.

Some—installing deadbolt locks or double-key locks (in doors with glass), getting a dog, or installing a home-security system—require planning far in advance. Here are 16 easier precautions you can take:

Outside

- Stop the mail or ask a friend to get it.
- Ask a trusted neighbor to park in your driveway and to come inside occasionally and change curtain positions.
- Install motion-sensor lights where a burglar can’t easily unscrew the bulbs.
- Follow the 3/6 rule: Trim shrubs in front of the house to no higher than 3 feet from the ground, and trim trees so that the lowest branches are at least 6 feet up (less hiding room for burglars).
- Don’t hide a spare key anywhere that’s remotely obvious.
- Secure first-floor air conditioners with a bracket outside and a sliding window lock on each side of the window frame.

ILLUSTRATION: HARRY CAMPBELL

Sour news for Nectresse sweetener

Nectresse is a new sweetener made of a sugar alcohol (erythritol), regular sugar, monk fruit extract, and molasses. It comes from the maker of Splenda, and each packet is supposed to provide the sweetness of 2 teaspoons of sugar. One cup of sugar has 774 calories; a quarter-cup of Nectresse, equally sweet, has 86 calories. Our testers tried Nectresse in a baked cake and in beverages.

In a cake. A yellow cake we made with Nectresse was pale, didn’t rise much, and was doughy and raw on the bottom. On the other hand, tasters pronounced the cake

made with regular sugar “yummy.”

In lemonade and coffee. Nectresse imparted an artificial-sweetener or chemical flavor and an unpleasant cooling sensation. Tasters said lemonade and coffee made with sugar were much better.

Bottom line. Nectresse doesn’t measure up to sugar. As for other sweeteners, we’ve found stevia to be bitter in previous tests. In beverages, the old standbys Equal, sucralose (Splenda), and xylitol (Ideal) impart fewer off-notes to beverages. For baking, we haven’t found one that works very well unless combined with regular sugar.



► Inside

- Keep empty boxes (especially from pricey items) in the garage until garbage day.
- Cover garage windows so that no one knows whether a car is inside.
- Lock up ladders and tools that could be used to break in.
- Leave a radio on, tuned to a talk-show station.
- Put lamps on a timer.
- Turn down the phone's ringer.
- Consider placing safety film over windows near door handles to make glass hard to smash.
- Hide valuables well—in a hollowed-out book or a fake wall outlet, for example.
- Bolt down safes so that they can't be picked up and carried out.
- Place a solid stick in slider tracks.

TOP RIGHT: GETTY IMAGES



Medical gripes: The doctor won't see you now

In a nationally representative survey, we asked 1,000 Americans about things that might bug them during a doctor visit. Unclear or incomplete explanations of a problem bothered them much more than most other complaints.

Respondents rated 16 complaints on a 1-to-10 scale, with 1 meaning "you are not bothered at all" and 10 meaning "you are bothered tremendously." Our gripe-o-meter shows the results.

Long waits in exam or waiting rooms were more distressing than inconvenient office hours or filling out medical forms. Significantly less bothersome than the other things was a doctor's discouragement of alternative treatments such as acupuncture, herbal remedies, and chiropractic.

Women were much more bothered than men about private discussions taking place within earshot of other patients, rushed office visits, too-early release of hospital patients, and inconvenient office hours. They were also more likely than men to be bugged if a doctor took notes on an electronic device instead of interacting face to face. Americans age 65 and older were more peeved by having to fill out long forms than were those under 65. Americans under 35 said they'd be less bothered than did older folks by doctors who are too quick to order tests and procedures. Westerners were much more bothered by the discouragement of alternative medicine and by doctors who rushed through visits than were all other respondents.

Bottom line. We've reported over many years that openness, respect, and trust are critical to a successful doctor-patient

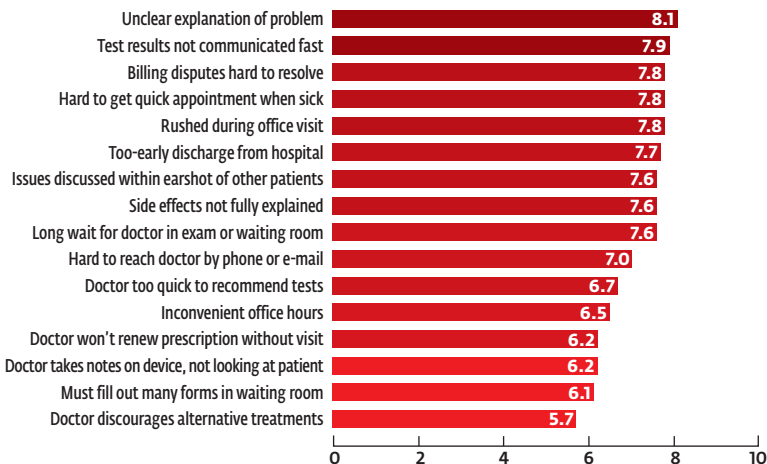


relationship. Because many office visits last just 10 to 20 minutes, it's important to prepare a list of concerns and questions. Prioritize, and raise your big three or four concerns first. Explain symptoms clearly, and gently interrupt if you feel you're not being heard. Prepared patients have reported an improved relationship with their doctor. Taking a family member or friend along can be very helpful.

When choosing a new doctor, people who found their physicians through someone they trusted—a friend, family member, or another doctor—had the most favorable experiences, our surveys have shown. For more information, go to ConsumerReports.org and click on Health, then on Doctors & Hospitals in the upper bar.

► Gripe-o-meter

Scores are based on a 10-point scale, with 10 being most bothersome.



Source: The Consumer Reports National Research Center. Differences of 0.4 points or less are not meaningful.

Sneaky packages

CONSUMER REPORTS comes down hard on tough-to-open, overwrapped, and underfilled bags, boxes, and containers. But other packaging tactics are even more subtle: attempts to make products look bigger, better, cheaper, or more healthful.

"Consumers are very easily influenced," says Brian Wansink, director of Cornell University's Food and Brand Lab. "When people shop, they're not cool or rational but in a 'hot' state—stressed, tired, in a hurry."

We asked our Facebook fans about products they had been persuaded to buy because of their look or label. Then we sent our reporter to supermarkets to round up examples.

To avoid being fooled into paying too much, focus on fine print, including ingredient lists and nutrition labels. Ignore pretty packaging, bright colors, and bold lettering. Compare unit prices on shelf tags (per ounce, per quart, or per 100 sheets). And if you like a product but not its marketing, contact the manufacturer. You can air your grievance, and many companies send coupons to customers who call or write.

▶ Wow 'em with numbers

This 50-ounce bottle seems like a bargain because the label screams "25% more ounces." But tiny type below makes a head-scratching comparison: "vs. 40-ounce detergents." Likewise, we found identical 12-ounce bottles of Vicks Nyquil with comparisons so obvious they were silly. The label on one bottle bragged that it contained "50% more (than our 8 oz size)"; the other, that it had "20% more (than the 10 oz size)."



▶ Paint a pretty picture

The front of this bag is similar in color to the potatoes and makes them look appealing and pristine. The flip side? It's clear and shows cracks, bruises, and eyes. Another trick: Paint the container a more vibrant version of what's inside. Ketchup bottles are usually clear, but one we found was bright red—sure to catch a shopper's eye.



▶ Copy the genuine article

Our tasters have said there's no comparison between maple syrup and pancake syrup. So it's easy to see why Log Cabin, which produces "table syrup"—brown rice syrup, sugar, and water—might use a container that makes it look like the real deal.



▶ Make commodities cute

Would you pay three times as much for a single yam just because it had its own label and came in a microwavable wrapper? The Chef's Pride sweet potato with that special treatment cost \$1.50. A fatter one we pulled from a bin cost 50 cents.

▶ Tell part of the story

The label on Peter Pan peanut and honey spread notes that the contents are free of high-fructose corn syrup, which consumers might find comforting. It downplays the presence of partially hydrogenated fat, which is definitely not heart-healthy.





❑ Tout the irrelevant

Fortifying cornstarch with calcium offers little benefit, our medical experts say, because it's commonly used in small amounts. A spokeswoman for Clabber Girl told us that "the dietary benefit offers value to our customers."



❑ Charge more for less

The jar of America's Choice looks larger and costs about \$1 less. In fact, the jars contain the same amount of coffee. But cup for cup, Maxwell House is cheaper because it claims to make 60 cups; America's Choice, 30 (using rounded teaspoons). A&P, seller of America's Choice, told us the label was a misprint: 30 should be 50. As of April, we hadn't seen a corrected label.



❑ Make snacks health food

Triscuits are made with whole-grain wheat, and Nabisco notes that diets rich in whole grains and low in saturated fats and cholesterol may help reduce the risk of heart disease. But the Nutrition Facts reveal that a serving (six crackers) has 120 calories, 4 grams of fat, and 180 milligrams of sodium. And how many people stop at six?



❑ Hide shrinkage

Peanut butter and mayonnaise have been downsized in recent years. Instead of an outright price increase, manufacturers simply give you less for your money. Companies sometimes mask the decrease not by shrinking the jar's dimensions but by indenting the bottom.

❑ Think outside the jar

Conventional wisdom suggests that McCormick ground mustard in a fancy glass jar costs more than mustard in plain plastic. Wrong. The smaller mustard, in plastic, is about \$81 per pound. The mustard in glass: \$48 per pound.



❑ Use meaningless terms

"All natural" often means nothing: The Food and Drug Administration doesn't define or regulate the term except when it refers to meat. Yet in a recent nationally representative survey, the Consumer Reports National Research Center found that half of Americans buy food labeled "natural." Take Kix, made with "all natural corn." General Mills never explains the benefits of the corn or how it differs from the "unnatural" variety. Similarly, "fat free" boasts on corn flakes are stating the obvious. We couldn't find any corn flakes with fat among their ingredients.

5-MINUTE CONSULT

Nursing-home rights & wrongs



Orly Avitzur, M.D., a board-certified neurologist, is a medical adviser to Consumer Reports.

RECENTLY one of my patients transferred her 83-year-old mother from a hospital to a nursing home for physical therapy and recuperation after an illness. Upon discharge, her mother went to the nursing home by ambulance. My patient followed shortly after by car. Imagine her surprise when she learned

that in the brief interval between her mother's arrival and hers, a visiting dentist had performed an admission dental exam and—without explanation to or consent from the daughter, who held power of attorney for her mother's health care—extracted a tooth. Her mother, who was in the early stages of Alzheimer's disease, was confused and frightened. My patient was enraged.

Know your rights

The rights of nursing-home residents are protected under the federal Nursing Home Reform Act. Passed in 1987, it applies to every nursing home certified to accept Medicare or Medicaid patients. Among the law's provisions are the right to freedom of choice over medical care, the



FREEDOM OF CHOICE Residents have the right to refuse drugs or other treatment.

right to refuse treatment, and the right to advance notice of changes to the resident's care or treatment plan.

But some nursing homes disregard the law, and often they get away with it. One reason is that residents or their families might be reluctant to make a formal complaint because they fear the staff will retaliate. Some also worry, wrongly, that refusing an unwanted treatment will lead to eviction. (That is illegal.) As a result, a culture of acquiescence develops, and egregious behavior continues.

Red flags to watch for

In addition to unneeded dental work, several other practices may be overused or misused in nursing homes, even though the law restricts their use except for very specific reasons:

Physical restraints. The use of vests or belts that tie residents to wheelchairs or beds has declined, but some nursing homes still use them, and they can be physically and emotionally harmful. (They might be justified in situations where a patient has

the capability to do bodily harm.) It's illegal for staff to use restraints for convenience, such as to prevent wandering or address behavioral challenges. Electronic monitors, increased staffing, and behavioral interventions to discourage boredom are better options.

Antipsychotic drugs. These and related drugs are supposed to be used only for patients with diagnosed psychiatric conditions such as schizophrenia and not for disciplinary reasons such as quelling agitation in patients with Alzheimer's dementia. In a large 2010 study, almost 30 percent of nursing-home residents had received an antipsychotic; of them, almost one-third had no identified indication for use. The drugs don't help dementia and have been linked to other risks, including less functional improvement, longer nursing-home stays, and a greater chance of dying. A review published in March by the Cochrane Collaboration concluded that most older adults with dementia can successfully be taken off antipsychotic drugs.

Feeding tubes. They deliver nutrition via a tube inserted into the stomach and are sometimes necessary for people who can't swallow or otherwise eat safely. But nursing homes sometimes use them to save time and labor with residents who eat very slowly or need encouragement to eat. That is never a legitimate reason for inserting a feeding tube, which denies a patient the pleasure of tasting food and can diminish quality of life.

Residents and their families should be on the lookout for those practices and ready to speak up if they're used or pushed unnecessarily. (For help, see box at left.) My patient ultimately did just that: She filed a complaint about her mother's hasty and unpermitted dental procedure with the state board. It led to the firing of the dentist and a state investigation of the facility.

Helpful resources

ltombudsman.org Find contact information for your state's free ombudsman program, which provides advocacy for nursing-home residents.

nslc.org/index.php/books This section of the National Senior Citizens Law Center website has a downloadable booklet on common nursing-home problems and how to resolve them.

projects.propublica.org/nursing-homes This program of the investigative journalism group ProPublica lists inspection reports for more than 60,000 nursing homes.

Why sleeping less makes you eat more (and more and more)

Burning the midnight oil might encourage weight gain by providing excessive opportunity for snacking, a small study has found. Researchers at the University of Colorado studied the effect of five days of inadequate sleep on the eating habits, calorie expenditure, and body weight of 16 adults. They burned slightly more calories per day when they got less sleep, but the amount they ate—especially

at night—increased even more, leading to a net weight gain. The researchers concluded that your body needs a little more food during periods of insufficient sleep to fuel it through the extra hours you're awake. But when food is easily accessible (for example, you have a plate full of cookies and nobody up to share them), you're likely to eat much more than what's needed to compensate.



Get a better return on savings

WHEN A BANK advertises a 1 percent savings interest rate as “high yield,” you know savers must be frustrated.

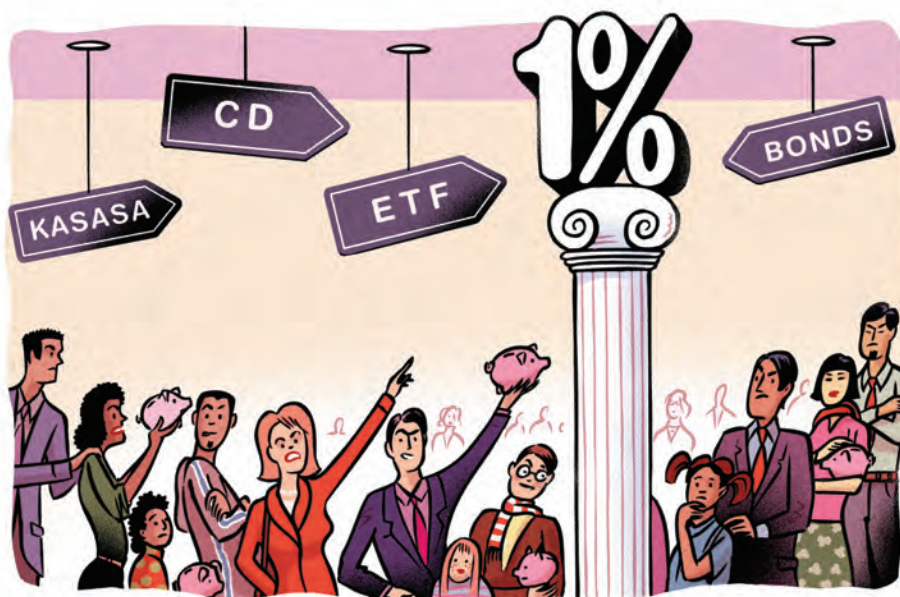
That certainly was the consensus among more than 6,500 CONSUMER REPORTS readers we surveyed recently on bank and brokerage annoyances. They were far more peeved by the piddling pennies on their statements than they were by excessive fees and commissions, unhelpful Web tools, or even the hurdle of reaching a live person on the phone. In fact, low interest rates were the only issue that stood out as bothering readers in our survey.

Interest rates should go up once unemployment drops and economic growth accelerates. In the meantime, the options below might offer more for your savings. Switch only if you don’t have to change a lot of automatic-payment and direct-deposit arrangements, and avoid fees that can erase the interest you earn. The choices are listed from low to moderate risk.

▣ FDIC-insured

Online banks. The most competitive online banks—institutions without a brick-and-mortar presence—have been offering interest rates around or slightly below 1 percent, far higher than what’s available through walk-in banks. Barclays.com’s savings account recently had an annual percentage yield of 1 percent with a \$1 minimum balance. With \$10,000, you’d get \$100 in the first year at Barclays compared with \$5 at most with Chase Plus, which was offering a microscopic 0.01 percent APY for savers who weren’t linked to certain active checking accounts and 0.05 percent for those who were. Bankrate.com, BestCashCow.com, and Nerdwallet.com let you search for other “high yield” bank and credit-union accounts.

Certificates of deposit. A long-term CD may be worthwhile if the early-withdrawal penalty is small. For instance, Web-based Ally Bank was recently offering a 1.54 percent APY on its five-year CD, with a withdrawal penalty of just 60 days’ interest. If you held your \$10,000 there and withdrew after a year, the APY would still be 1.28 percent, yielding compound interest of \$129. That’s better than the \$89 you’d get with a one-year CD from Ally itself and more than twice the average \$63 you’d get from one-year CDs from competing banks. To see



how early withdrawal would affect yields from any CD, check out the calculators at cdcalc.herokuapp.com and depositaccounts.com.

High-yield checking. These no-fee accounts pay competitive rates up to a certain level of savings. For example, Consumers Credit Union (not related to Consumer Reports or Consumers Union), based near Chicago, recently offered 3.09 percent on balances of up to \$5,000. For those rates, though, you need to actively use your account each month, via regular direct deposit and debit-card transactions and other activities. You also get reimbursed for ATM fees from other banks if you meet certain requirements. A number of institutions providing this type of account participate in a program called Kasasa Cash; check their requirements before signing up. To search for such accounts offered locally and nationwide, go to kasasa.com.

▣ Guaranteed principal and interest

Series I savings bonds. This is the exception to our short-term advice because it includes a variable-interest-rate component that adjusts twice a year with inflation. That flexibility helps protect you even when interest rates begin to rise. (Through April of this year the interest rate on I bonds was an annualized 1.76 percent; new rates were unavailable at press time.) You pay a penalty of the last three months’

interest if you redeem the bond in the first five years. Buy them in any amount from \$25 to \$10,000 at treasurydirect.gov.

▣ Not federally guaranteed or insured

Dividend exchange-traded funds. ETFs, as they’re known, are low-expense funds that generally track an index and are traded like stocks. Dividend ETFs are composed of a collection of dividend-paying companies, which are typically known for their stability and low price volatility. But they carry a higher degree of risk than the other options listed here. Look for low fees and expenses; the Vanguard High Dividend Yield Index ETF (VYM), for instance, has an expense ratio of 0.1 percent; recently it was yielding 3.13 percent.

Short-term bond funds and ETFs. The corporate and government bonds in these funds are typically of only a few years’ duration. (The corporate bonds in these funds and ETFs are not federally guaranteed or insured.) You won’t make much currently; investment research giant Morningstar.com says the average short-term bond fund is yielding just 0.76 percent. But the high-quality, low-cost ETF Vanguard Short-term Corporate Bond (VCSH) was recently yielding 1.2 percent. When interest rates go up, bond prices drop. But a well-managed fund will be poised to jump on higher rates, so the risk of losing your principal isn’t substantial.

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SERVICE NOT AVAILABLE IN CANADA

0613E



LABELED Costco is one of a few retailers that disclose whether beef has been mechanically tenderized.

▶ Buying beef? Read this first

Concerned about food safety? Here's a little-mentioned practice you need to know about. Many steaks and other cuts of beef that you buy in grocery stores or restaurants have been run through a machine that punctures them with blades or needles to tenderize them.

Unfortunately the process also can drive bacteria like the deadly pathogen *E. coli* O157:H7 from the surface deep into the center of the meat, where they are harder to kill. That increases the risk of illness for people who eat that beef rare or medium rare.

Mechanically tenderized beef caused at least five *E. coli* O157:H7 outbreaks between 2003 and 2009, causing 174 illnesses, four of them fatal, according to the national Centers for Disease Control and Prevention. That may not seem like a large number, but cases reported as part of outbreaks represent only 10 to 25 percent of all lab-confirmed cases of *E. coli* O157:H7 that are reported annually by state and local health authorities.

"And for every lab-confirmed case reported, the national estimate is that there are 26 more out there that aren't identified," says Kirk Smith, an epidemiologist at the Minnesota Department of Health.

No telltale signs

Because obvious marks aren't left by the small needles or blades used, you can't tell by looking at a piece of meat whether it has been mechanically tenderized. And no labeling is required to let you know that it has and therefore must be cooked more thoroughly. A certified-organic label offers no guarantee either. The Department of Agriculture estimates, based on 2008 data, that 37 percent

of companies that slaughter or process beef use mechanical tenderization, producing more than 50 million pounds a month. Yet this tenderized beef is not even being tested by federal meat inspectors for *E. coli*. That's despite the fact that "these products present some additional risk for *E. coli* contamination," according to a recently released audit by the USDA's Office of the Inspector General, which recommended that the agency re-evaluate its testing policy.

More than a year ago, the USDA drafted a rule that would require such beef to be identified with labeling that includes safe cooking

instructions. Consumers Union, the policy arm of Consumer Reports, has long supported such labeling. The American Meat Institute, a trade group, had opposed labeling but says it may reconsider its position if new federal data suggest

that labeling would be helpful. The Office of Management and Budget has been reviewing the proposed rule for more than six months, while evidence of illnesses linked to mechanically tenderized beef continues to mount. After bladed steaks sold by Costco were linked to an *E. coli* outbreak in Canada in September 2012, Costco began voluntarily labeling mechanically tenderized beef.

What you can do. To reduce the risk of illness, cook mechanically tenderized steaks or roasts to an internal temperature of 160° F, just like a hamburger, rather than to the 145° F (typical for medium-rare) that the USDA recommends for non-tenderized steak. Use a meat thermometer. And to be safe in restaurants, you might want to order your steak well done. People most at risk of illness are pregnant women, children, the elderly, and people with compromised immune systems.

That rare or medium-rare steak could be risky.

▶ RECALLS

HOUSEHOLD PRODUCTS LED lightbulbs

Bulbs can overheat and cause fire.

PRODUCTS 554,000 Lighting Science Group LED bulbs marketed under brand names Definity, EcoSmart, Sylvania, and Westinghouse. The recalled LEDs, equivalent to 40- or 50-watt incandescent bulbs, were made between October 2010 and mid-March 2011. They were marketed as 6-, 8-, or 9-watt LEDs and include A19, G25, and R20 (also known as PAR20) bulb types. You'll find the type indicated on the packaging and on the circular neck above the base of the bulb where the date code appears. Date codes range from L4010 to L5210, and L0111 to L1111. Lighting Science Group has reports of 68 incidents. Check recalls.gov for more details.

WHAT TO DO Remove the bulb from the fixture and call the Lighting Science Group at 855-574-2533 or go to lsgc.com/recall for replacement bulbs.



▶ UPDATE

Whirlpool to repair some microwaves

Consumers like Robert Webster of Vero Beach, Fla., who faced problems with certain KitchenAid microwave ovens, may be getting some relief. Webster, who was among those featured in our March 2013 investigation, "Microwave Mystery," received a \$150 refund for the repair of his microwave oven. The article cited dozens of cases of KitchenAid KHMS155LSS microwaves turning on by themselves, catching fire, or smoking while not in use.

Whirlpool, which owns KitchenAid, at first said it had not been able to verify a case of self-starting with that model. But after publication, it said it did have confirmation of a 2008 incident in which a KitchenAid KHMS155LSS microwave turned on by itself and caused damage to the oven cavity.

Whirlpool says, "We have determined that it was possible for certain keypads in this specific model microwave to develop unintended electrical paths, which could cause the keypad to beep, or very rarely, start the microwave oven."

The company says it will offer a free repair to consumers who contact it at 800-422-1230. (Webster said he had some initial difficulty getting through.) Whirlpool told us that it will evaluate each consumer's case for an appropriate remedy.



Keep your phone safe

How to protect yourself from wireless threats

LIKE MANY of the more than 100 million Americans who use a smart phone for everything from paying for lattes at Starbucks to presenting digital boarding passes at airports to tracking investments, Scott Segal loved using apps on his iPhone.

But then his phone was suddenly unable to connect to its 3G network, and it took two new phones and ultimately the removal of some apps to reconnect. Segal, a Palm Springs, Calif., native and former defense-projects coordinator for a government contractor, became far more wary about apps. "I no longer downloaded them thinking they were risk-free," he says. "They might gain access to things I might

not want to give up."

Chances are you're among the roughly half of American adults who use an iPhone, Android-based phone, or other type of smart phone. And you probably entrust it with sensitive information: your circle of friends, your whereabouts from day to day, or passwords to your accounts.

But when you take your phone into your confidence, so to speak, you're also taking in a host of parties that make all of those wonderful mobile services possible, including app developers, your wireless carrier and phone manufacturer, mobile advertisers, and the maker of your phone's operating system.

All of that convenience can be risky.

DO THIS Use a strong pass code. A four-digit code is better than nothing, but a longer code is tougher to crack.

"You need to be aware that when you use [a smart phone] you're making sacrifices," Segal says. "I just assume we no longer have the luxury of privacy."

Just how private and secure is your smart phone? If it's lost or stolen, how easily could someone read the sensitive information it holds? How well do app developers and wireless providers protect that data? And what can you do to protect yourself?

To find out, we spoke with privacy experts, wireless carriers, phone makers, government agencies, and white-hat hackers—the good guys who test the security of phones and apps. We also reviewed government reports. And we asked 1,656 smart-phone users about their experiences as part of a nationally representative survey of 3,036 adult online users, who also told us about their use of home computers. We then projected those data to estimate national totals.

We found that a smart phone can be quite secure if you take a few basic precautions. And so far most users haven't suffered serious losses because of their phone. But we also uncovered causes for concern, including these:

Many users don't secure their phones. Almost 40 percent in our survey didn't take even minimal security measures, such as using a screen lock, backing up data, or installing an app to locate a missing phone or remotely erase data from it.

Malicious software is a real threat. Last year, 5.6 million smart-phone users experienced undesired behavior on their phones such as the sending of unauthorized text messages or the accessing of accounts without their permission, our survey projects. According to experts,

BY THE NUMBERS

7.1 million

That's the number of consumers who had a smart phone that was irreparably damaged, lost, or stolen and not recovered last year, we project.

those are symptoms indicating the presence of malicious software.

The rate of such symptoms on smart phones, 5 percent, was far lower than the 31 percent rate of viruses and other malware infecting home computers that our survey also found. But it's still troubling because it shows how common such incidents have become in just the six years since the iPhone popularized touch-screen smart phones.

Just as worrisome is the toll those incidents took on what we project were 1.2 million smart-phone users—charges for calls

Many people don't take basic precautions, our survey shows.

or texts they never made, harassment by someone following their activities, identity theft, or the loss of all of their photos.

In light of those findings, we recommend that users who use a lot of apps consider installing a security app. We'll test such products in the near future.

Users' whereabouts can be exposed. All smart phones have a feature called location tracking that can be used by apps to deliver services tailored to the phone's current location. But such information can also be used in ways that can expose you to harm.

For example, 1 percent of smart-phone users told us that they or a person in their household had been harassed or harmed after someone used such location tracking to pinpoint their phone. Seven percent said they had wanted to turn that feature off but didn't know how.

New phones usually have the feature turned off. But once you use an app that requires your location, such as mapping, tracking stays on until you turn it off.

Apps are often too intrusive. Before many apps can be installed or used, they ask for permission to perform various actions, such as reading your contact list. But not all of the permissions that apps request are essential to the app. In 2011, researchers from the University of California, Berkeley, studied hundreds of Android apps and found

that often because of developer confusion, roughly one in three asked for more privileges than needed.

Intrusive apps are still common, and that intrusiveness bothers users. Roughly 48 million users had stopped installing an app in the previous year because it requested too many privileges, our survey suggests. More than 8 million had done so more than five times.

It's hard to control your privacy. Small screens and lengthy privacy notices (when notices even exist) can make it tough to find out what personal information app developers and advertisers collect, how they use and secure it, and how you can control access to it.

Millions of children need protection. At least 5 million preteens use their own smart phones, we project. In doing so, they may unwittingly disclose personal information or risk their safety (see "Young Phone Users Need Protection," on page 23).

Home computers are at risk, too. Software infections and scams still ravage home computers. Our survey suggests that 3.4 million users had to replace a computer last year because of infections.

Mobility has its risks

It's not surprising that threats that have plagued computers for years have begun affecting smart phones. After all, the



DISILLUSIONED Scott Segal no longer considers the apps on his smart phone risk-free.

smart phone is fast replacing the venerable home computer for many daily activities, such as e-mailing, shopping, and social networking. In taking the place of a computer, though, a smart phone exposes its owner to many risks that a home computer rarely does.

Smart phones' small size makes them easy to steal or lose. Their nomadic life also exposes them to a variety of mishaps.

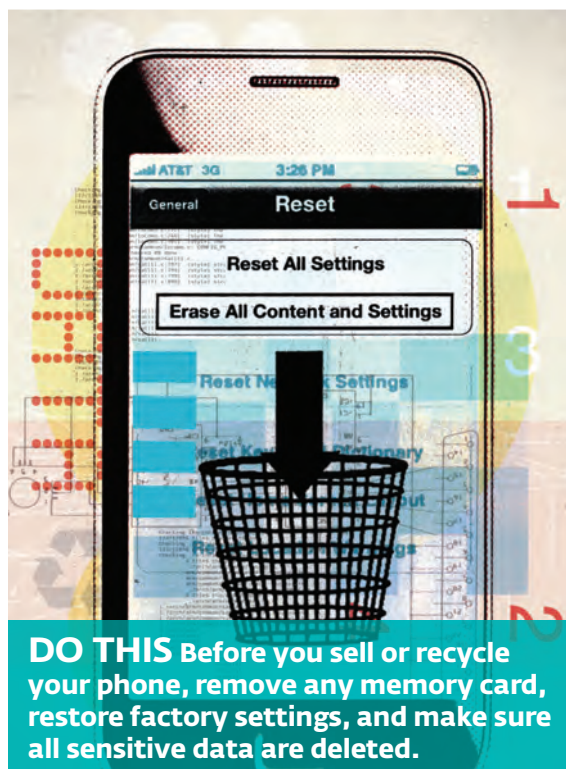
A smart phone can contain a lot of information you'd rather keep private, such as text messages, contact lists, phone numbers, and appointments. You may consider your smart-phone photos irreplaceable. Yet almost 70 percent of smart-phone users hadn't backed up their data, including photos and contacts.

Smart phones routinely accept texts and photos sent from other phones or the Internet. Texts can contain addresses of malicious websites. Others may add unexpected charges to your phone bill.

Reports estimate that there are more than a million apps. Many are from brands you've never heard of. Most are free or inexpensive, so you might be tempted to install them without much thought, potentially granting them access to a lot of personal information on your phone.

Securing a phone with a strong password is inconvenient. Its small screen makes it cumbersome to type the combination of at least six letters, numbers, and symbols that stronger security requires. Some phones offer password alternatives, such as face or gesture recognition, but only 8 percent of the smart-phone owners surveyed used them.

A variety of parties, including Apple or Google, may be able to collect



DO THIS Before you sell or recycle your phone, remove any memory card, restore factory settings, and make sure all sensitive data are deleted.

enough information, such as your phone's location and unique ID, to track your activities. In this report, we focus on Apple's iPhone and Google's Android platforms, because a small fraction of users use another, such as BlackBerry or Windows. Information on those platforms' privacy and security practices are at us.blackberry.com and windowsphone.com.

How to protect yourself

Securing your personal data doesn't need to take long if you're careful.

Use a strong pass code. A four-digit one, which almost one in four users told us that they used, is better than nothing. But on Android phones and iPhones earlier than iPhone 5, a thief using the right software can crack such a code in 20 minutes, according to Charlie Miller, security engineer for Twitter and author of books on hacking and mobile security. A longer code that includes letters and symbols is far stronger.

Install apps cautiously. Malicious apps may not lurk around every corner, but they're out there and can be tricky to spot. For example, our survey suggests that 1.6 million users had been fooled into installing what seemed to be a well-known brand-name app but was actually a malicious imposter. iPhone users have one source for apps, Apple's store, where there have been few reports of malicious apps.

If you use an Android-based phone, you

can get apps from numerous sources. Stick with the two most reputable, Google Play and Amazon's Appstore. Three percent of Android users told us they had installed apps from another source last year.

If you're an Android user, you can minimize exposing your privacy by refusing to install an app if it asks to use phone features you don't want it to use. A flashlight app, for example, shouldn't ask to access your location, like the Brightest Flashlight Free app did.

Almost half of the Android users we sur-

veyed had stopped installing an app after it asked for privileges to which they objected. iPhone apps don't ask for such privileges until after they're installed, at which time you should exercise caution.

Be alert to insecure Wi-Fi. Thirteen million users engaged in financial transactions at hot spots in hotels, retail stores, and airports last year, our survey suggests.

Before using any app to do business at a hot spot, check its privacy policy to see whether it secures wireless transmission of such data. Otherwise, you may disclose an account number or password to a nearby criminal.

But privacy policies aren't always clear about security practices. Privacy experts say consumers need something easier to understand.

"Most consumers don't realize when they're transmitting info over

an open Wi-Fi network that it can be intercepted," says David Jacobs, consumer protection counsel at the Electronic Privacy Information Center, an advocacy group in Washington, D.C. "Better notice would inform them of that fact—something other than the general discussion that filters down to them from license agreements and privacy policies."

Built-in e-mail apps don't usually secure such messages, Miller says, so using them at hot spots also has risks. You can guard the data your phone transmits with a free



DO THIS If you use an insecure Wi-Fi hot spot, make sure apps that handle sensitive data use secure transmission. Or use a virtual private network.

Which type of smart-phone user are you?

► The minimalist

You use your phone mainly to make calls, send texts, or exchange e-mail. A pass code just gets in the way, so you don't use one.

How to protect yourself:

- Install few or no apps. Fifteen percent of smart-phone owners told us they didn't install any in the previous year. In fact, the median number installed was just eight.
- If you plan to download apps, choose them from a reputable brand and make sure their user reviews include no credible complaints about security or privacy concerns.
- If an app uses sensitive personal information, make sure the app can't be used without entering a password.
- Don't use your phone to store sensitive data such as PINs or passwords for your accounts, or your Social Security number.

► The mobile enthusiast

You're willing to try unfamiliar apps to get more out of your phone.

How to protect yourself:

- Set up a screen lock. Unless you have an iPhone 5, use a pass code that includes more than four letters, numbers, and symbols. Or use a finger slide pattern or facial recognition if your phone offers them.
- If you use a lot of apps, consider adding a security app. For an Android phone, look for an app that can remotely locate, lock, or erase everything on the phone. For an iPhone, use Apple's free Find My iPhone.
- Back up important data. Last year, more than 7 million users' smart phones were irreparably damaged, lost, or stolen and not recovered, and 4.4 million lost their phone's photos for various reasons, our survey suggests.

► The daredevil

You want your smart phone to do anything it can. So you'll modify an iPhone's operating system (called jailbreaking) to install apps not from the Apple App store. (About 2.5 million iPhone users installed those last year, we project.) Or you modify an Android phone's operating system (called rooting) for better performance, for new features, or to remove needless pre-installed software.

Jailbreaking and rooting are legal for phones but not for tablets. But it makes your phone more vulnerable to hackers. And Apple warns that jailbreaking an iPhone will void your warranty.

How to protect yourself:

- Don't store private data on the phone.
- Be prepared to lose whatever you do store on it, including your photos and videos.

virtual private network (VPN) or one such as Astrill (astrill.com), which costs \$70 per year. We'll test such services in the near future.

Don't fall for text spam. It appears to be on the rise. The Federal Trade Commission recently charged 29 scammers with collectively sending more than 180 million texts containing links to websites enticing users to enter personal information.

Links in text spam can lead to websites that download malicious software or to the sort of bogus sites that e-mail scammers have used for years. Your safest bet is to not click on unfamiliar links within a text. You can also go to your wireless carrier's website and ask to have texts sent over the Internet blocked. Or install an app that can block them.

Turn off location tracking. Disable it except when you need it, such as for driving directions or finding a nearby store. Roughly one in three we surveyed had turned it off at times during the previous year. If your phone's operating system lets you selectively turn it off for individual apps, use that feature for greater control.

Clean out your old phone. Before you sell or recycle your phone, remove any memory card, restore its factory settings, and make sure all sensitive data are deleted.

Security isn't only your job

Smart-phone security is a chain no stronger than its weakest link. Many companies that make mobile services possible could take more steps toward smart-phone security, experts say.

Platform makers. Whose platform is more secure, Apple's (iPhone) or Google's (Android)? "The iPhone is more secure, but in a lot of ways Android is also secure," Miller says.

The Apple App Store's security relies on the fact that Apple reviews all apps for risks to the user before it approves them for its App Store. Once there, they can't be changed without Apple's approval.

Still, he says, the Apple environment isn't perfect. Last year, after determining that there was a vulnerability in the iPhone's operating system, he says he was able to sneak potentially malicious software into the App Store. At the same time, he adds, "I haven't seen a lot of malware" in the Apple App Store. Apple declined to comment on Miller's actions.

Google has its own system for keeping malicious apps out of its Google Play store. It uses its own service, called Bouncer, to spot problems. But that doesn't mean an

app developer can't slip changes, even potentially harmful ones, past the Bouncer, as Trustwave security researcher Nicholas Percoco demonstrated at the Black Hat USA 2012 security conference. Google wouldn't comment on Percoco's finding. Amazon told us that it too screens apps for safety before permitting them into its app store.

One difference between the platforms that could put users of Android-based

Smart-phone security is a chain no stronger than its weakest link.

phones at risk is that Android phones can use apps from a variety of sources that may not be as secure as Google Play. A new version of Android (4.2) tries to minimize that risk by letting you have Google screen any new app, regardless of its source, just before you download it.

Android differs from the iPhone platform in yet another way. Before you install Android apps, they ask your permission if they are to perform actions that might affect your privacy. iPhone apps don't re-

quire such prior permission. But the latest version of the iPhone's operating system, iOS 6, has privacy settings that let you monitor and control which apps can perform various actions.

What they need to do. Right now, consumers often have to pore over lengthy privacy notices to find out whether and how an app protects their personal data. In its February report on mobile privacy, the FTC recommended that platform makers urge app developers to make their privacy policies easier to access and understand.

Phone manufacturers. A maker of Android and Windows phones has fallen down on the job. HTC, a major phone manufacturer, recently settled charges by the FTC that it had left more than 18 million of its phones and tablets potentially vulnerable to malicious apps that could have tracked the user's location, sent text messages, or recorded conversations.

Recently, international security company MWR InfoSecurity announced that it had found that 16 percent of the software installed by phone manufacturers on a variety of Android phones could expose users to serious security risks, such as access to the phone's data.

Phone makers and carriers deliver operating-system updates, which often

Meanwhile, on your home computer ...

Consumers' home PCs were no safer than they were last year, our survey found. Heavy spam afflicted 43 percent of those surveyed. We've used our survey to extrapolate the number of consumers affected nationally.

Trouble on Facebook

9.8 million

adult Facebook users had their account used by an unauthorized person; had their reputation harmed; or were harassed, threatened, or defrauded. Also, several hundred thousand minors were bullied on Facebook, and at least 3.7 million preteenagers violated its terms of service by actively using the social network.

Stealthy Facebook users

28.5 million

Facebook users altered personal information in their profile to protect their privacy. Birth dates and names were the biggest fakes.

Malware problems

58.2 million

online users experienced a malware infection that affected their computer's features or performance. The bill to fix the damages: \$3.9 billion.

'Phishing' schemes

9.2 million

consumers were tricked into submitting personal data to criminal websites that appear to be well-known companies' sites. Hundreds of thousands lost money from a bank account as a result. Among the big-name companies whose names successful phishers used most often: Bank of America, Chase, Facebook, PayPal, and Visa.

include remedies for known security flaws. But Android phone users can wait a long time for such updates after Google releases them, according to Kenneth R. van Wyk, principal consultant at KRvW Associates, a security consulting company in Alexandria, Va. That can leave users exposed to threats.

Owners of older Android phones may not even receive updates because their phones are incompatible with them. For example, our survey suggests that 3.4 million people own Android phones that are three or more years old. Not receiving updates would leave owners exposed to security flaws that have been fixed on newer phones.

That's less of a problem with iPhones. Apple updates its phones for more than a couple of years, according to Miller, the Twitter security engineer.

What they need to do. The FTC should fully develop security recommendations for phone makers. But every manufacturer could put in place the kind of program the agency recently required of HTC. That includes building security into phone design and testing, addressing risks in phones and their data transmission, regular testing or monitoring of safeguards, and reviewing and responding to weaknesses reported by outside researchers.

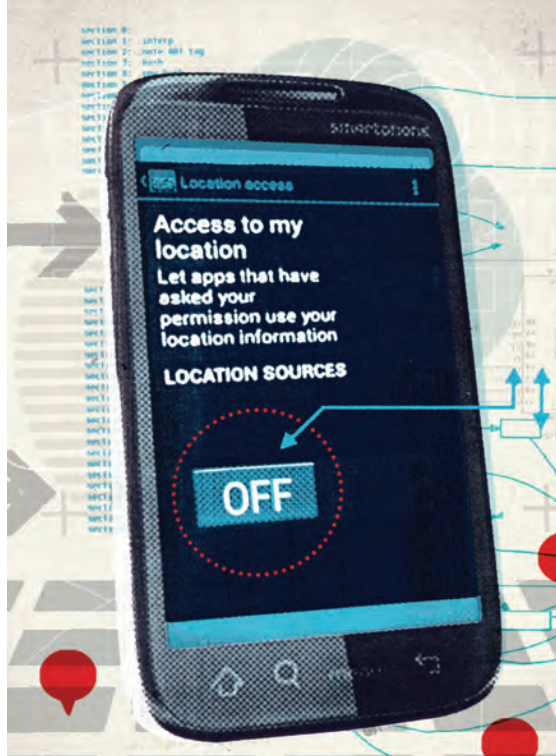
App developers. Experts told us that developers vary in how thoroughly they build security into their apps. Van Wyk, the consultant, says he has found apps on both platforms storing sensitive data inside a phone without adequately protecting it. And some Android apps use stronger protections than others, says Prashant Verma, senior security consultant at Paladion, an international security company based in India.

If not all app developers are securing data as well as they might, it's not for lack

of good security tools. Apple, for example, offers a data-protection feature that a developer can use to beef up the security of sensitive data. And Google gives developers the ability to encrypt data files to protect them if a device is lost or stolen. But developers have discretion over whether to use such tools.

And there's often no obvious way for a consumer to tell if an app developer went the extra mile to secure a user's personal information or if it cut corners. That's because app privacy policies often provide minimal information about how personal data are secured.

What they need to do. Developers could also take a cue from the HTC settlement with the FTC by putting a strong security program in place. All current versions of Consumer Reports' mobile apps securely store and transmit any personal information that they may use, such as account name and password.



DO THIS Turn off location tracking except when you really need it, such as for driving directions or maps.

Toward greater privacy

Smart-phone users need clear policies and controls, privacy advocates say. But those can be hard to fit on a phone's screen. Even among computer users, 45 percent of people we surveyed hadn't read any website privacy policy in the previous year.

The FTC's February report also suggested that platforms offer visual tools that consumers could use to control privacy preferences and that app developers get consumers' consent just before collecting sensitive data.

Meanwhile, officials and industry and consumer groups, including Consumers Union, are meeting to negotiate privacy guidelines for mobile apps.

Location tracking is another major concern. Seventy-six percent of those we surveyed said they strongly agreed that companies that collect data about consumers' locations should be legally required to get

their permission first.

"Getting permission from a user can be as easy as a one-time pop-up from a company that asks if they can collect and share your info and a short list of who they're going to share it with," says Sen. Al Franken, D-Minn., who plans to reintroduce the Location Privacy Protection Act, which incorporates such permission.

In February 2012, Amazon, Apple, Google, Hewlett-Packard, Microsoft, and Research in Motion (maker of BlackBerry) agreed, at the behest of California Attorney General Kamala Harris, to ensure that apps in their app stores that collect personal data conspicuously post a privacy policy.

Four months later, the Future of Privacy Forum, a think tank based in Washington, D.C., studied popular apps from Amazon's Kindle Appstore, Apple's App Store, and Google Play. It found that 61 percent of the apps studied had a privacy policy.

Harris recently recommended that developers offer clear policies and collect only personal data that the app needs to function. She also recommended that advertisers get users' consent to deliver ads from outside an app.

That may not sway users like Scott Segal. "Consumers should not just assume we all continue to enjoy the privacy we enjoyed before the rise of digital technology," he says, "and especially app-laden smart phones."

▮ ABOUT OUR SURVEY

The figures we cite on the experiences of Internet users, including those with smart phones, are drawn from our annual State of the Net survey conducted in January by the Consumer Reports National Research Center. The findings are nationally representative of U.S. adult Internet users. Participants were 3,036 adults with a home

Internet connection who were part of an online panel convened by GfK, a leading research company. From those respondents, we made national projections. The margin of error for the full sample was plus or minus 1.8 percent, 2.4 percent for the subset of 1,656 smart-phone users, both at a 95 percent confidence level.

▶ Young phone users need protection

When Andrew Hemp bought his 10- and 12-year-old daughters iPhones for emergencies two years ago, he didn't expect a \$200 phone bill. "It was quite a shock," says Hemp, a senior executive at a shipping company from El Sobrante, Calif. "She ended up purchasing a large number of apps," he says of the younger daughter. "She'd download one, use it once or twice, then get another one."

After he explained the situation to Apple, the company reversed the charges. He says there should be better warnings to children who download apps—something like, "This is going to cost your parents \$5. Do you want to proceed?"

Privacy and safety concerns

According to projections from our national survey, roughly 5 million preteens own smart phones. The Federal Trade Commission has been questioning app developers' data-sharing practices concerning children.

The agency has adopted new amendments to the Children's Online Privacy Protection Act (COPPA). Changes include adding location information, photographs, and videos to the list of data that require parental notice and consent before they can be collected; extending the rule to cover mobile-device IDs, an identifier that could make the user more recognizable; and closing a loophole that let third parties collect data from children without their parents' knowledge. The Do Not Track Kids Act, a bipartisan bill, is expected soon and would prohibit companies from collecting personal and location information from anyone under 13 without parental consent, as well as other protections.

The FTC also recently settled a suit against a social network, Path, which included charges that it let children create journals that could include photos and their location and collected personal information.

The FTC's actions followed its study last year of 400 apps for children, which found possible COPPA violations. As a result, the agency said it was launching multiple investigations. The study found that parents weren't always shown privacy notices or information about interactive features that might allow a child to participate in social media, view ads they lack the maturity to assess, or make in-app purchases.

Security software

Best ways to protect your computer

A GOOD SECURITY SUITE is as essential to your computer as a keyboard. Most new computers typically come loaded with an anti-malware program, usually a trial version. When the trial runs out, you either pay up or you're on your own.

Our latest Ratings show that you don't need to pay up. Free software offers very good protection from online threats, we found, and should adequately protect all but the most at-risk Internet users from malware such as viruses and spyware and from other online threats, such as phishing scams.

Our tests, which included 1,000 visits to malicious websites, were performed in conjunction with International Consumer Research & Testing, an association of independent nonprofit organizations.

Pair a free program such as Avast, which we recommend, with other free tools to build a "suite" that should keep you safe. Make sure Windows Firewall is on to help block malware and keep malicious websites from grabbing data off your computer. But if you remotely access files on your computer when you're away from home, you'll need stronger protection and should consider a pay suite such as G Data.

Windows also includes limited parental controls that let you block any game or program and place time limits on computer use. For more robust controls, such as protection when your child is browsing, consider a full for-pay software suite.

If you use a Web-based e-mail service such as Gmail, Yahoo, or AOL, you already have strong protection from spam. But if you use a stand-alone e-mail program, such as Windows Mail or Outlook, and it allows too much spam to get through, add a free anti-spam program such as Spamfighter, at spamfighter.com.

Widely used browsers, such as Chrome, Firefox, Internet Explorer, and Safari, warn you if you go to a risky site used in phishing scams or one that might host malware. Most of the software we tested

Free programs offer very good protection from online threats.

offers additional, if spotty, protection from such sites. Even the best missed 20 percent of them; the worst missed 85 percent or more.

Apple computers suffer far fewer attacks than PCs. Their built-in security features offer sufficient protection. But Mac users may want to install a security program, such as Avira Free Mac Security (which we didn't test) at avira.com, to avoid passing along Windows malware.

Before installing free software on a Windows PC, uninstall any trial programs. Some free programs have persistent pop-ups that try to sell you the pay version, though that was more of an annoyance with Avira than with the others.

Pay suites offer more features and are simple to use, with a single control panel; they require just one download and installation, and periodic upgrading of only one program. Watch for automatic renewals, especially if you don't plan to use the program again. Anti-malware programs let you know with pop-up messages when your subscription is about to end. Several automatically renew, although you can opt out of that service.

▶ DID YOU KNOW?

How to spot a virus

In our recent national survey, we asked people whose computers had been infected by malware how they verify such problems:

- Sixty-two percent relied on antivirus software to notify them.
- Seventeen percent verified it themselves.
- Fifteen percent relied on someone else.
- Five percent used a retailer's tech-support service.



Overview

Running a firewall and a free anti-malware program should provide sufficient protection. Add anti-spam software if your e-mail program is letting through too many unwanted messages.

☒ **Recommended** These high-performing products are all fine choices.

FREE PROTECTION (FINE FOR MOST)

A1 Avast

A2 Avira

A1 was the most effective in this category at detecting malware. It's easy to use and updates itself quickly to detect new malware. When it's paired with a firewall such as Windows', it provides decent protection. **A2** offered good, basic protection and excelled at taking the right course of action when a threat was detected. Both free programs occasionally display messages promoting their pay suites, which we also tested.

FOR EXTRA PROTECTION AND FEATURES

B1 G Data

B2 ESET

B3 F-Secure

B4 Kaspersky

B5 Avira

All were very good at most tasks. **B1** was the least costly of the pay packages and excellent at blocking online threats. **B2** protected well and had the least impact on the computer's performance. **B3** is relatively inexpensive and had the most effective firewall. **B4** was excellent at protecting against online threats but less effective at finding viruses already installed. **B5** was a good performer but less effective at detecting fraudulent websites, so use it with another anti-phishing tool enabled in your browser. **B3**, **B4**, and **B5** provide a way to recover from malware that prevents Windows from loading.

Ratings Security software

All tested products In performance order, within types.

☒ Recommended

● Excellent
● Very good
○ Good
○ Fair
● Poor

Recommendation	Rank	Product	Price	Overall score	Anti-malware	Features
			Download Renewal fee/yr.		Threat blocking Ease of use Malware scan Resource drain Firewall Updating Anti-phishing Response to threats	Informative help Clear firewall warnings Spam filter Parental filter Startup repair
				0 100 P F I G V G E		

A FREE ANTI-MALWARE PROGRAMS Protect against viruses, spyware, and other malicious software.

<input checked="" type="checkbox"/>	1	Avast Free Antivirus	NA	NA	58	● ● ○ ○ ○ ○ ● ○ ○	1	●
<input checked="" type="checkbox"/>	2	Avira Free Antivirus	NA	NA	55	○ ● ● ● ● ○ ● ● ●	1	●
	3	AVG AntiVirus Free 2013	NA	NA	49	● ○ ○ ○ ○ ● ● ● ●	1	●
	4	Microsoft Security Essentials	NA	NA	43	● ○ ● ● ● ○ ● ● ●	1	

B PAY SECURITY SUITES Protect against malware and spam, and include a firewall. ②

<input checked="" type="checkbox"/>	1	G Data Internet Security 2013	\$45	\$45	67	● ● ● ○ ○ ○ ● ○ ●	●	● ●
<input checked="" type="checkbox"/>	2	ESET Smart Security 6	80	60	66	● ● ● ○ ○ ● ○ ○ ●	● ● ● ●	
<input checked="" type="checkbox"/>	3	F-Secure Internet Security 2013	60	46	64	● ○ ○ ○ ● ● ○ ● ●	● ● ● ●	
<input checked="" type="checkbox"/>	4	Kaspersky Internet Security 2013	80	80	63	● ● ● ○ ○ ● ● ● ●	● ● ● ●	
<input checked="" type="checkbox"/>	5	Avira Internet Security 2013	90	90	62	○ ● ● ○ ○ ○ ● ● ●	● ● ● ●	
	6	Avast Internet Security 7	70	70	57	● ● ○ ○ ○ ● ○ ● ●	●	●
	7	Bitdefender Internet Security 2013	70	70	56	● ○ ○ ○ ● ● ○ ● ●	● ● ● ●	
	8	Trend Micro Titanium Internet Security 2013	80	72	54	● ○ ○ ○ ○ ● ○ ● ●		● ● ●
	9	BullGuard Internet Security 2013	60	60	53	● ○ ○ ○ ○ ● ● ● ●	● ● ● ●	
	10	McAfee Internet Security 2013	80	80	53	● ● ○ ○ ● ○ ○ ● ●	● ●	
	11	AVG Internet Security 2013	70	60	51	● ● ○ ○ ● ○ ● ● ●	● ● ● ●	
	12	Norton Internet Security 2013	80	80	50	● ○ ○ ● ● ● ○ ● ●	● ● ● ●	
	13	ZoneAlarm Internet Security Suite 2013	80	80	45	● ● ● ○ ○ ● ● ● ●		● ● ● ●
	14	Panda Internet Security 2013	70	56	43	● ○ ○ ○ ● ● ● ○ ●	● ● ● ●	

① Windows Firewall used. ② All suites provide a unified user interface and automatic updating of all components, are compatible with Windows XP or higher, and have a time-limited trial version available.

Guide to the Ratings

Price is for software download, usable on three PCs, for the first year; box version, if available, is about \$10 more. **Renewal fee/yr.** is the approximate cost to maintain updates after the first year; promotional prices may be lower. **Threat blocking** shows how well the product protected against live exploits from websites and local drives. **Ease of use** covers installation, changing settings, and interacting with the software. **Malware scan** measures effectiveness scanning the PC for malware, both online and offline. **Resource drain** measures use of memory and tendency to slow computer operation during a scan. **Firewall** shows how well the software and its firewall stopped rogue connections to and from the Internet. **Updating** shows how quickly the product was able to protect against new malware. **Anti-phishing** measures the ability to block websites known to host malware or steal personal information. **Response to threats** indicates appropriateness of the suggested or default response to a detected threat. **Informative help** provides clear, useful instructions on a particular setting or activity in the software. **Clear warnings** are easy to interpret and guide you to the correct action when triggered. **Spam filter** removes unwanted mail from the inbox of your e-mail program. **Parental filter** is optional website filtering to protect children. **Startup repair** provides a way to recover when malware stops your PC from booting.



Save on auto insurance

Cut your premium—but not your coverage

DOU**G BERNHARD** has stuck with one auto insurer for more than two decades, as have almost four in 10 CONSUMER REPORTS subscribers. But don't assume that his is a case of blind loyalty. Rather, Bernhard's insurer, USAA, earned his business by consistently delivering the best-quality service and lowest premiums year after year. "USAA rates are very good," says Bernhard, of Roswell, Ga. "But I will always shop and compare. After all, no one looks out for my welfare like I do."

That kind of mutual allegiance in this competitive business might explain why auto insurance is one of the most highly rated consumer services we've evaluated over the past 35 years. That's based on our recent survey of more than 29,000 subscribers who filed an auto-loss claim between

January 2009 and June 2012.

"I got as close to red-carpet service as could be expected under the circumstances, and my premiums barely increased after a costly at-fault accident," says Cory Fryling, a survey respondent from Ontario, Calif., about highly rated Amica.

An impressive 87 percent of claim filers in our survey were highly satisfied with how their insurer handled and settled their claims. But in a separate survey of online subscribers, just 71 percent of people who had vehicle damage from Superstorm Sandy were highly satisfied with the handling of their claims. Most respondents (68 percent) said their annual premiums—\$1,200 on average—were about the same as or lower than they were in the previous year. Even among those who saw their rates rise unrelated to a claim, usually by \$50 to \$199, just

23 percent thought the hike was excessive.

Some auto-insurance cost factors are beyond your control, but you can still economize. Here are ways to get the best value while maintaining the coverage you need:

1 Pick a top-rated insurer

Insurers reward longtime customers, especially those who haven't filed claims, with loyalty discounts, which might help explain why 38 percent of our subscribers have stuck with the same carrier for more than 20 years. But premiums are only one part of the equation.

We rate insurers based on our subscribers' overall satisfaction with how their claims were handled. Among the highest-rated insurance groups are Amica, New Jersey Manufacturers Insurance, and USAA, which had overall satisfaction scores of 93 or higher. Some of the rated companies offer insurance only in certain regions or have eligibility rules for policyholders, such as USAA, which is open to people who served in the military and their families.

"USAA was helpful, fast, and thorough," says Anna Wilson of Cedar Park, Texas. "When my vehicle was totaled, they provided my check very quickly and arranged a convenient place for me to drop my car off."

Continued on next page

2 Avoid high-loss vehicles

Data-driven insurers track repair costs in intricate detail, so they know which vehicles cost more to repair (the luxury Lexus IS F, for example, as well as the lower-priced Mitsubishi Lancer) and which ones rack up more bodily-injury damages (the Hyundai Accent and Mitsubishi Eclipse).

So when shopping for various makes and models, ask your car dealer to show you each one's rating in the "Relative Collision Insurance Cost Information Booklet," produced annually by the National Highway Traffic Safety Administration.

The Highway Loss Data Institute also posts data on each make and model's relative loss costs for liability (bodily injury, personal injury, medical payments, and property damage) as well as for collision and comprehensive losses at iihs.org/research/hldi/composite. Or ask your insurer for premium quotes for the models under consideration.

3 Look for discounts

Almost 90 percent of our respondents saved with a good-driver discount, and 85 percent got breaks for having safety features on their vehicle, such as an antilock brake system and side air bags. Anti-theft devices provided savings for 69 percent of those surveyed.

Multipolicy discounts might apply if you buy your auto, home, and other insurance

from the same company. James Hannah of McKinney, Texas, says he gets a "significant" 20 percent bundling discount from Ameriprise, which cuts his \$1,060 annual premium down to \$847. Three of our higher-rated auto insurers—Amica, Auto-Owners, and USAA—were also rated highly in our Ratings of home insurers (see "Protect Your Home," September 2012).

If you have a child on your policy, check out the good-student discount available to drivers who maintain a certain grade-point average. And if your child is off at college without a car, be sure to look into a "student away" discount. Paul Cahill of Centerville, Ohio, saved \$2,000 a year when his daughter attended a college 1,000 miles from home. But Cahill's son didn't qualify for the discount because he went to a school only 80 miles from home and his insurer required a minimum of 100 miles.



4 Don't settle for poor-quality repairs

You can avoid getting ripped off on repairs, which can happen if your insurer pushes you to use a shop that cuts corners. Most claim filers in our survey—94 percent—selected their own repair shop or went along with a shop recommended by their insurer without undue pressure, and 90 percent of them were highly satisfied with their repairs. But 7 percent felt pressured to get their car repaired at an insurer-recommended shop, and only 67 percent of them were highly satisfied.

Dave Matlin of Pittsburgh took his deer-damaged car to a State Farm Select Service shop, where he says his repair was repeatedly delayed and his phone calls and e-mail messages were ignored. When he finally received his vehicle two months after taking it in for a promised three-week repair, Matlin found new damage, which had to be repaired by another shop. He repeatedly complained to the shop, then got action by complaining to State Farm.

Only 6 percent of our survey respondents had a problem with the quality of their repairs, and of that group, only a third complained about it to their insurer. But airing their gripes was a good decision because 67 percent of complainers ultimately got what they had expected.

5 Shop for a better rate

Even if you're satisfied with your premium, it still pays to shop. "You won't know how good a deal it is unless you get a quote," says Laura Adams, senior analyst at InsuranceQuotes.com, an online shopping site that helps consumers get quotes from agents for all of the biggest insurers.

When we asked about premiums, 88 percent of survey respondents who checked said they found that their current insurer's premiums were about as low as or

Is a 'black box' in your future?

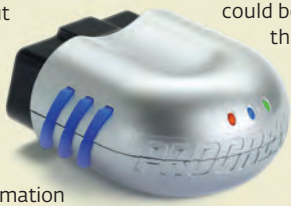
Insurers have long depended on crude predictors of risk for large groups to figure out what to charge individual consumers. Technology and data mining now allow more fine-tuning, but not without some controversy.

Progressive Insurance offers consumers an electronic "Snapshot" device, which for six months tracks the hours driven and how often you brake suddenly. Progressive advertises savings of "up to 30 percent," but it told us the average savings are more like 10 to 15 percent. Phil Schatz of Jacksonville, Fla., used Snapshot to lop almost \$230 off his \$910 annual premium, a 25 percent discount. But Philip Simon of Vienna, Va., told us the device netted him only \$42, or just 2 percent off his \$2,400 annual premium. Some of our readers say they worry that the information

could be used against them in a legal case, and a Progressive spokesman confirmed that the data could be subpoenaed.

Companies are also using a kind of statistical black box to set premiums, first with credit scores and now with other data. But the Consumer Federation of America determined in a study that major insurers' use of occupation and education to determine premiums discriminates against low- and moderate-income drivers. In a comparison of 109 rate quotes from five big insurers in a dozen cities, the CFA found that an exemplary driver with no accidents or moving violations could be charged higher premiums than a similar driver with one at-fault accident because of those differences.

BIG BROTHER Progressive's Snapshot tracks driving habits to help set rates.



lower than what the competition wanted to charge. But 12 percent found a better deal. George Schutz of Central, Ill., had been paying American Family \$2,416 per year to cover four vehicles. But when he checked prices, he found that Hanover would charge only \$1,498 for exactly the same coverage. "I switched in a heartbeat," Schutz says.

Other shopping services to consider include Answer Financial, Insure.com, and NetQuote. You usually won't get an immediate quote online, but you will get e-mail messages from agents who want your business. Alternatively, consider buying from an independent agent, who will periodically check a number of carriers' rates at no extra charge.

6 Raise your deductible The vast majority of our respondents had deductibles of less than \$500 on their collision and comprehensive coverage; many can save by raising it. Boosting your deductible from \$250 to \$1,000 could reduce your premium by 20 percent because you're shouldering more of the cost of a loss—if you have one.

That can be a money saver if you're a good driver, because you always have to pay your premiums, whereas you might never need to pay a deductible as long as you don't have an at-fault accident. Of course, you should have emergency funds in the bank to cover the deductible if you end up having to pay one.

7 Report when you're driving less The more you drive, the more chance of an accident and the more insurers will charge you to cover that exposure. The reverse is also true. If you drive less, as 41 percent of our respondents did, let your insurer know so that you can pay lower premiums.

When Boyd Matzen of South St. Paul, Minn., retired and started to work part-time, his annual mileage dropped from 15,000 to less than 4,500. His auto premium was reduced by about 10 percent.

8 Don't buy state minimums It can be penny-wise and pound-foolish for you to buy only the minimum coverage required by law. For example, the reimbursement cost for a car-crash injury that doesn't leave the victim incapacitated averages \$22,000, according to the National Safety Council. Yet the mini-

mum legally required bodily injury liability coverage is only about \$10,000 to \$20,000 in 16 states, including California, Florida, and New Jersey.

No state's bodily injury minimum covers the much higher average cost of more-severe incapacitating injuries—\$69,000.

The highest state minimum for bodily injury is only \$50,000, in Alaska and Maine.

So if you're in an accident that results in a severe injury, you could be on the hook for the rest. The standard injury coverage from many car insurers is \$100,000, a level we've long recommended.

Ratings Auto insurers

In order of reader score.

Insurer*	Reader score	Survey results			
		Promptness of response	Claims problems	Dollar damage estimates	Satisfaction with premiums
	0				
	100				
USAA Group <i>usaa.com</i>	94	●	●	●	●
NJM Insurance Group (New Jersey Manufacturers Insurance Company) <i>njm.com</i>	93	●	●	●	●
Amica Mutual Insurance Company <i>amica.com</i>	93	●	●	●	●
Auto-Owners Insurance Group of Companies <i>auto-owners.com</i>	91	●	●	●	○
Erie Insurance Group <i>erieinsurance.com</i>	90	●	○	●	●
Farm Bureau Property & Casualty Insurance Company <i>fbfs.com</i>	89	●	○	●	○
State Farm Mutual Automobile Insurance Company <i>statefarm.com</i>	89	●	○	●	○
American Family Insurance Group <i>amfam.com</i>	88	●	○	●	○
Automobile Club of Southern California <i>aaa-calif.com</i>	88	●	○	●	●
AAA Northern California, Nevada & Utah Insurance Exchange <i>aaa4insurance.com</i>	88	●	○	●	○
State Auto Insurance Companies <i>www.stateauto.com</i>	88	●	○	●	○
The Hartford Financial Services Group <i>thehartford.com</i>	88	●	○	●	○
Auto Club Insurance Association <i>aaa.com</i>	87	●	○	●	○
Hanover Insurance Group <i>hanover.com</i>	87	●	○	●	●
Berkshire Hathaway (Geico) <i>geico.com</i>	87	●	○	●	○
Travelers <i>travelers.com</i>	86	●	○	●	○
Nationwide Mutual Insurance Company <i>nationwide.com</i>	86	●	○	●	●
Ameriprise Financial (IDS) <i>ameriprise.com</i>	86	●	●	●	●
Liberty Mutual Insurance <i>libertymutual.com</i>	86	●	○	●	○
Mercury General Corporation <i>mercuryinsurance.com</i>	86	●	●	●	○
MetLife <i>metlife.com</i>	86	●	○	●	○
Allstate Insurance Company <i>allstate.com</i>	85	●	○	●	●
The Progressive Group of Insurance Companies <i>progressive.com</i>	85	●	○	●	○
Farmers Insurance Group of Companies <i>farmers.com</i>	84	●	○	●	○
Mapfre USA (formerly Commerce) <i>mapfreinsurance.com</i>	82	●	○	○	●

*Some companies offer insurance only in specific regions.

Guide to the Ratings

Based on a survey of 102,207 CONSUMER REPORTS readers by the Consumer Reports National Research Center. **Reader score**, **promptness of response**, **claims problems**, and **dollar damage estimates** are based on the experiences of 29,116 respondents who filed claims that were settled or rejected from January 2009 to June 2012. Ratings for **satisfaction with premiums** are based on the experiences of all respondents. Results might not reflect the experiences of the U.S. population as a whole. **Reader score** reflects overall satisfaction with claims handling. A score of 100 would mean all readers were completely satisfied; 80, very satisfied, on average; 60, fairly well satisfied. Differences of fewer than 5 points aren't meaningful. Ratings for **promptness of response**, **dollar damage estimates**, and **premium satisfaction** were each based on mean scores for each company on six-point satisfaction scales, ranging from "completely satisfied" to "completely dissatisfied." The Rating for claims problems is a relative measure that indicates how each insurance group fared in comparison with the median of all groups for that factor. Ratings are for insurance groups, which are sometimes made up of several affiliated companies. Ratings for companies within groups may vary, but group ratings represent the sum of experiences of CONSUMER REPORTS subscribers insured by the affiliated companies.

The New Rules of Car Buying

Save thousands of dollars on a new car. Negotiating is the secret.

Negotiating for a new car can strike fear into the heart of even the most rugged individuals. It's not surprising. Car dealers and manufacturers have arranged pricing in a manner designed to daze and confuse the consumer.

However, simply by understanding the tricks of the trade, consumers can save hundreds, even thousands of dollars on their new cars.

That's why *Consumer Reports* has created *The New Car Price Service*. This service gives you everything you need to walk into a showroom with confidence – and walk out with a great deal.

The New Car Price Service breaks down the negotiating process into a few simple rules:

RULE #1: BREAK THE DEALER'S CODE.

When you walk into a car showroom, you'll see two prices:

1. The *Manufacturer's Suggested Retail Price (MSRP)*
2. The *Dealer Invoice Price*. Naturally, most people think it is wise to negotiate down from the *MSRP* to as close to the *Dealer Invoice*

Price as you can get. And that's exactly what the dealer wants you to think – but it won't get you the best deal. The reason:

Both the *MSRP* and the *Dealer Invoice Price* are "artificial" numbers created by the car manufacturer and dealer to serve their negotiating purposes.

Neither price should be used by you as a starting point in your negotiation.

What you need is the real price the dealer paid for the car.

If you know the real price, you'll have true negotiating power because you'll know how much



New-car buyers who use *The New Car Price Service* save an average of \$1,661.

"wiggle" room you really have. You should bargain up from this real price.

Naturally, dealers don't display this real price in the showroom. To obtain the real price for any car you're interested in buying, call *The New Car Price Service* at 1-800-279-5658.

RULE #2: FIND OUT ABOUT UNADVERTISED DEALER INCENTIVES AND HOLDBACKS.

These are tools the dealer uses to negotiate to his favor. You should know about them so you can use them to negotiate to your favor.

Take "dealer holdbacks," for example. A holdback is a percentage that is repaid to the dealer by the manufacturer. The holdback is designed to supplement the dealer's cash flow (code words for sales commissions) by artificially elevating the dealership's paper cost. If you know the dealer's holdback, you can use that information as a negotiating tool to lower your price. To learn how to use these powerful negotiating tools, call *The New Car Price Service*: 1-800-279-5658.

RULE #3: PLAY THE GAME.

The Consumer Reports New Car Price Service takes you step by step through the negotiating game with professional new-car buying advice. And when it comes to options and safety equipment, you'll know what's really worth your money versus "dealer extras" that do nothing except cost you "extra" money.

For example: The dealership's "business manager" may try to sell you undercoating, rustproofing, fabric protection, extended warranty, windshield etching, etc. But don't bite. Such add-ons are generally worthless or overpriced.

RULE #4: IF YOU HAVE A TRADE IN.

Don't even mention it until you've agreed on the price of your new car. But when it's time to talk trade-in, you should know what your trade-in is worth whether you sell it privately or to a dealership. You can get that information from us too and it costs just an additional \$12.

THE NEW CAR PRICE SERVICE

The New Car Price Service costs \$14 and can save you thousands of dollars on a new car. The service gives you a complete report on the car you are interested in purchasing. The report is an organized plan and advice on playing the game. While the average savings is \$1,661, the potential savings is far greater, depending on the model of car. For example, the potential savings on the Jeep Liberty is \$4,908. The phone call is free: 1-800-279-5658

To Save Money Fast:

Please have the following ready when you call:

- ✓ Year, make and model of the new car, minivan, van, SUV, or pickup truck you want to buy. (Example: 2011 Honda Accord)
- ✓ Year, make, model, and trim line of your trade-in, if you have one. (Example: 2004 Honda Odyssey)
- ✓ Your credit card (Visa, MasterCard, Discover or American Express)

Ask about
our newest feature
"Build & Buy"

call toll-free

1-800-279-5658

ConsumerReports®
New Car Price Service

Best buys of summer



Inside the section



The great outdoors

Six ways to help accident-proof your yard. **page 30**



Gas grills

Great grills and gadgets for your next backyard party. **page 32**



Paints & stains

The brands that resist staining, cracking, and mold the longest. **page 36**



Sporting goods

The best and worst stores for balls, bats, fishing gear, and more. **page 39**



The Hot List

The best air conditioners, blenders, dehumidifiers, and mowers. **page 42**



Plus Cars for the open road

Make your daily drive more fun with these convertibles. **page 55**

**WARMING ZONE**

Fire pits are nice on cool days and nights, but they need attention.

The great outdoors

Six ways to help accident-proof your yard

SPENDING TIME outdoors with friends and family is one of the joys of summer. Most Americans play it fairly safe when it comes to entertaining outdoors, according to a recent nationally representative

CONSUMER REPORTS survey of homeowners with yards. But we did spot several danger zones where attitudes are more lax. So before your next backyard barbecue, pool party, or fireside fete, use these tips to do a safety check.



Check the deck

Close to nature and within easy access of the kitchen, decks are ideal open-air gathering spaces. More than half of people in our survey have one. But 40 million decks in the U.S. are more than 20 years old, according to the North American Deck and Railing Association. So it's no wonder the structures, together with porches, cause an average of 45,000 injuries each year.

What you can do

- Look for loose connections at the ledger board, which attaches the deck to your home's main structure.
- Inspect the deck for rotten boards, popped nails, loose fasteners, and wobbly or rotten steps.
- Make sure railings are secure and at least 3 feet tall with no more than 4 inches between rails.
- When in doubt, have your deck inspected by a structural engineer.



◀ Contain outdoor fires

Whether it's a built-in fire pit or a freestanding chiminea, an outdoor fireplace brings campsite magic to your backyard. Almost a third of our survey respondents said they own one. But this backyard amenity, along with patio heaters, caused an estimated 2,900 injuries in 2011, based on emergency-room-treated injuries reported to the Consumer Product Safety Commission. That's almost triple the number of similar injuries in 2006.

What you can do

- Keep a fire extinguisher or hose nearby, and make sure embers are fully extinguished by either burying them in dirt or dousing them with water.
- As with grills, establish a 3-foot safety zone for children around fire pits.



▶ Provide protection

The best outdoor spaces offer a combination of sun and shade. More than 85 percent of respondents provided sun protection in the form of umbrellas, awnings, or trees. Also be on the lookout for dead or sick tree branches that could fall on people in your yard.

What you can do

- Make sunscreen available for guests. In our tests, Equate (Walmart) Ultra Protection SPF 50 offered very good protection against UVA and UVB radiation.
- Remove dead or broken tree branches, which are vulnerable to various insects and diseases, as soon as possible to prevent the disease from spreading and the branches from falling down.



▶ Play safely

We've come a long way from the days of lawn darts, which were banned in 1988. But almost a quarter of survey respondents who were hurt outdoors in their yards said the cause was sporting or gaming equipment. Pool owners take note: Almost 300 children younger than 5 drown each year in pools, and thousands more are injured.

What you can do

- To prevent run-ins, always put badminton nets, croquet wickets, and other equipment away when not in use.
- Think twice about installing a trampoline. They sent about 83,000 victims, often children, to emergency rooms in 2011.
- Many municipalities require a barrier around pools that's 4 or 5 feet high. For more information on pool safety, see our iPad edition or go to poolsafely.gov.



▶ Guard the grill

Almost 90 percent of our survey respondents said they barbecue at home, making it the most popular outdoor activity. But with increased grilling comes a greater frequency of unintended blazes. In fact, fire departments now respond to approximately 8,600 home fires each year involving grills, barbecues, and hibachis.

What you can do

- Position the grill at least 10 feet from your house and other structures and establish a 3-foot safety zone for kids.
- Place a nonflammable pad under the grill to protect the deck.
- Regularly check gas valves, hoses, and connections for leaks and breaks.
- Stand back when lighting the grill, and light the gas quickly to prevent a flare-up.
- Don't leave a grill that's in use unattended.

▶ Light the way

The rise in outdoor fireplaces has resulted in more nighttime entertaining and an extension of the season into darker months of the year. Prevent trips and falls by ensuring adequate landscape lighting on paths and stairways. Exterior lighting can also deter burglars, especially if it's equipped with motion sensors.

What you can do

- The best landscape fixtures have a shield or reflector that prevents glare while casting light directly onto a pathway.
- Consider LED fixtures, which continue to come down in price. Many have the warm light of incandescent bulbs, and their low-voltage wiring is easier to install because it needs to be buried only 6 inches, not the 18 inches required with line voltage.
- If you want to use decorative tiki torches, make sure they're securely anchored and set back from combustibles, including low-hanging branches.



▶ BY THE NUMBERS

Here's what Americans say they do to keep their yards safe:

69%

Drain kiddie pools after each use.

68%

Always remove gaming or sporting equipment when not in use.

63%

Always make sure charcoals are fully extinguished.

58%

Always light steps and paths adequately.

32%

Equip pool with an emergency flotation device.

20%

Use a non-flammable pad under a grill at all times.

Source: Consumer Reports National Research Center. Based on percentage of homeowners with these types of equipment in their yards.

Gas grills

Our tests find 13 sizzlers

WE'VE ADDED NEW brands, new tests, and lots of lower-priced models to our Ratings of more than 100 gas grills. But it's an old name with a new "spirit" that's top rated. Weber revamped its Spirit line by changing the placement of its burners, moving them closer to the grates to improve performance. It also moved the control knobs to the front of the grill to free up prep space on its side shelf. The results are impressive.

The top-rated Weber Spirit SP-320, \$600, and Weber Spirit E-220, \$450, preheated quickly and evenly, and were superb at high- and low-temperature evenness. And they were fine at indirect cooking, a delicious way to slow-cook ribs, roasts, and whole poultry by placing the food next to the fire, not over it. The medium-sized SP-320 has three burners; the E-220 has two.

Walmart racks up more grill sales than

All the right stuff

An electronic igniter is usually easier and more reliable than a rotary or push-button starter.

A fuel gauge shows you how much propane remains and helps prevent surprises.

Rounded edges are safer than sharp ones, especially if kids are afoot. To test a grill's sturdiness, nudge it in several places, and press down on the side shelf to see whether it will support a heavy pot.



Weber Spirit SP-320

Gadgets for grilling fish, veggies, and more

Veggie cookers



► **Master Forge stainless-steel topper 267447, \$17 (Lowe's)**

Best for evenly cooking large quantities of cut vegetables or fish fillets and chicken cutlets thanks to its large surface area. Small surface holes keep food from falling through.

But the pan has only three low sides, so food can fall off as you're turning it. Food also stuck to the pan a bit, even after using cooking spray.



► **Master Forge grill wok 25375, \$17 (Lowe's)**

Best for keeping smaller batches of vegetables or small fish such as shrimp or scallops from going overboard due to its deeper sides and bowl-like shape. The holes are small enough to keep food from escaping while allowing juices to drain.

But a large amount of food might cook unevenly because it's piled up.



► **Kenmore grilling wok and tong 15273, \$15**

Best for sautéing vegetables or fragile or small items on a grill. The folding handle is convenient.

But cooking was uneven because of the small surface area of the wok. The handle is thin and uncomfortable to use, and the tongs, which are flimsy, permanently scratched the wok the first time we used them together.

Fish cooker



► **Brinkmann flexible grilling basket 812-9012, \$16 (Home Depot)**

Best for cooking large quantities of thin fish fillets such as sole or tilapia, or vegetables cut flat such as eggplant or zucchini, because of its 24x16-inch surface area. And you can flip over lots of food with one turn.

But whatever you cook has to be exactly the same thickness or the thinner items may fall out when the basket is flipped over. Its large size made it awkward to flip, open to remove food, and wash.

Tip: Materials matter. Stainless-steel gadgets can be cleaned with steel wool or stainless cleaner. Porcelain-coated tools are more fragile, so use a plastic scrubber.

Burner warranties of 10 years or longer are a plus since burners are the most frequently replaced part.

Stainless steel or coated cast-iron grates tend to be better for searing and maintaining even grilling temps, though stainless is more durable.

most retailers, according to the Hearth, Patio, & Barbecue Association, a trade group, and it has beefed up its grill offerings. So we shopped there, too, buying grills from Back Yard Grill, Better Homes and Gardens, Black & Decker, and Char-Broil. The best performer was the Char-Broil Tru-Infrared Performance, \$260. The mid-sized grill was excellent on high heat and impressive in other tests, but lacked some convenience features. Most others from Walmart also heated quickly but were mediocre performers or not as well constructed as models that made our recommended list. Here's what else we found after months of testing:

You talked, we listened. Seventy-five percent of online subscribers preheat their grill for 5 to 10 minutes, according to a recent survey by the Consumer Reports National Research Center. So we added a test to check surface temperature and how evenly heat was distributed across the grill after 10 minutes of preheating. Grills scoring Very Good or better got hotter faster. Those scoring Good may take longer to cook food.

Focus on features. More grills have convenient features such as electronic igniters, fuel gauges, illuminated control

knobs for nighttime grilling, and fold-down shelves for food prep. Grand Hall promises that its patented grates tame flames, and we found that its Grand Tech, a \$500 large grill, was less likely to flare up. Among mid-sized models, the Kenmore 23681 has six burners, three storage cabinets, and a large folding table for food prep. But its high- and low-heat performance weren't as appealing as its \$600 price. The Kenmore 23666, \$500, was better and has an oven, but a frozen lasagna took more than 2 hours to cook, and cake and cookies we made needed attention or they would have had burned bottoms.

Buying online? Beware. Like you, we often buy products online. Usually it's a cinch. Not so with the Grand Hall Odeon 32-inch Crossray that we got from *bbqgalore.com*. During testing, the front right burner on the \$1,700 grill shut off repeatedly. So we called the online retailer, who told us to call the manufacturer. The warranty, which isn't on the manufacturer's website, is on the last page of the owner's manual at the online retailer, and says there's a shipping and handling charge for replacement parts. A month after we first contacted Grand Hall, the part finally arrived—without any installation instructions.

The cooking surface should be big enough to fit enough food to feed your usual crowd. Larger grills usually have bigger cooking areas, but not always. We don't count warming racks and searing burners in our measurements, but manufacturers might.

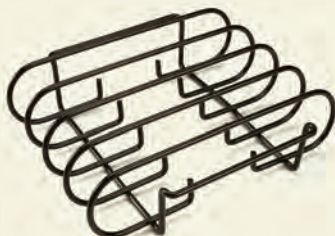
Rib cookers



▶ Weber original rib and roast holder, \$20

Best for cooking full racks of ribs upright on large grills. A roast we cooked, turning it once, came out just as well as one cooked on a grill spit. The holder is versatile and easy to clean. **But** we couldn't close our medium-sized grill's lid when we placed this big holder front-to-back to hold full racks of ribs because it stuck out.

Tip: Remove ribs from racks with tongs and place them on a serving dish, because the racks get very hot.



▶ Brinkmann rib rack, \$18 (Home Depot)

Best for cooking several half- or full-sized racks of ribs. Cross-bars on the bottom keep ribs from falling through. The rack was also easy to clean. **But** its porcelain coating may be damaged by aggressive cleaning, so use a plastic scrubber.

Pizza stones

▶ Weber Style pizza stone 6430, \$50

Best for cooking one large pizza or several personal-sized ones. A handle allows you to easily move the stone from the grill or rotate it during cooking to adapt to hotter spots. A holder elevates the stone off the surface, so it's not as likely to crack if placed on a wet surface, for example.

But the metal holder, like the stone, will be burning hot when moved from the grill, so use oven mitts and caution.



▶ Brinkmann 13-inch pizza stone, \$13 (Home Depot)

Best for cooking pizza or flatbread with a crispy crust. **But** like other pizza stones, it's fragile and can break if exposed to extreme temperature changes (from the grill to a cold or wet counter, for example). It's hard to move because it gets blazing hot and has no handles. And like other pizza stones, this one was difficult to get completely clean once we started using it.

Tip: It's hard to control the cooking temperature with pizza stones, so you have to watch the pizza carefully.





2 Vermont Castings

Overview

You don't always get what you pay for; the most expensive grills we tested weren't the best. Some budget grills were impressive, with electronic igniters and long warranties for burners.

✓ **CR Best Buy** These blend value and performance, and are recommended.

✓ **Recommended** These offer top performance and often specific strengths.

BEST MEDIUM-SIZED GRILLS

- 1 **Weber** \$600
- 2 **Vermont Castings** \$1,200
- 3 **Weber** \$950

All have electronic igniters and premium grates. **1** excelled at most tests and was easy to use. **2** and **3** are made in the U.S. and boast lots of stainless steel but **2** lacks a side burner.

OTHER FINE CHOICES

- 4 **Char-Broil** \$400 **CR Best Buy**
- 15 **Huntington** \$370
- 17 **Kenmore** \$500

These grills have electronic igniters, premium grates, and side burners for cooking kettles of corn. **4** delivers sizzling performance yet costs hundreds less than the other top-rated medium grills and has a lifetime burner warranty. **15** and **17** didn't make the recommended list but came close. **17**'s folding side table offers lots of workspace.

BUDGET BUYS

- 6 **Brinkmann** \$260 **CR Best Buy**
- 11 **Char-Broil** \$260
- 18 **Kenmore** \$300

These delivered impressive performance but had trade-offs. **6** has a rotary igniter and a shorter burner warranty, while **11** lacks some convenience features. **18** was among the fastest to preheat evenly of all the medium-sized grills, but indirect cooking was so-so.

Ratings Grills

All tested models In performance order, within types.

	Brand & model	Price	Overall score	Test results					Features			
Recommended	Rank	Similar models, in small type, are comparable to tested model.		Preheat performance	Low-temperature evenness	High-temperature evenness	Indirect cooking	Convenience	Electronic igniter	Infrared cooking	Stainless-steel grates	Coated cast-iron grates
			0 100	P F G V E								

MEDIUM-SIZED MODELS These have 370- to 520-inch cooking area, room for 16 to 30 burgers.

✓	1	Weber Spirit SP-320 46700401 SP-310 46500401 [1]	\$ 600	83	●	●	●	●	●	●	●	●
✓	2	Vermont Castings Signature Series VCS300SSP [1] VCS323SSP [1] [2]	1,200	80	●	●	●	●	○	●	●	●
✓	3	Weber Genesis S-330 S-310 [1]	950	79	●	●	●	○	●	●	●	●
✓	4	Char-Broil Red 463250511 [1] Gourmet Tru-Infrared 463251713 [1] (Home Depot)	400	78	●	●	●	●	○	●	main	●
✓	5	Weber Spirit E-320 46710001 E-310 46510001 [1]	820	77	●	●	●	●	●	●	●	●
✓	6	Brinkmann 810-2545-C 810-2546-C (Walmart)	260	76	●	●	●	●	○	●	●	●
✓	7	Weber Genesis E-330 E-310, E-320 [1]	800	75	●	●	●	○	●	●	●	●
	8	Kenmore 16142	350	74	●	●	●	●	○	●	●	●
	9	Char-Broil Red 463250811 [1] Gourmet Tru-Infrared 463251913 (Home Depot) [1]	500	74	○	●	●	●	○	●	main	●
	10	Blue Ember BE50070-584	800	72	●	●	●	●	○	●	rotiss.	●
	11	Char-Broil Tru-Infrared Performance Series 463434313 (Walmart)	260	72	●	●	●	●	○	●	main	●
	12	Jenn-Air 720-0336C (BJs) [2]	650	71	●	●	●	●	○	●	rotiss., side	●
	13	Vermont Castings Signature Series VCS423SSP [1]	1,700	71	●	●	●	●	○	●	side, rotiss.	●
	14	Char-Broil Tru-Infrared Performance 463434413 (Walmart)	290	70	●	●	●	○	○	●	●	●
	15	Huntington 696264C (Lowe's)	370	69	●	●	●	●	○	●	●	●
	16	Kenmore 03982838 03982844 (Kmart)	300	68	●	●	●	●	○	●	●	●
	17	Kenmore 23683 [1]	500	67	●	●	●	●	○	●	●	●
	18	Kenmore 23680 [1]	300	67	●	●	●	○	○	●	●	●
	19	Char-Broil Classic 463211512 463211513 (Home Depot)	200	67	●	●	●	●	○	●	●	●
	20	KitchenAid 720-0745A 720-0745B (Lowe's)	800	67	●	●	●	●	○	●	rotiss., side	●
	21	Jenn-Air 720-0720	1,200	66	●	●	●	●	○	●	rotiss., side	●
	22	Weber Summit S-470 E-470 [1]	1,900	66	●	●	○	●	○	●	rotiss.	●
	23	Grill Master 720-0697	200	66	●	●	●	●	○	●	●	●
	24	Blue Ember FGF50069-584 (BJs)	400	66	○	●	○	●	●	●	rotiss.	●
	25	Brinkmann Zone 5-in-1 810-2390-S (Home Depot) [1]	330	65	○	○	●	●	○	●	●	●
	26	Kenmore 16154 [1] [2]	400	65	●	●	●	●	○	●	●	●
	27	Master Forge 1010037 (Lowe's)	380	64	●	●	●	○	○	●	●	●








Guide to the Ratings

Overall score is based on performance, convenience, and features. **Preheat** indicates how hot the grill's surface is, and how quickly and evenly it reached that temperature after 10 minutes of preheating. **Low-temperature** and **high-temperature evenness** is measured across the grill's surface using thermocouples. **Indirect cooking** indicates how well the grill will slow-cook food when only some of the burners are on and the food isn't placed directly over the flames. **Convenience** is an evaluation of construction, materials, and features. **Price** is approximate retail. Not every model with a rotisserie burner comes with a rotisserie motor and spit.

HOW TO BUY A GAS GRILL

Use your smart phone to download the RedLaser or ShopSavvy app and scan the code for the video.































										 Excellent			
										 Very good			
										 Good			
										 Fair			
										 Poor			
										 CR Best Buy			
										 Recommended			
		Brand & model	Price	Overall score	Test results				Features				
Recommended	Rank			<div><div></div><div>0100</div><div>P F E G V G E</div></div>	Preheat performance	Low-temperature evenness	High-temperature evenness	Indirect cooking	Convenience	Electronic igniter	Infrared cooking	Stainless-steel grates	Coated cast-iron grates

● Excellent
 ● Very good
 ○ Good
 ● Fair
 ● Poor

✓ CR Best Buy
 ✓ Recommended

MEDIUM-SIZED continued

28	Char-Broil Commercial Quantum 463247311  commercial Tru-Infrared 463247512 (Lowe's) 	\$ 500	<div><div>62</div></div>	<div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div>	main	
29	Brinkmann Ranger 810-4220-S (Home Depot)	130	<div><div>62</div></div>	<div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div>		
30	Char-Broil Tru-Infrared Commercial 463241313 (Lowe's) 	400	<div><div>62</div></div>	<div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div>	main	
31	Kenmore 23666 	500	<div><div>62</div></div>	<div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div>	rotiss.	
32	Broil King Signet 90 986784 LP	700	<div><div>60</div></div>	<div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div>		
33	Black & Decker JXG4103A (Walmart)	200	<div><div>60</div></div>	<div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div>		
34	Ducane Affinity 3100 	300	<div><div>60</div></div>	<div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div>		
35	Saber R50CC0312 R50CC0612, R50SC0012 	1,000	<div><div>60</div></div>	<div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div>	main	
36	Kenmore Elite 23674  	650	<div><div>60</div></div>	<div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div>		
37	Dyna-Glo DGP480CSP-D	400	<div><div>59</div></div>	<div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div>		
38	Ultra Chef U05RBPSS3 U0405RBPSS3  	700	<div><div>58</div></div>	<div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div>	rotiss.	
39	Brinkmann 810-2410-SB 810-2411-SB (Home Depot)	200	<div><div>58</div></div>	<div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div>		
40	Napoleon Prestige P500RSIB Pro 500RB, 500RSIB 	1,500	<div><div>58</div></div>	<div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div>	rotiss.	
41	Napoleon Prestige Pro450RB Pro450RSIB  	1,200	<div><div>57</div></div>	<div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div>	side	
42	Char-Broil Tru-Infrared 500 IR 463269411  	650	<div><div>57</div></div>	<div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div>	main	
43	Kenmore 23681 	600	<div><div>56</div></div>	<div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div>		
44	Brinkmann Elite 810-3660-SB (Home Depot)	300	<div><div>56</div></div>	<div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div>		
45	Brinkmann Vertex Sear 810-3885-S (Home Depot) 	600	<div><div>56</div></div>	<div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div>		
46	Ducane Affinity 4100 Series 	500	<div><div>56</div></div>	<div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div>		
47	Black & Decker JXG4604A (Walmart)	300	<div><div>54</div></div>	<div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div>		
48	Char-Broil Tru-Infrared Commercial 463247412 (Lowe's) 	370	<div><div>54</div></div>	<div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div>	main	
49	Master Forge GD4825 2 (Lowe's) 	270	<div><div>53</div></div>	<div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div>		
50	Napoleon Prestige P500 P500RB  	1,100	<div><div>51</div></div>	<div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div>		
51	Huntington Rebel 602054 	200	<div><div>51</div></div>	<div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div>		
52	Char-Griller Grillin Pro 3001 (Lowe's)	170	<div><div>51</div></div>	<div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div>		
53	Better Homes and Gardens BH13-101-099-01	260	<div><div>50</div></div>	<div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div>		
54	Black & Decker JXF5105A (Walmart)	360	<div><div>50</div></div>	<div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div>	side searing	
55	STOK Quattro SGP4330  	350	<div><div>46</div></div>	<div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div>		
56	Urban Islands 4-Burner by Bull (Costco) 	1,500	<div><div>42</div></div>	<div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div>		
57	Broilmaster Super Premium Series P3SX-PCB1 Premium Series P3-XF, P3-X  	1,450	<div><div>40</div></div>	<div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div>	main	
58	Better Homes and Gardens BG1755B (Walmart)	360	<div><div>37</div></div>	<div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div>	searing, rotiss.	
59	Member's Mark 720-0778C (Sam's Club)	400	<div><div>32</div></div>	<div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div>	side searing	
60	Char-Broil 463440109	200	<div><div>25</div></div>	<div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div>		

■ Discontinued, but similar model is available. Price is for similar model. □ Burners have a warranty for 10 years or more.
 ② Lacks a side burner.



6 Brinkmann



17 Kenmore

Best small & large grills

■ Weber Spirit E-220 46310001 \$450

This small grill aced our tests for even cooking and preheated quickly. It has an electronic igniter and a long burner warranty.

■ KitchenAid 720-0709C \$800

(Sam's Club)
Quick to preheat and capable once it did, this large grill has an electronic igniter, a side burner, and a long burner warranty.

■ Grand Hall Grand Tech \$500

Impressive evenness on high and low, this large grill was less likely to flare up when cooking fatty foods. But consider buying it at a store rather than online, because Grand Hall was very slow to ship us a replacement part for another one of its grills, which was broken when it arrived.

■ Master Forge 3218LTN \$600

(Lowe's)
The large grill offers fine performance, mostly stainless-steel styling, a folding prep table, and lots of storage at a relatively low price.

COOKOUT COMBOS

Check out our iPad app for which types of beer go best with your grilled burgers, steaks, chicken, fish, veggies, and more.

LABOR SAVER

Top finishes like Behr help make this job less frequent.

Paints & stains

Behr stands out among 23 top picks

IT'S OFFICIAL: Home Depot's Behr brand tops two of the three major types of exterior paints and stains. In fact, our results show that there's little reason to go anywhere but that store if you want a finish that stands the test of time.

Flat and satin paints are what most people use on siding. Resistance to cracking, fading, and mildew after the equivalent of nine years outside helped put Behr's Premium Plus Ultra Flat, \$37 per gallon, and Satin, \$39, at the top. Both are among eight picks that save time and money by letting you skip the usual prime coat.

Archrival Lowe's Valspar Duramax, \$40, won among the semigloss paints used on trim. But when it comes to value, it can't beat Behr's Premium Plus Semi-Gloss, \$29—one of six CR Best Buy paints and

stains sold only at Home Depot.

Finishes that emit less pollution are also news this year. Thirteen top paints and stains meet even the toughest regional California limits for volatile organic compounds (VOCs), which are linked to smog and respiratory illnesses. But our tough tests, which subject paints to sun, rain, and snow, also found some big-name losers and, for stains, a wide gap between the best and the also-rans. The details:

Kilz gets KO'd. True to its mildew-fighting promises, Kilz Casual Colors Satin and Semi-Gloss paints kept the slimy stuff away in our accelerated tests. But both are at the bottom of our Ratings because they didn't resist cracking and dirt very well.

Pricey stains get pummeled. Solid stains last longest overall. Behr's Solid

Color Waterproofing, a CR Best Buy at \$29 per gallon, handily beat Benjamin Moore's \$46 Arborcoat Deck & Siding Solid—and left similarly pricey stains from Sherwin-Williams and Sikkens on the mat.

"Clear" winners are scarce. Semi-transparent stains show some of the grain at the expense of longevity. Behr's Premium Semi-Transparent Weatherproofing is the only one that held up on a deck after the equivalent of two years. And Thompson's WaterSeal Advanced Waterproofing is the only colorless finish that looked presentable after a year.

How to choose

Don't buy solely by brand; even Home Depot's Behr finishes varied depending on the line. Frequent reformulations for performance and emissions also mean the paint or stain you loved last time may not perform as well this time around. Here's what else to remember before you buy:

Know what your pro is using. Painters often bargain with stores for discounts on specific brands, so the finish they push may not be the one that lasts longest. Whether the paint will be brushed or sprayed, insist on one that did well in our tests. The contract should include the brand and line to be used and the number of coats; we recommend two plus a prime coat for paints that require primer.

Look for deals. Check for sales and promos, especially during holiday weekends. And save by buying 5-gallon containers.

Play it safe. If your home was built before 1978, painters you hire must be certified by the Environmental Protection Agency and trained in lead-safe practices. And if your deck is older than 2004 and its finish is flaking, keep in mind that the wood is probably chromated copper arsenate (CCA), which contains arsenic. A trained pro is better equipped to safely refinish the deck and properly clean up.

Hot colors for selling—or staying put

Green may be all the rage on the runway. But when it comes to the outside of your house, think blue if you're selling, more neutral colors if you're staying awhile. Here are some specifics from experts we interviewed:

House colors that sell. "We're seeing more demand for mid-tone blues, between colonial and royal, combined with a return to tan for the trim work," says Debbie Zimmer of the Paint Quality Institute, which is part of Dow Chemical. "We also see more monochromatic

schemes, taking one color but mixing different shades and tints for the trim." But deep tones need extra thought: "You don't want people to feel they're walking into a black hole."

Door colors that make a difference.

Trendy options span the spectrum between lemon yellow and mid-orange (think Gorilla Glue packaging) to somber colors like burgundy and olive. But garish hues like school-bus yellow or fire-engine red are a no-no, Zimmer adds.

Shades that endure. Whites, grays, and tans are safe choices for lasting appeal. "White with black trim remains a favorite almost everywhere," says Dominic Cardone of the National Association of Realtors. For inland communities, think earth tones, he says; for shore towns, it's pastels.



PHOTOS: (TOP) NIKERISLO/GETTY IMAGES; (BOTTOM) GETTY IMAGES

Ratings Exterior paints

All tested products In performance order, within types.

- Excellent
- Very good
- Good
- Fair
- Poor
- ✓ CR Best Buy
- ✓ Recommended



B2 Behr

C1 Valspar

D1 Behr

Overview

All of our picks meet federal VOC limits of 250 grams per liter for paint and 350 to 550 grams for stain. Several meet stricter regional California limits of 50 grams per liter for paint, 100 grams for stain. We focus below on those with special strengths, added value, or both.

- ✓ **CR Best Buy** These perform best for the price and are all recommended.
- ✓ **Recommended** These are all fine choices and include CR Best Buys.

TOP FLAT AND SATIN PAINTS (SIDING)

- A1** Behr \$37
- A6** Behr \$26 **CR Best Buy**
- B1** Behr \$39
- B2** Behr \$28 **CR Best Buy**
- B5** Glidden \$25 **CR Best Buy**
- B6** Glidden \$27 **CR Best Buy**

Among flats, choose **A1** for its top protection and built-in primer, **A6** for its dirt resistance and lower price. For satins, **B1** blends performance, a built-in primer, and low VOCs. **B2** does nearly as well but requires a prime coat. Also consider **B5** and **B6** if mildew isn't a problem.

FOR WINDOWS AND OTHER TRIM

- C1** Valspar \$40
- C4** Behr \$29 **CR Best Buy**
- C5** Glidden \$28 **CR Best Buy**

All are semigloss. **C1** offers low VOCs and a built-in primer. **C4** adds dirt and mildew resistance but requires priming. Pick **C5** if you aren't buying at Lowe's or Home Depot.

TOP STAINS (DECK, FENCE, SIDING)

- D1** Behr \$29 **CR Best Buy**
- E1** Behr \$37
- F1** Thompson's \$23

D1 proved to be most durable for solid stains, **E1** for semitransparent finishes. Choose **F1** if you want to see all the grain and are willing to refinish much more often.

DID YOU KNOW?

Spraying costs less

You can cut costs 50 percent or more by having a pro spray-paint your house. While spraying requires more time to cover shrubs and windows, it's about three times faster overall. To get the best price, get a regular estimate first—then ask about spray-painting.

Rec.	Rank	Product	Price	Overall score	Appearance	Resists
			Per gallon	0 100	After 3 yr. After 6 yr. After 9 yr.	Cracking Color change Dirt Mildew Claimed VOCs
				P F G V G E		

A FLAT May hide minor surface imperfections.

✓	1	Behr Premium Plus Ultra Flat (Home Depot) ¹	\$37	80	● ● ●	● ● ●
✓	2	California Paints Fres-Coat Velvet Flat	44	79	● ● ●	● ● ●
✓	3	Sherwin-Williams Duration Flat ¹	67	79	● ● ●	● ● ●
✓	4	Glidden Spred Flat	25	77	● ● ●	● ● ●
✓	5	Glidden Premium Flat (Home Depot)	22	77	● ● ●	● ● ●
✓	6	Behr Premium Plus Flat (Home Depot) ²	26	76	● ● ●	● ● ●
	7	Valspar Ultra Flat (Lowe's)	28	75	● ● ●	● ● ●
	8	Valspar Duramax Flat (Lowe's) ¹	37	74	● ● ●	● ● ●
	9	Sherwin-Williams Resilience Flat	59	70	● ● ●	● ● ●

B SATIN Adds slight gloss to finish.

✓	1	Behr Premium Plus Ultra Satin Enamel (Home Depot) ¹	39	82	● ● ●	● ● ●
✓	2	Behr Premium Plus Satin Enamel (Home Depot) ²	28	79	● ● ●	● ● ●
✓	3	Benjamin Moore Aura Low Lustre ¹ ²	68	79	● ● ●	● ● ●
✓	4	Sherwin-Williams Duration Satin ¹	68	78	● ● ●	● ● ●
✓	5	Glidden Premium Satin (Home Depot)	25	75	● ● ●	● ● ●
✓	6	Glidden Spred Satin	27	75	● ● ●	● ● ●
	7	Valspar Duramax Satin (Lowe's) ¹	39	72	● ● ●	● ● ●
	8	California Paints Fres-Coat Satin Gloss	48	72	● ● ●	● ● ●
	9	Sears WeatherBeater Ultra Satin	44	71	● ● ●	● ● ●
	10	Sherwin-Williams Resilience Satin	63	70	● ● ●	● ● ●
	11	Valspar Ultra Satin (Lowe's)	30	70	● ● ●	● ● ●
	12	Kilz Casual Colors Satin	30	63	● ● ●	● ● ●

C SEMIGLOSS Use mainly for trim, windows, and doors.

✓	1	Valspar Duramax Semi-Gloss (Lowe's) ¹	40	80	● ● ●	● ● ●
✓	2	Behr Premium Plus Ultra Semi-Gloss Enamel (Home Depot) ¹	40	79	● ● ●	● ● ●
✓	3	Sherwin-Williams Duration Semi-Gloss ¹	69	76	● ● ●	● ● ●
✓	4	Behr Premium Plus Semi-Gloss (Home Depot) ²	29	75	● ● ●	● ● ●
✓	5	Glidden Spred Semi-Gloss	28	74	● ● ●	● ● ●
	6	Benjamin Moore Aura Semi-Gloss ¹	68	70	● ● ●	● ● ●
	7	Glidden Premium Semi-Gloss (Home Depot)	27	69	● ● ●	● ● ●
	8	Valspar Ultra Semi-Gloss (Lowe's)	31	66	● ● ●	● ● ●
	9	Kilz Casual Colors Semi-Gloss	31	63	● ● ●	● ● ●

STILL BEING TESTED We've completed the equivalent of three to six years of exposure.

	1	Ace Royal Exteriors Flat ²	26	● ● ●	● ● ●
	2	Benjamin Moore Aura Flat ¹	68	● ● ●	● ● ●
	3	Ace Royal Exteriors Semi-Gloss ²	29	● ● ●	● ● ●
	4	Ace Royal Exteriors Satin ²	28	● ● ●	● ● ●
	5	Glidden Brilliance Collection Flat (Walmart) ¹	27	● ● ●	● ● ●
	6	Glidden Brilliance Collection Satin (Walmart) ¹	29	● ● ●	● ● ●
	7	Glidden Brilliance Collection Semi-Gloss (Walmart) ¹	30	● ● ●	● ● ●
	8	Clark & Kensington Flat (Ace) ¹	33	● ● ●	● ● ●
	9	Clark & Kensington Semi-Gloss (Ace) ¹	36	● ● ●	● ● ●
	10	Clark & Kensington Satin (Ace) ¹	35	● ● ●	● ● ●

¹ Self-priming. ² Manufacturer claims that product has been reformulated since we tested.

"Paint" before you buy

A growing list of free sites and apps can help you narrow your choices, figure out how much paint you'll need—and even "paint" your house before you open a can.

Guessing gallons. The Paint Quality Institute (paintquality.com) has a helpful calculator for gauging how much paint or stain to buy. A project planner also offers tips on choosing colors, prepping, timing, safety, cleanup, and more.

Virtual painting. Major brands, from Behr to Valspar, offer tools on their sites that let you upload a photo of your home and try various colors before you commit.

Digital color-matching. Free apps let you photograph a house color you like and digitally match it with a brand's offerings. Valspar also offers color consultations with a professional consultant. The apps typically download via iTunes, though they won't work on every device. Here are some major ones and the devices they work with:

- Behr ColorSmart (iPhone, iPad, Android)
- Benjamin Moore Color Capture (iPhone, Android)
- Glidden on the go (iPhone, iPad)
- Sherwin-Williams ColorSnap Studio (iPhone, iPad, Android)
- Valspar ConnectLive (iPad, with iPhone on the way)

Whichever colors you like, try actual samples on your siding, since virtual paint can look different in the real world.



Valspar Color Selector.

Guide to the Ratings

Overall score for paints and stains is weighted average of each year's appearance for white, blue, and brown (clear for sealers); score is based on two coats over primed pine-clapboard siding (for stains and self-priming paints, two coats without primer). Fully tested finishes undergo accelerated outdoor weathering for up to three years; each year approximates three years on vertical surfaces, one year on decks. Displayed scores are rounded; products are listed by precise overall score. Scores for previously tested products may have changed because of changes in tabulations.

Appearance denotes long-term testing. **Resists** means score of at least Good for that attribute at the end of testing. **Claimed VOCs** is maximum grams per liter as stated on can. **Price** is approximate retail per gallon.

Ratings House & deck stains

All tested products In performance order, within types.

● Excellent
 ● Very good
 ○ Good
 ○ Fair
 ● Poor

CR Best Buy
 Recommended

Rec.	Rank	Product	Price	Overall score	Appearance	Resists
			Per gallon	0 100	After 1 yr. After 2 yr. After 3 yr.	Cracking Color change Dirt Mildew Claimed VOCs
				P F G V E		

D SOLID STAINS These form a paint-like film that shows only texture of wood grain.

✓	1	Behr Solid Color Waterproofing Wood Stain (Home Depot)	\$29	80	● ● ●	● ● ● ● 100
✓	2	Benjamin Moore Arborcoat Deck & Siding Solid	46	68	● ● ●	● ● ● 100
✓	3	Wolman DuraStain Solid	33	66	● ● ●	● ● ● 100
✓	4	Sears Weatherbeater Deck, Fence & Siding Solid	32	64	● ● ●	● ● ● 90
	5	Sherwin-Williams Woodscapes Solid ^[1]	48	62	● ● ●	● ● ● 136
	6	Olympic Maximum Deck, Fence & Siding Solid Stain (Lowe's) ^[4]	36	62	● ● ●	● ● ● 166
	7	Behr Premium Solid Color Weatherproofing Wood Stain (Home Depot)	37	61	● ● ●	● ● ● 100
	8	Sherwin-Williams Deckscapes Solid ^[2]	46	61	● ● ●	● ● ● 122
	9	Flood SWF-Solid Wood Stain	29	56	● ● ●	● ● ● 250
	10	Cabot Solid Color Decking Stain ^[2]	38	55	● ● ●	● ● ● 100
	11	Sikkens Rubbol Solid Siding Finish ^[1]	41	41	● ● ●	● ● ● 200
	12	Woodsman Solid Color Deck Stain ^[4]	30	27	● ● ●	● ● ● 250

E SEMITRANSSPARENT STAINS These soak into wood, adding color, but grain is visible.

✓	1	Behr Premium Semi-Transparent Weatherproofing Wood Stain (Home Depot)	37	65	● ● ●	● ● ● ● 100
	2	Cabot Semi-Transparent Deck & Siding	38	46	● ● ●	● ● ● 250
	3	Behr Semi-Transparent Weatherproofing Wood Stain (Home Depot)	29	41	● ● ●	● ● ● 100
	4	Sherwin-Williams Deckscapes Semi-Transparent ^[2]	46	38	● ● ●	● ● ● 170
	5	Flood TWF-Semi Semi-Transparent Wood Stain	29	38	● ● ●	● ● ● 250
	6	Ace Wood Royal Semi-Transparent Deck & Siding	31	35	● ● ●	● ● ● 100
	7	Thompson's WaterSeal Deck & House Semi-Transparent Latex	25	32	● ● ●	● ● ● 100
	8	Wolman DuraStain Semi-Transparent	30	32	● ● ●	● ● ● 250
	9	Sikkens Cetol SRD Semi-Transparent ^[3]	43	31	● ● ●	● ● ● 250
	10	Olympic Maximum Deck, Fence & Siding Semi-Transparent Stain (Lowe's) ^[4]	36	31	● ● ●	● ● ● 233
	11	Sherwin-Williams Woodscapes Semi-Transparent ^[1]	46	21	● ● ●	● ● ● 79

F CLEAR SEALERS These soak into wood, showing grain but allowing the wood to age naturally.

✓	1	Thompson's WaterSeal Advanced Waterproofer ^[4]	23	31	● ● ●	● ● ● 250
	2	Thompson's WaterSeal Waterproofer Plus Clear Wood Protector ^{[3] [4]}	19	28	● ● ●	● ● ● 100
	3	Olympic Maximum Waterproofing Sealant (Lowe's) ^[4]	33	22	● ● ●	● ● ● 230
	4	Wolman RainCoat Clear Water Repellent	18	21	● ● ●	● ● ● 250
	5	Benjamin Moore Waterproofer ^[4]	24	18	● ● ●	● ● ● 250
	6	Sherwin-Williams Deckscapes Clear Sealer ^[2]	38	15	● ● ●	● ● ● 311

STILL BEING TESTED We've completed one to two years of exposure.

	1	Cabot Solid Acrylic Siding ^[1]	36	● ● ●	● ● ● 100
	2	Thompson's WaterSeal Deck & House Solid Latex	26	● ● ●	● ● ● 100
	3	Sikkens Rubbol Solid DEK Deck Stain ^[2]	45	● ● ●	● ● ● 250
	4	Cabot Express Deck Wood Stain Semi-Transparent ^[2]	37	● ● ●	● ● ● 250

^[1] Recommended only for siding and fences. ^[2] Recommended only for decks. ^[3] Clean up with mineral spirits. ^[4] Manufacturer claims that the product has been reformulated since we tested.



HARD-CORE L.L.BEAN rated highly among stores catering to people who favor vigorous outdoor pursuits.

Which sports stores earn high scores?

26,000 readers rate the best and worst among dozens

IF YOU'RE LIKE many shoppers, you buy sports apparel and equipment at Dick's Sporting Goods or Sports Authority, which have a total of about 1,000 stores nationwide. But by doing that, you're missing a chance to up your game—whether it's played on grass, snow, water, or asphalt.

In our first Ratings of sporting-goods retailers, 26,461 readers told us about 34,229 experiences buying treadmills, skis, and the like. Almost 30 percent of the trans-

actions took place at Dick's and Sports Authority. But neither made readers as happy as did independent stores and pro shops, one-sport chains, or outdoorsy companies such as L.L.Bean and REI.

The merchants that pleased readers most offered value (the goods were worth their cost), wide selection, high-quality products, and solid service. Independent stores and pro shops were especially skilled at providing knowledgeable and solicitous service. "If you're investing \$1,000 on a set of clubs, you want a personal connection with someone who knows what they're talking about," says Lee Diercks, a partner at the Clear Thinking Group, a business-strategy company. "Specialty shops exist because there are those consumers who value someone who can string a racket and make sure it's properly weighted, teach you how to shoot, and make sure you select the right ski boots."

Survey respondents who shopped at

independents and pro shops took full advantage of the help available: 92 percent interacted with the sales staff. Only 43 percent of respondents who shopped at a mass merchant received help.

Among all-purpose retailers, Costco—a reader favorite in survey after survey for products as varied as eyeglasses and electronics—rated highly, mainly because of outstanding value and quality. Costco's drawbacks, common to warehouse clubs, are narrow selection and minimal service. Among the least likely to satisfy were Walmart, Kmart, and Sam's Club, all of which scored lower than most of the rated stores for service and ease of checkout.

The most common problem for sporting-goods shoppers was a limited choice of sizes. Overall, about one in four respondents had a complaint that wasn't related to service or selection, usually about cluttered aisles, long checkout lines, or hard-to-find price tags. Thirty-eight percent of

BY THE NUMBERS

88%

Readers who were highly satisfied with independent stores and pro shops.

those who shopped for sporting goods at JCPenney, Sears, Walmart, and other mainstream retailers had at least one problem, compared with 15 percent who shopped at outdoor chains and 11 percent who shopped at independents.

We limited our Ratings to walk-in stores because that's how most people buy sporting goods. Bruce Hammond, director of marketing and communications for the National Sporting Goods Association, a trade group, says that more than three-quarters of athletic equipment and shoes were bought at walk-in stores in 2011.

But if you know exactly what you want, buying online makes sense. Prices on the Web are frequently as much as 10 percent lower than in stores, in part because federal law doesn't require online retailers to collect state sales tax unless they have a physical location in that state.

If you don't know exactly what you want, websites give you lots to look at. Amazon offers many types of athletic equipment, including boxing gloves and ballet shoes, and has rated high in many CONSUMER REPORTS surveys. But most of the merchants in the Ratings offer more choices online than in their stores. Walmart's website, for instance, sells more than 1,400 fishing rods and reels; at a Walmart near our Yonkers, N.Y., headquarters, we spotted 100 or so.

Which type is right for you?

The different types of sports stores satisfy different customer needs.

Sporting-goods specialists. In our Ratings, these cover a wide range:

- Independents and pro shops tend to focus on sports with hardcore enthusiasts who consult with savvy sales staff before dropping big bucks. (Survey respondents who shopped at these stores spent an average of \$190 on their shopping trip, more than twice as much as readers who shopped at mass merchants.)

- One-sport chains, including high-rated Edwin Watts Golf Shops and Performance Bicycle, focus on one type of gear. Like independents and pro shops, they were praised for service by customers such as reader Betsy Keller, a 39-year-old runner from Chicago. "I went to Fleet Feet Sports for its larger running-shoe selection with a staff that could help find the shoe that meets my gait, pronation, foot strike, the things my doctor wanted, and the amount of miles I run," she told us. "It took almost an hour of one-on-one fitting."

- Regional chains sell a mix of products

tailored to local markets. They include Big 5, with 414 stores in the West; Dunham's Sports, with 170 in the Midwest; and Modell's, with 150 in the Northeast. Regional chains tend to devote a lot of real estate to hunting and fishing but also to sports from archery to yoga, carrying an edited assortment within those categories.

Some of the smaller chains provide special help. For instance, Scheels All Sports (24 stores, mostly in the Midwest) offers gunsmithing and bike repairs.

- The two national chains dedicate as much as 40 to 60 percent of floor space to apparel and footwear, Diercks says. "Every customer has two feet," he says, adding that clothes and shoes carry profit margins of at least 50 percent, far more than golf balls, fishing poles, and ammunition.

At the bigger sporting-goods specialists, bargains are a significant part of the appeal. Like any other major retailer, those chains woo customers with cheap prices and, once they're inside, tempt them with impulse items on end-aisle displays. "It's not just the skis," Diercks points out, "but the socks, the hats, the mittens, earmuffs, jackets, and hand warmers."

Outdoor stores. As a group, these stores, which equip customers for vigorous activities, ranked just behind independents and pro shops: 82 percent of readers who shopped at them were very or completely satisfied with the experience. When a product had to be returned, readers said, the process was especially smooth.

More than 90 percent of readers were highly pleased with the quality of the mer-

Angling for a fishing rod

To gauge the shopping experience at different types of stores, we sent two reporters to look for fishing rods. They browsed anonymously.

► The independent

Fisherman's World, Norwalk, Conn.

A man immediately asks whether I need help. I say I'm looking for a saltwater fly rod for a friend. He leads me to an aisle bristling with rods, lures (from "grizzly minnow" to "crazy Charlie"), and other equipment. The rods include aficionado brands such as Redington, G. Loomis, and Sage. The staffer says prices range widely but that I can get a fine rod for about \$150. He says my friend, an experienced angler, will need two rods for bonefish and tarpon, which require different gear. Why choose his store? He cites the staff's experience and knowledge of regional waters. The owner has skippered charter boats for more than 35 years.



HOOK, LINE, SINKER Independent stores such as Fisherman's World tout staff savvy.

► The national chain

Dick's Sporting Goods, Yonkers, N.Y.

I lose count at about 350 rods and rod-and-reel combos. Rods range from cheap bamboo sticks to poles seemingly big enough to land Jaws. Most cost less than \$200. Big brands plus niche rods and many bottles of fish "aphrodisiac" are available. Fly-fishing is a weak link. I ask a salesman how to narrow the options. "Where do you plan to fish?" he asks, and explains differences in rod weight. He suggests a rod and spin-cast reel starter kit for \$40 to \$50.

► The outdoor store

L.L.Bean, Yonkers, N.Y.

The small angling section is devoted mostly to fly-fishing. There are 14 Bean-branded rods at \$209 to \$465 and a spin/fly kit. I ask a clerk what type of rod I need as a beginner. "Depends on the species of fish and the water," he says, suggesting the starter kit. He explains differences in line, rod, and reel, but when my questions become specific, he jokes that most of the fish he encounters come out of his freezer and directs me to a nearby competitor. "Orvis is a great resource because they specialize in fly-fishing," he says.

► The mass merchant

Walmart Superstore, Fishkill, N.Y.

A smallish fishing section in this huge store has kits from \$10 to \$50, including a Barbie model. I count about 80 rods, priced from \$8 to \$140. A trash can is also filled with discontinued rods, plus a handful of ice-fishing poles. I don't spot fly-fishing gear. Although I roam the aisle and take notes for almost half an hour, I never encounter a salesperson.

chandise, which has a slightly different focus or specialty area depending on where you shop. Gander Mountain (113 stores, mostly in the Eastern U.S.) stocks 15 brands and almost 100 models of binoculars, for starters. REI and Eastern Mountain Sports (EMS) cater to people who camp, snowboard, cross-country ski, or snowshoe.

Promoting an outdoorsy lifestyle is as much a part of these stores as the merchandise. Cabela's (about 40 stores nationwide) has dozens of "pro staffers" who share their expertise online on subjects as diverse as dog training and bow hunting.

Mass merchants. Forty-five percent of respondents who bought sporting goods at these stores said they went there mainly to buy something else. Mass merchants tend to concentrate on athletic activities that appeal to the widest audience: hunting, fishing, bicycling, camping, and team sports. Equipment and clothes are usually

Common gripe: A limited choice of sizes.

tailored to the region and the season. You'll usually find less product depth within categories at mass merchants than at the other rated retailers.

Each chain allocates space differently. During a trip to Costco, we saw just one brand and model of bicycle, one brand of tennis ball, and one brand of basketball. No treadmills were on the sales floor at a Target we visited, although the company's website offered about 20, for \$107 to \$2,100.

The chains generally showcase familiar brands with mass appeal. When they do carry higher-end names, the items might not be top of that line.

Survey respondents tended to criticize mass merchants for limited brands, sizes, and models and for long waits at checkout. About one-quarter of those surveyed couldn't find help when needed, and 20 percent were at least somewhat dissatisfied with the staff's product knowledge.

Bottom line. If you're serious about sports and want expert advice, lessons, or top-line merchandise, shop at an independent or pro shop or high-rated outdoor store. Sporting-goods chains are convenient, but many of the big names fell short in selection, quality, and service. Mass merchants are OK if you're not very picky and don't have many questions.

EDWIN WATTS GOLF
EST. 1968
AMERICA'S GOLF CLUB

L.L.Bean



GOLF GALAXY

COSTCO
WHOLESALE

Ratings Sporting-goods stores

In order of reader score, within types.

Better ← → Worse
● ● ○ ● ●

Retailer	Reader score	Survey results				
		Value	Selection	Service	Quality	Checkout

SPORTING-GOODS SPECIALISTS

Independent stores/pro shops	89	●	●	●	●	●
Edwin Watts Golf Shops	88	●	●	●	●	●
Golf Galaxy	85	●	●	●	●	●
Golfsmith	84	●	●	●	●	●
Performance Bicycle	84	●	○	●	●	●
Scheels All Sports	83	●	●	●	●	●
Academy Sports + Outdoors	80	●	○	○	●	●
Sport Chalet	79	○	○	○	●	●
MC Sports	78	●	○	○	●	●
Dick's Sporting Goods	76	○	○	○	●	●
Big 5 Sporting Goods	76	●	●	○	○	●
Sports Authority	75	○	○	○	○	●
Dunham's Sports	75	○	○	○	○	●
Modell's Sporting Goods	74	○	●	○	○	○

OUTDOOR STORES

L.L.Bean	89	●	●	●	●	●
REI	89	●	●	●	●	●
Cabela's	84	●	●	●	●	●
Eastern Mountain Sports	84	●	○	●	●	●
Bass Pro Shops	83	●	●	●	●	●
Sportsman's Warehouse	83	●	●	●	●	●
West Marine	79	○	○	●	●	●
Gander Mountain	78	○	○	●	●	●

MASS MERCHANTS

Costco	84	●	●	●	●	○
Fleet Farm	82	●	●	●	●	●
JCPenney	80	●	○	○	●	○
Sears	79	●	○	○	●	●
Target	77	●	●	●	○	○
Sam's Club	75	●	●	●	○	●
Kmart	72	○	●	●	○	●
Walmart	70	○	●	●	●	●

Guide to the Ratings

Ratings are based on 26,461 subscriber responses to a survey by Consumer Reports National Research Center. Respondents told us about 34,229 experiences buying sporting goods for a wide range of outdoor, fitness, recreational, and competitive athletic activities. We excluded stores that sell only apparel and shoes. Buying took place at walk-in stores between January 2011 and June 2012. Findings reflect the experiences of our readers, not necessarily those of the general population. **Reader score** indicates shoppers' overall satisfaction and is not limited to the criteria in the table. A score of 100 would mean all readers were completely satisfied; 80 would mean very satisfied, on average; 60, fairly well satisfied. Even the lowest-rated stores pleased most customers. Differences in scores of fewer than 5 points are not meaningful. Scores for **value** (price relative to quality), **selection** (of brands and models), **service** (knowledge and courtesy of the staff), merchandise **quality**, and ease of **checkout** are relative. Ratings are comparable across store types.

The Hot List

A monthly guide to the top products our testers recommend

Ahhh, summer. We hope these recommended models help you kick back and relax in comfort—or at least make your work a little easier.



Lawn mowers

MODEL	SCORE
SELF-PROPELLED, MULTIPLE SPEEDS	
Honda HRX217VKA, \$600	83
Honda HRR2169VLA, \$500	83
Toro 20381, \$520	82
Toro 20382, \$570	82
Honda HRR269VYA, \$480	82
Honda HRR269VKA, \$400	81
Toro Recycler 20333, \$400 (and similar 20334, \$420)	75
Troy-Bilt TB-280ES 12AGA26G, \$340	73
Toro Recycler 20332, \$350	73
Troy-Bilt TV-320 12AVC35U, \$330	72
Ariens Razor 911179, \$400	70

Blenders

MODEL	SCORE
STANDARD	
Ninja Master Prep Professional QB1004, \$60	91
Vitamix 5200, \$450	91
Ninja Professional NJ600, \$100	87
Vitamix Professional Series 750, \$650 (and similar Vitamix 7500 and Vitamix Professional Series 300, each \$530)	81
Hamilton Beach Commercial Tempest HBH650, \$450	77
KitchenAid KSB565, \$100	74
Ninja Kitchen System 1100 NJ602, \$160	73
Breville Juice & Blend BJB840XL, \$450	70
Blendtec Total Blender Designer Series Wildside, \$460	70
IMMERSION	
Breville Control Grip BSB510XL, \$100	91
Miallegro Professional MiTutto 9090, \$68	84
DeLonghi DHB723, \$100	81



Ninja Master Prep Professional QB1004



Vitamix 5200

Dehumidifiers

MODEL	SCORE
LARGE CAPACITY	
Frigidaire FAD704DUD, \$238	89
Soleus Air SG-DEH-70-2, \$225	88
Haier DE65EK-L (Walmart), \$197 (and similar DE65EK, \$230)	86
MEDIUM CAPACITY	
Frigidaire FAD504DUD, \$200	84
GE ADE50LQ, \$260; ADEH50LQ (Home Depot), \$220; ADEW50LQ (Walmart), \$240	81



Frigidaire FAD704DUD



Soleus Air SG-DEH-70-2



Haier DE65EK-L



Air conditioners

MODEL	SCORE
MIDSIZED	
Friedrich Kuhl SS08M10, \$800	82
Friedrich Chill CP08G10, \$330	78
Sharp AF-S85RX (Costco), \$200 (and similar AF-S80RX, \$250)	76

Reports

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Lab tests

Ratings, reviews, recommendations

Why compact refrigerators gulp energy



◀ **Samsung**
RF323TEDB[S]
Claimed capacity:
31.6 cubic feet

▼ **Magic Chef**
MCBR445W
Claimed capacity:
4.4 cubic feet

A **mini-fridge** from Magic Chef uses more energy than Samsung's French-door bottom-freezer, despite being one-seventh the size. Stricter federal energy standards, to go into effect in September 2014, should improve the efficiency of all compact refrigerators. If you can't wait that long, our tests have found a few more miserly models.

Unlike full-sized fridges, which have an external condenser and fan, compact refrigerators typically use their exterior walls to dissipate heat. As a result, they tend to be very sensitive to room temperatures—the warmer the room, the more energy they use. And some models are more sensitive than others, including the Magic Chef shown at left.

A better option is the **Frigidaire FFPH44M4L[M]**, \$220, with a claimed 4.4 cubic feet, which costs about \$27 a year to run, our tests show. It's the only mini-fridge we recommend, thanks to its efficiency and solid performance.

In general, we've found that annual costs differ from what you'll see on a model's yellow EnergyGuide label because the Department of Energy's tests are currently run under different conditions. (The 2014 standard is in closer alignment with our tests.) Your energy use could be higher or lower than what's on the label depending on how you use the unit.

All compact refrigerators will use more energy if they're inside a cabinet or other enclosure, or squeezed into a corner with stuff all around them, because that could trap heat. Try to keep your compact refrigerator in the coolest possible spot.

How to choose. Decide between tall models, which are bigger and tend to have better temperature control in their fresh-food compartments, and two-door models, which offer superior freezing performance. Helpful features include removable interior shelves for easier cleaning, and can dispensers.

Some wine chillers use a lot of juice, too

The **federal energy** standard for compact fridges is due for an update next year, but there's no efficiency standard for wine chillers. Energy use for models with similar capacities can range from less than \$10 a year to more than \$100, according to our most recent tests. And there are no yellow EnergyGuide labels to help you compare costs. The Danby DWCI13BLSDB, a \$380 freestanding wine chiller, guzzled \$105 worth of electricity in our tests, double that of some full-sized refrigerators. So stick with our recommended models. They're efficient and maintain steady temperatures.

How to choose. First decide whether a built-in or freestanding model works best for you. Like compact refrigerators, wine chillers without an external condenser and fan, typically freestanding models, will use more energy if installed in a cabinet or enclosure. Our energy test for wine chillers does not include an enclosure.

Dual-zone models, such as the **A1 Electrolux**, **A2 Haier**, **A3 Vinotemp**, and **B1 Frigidaire**, let you maintain separate temperatures—one, say, for storage and another for wines about to be served. Single-compartment models such as the **A4 GE** let cool air sink within the container to create zones. Shelves with full-extension ball-bearing glides are the easiest to use.



A1 Electrolux

A2 Haier

B1 Frigidaire

Ratings

Recommended models only From 14 tested.

Rec. Rank	Brand & model	Price	Overall score	Energy cost per year	Capacity (750-ml bottles)	Temperature performance	Energy efficiency	Noise	Full-extension ball-bearing glides	Door lock	Zones
	Similar model, in small type, is comparable to tested model.										
				0 100							
				P F G V E							

A UNDERCOUNTER

✓ 1	Electrolux IQ-Touch EI24WC65GS	\$1,530	71	\$7	46	●	●	○	●	●	2
✓ 2	Haier WC200GS	980	68	14	42	●	●	○	●	●	2
✓ 3	Vinotemp VT-46TS-2Z	1,000	67	27	46	●	●	○	●	●	2
✓ 4	GE Profile PCR06WAT[SS]	1,400	67	19	52	●	○	●	●	●	1

B FREESTANDING

✓ 1	Frigidaire FFWC42F5LS LFWC42F5LS (Low's)	380	56	17	45	○	○	●	●	●	2
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● Excellent
● Very good
○ Good
● Fair
● Poor

✓ CR Best Buy
✓ Recommended

Best blood pressure monitors

Our latest tests of blood pressure monitors found six recommended models priced from \$60 to \$100. Shop around for the best price, and check to see whether a monitor is covered by your health insurance—it just might be.

For arm models, make sure the monitor you choose has a cuff that fits the circumference of your upper arm. Using a cuff that's the wrong size can result in an incorrect reading. Most models we tested include two cuffs or a one-size-fits-all cuff. Make sure your choice fits well.

In our tests, **A1 CVS** and **A3 Rite Aid**, CR Best Buys, scored Very Good and Good for comfort, respectively. They feature arm cuffs with indicators that show when the size is correct for the user. They scored Excellent for convenience. All of the models in the chart have excellent accuracy.

Look for easy-to-use features

Pick a top-scoring model that will make testing easier for you. For example, the **A1 CVS**, **A2 Omron**, and **A3 Rite Aid** all have large-digit displays. Make sure it's easy to read and understand and that the buttons are big enough. The directions for applying the cuff and operating the monitor should be clear.

For example, according to the instructions for the **B1 Omron** wrist model, the user must hold the unit across the chest at heart level while supporting the elbow with the other hand. The device has a positioning indicator to help place the wrist at heart level.

The **A1 CVS**, **A2 Omron**, **A4 iHealth**, and **B1 Omron** have a multiple-user memory feature that allows two or more users to save readings. Those products, along with **A5 LifeSource**, also feature a risk-category indicator that tells you whether your blood pressure is in the high range. Each of the six models we recommend



CVS Advanced Automatic

Ratings

Recommended models only From 21 tested.

- ☒ CR Best Buy
☒ Recommended
- Excellent
 ● Very good
 ○ Good
 ○ Fair
 ● Poor

Rec.	Rank	Brand & model	Price	Overall score	Test results		
		Similar models, in small type, are comparable to tested model.			Accuracy	Convenience	Comfort
				0 100			
				P F G V E			

A ARM MONITORS

<input checked="" type="checkbox"/>	1	CVS Advanced Automatic BP3MV1-1ECVS #800230	\$ 66	92	●	●	●
<input checked="" type="checkbox"/>	2	Omron 10 Series BP785	80	89	●	●	●
<input checked="" type="checkbox"/>	3	Rite Aid Deluxe Automatic BP3AR1-4DRITE	60	85	●	●	○
<input checked="" type="checkbox"/>	4	iHealth Dock BP3	100	84	●	○	●
<input checked="" type="checkbox"/>	5	LifeSource Advanced One Step UA-767PVL UA-767PV, UA-767PVS	60	81	●	●	●

B WRIST MONITOR

<input checked="" type="checkbox"/>	1	Omron 7 Series BP652	60	84	●	●	●
-------------------------------------	---	----------------------	----	----	---	---	---

are claimed to check for irregular heartbeat and other abnormalities.

Bottom line. At-home readings with a top blood pressure monitor can provide you with an important supplement to readings at a doctor's

office, in part because you can check periodically to get the most reliable picture over time. Choose one of our recommended models that has the features most important to you and that is comfortable enough to use regularly.

New gadgets to make the most of your workout

You have more options than ever for checking the intensity of your exercise if you want to stick to a training regimen.

Our tests of heart-rate monitors included a new so-called continuous wrist monitor that doesn't require a chest strap. We also tested six that use chest straps and four for which you touch the wristwatch rim or a button on the rim to get a reading.

To assess accuracy, we compared heart rates on the monitors with those measured by an electrocardiograph. A panel of staffers also took the monitors home to see how easy they were to use while exercising. All but one of the tested models scored Excellent for accuracy. Here's what we found:

Continuous wrist monitor. The **Mio Alpha**, \$200, uses an optic sensor to sense

blood flow and then displays the results on its screen. It is worn tightly on the wrist and provides a continuous heart-rate reading while you are exercising. But it scored only 73, not high enough in this product class to be recommended. The **Mio Alpha** was excellent for accuracy, but it scored lower than most other models for ease of use and features.

Chest-strap systems. Most of our panelists liked the **Polar H7 Heart Rate Sensor**, \$70, which had the highest overall score, 98, of any model we



WINNER The Polar H7 chest-strap model is easy to use with an iPhone app.

tested. It transmits your heart rate via Bluetooth to your iPhone. Panelists preferred it and the **Polar FT7**, \$110, to the touch watches.

Touch watches. These included the **Timex Health Touch**, \$55, and **New Balance HRT Slim**, \$70, which are fairly easy to use. But they're not great for all workouts, including outdoor biking. You may have to wet them and take a hand off the handlebars to touch the rim to get a reading. And they seem to work best when your hands are wet.

LED lightbulbs for \$15 or less

PRICES FOR LED BULBS are dropping. New 60-watt replacement bulbs introduced by Cree and Philips cost \$13 to \$15, compared with \$25 or more for similar LEDs sold just a few months ago. But are they as good or just cheaper?

The **Cree 60W Replacement Warm White Dimmable LED**, \$13, looks like an incandescent bulb and instantly provided a bright, warm light in our initial tests. And like an incandescent, the Cree evenly casts light in all directions. It's dimmable and is pretty good at showing the true colors of objects, with a Color Rendering Index (CRI) of 81 out of 100, typical of most LEDs we've tested. The Cree uses only 9.5 watts of energy and is supposed to last 25,000 hours, or almost 23 years when used 3 hours a day. So it would take just under two years to pay for itself and would save about \$150 in energy and bulbs over its life compared with an incandescent. Cree adds a 10-year warranty to sweeten the deal. The company says it is working on getting the bulb Energy

Star qualified, so it could be eligible for utility rebates, which would cut its price even more.

The **Philips A19 LED 10.5W 60-watt 420240**, \$15, which also mimics the shape of an incandescent, uses 10.5 watts of energy. In our preliminary tests, it was even brighter than promised and instantly cast a white light similar to a halogen

bulb's. But most of the light was cast in one direction—upward. Its CRI is 81, and it isn't dimmable. It has a claimed life of 20,000 hours, or around 18 years. Its payback period is about two years, and after that you pocket roughly \$110 in savings over its life. We'll report back after we test the Cree and Philips LEDs for 3,000 hours.

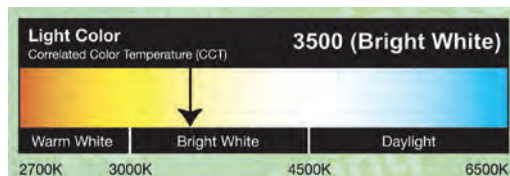
Don't want to wait? Consider our top-rated 60-watt replacement, Home Depot's **EcoSmart A19 60W Bright White 400674 Dimmable LED**. Its price has recently dropped to \$14 from \$26. It provides a bright white light and excelled in all of our tests.



■ DID YOU KNOW?

Location, location

Warmer yellow and white color temperatures mimic the light of incandescent bulbs and are good for general illumination. Bluer daylight light is best for task lighting.



Get some flextime with these garden hoses

We tried out a new breed of garden hose that weighs as little as 1 pound and stretches like an accordion to roughly three times its original length with the water on. Then it retracts when you're done.

The tested hoses were 50-foot models: the **Pocket Hose**, \$28, **FlexAbleHose**, \$39, and **DAP XHose**, \$48, including shipping. All three lived up to most of their TV infomercial promises in our kinking, twisting, slashing, and freezing tests. We even found a clear winner, the Pocket Hose, if you want higher flow far from the spigot but have wimpy water pressure.

The hoses resist kinking and bursting. None lost flow when folded, twisted, or knotted—a problem with the conventional hoses we bought for comparison. And none burst until we boosted water pressure to more

than 200 pounds per square inch (psi), much more than the 40 to 80 psi that's usual in most homes.

Though small nicks we made created weak spots, the hoses held together until cuts reached about 1 inch in length. If any part is damaged or the hose leaks, expandable hoses can't be repaired like conventional ones. Their manufacturers warn you to keep them out of the sun when you aren't using them. They may also shrink under reduced pressure. The hoses delivered full flow for car-washing and other jobs at 60 psi with the nozzle wide open. But at 40 psi, they started retracting unless we reduced the flow at the nozzle. The Pocket Hose shrank the least, losing roughly 10 feet of length compared with

almost 30 feet for the others. Because they shrink to their original size when the water is turned off, all three are poor choices for use with sprinklers.





Talking turkey

Our new tests show reasons for concern

IN OUR FIRST-EVER lab analysis of ground turkey bought at retail stores nationwide, more than half of the packages of raw ground meat and patties tested positive for fecal bacteria. Some samples harbored other germs, including salmonella and staphylococcus aureus, two of the leading causes of foodborne illness in the U.S. Overall, 90 percent of the samples had one or more of the five bacteria for which we tested.

Adding to the concern, almost all of the disease-causing organisms in our 257 samples proved resistant to one or more of the antibiotics commonly used to fight them. Turkeys (and other food animals, including chickens and pigs) are given antibiotics to treat acute illness; but healthy animals may also get drugs daily in their food and water to boost their rate of weight gain and to prevent disease. Many of the drugs are similar to antibiotics important in human medicine.

That practice, especially prevalent at large feedlots and mass-production facilities, is speeding the growth of drug-resistant superbugs, a serious health concern. People

sickened by those bacteria might need to try several antibiotics before one succeeds.

Among our findings:

- Sixty-nine percent of ground-turkey samples harbored enterococcus, and 60 percent harbored *Escherichia coli*. Those bugs are associated with fecal contamination. About 80 percent of the enterococcus bacteria were resistant to three or more groups of closely related antibiotics (or classes), as were more than half of the *E. coli*.
- Three samples were contaminated with methicillin-resistant staphylococcus aureus (MRSA), which can cause fatal infections.

• Ground turkey labeled “no antibiotics,” “organic,” or “raised without antibiotics” was as likely to harbor bacteria as products without those claims. (After all, even meat from organic birds can pick up bacteria during slaughter or processing.) The good news is that bacteria on those products were much less likely to be antibiotic-resistant superbugs. For details on our results, go to ConsumerReports.org/turkey0613.

The Food and Drug Administration, which regulates approval of human and animal antibiotics, analyzes bacteria levels in ground turkey and other retail meats, as we’ve done. In 2011 the agency found even higher rates of contamination than ours.

From barn to burger

Conventionally raised turkeys are fed mostly corn and soybean meal plus a vitamin and mineral supplement. They usually get FDA-approved antibiotics that may be given in low doses without a prescription. Before the birds are killed, antibiotics must be withdrawn to ensure that residues clear from the birds’ systems.

But harm may already have been done. Although the antibiotics eventually kill off vulnerable barnyard bugs, bacteria that are immune to their effects can flourish and spread. They can exchange genetic material with other bugs, further accelerating antibiotic resistance. And bacteria on turkeys can develop resistance to similar drugs that aren’t even given to turkeys.

Some bacteria that end up on ground turkey, including *E. coli* and staph aureus, can cause not only food poisoning but also urinary, bloodstream, and other infections.

Antibiotics aren’t allowed in turkeys labeled “organic,” “no antibiotics,” or “raised without antibiotics.” (Sick birds may be treated, but they’re then sold to nonorganic markets.) Organic birds must eat only certified organic feed and pasture, which means no genetically modified organisms; and production of those birds must not

Germ count

We found many samples of turkey that harbored germs, especially the fecal bacteria enterococcus and *E. coli*. (Some forms of *E. coli* can cause severe illness, but our tests didn’t differentiate among the forms. In any case, you don’t want *E. coli* in your food.)

Levels of contamination

Bacterium	Positive samples
Enterococcus	69%
<i>Escherichia coli</i>	60
<i>Staphylococcus aureus</i>	15
<i>Salmonella</i>	5
<i>Campylobacter</i>	0

contribute to contamination of soil or water. Producers of organic and free-range turkeys must demonstrate to the Department of Agriculture that they've allowed birds "access to the outside," though that phrase is not specifically defined and some birds may not venture outdoors.

Such steps are among the requirements for raising a food animal sustainably—without drugs and in a way that's more healthful for animals and people.

Indeed, when we focused on antibiotic use, our analysis showed that bacteria on turkey labeled "no antibiotics" or "organic" were resistant to significantly fewer antibiotics than bacteria on conventional turkey. We also found much more resistance to classes of antibiotics approved for use in turkey production than to those not approved for such use. Consumers Union, the advocacy arm of Consumer Reports, believes that the FDA should ban all antibiotics in animal production except to treat illness.

A salmonella superbug

When any food animal is slaughtered, the bacteria that normally live in its gut without causing harm can wind up on its carcass. To limit contamination, federal law requires processors to create a Hazard Analysis and Critical Control Point plan. For turkey processors, HACCP includes steps for washing and chilling carcasses throughout processing to reduce the growth of harmful bacteria and contamination of the finished product.

But HACCP doesn't require eradication of harmful bacteria. In fact, salmonella is permitted in up to half of the ground-turkey samples that the USDA's Food Safety and Inspection Service (FSIS) tests at processors' plants. And bugs that remain can keep growing until the turkey is cooked.

In 2011 Cargill Value Added Meats Retail announced two voluntary recalls of a total of 36 million pounds of conventionally raised ground turkey—among the largest recalls of poultry meat in U.S. history—due to possible contamination with a resistant strain of salmonella Heidelberg. The superbug was traced to a Cargill establishment in Springdale, Ark. In all, 136 people fell ill during that outbreak, according to the national Centers for Disease Control and Prevention, and one of those victims died.

"As we've publicly stated over the past year and a half, no stone was left unturned in our efforts to determine the originating source of salmonella Heidelberg associated with the ground-turkey recalls, yet to this

day we do not know the origin of the bacteria linked to outbreak of illnesses," said Mike Robach, vice president of corporate food safety and regulatory affairs for Cargill in Minneapolis. He provided a long list of steps that Cargill has taken since the outbreak to make its ground turkey safer.

In the wake of the recalls, the FSIS required all ground-poultry processors to review and update their safety procedures, paying special attention to the sanitation of equipment. The agency told us that it also plans to conduct a risk assessment of salmonella and campylobacter (another food-poisoning bacterium) in ground-turkey products. The goal: a new standard for salmonella and, possibly, campylobacter.

Eight ground-turkey samples in our tests, conducted a year after the recalls, harbored salmonella that resisted three

How resistant to antibiotics?

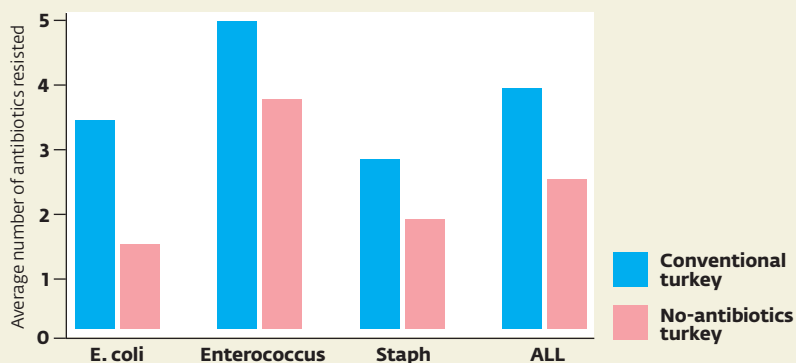
We determined whether samples of four bacteria isolated from our tested ground turkey could survive exposure to as many as 16 antibiotics at levels usually effective against those bugs. The antibiotics we tried differed with each bug and included ampicillin, ceftriaxone, ciprofloxacin, tetracycline, and others often used to treat the illnesses those bacteria cause. Classes are groups of similar antibiotics. Three of the 39 samples of staph aureus harbored MRSA, a potentially deadly bacterium.

Bugs immune to drugs

Bacterium	Samples tested	Resisted one or more antibiotic classes	Resisted three or more antibiotic classes
ENTEROCOCCUS	178	177	144
ESCHERICHIA COLI	155	135	82
STAPHYLOCOCCUS AUREUS	39	34	8
SALMONELLA	12	11	8

'No antibiotics' turkey vs. others

Bacteria from turkey labeled "no antibiotics," "organic," or "raised without antibiotics" were less likely than bacteria from unlabeled turkey to resist the drugs that could help cure illness. (We found too little salmonella on the tested turkey to substantiate a difference between labeled and unlabeled turkey.)



or more antibiotic classes. One of those samples came from a package of turkey processed at Cargill's Springdale plant. It harbored a strain of salmonella Heidelberg that was not the outbreak strain but resisted the same antibiotics. Even a finding of the outbreak strain, the FSIS said, "likely would not trigger a specific follow-up action by FSIS if steps were previously taken for the affected establishment to regain control of its operations."

Consumers Union says the current salmonella standard isn't strict enough, and is urging the USDA to allow no more than 12 percent contamination in ground-turkey samples, a standard most of the industry already meets.

Any improvement will come too late for consumers such as Diana Goodpasture, 66, of Akron, Ohio. She was sickened with sal-

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monella Heidelberg from ground turkey in June 2011 and was hospitalized for five days. “I’ve had complications ever since then,” she says. “I’m still seeing a gastroenterologist. I don’t know that I’ll ever be well.”

What you can do

Common slip-ups while handling or cooking ground turkey can put you at risk of illness. Although the bacteria we found are killed by thorough cooking, they can produce toxins that may not be destroyed by heat. Take the following precautions:

- Buy turkey labeled “organic” or “no antibiotics,” especially if it also has a “USDA Process Verified” label, which means that the USDA has confirmed that the producer is doing what it says. Organic and no-antibiotics brands in our tests were: Coastal Range Organics, Eberly, Giant Eagle Nature’s Basket, Harvestland, Kosher Valley, Nature’s Place, Nature’s Promise, Nature’s Rancher, Plainville Farms, Wegmans, Whole Foods, and Wild Harvest.
- Consider other labels, such as “animal

Slip up during handling and you risk illness.

welfare approved” and “certified humane,” which mean that antibiotics were restricted to sick animals.

- Be aware that “natural” meat is simply minimally processed, with no artificial ingredients or added color. It can come from an animal that ate antibiotics daily.
- Know that no type of meat—whether turkey, chicken, beef, or pork—is risk free.
- Buy meat just before checking out, and place it in a plastic bag to prevent leaks.
- If you will cook meat within a couple of days, store it at 40° F or below. Otherwise, freeze it. (Note that freezing may not kill bacteria.)
- Cook ground turkey to at least 165° F. Check with a meat thermometer. (Some whole cuts of meat may need thorough cooking, too; see page 17.)
- Wash hands and all surfaces after handling ground turkey.
- Don’t return cooked meat to the plate that held it raw.

Note: Funding for this project was provided by The Pew Charitable Trusts. Any views expressed are those of Consumer Reports and its advocacy arm, Consumers Union, and do not necessarily reflect the views of The Pew Charitable Trusts.

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Reports

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WRONG WAY California's ban on operating a handheld phone while driving includes using maps. Put the phone in a secure mount.

Cars

Road tests, auto products, hot topics

The danger in the next lane

State bans help reduce driver distraction, our survey finds

LAWS PROHIBITING the use of a handheld cell phone or texting while driving in many states are making an impact. That's one of the findings in our latest nationally representative survey of adult drivers conducted by the Consumer Reports National Research Center. But that news comes even as the number of deaths related to distracted driving is edging up.

In our survey of 1,003 people, conducted in December, 71 percent of respondents said they'd stopped or reduced texting, using a handheld phone, or operating a smart phone while driving in the previous year. More than half of that group indicated that they did so because of state laws; that's up from 44 percent in a similar survey we conducted two years ago.

Moreover, 56 percent of respondents who live in states with a full texting ban said they reduced or stopped such behavior because of that law or one banning handheld phone use. That compares with only 34 percent in states with no ban or one that affects only some drivers.

But our survey also found that many drivers are unsure of their own state laws. A quarter of respondents didn't know whether their state had a ban on either activity, and 23 percent claimed the state had a texting law when it didn't.

An epidemic on the road

Fatal crashes caused by distraction rose to 3,331 in 2011 from 3,267 in 2010, even as overall deaths dropped during that time. According to the National Highway Traffic Safety Administration, 387,000 people were injured in crashes involving a distracted driver in 2011. And at any moment during daylight hours, about 660,000—5 percent of U.S. drivers—are using cell phones or other electronic devices.

Final statistics aren't yet available for

2012, but according to NHTSA, fatality estimates for the first nine months show a 7 percent increase—the largest jump since 1975. Data from the Governors Highway Safety Association also show a 19 percent jump for 16- and 17-year-old drivers in the first six months of 2012.

It's not clear how much distracted driving has played a role in that increase, but, "We know that cell-phone use in crashes is underreported," says Barbara Harsha, executive director of the GHSA. "It's really

Built-in distractions

Even if you don't use a handheld device while driving, you might not be able to avoid distracting technology. Many vehicles now come with sophisticated control systems that incorporate audio, communication, climate, and other functions, but some are overly complex and complicated to use.

The systems often use a touch screen or multifunction controller that requires more attention to operate than do the traditional buttons and knobs, and that was reflected in our survey responses.

Seventeen percent of respondents own a car with a multifunction controller, and 9 percent have a touch screen. About half of each of those groups said they found performing common tasks, such as adjusting



ERGONOMIC OVERLOAD Many respondents found multifunction controllers difficult to use.

the radio and cabin temperature, somewhat or very distracting.

The federal government is working on guidelines to help automakers develop in-car electronic devices that don't distract a driver or sacrifice safety.

difficult to get distraction data. If the crash is a survivable one, people generally are not honest about whether they've been using a cell phone."

Overall, phone use behind the wheel is growing, as reflected in a recent AT&T poll, in which 49 percent of commuters admitted they text while driving, with six in 10 saying they never did so three years ago. That percentage even exceeded the 43 percent for teens. The problem of distracted adults was also reflected in our 2011 survey of young drivers, in which 48 percent said they had witnessed their parents talking on a handheld phone in the previous 30 days, and 15 percent saw them texting.

Sending or reading a text takes your eyes off the road for 4.6 seconds, according to

NHTSA; at 55 mph that's the equivalent of driving the length of a football field with your eyes closed.

A positive sign in our survey, though, is that people are speaking up. Four in 10 respondents said they had at some point asked a driver to stop using a phone because they were concerned for their safety.

A tech problem or not?

Some people think that because distracted driving is a problem created by technology, the solution must be technological. That's the viewpoint of Jeffrey H. Coben, M.D., and Motao Zhu, M.D., Ph.D., of the West Virginia University School of Medicine. In a recent article published in the *Journal of the American Medical Association*, they argue

that the best solution to help prevent more deaths is to have vehicle and/or cell-phone manufacturers render a handheld device inoperable whenever it's in a moving car.

"The interventions we have tried to implement to this point have been education and legislation, and our history suggests those interventions are not going to be sufficient," Coben says. Citing air bags as an example, he adds, "Technological innovations or engineering design principles actually build safety into the environment, and people don't need to do anything in order to be protected."

Bryan Reimer, a research scientist at the Massachusetts Institute of Technology's AgeLab, disagrees. "Combating technology with technology is never going to work," he says. "If we can create a way of combating it here today in the U.S., someone in China tonight or tomorrow morning before I wake up will find a way around that."

Reimer thinks the problem goes deeper. In a recent study of the general behavior of people who report frequent phone use while driving, he found that those drivers show a pattern of risky behavior, such as speeding and frequent passing and lane changes. "Regardless of the technology, people who are willing to pick it up more frequently are a higher-risk group of drivers to start with," Reimer says. "How do we begin to functionally look at the behavioral problem we have on the roadway as opposed to the technology problem?"

Some answers could come from the Strategic Highway Research Program, which is conducting the largest and most comprehensive driving study yet performed. In the program—administered by the Transportation Research Board, a nonprofit institution that provides research for the government and scientific communities—2,800 drivers have been recruited for observation of their behaviors behind the wheel. When the study is completed in 2014, the data will cover more than 33 million miles and document how people drive and what they are doing before a crash. After analysis, highway agencies will be able to develop countermeasures to improve driver safety and reduce inattention.

What's being done

It's currently illegal to text while driving in 39 states and Washington, D.C., and to use a handheld phone in 10 states and D.C. Many in our survey said they'd support more laws. More than 90 percent of respondents said they support laws banning

Tech aids can reduce distraction

A growing number of smart-phone apps and other aids are designed to reduce drivers' cell-phone use. Here's a sampling:

▶ **Hands-free aids.** Many cars now come with a Bluetooth system built in, so you can wirelessly connect your phone to the car's audio system. Alternatives include a Bluetooth headset or an aftermarket device (see "Affordable Hands-Free Calling," May 2013).

▶ **PROS** They handle incoming calls easily with the press of a button or a voice command, and some systems read messages aloud and let drivers speak responses.

▶ **CONS** Initiating outgoing calls can be distracting, especially if the device doesn't recognize your command. Some devices have phone-compatibility problems.

▶ **Smart-phone apps.** They restrict the phone from being used when the app is switched on or when the vehicle is in motion (as detected through the phone's GPS receiver or Bluetooth). They're available from major cell-phone carriers, such as AT&T, Sprint, T-Mobile, and Verizon, as well as from independent providers, such as iZup and tXtBlocker.

▶ **PROS** All of the apps we've tried can call 911, and some are free. Some automatically activate when the car is in motion and, depending on the app, can send automatic replies to incoming texts, e-mail messages, or calls. And some can notify parents if the app is deactivated.

▶ **CONS** Monthly costs of \$2 to \$10 can add up, and use of the phone's GPS can drain the phone's battery. Apps can't tell when a passenger is using the phone instead of the driver, they can be manually turned off, and some don't work with the iPhone.

▶ **Devices connected to the vehicle's diagnostic port.** They plug into a connector under the dash and restrict phone use in a way similar to apps.

▶ **PROS** They can send an auto-reply to calls and texts, they don't drain the phone's battery, and they're tamperproof because parents set a code to unlock them.

▶ **CONS** They can be pricey, ranging from about \$90 to \$180, plus extra costs for accessories. Each works with only one car, and they aren't compatible with the iPhone.

▶ **Monitoring systems.**

They track a driver's behavior and speed with cameras, special phones, and other systems.

▶ **PROS** They activate when the vehicle is in motion. All collected information is logged, and some systems allow real-time online

tracking. Data reports are available to parents and companies that subscribe.

▶ **CONS** Some systems require you to buy a particular phone and pay a monthly fee of about \$10. The phones can lose battery power quickly because the GPS is constantly on, and those with cameras and sensors can be used in only one vehicle.



PHONE BLOCKERS
Apps such as AT&T's DriveMode stop incoming texts and calls and send an automatic reply.

texting while driving; 60 percent support bans on talking on a handheld phone.

Activists are working to get laws passed in the remaining states, but it can be an uphill battle. Bonnie Raffaele's 17-year-old daughter, Kelsey, died in 2010 after she crashed while talking on a handheld cell phone. Raffaele, of Sault St. Marie, Mich., fought to get a law passed in her state that might help save other teens' lives. Raffaele said she initially faced resistance, with the state's speaker of the house telling her it was a "common-sense law, and they didn't need to legislate common sense." But her efforts have paid off. Kelsey's Law, which makes it illegal for 16- and 17-year-old drivers to use a cell phone, went into effect March 28. But it's still legal for adults.

Other states are resisting because legislators say the bans infringe on personal freedom and because research on their effectiveness is mixed. In 2010 the Insurance Institute for Highway Safety assessed several states with handheld and texting bans and found that accidents had not declined after they were passed. In certain states, in fact, insurance claims increased. Some of that is attributed to drivers moving the phone down to their lap to avoid being seen by police. That exacerbates the problem because it results in a person's eyes being off of the road for a longer time.

NHTSA-sponsored studies have shown that increased enforcement of the laws is a key to their success. In 2011 NHTSA worked with police departments in Hartford, Conn., and Syracuse, N.Y., to conduct several waves of high-visibility enforcement, modeled after the successful "Click It or Ticket" safety-belt and "Drive Sober or Get Pulled Over" drunk-driving campaigns. After completing four waves in each location, the police found that their "Phone in One Hand, Ticket in the Other" campaigns had resulted in a 57 percent drop in drivers talking on a handheld phone and a 72 percent decline in texting in Hartford. Syracuse saw a 32 percent drop in both behaviors.

Larger-scale programs are being conducted in Delaware and in Sacramento, Calif. In addition to stepped-up police enforcement, radio and TV ads and digital road signs alert drivers to the dangers. How effective the campaigns are in reducing distracting behavior will be analyzed after the programs conclude in June.

"I do think the message is getting out," says Jana Simpler, director of the Delaware Office of Highway Safety. "I think it takes



Many drivers are unsure about distracted-driving laws in their state.

time; you're not going to change driver behavior overnight."

NHTSA has also awarded Connecticut and Massachusetts grants to help them plan and conduct high-visibility anti-texting enforcement programs. The money will be used to train police to spot texting offenders (who are more difficult to detect) and to work on effective media campaigns.

To fight the problem, Consumers Union, the advocacy arm of Consumer Reports, believes a coordinated effort is needed, with strong laws, strict enforcement, driver education, and technology solutions.

According to our survey, simply getting the word out was a big influence on people who said they stopped or reduced such behavior. Sixty-four percent of those

respondents said they were influenced by reading or hearing about the dangers of distracted driving, and 33 percent said they were influenced by media campaigns.

Drivers can also help the cause by being responsible and taking action:

Put down the device. Use a handheld cell phone or other personal electronic device only when the car is stopped.

Don't enable. If you know someone is driving, don't call or text. As a passenger, speak up if a driver picks up a device to use.

Educate yourself. Learn the rules in your state (go to ihs.org), but impose your own restrictions even if a law isn't in place.

Be heard. To help pass or strengthen laws in your state, call your legislators to voice your concerns. Cite examples of dangerous behaviors you've seen on the road. Raffaele bombarded state officials with calls and postcards every day.

Lead by example. Kids mimic their parents' behavior, so if you are using the phone or texting while driving, they will think it's OK to do the same.

Go hands-free. If you must talk on a phone while driving, keep your eyes on the road and your hands on the wheel. Hands-free conversations are less distracting than trying to juggle a phone and focus on driving at the same time.

BY THE NUMBERS

Our survey found widespread use of cell phones behind the wheel, despite most people saying it's dangerous.

What they saw in the previous 30 days:

91%

saw a driver talking on a handheld phone.

62%

saw a driver texting.

22%

saw a driver using hands to operate a smart-phone app.



What they did:

43%

had a conversation on a handheld phone.

33%

of smart-phone owners used their hands to operate an app.

18%

of smart-phone owners accessed e-mail or social media.

14%

texted.



What they say:

91%

said texting is very dangerous.

51%

said using a handheld cell phone is very dangerous.



SMALL SUVs

Mazda CX-5 vs. Toyota RAV4

A reinvigorated challenger edges out the champ

FOR YEARS, the RAV4 has been one of our highest-rated small SUVs, going neck and neck with the Subaru Forester and capturing that class's Top Pick honor in 2011 and 2012. So many people have anticipated its 2013 redesign. Would it have the goods to retain its top spot in a class that has seen a number of recent redesigns? We now can say that the new RAV4 has emerged as a very solid package that's versatile, efficient, and easy to live with. And the redesign brings some welcome changes, such as more agile handling and an easier-to-use rear hatch that lifts up instead of swinging to the side.

But what came as a surprise is that the Mazda CX-5, which received a stronger, more-spirited engine for 2013, would edge out the RAV4 in our road-test scores, albeit by a single point. Both SUVs placed just below our 2013 Top Pick, the Honda CR-V.

If the CX-5 has been a sleeper among small SUVs, its new 184-hp, 2.5-liter four-cylinder engine will wake people up. Included in mid- and top-trim models, the new four feels more muscular and provides much quicker acceleration than the pokey 155-hp, 2.0-liter four in the CX-5 that we tested last year and that's now relegated to the base Sport trim. And it got the same impressive fuel economy: a best-in-class 25 mpg overall.

The CX-5 is also one of the more fun-to-drive SUVs we've tested, thanks to its agile handling. Plus, it has a surprisingly roomy interior and comfortable seats. Drawbacks include a noisy cabin, so-so ride comfort, and a relatively high price that doesn't include several features found on competitors, such as heated seats and automatic headlights.

The RAV4 is every bit as compelling. With 24 mpg overall, it also stretches your fuel dollars farther than most competitors. And its agile handling and spirited powertrain make

it enjoyable to drive. A roomy interior, super-easy access, and mostly intuitive controls add to its appeal. For 2013, Toyota has dropped the optional third-row seat, which few people will miss, and the sprightly, efficient V6 engine, which some will miss. Knocks? The ride borders on being overly firm, the cabin is fairly noisy, and some interior trim is quite basic.

Overall, the CX-5 and RAV4 are capable, well-equipped vehicles that provide versatile alternatives to a midsize sedan. As with many SUVs, however, don't expect the same ride comfort and quietness of similarly priced sedans.

Our mid-trim CX-5 Touring stickered at \$28,090, and our mid-trim RAV4 XLE was \$26,802, par for this class. Because we expect above-average reliability from each, the CX-5 and RAV4 are recommended. Meanwhile, check in next issue to see how the redesigned 2014 Forester stacks up against these two SUVs.

Continued on page 54

Mazda CX-5

ROAD-TEST
SCORE
76



✓ Recommended



Tested vehicle

HIGHS	Fuel economy, agility, rear-seat comfort, blind-spot detection, reliability
LOWS	Ride, noise, low dash vents
TRIM LINE	Touring AWD
DRIVETRAIN	184-hp, 2.5 liter four-cylinder engine; six-speed automatic transmission; all-wheel drive
MAJOR OPTIONS	Moonroof, Bose audio, premium paint
TESTED PRICE	\$28,090

More test findings

BRAKING	Very short stops on wet and dry pavement.
HEADLIGHTS	Low beams project a good distance with very good intensity but have a sharp upper cutoff. High beams are brighter and shine farther forward.
ACCESS	Easy, but the door openings are smaller than in most small SUVs.
VISIBILITY	Good, with large windows but thick front pillars. Most versions come with a backup camera and a blind-spot monitoring system.
CABIN STORAGE	Rudimentary but adequate.
HEAD RESTRAINTS	The center-rear restraint is too low for adequate protection.
CHILD SEATS	Some rear-facing child seats are a tight fit. Outboard-rear LATCH anchors are easy to access.



DRIVER ALERT

The blind-spot detection system, standard on higher-end models, works well.



LOW CONTROLS

The dash vents, clock, and climate knobs are located far down on the dash.



Scan for video.

ROAD-TEST
SCORE
75

Toyota RAV4



✓ Recommended



Tested vehicle

HIGHS	Fuel economy, agility, transmission, access, roominess, standard backup camera
LOWS	Ride, noise, driver-seat lumbar support, daytime running lights are too easy to turn off
TRIM LINE	XLE AWD
DRIVETRAIN	176-hp, 2.5-liter four-cylinder engine; 6-speed automatic transmission; all-wheel drive
MAJOR OPTIONS	None
TESTED PRICE	\$26,802

More test findings

BRAKING	Very good on wet and dry pavement.
HEADLIGHTS	Low beams have good reach and brightness but a sharp upper cutoff. High beams have the same intensity but reach farther.
ACCESS	Very easy in front and rear.
VISIBILITY	Good overall except to the rear quarter. The standard backup camera helps.
CABIN STORAGE	Moderate.
HEAD RESTRAINTS	The center-rear restraint must be raised to be effective for adults.
CHILD SEATS	Complicated seatback-adjustment/seating requirements. Rear-facing seats are difficult to secure in the center-rear. LATCH anchors are hard to access.



TUNING IN Onscreen preset buttons are small, but most radio functions are a snap.



EASIER LOADING

A lift-up rear hatch, new for 2013, opens to a large cargo area.



Scan for video.

On the road

Both SUVs are satisfying to drive. Handling is the CX-5's forte. It feels taut and alert when tackling corners, and it's one of the few SUVs that's enjoyable to thread along a twisty road. It has little body lean and remains unfazed by bumpy corners. The new RAV4 is just as frisky, having recaptured the agility that made its first generation fun. The SUVs also provide quick, well-weighted steering and decent road feel.

Differences were more pronounced when the vehicles were pushed to their handling limits at our track. While the RAV4 remained planted, steady, and unflappable, the CX-5 gripped the pavement well only up to a point. Past those limits, it got a little twitchy and tended to raise an inside rear wheel in hard cornering. The electronic stability control system took a moment to kick in but ultimately reigned in the car. The CX-5 posted a slightly higher speed than the RAV4 through our avoidance maneuver, but our drivers felt

If the CX-5 has been a sleeper, its new engine will wake people up.

less confident going through the cones.

Neither of these SUVs has a great ride. The CX-5's is rather stiff, and ride motions are short and quick. A mild underlying choppiness persists on the highway and wears thin over time. The RAV4's ride is taut and well-controlled, but an underlying firmness results in some abrupt motions and jiggle.

As mentioned, cabin noise is a real problem for the Mazda. Road, wind, and engine sounds combine to produce a constant din that will turn off some people. Though the Toyota isn't as noisy, it's no library either, suffering

from pronounced road noise.

Each car has a six-speed automatic transmission. The Toyota's is the smoother and more decisive of the two, making the vehicle feel more responsive in everyday driving. But the Mazda accelerated faster in our tests. For slippery conditions, the RAV4 has a button that sends equal power to all wheels for optimum traction.

Inside the cabins

The interiors are nicely finished and well put together. Soft-touch surfaces are judiciously placed, although a lot of chintzy hard plastic is also noticeable. The Mazda has a rather austere ambience, and the RAV4 makes more of a style statement, with a thick band of stitched leatherette sweeping across the dash.

Drivers will find a high seating position with plenty of room all around in the SUVs. Each has a tilt-and-telescopic steering wheel, although the RAV4's has a very limited adjustment range. The CX-5's, though better, doesn't extend very far either. They also have a backup camera that aids the view to the rear in parking maneuvers; it's standard on all RAV4s. A blind-spot monitoring system comes on most CX-5s.

The RAV4's seats are well-shaped and firm. But the XLE version lacks an adjustable lumbar bulge; for that and a power seat, you'll have to get the top-trim Limited version. Our CX-5's power seats are much more supportive and have lumbar adjustment, but their prominent wing bolsters may feel confining to people with broad shoulders. Rear seating in each is spacious and comfortable, at least for two adults, but the RAV4 has a bit more foot room. Access doesn't get easier than it is in the RAV4.

Gauges are clearly legible, and controls are mostly straightforward. The RAV4's headlight switch makes it easy to inadvertently turn off the daytime running lights. Our CX-5 Touring has only a manual climate-control system, but the RAV4 XLE has an automatic dual-zone setup.

Each car has a touch-screen audio system. The RAV4's is more sophisticated and easier to use. Bluetooth smart-phone pairing is easy, especially in the Toyota, although our RAV4 XLE's Bluetooth hands-free voice command capabilities were surprisingly limited, and the system blocks out phone contacts while you're on the move. Top-trim versions of each have more state-of-the-art infotainment features.

Cargo space is generous. With the 60/40-split rear seatbacks folded flat, we measured 33 cubic feet in the CX-5 and 37 in the RAV4. With either you can fold the center section, allowing you to load long objects such as snowboards while still seating two rear passengers. The RAV4's new top-hinged hatch is powered in the Limited version.



Mazda CX-5

Ratings Small SUVs

All tested models In performance order.

Recommended


- Excellent
- Very good
- Good
- Fair
- Poor

	Make & model	Price as tested	In this issue	Overall road-test score	Predicted reliability	Overall mpg
Recommended	Rank			0 100 P F G V E		

SMALL SUVs

✓	1	Honda CR-V EX	\$26,455	77	●	23
✓	2	Mazda CX-5 Touring (2.5L)	28,090	76	●	25
✓	3	Toyota RAV4 XLE	26,802	75	●	24
	4	Ford Escape SE (1.6T)	28,040	75	new	22
✓	5	Mazda CX-5 Sport (2.0L)	25,300	74	●	25
✓	6	Nissan Rogue SV	25,850	73	●	22
✓	7	Kia Sportage LX	24,400	70	●	22
✓	8	Hyundai Tucson GLS	24,920	70	○	22

Why some cars are not recommended. The Ford Escape scored well enough in our tests but is too new for us to have reliability data.



Cars for the open road

The Porsche Boxster tops a quartet of roadsters

WHETHER YOU want to inject some fun into your daily driving, long to trade in the SUV for a good midlife-crisis car, or simply daydream of top-down driving on a sunny afternoon, it's hard to go wrong with a luxury roadster.

These convertible two-seat sports cars blend a fun-to-drive character, plenty of performance, lots of features, and striking looks that can turn heads on the road.

For this issue, we tested the Porsche Boxster, Mercedes-Benz SLK, Audi TT, and BMW Z4, which range in price from the TT's \$45,300 to the Boxster's \$59,600.

Of the four, the redesigned Boxster easily comes out ahead, with a score of 89. It handles, accelerates, and brakes with the best; it is relatively practical; and its soft-top is very easy to operate.

Although each model scores well in our testing, we can't recommend any of them because we don't have sufficient reliability data from our subscribers.

OK, reality check. Roadsters have their drawbacks in everyday driving. They don't have much cargo space, the seats are often tight and low, and the ride can be stiff. And if you're willing to give up some performance, features, refinement, and panache, you can get a Mazda Miata for about \$15,000 to \$30,000 less than these four.

Porsche Boxster

ROAD-TEST
SCORE
89

The mid-engine Boxster delivers the purest sports-car experience of the four roadsters we tested. It's quick and agile, with an invigorating engine note. Braking is superlative. Turn-in response is telepathic, and the body stays even-keel. All of that makes it truly fun to drive.

The Boxster also has an impeccable interior, a tolerable ride, and a convertible top that operates with the press of a button and can be quickly raised or lowered while driving up to 31 mph. Thanks to a wind blocker, wind buffeting is minimal with the top down.

Our test car's 265-hp, 2.7-liter six-cylinder engine is paired with a crisp six-speed manual transmission. The Boxster might not feel as brawny as a Corvette from a standstill, but acceleration builds quickly. And it's smooth

and returns a decent 23 mpg overall.

The mid-engine design allows for front and rear trunks, notable in a class where cargo space is piddling. Gripes include meager top-up rear visibility and some confusing controls.



Tested vehicle

HIGHS	Handling, braking, engine sound, relative practicality, easy top operation, fit and finish
LOWS	Rear visibility, narrow seats, access, some controls, price
TRIM LINE	—
DRIVETRAIN	265-hp, 2.7-liter six-cylinder engine; six-speed manual transmission; rear-wheel drive
MAJOR OPTIONS	Automatic climate control, heated and ventilated sports seats, HID headlights, variable effort power steering, 20-inch wheels.
TESTED PRICE	\$59,600



SNUG SET
The Boxster's well-bolstered seats can be too tight for some.



Scan for video.



Mercedes-Benz SLK

ROAD-TEST
SCORE
81

Helped by its retractable hard-top, the SLK is the most luxurious of our four cars and the best for a long cruise. With the top up, it provides the enclosed quiet and comfort of a sports coupe. But the top can be folded away with the press of a button.



BALMY BREEZE A wind blocker and neck-level vents that blow warm air make open-top driving pleasant even on chilly days.

The SLK also shines for its sporty character. Handling is crisp and agile, with good steering feedback. At its handling limits, the stability control allows some tailslide, but the car is balanced and predictable. The SLK achieved a high speed through our avoidance maneuver but was a bit challenging to navigate through the cones. The ride is firm yet supple. And stopping distances are very short.

Though the 1.8-liter turbocharged engine in our SLK250 can sound a bit wheezy, it delivers plenty of thrust while getting an impressive 26 mpg overall. But the shifter and clutch action of the six-speed manual transmission makes it hard to drive smoothly.

The snug cabin is well finished, but the car's low stance makes access difficult.



Scan for video.



Tested vehicle

HIGHS	Handling, steering, braking, fuel economy, decent ride, neck warmer, fit and finish
LOWS	Manual shifter and clutch, engine refinement, access
TRIM LINE	250
DRIVETRAIN	201-hp, 1.8-liter turbocharged four-cylinder engine; six-speed manual trans.; rear-wheel drive
MAJOR OPTIONS	Parking guidance, dual-zone climate control, rear spoiler, heated seats, Aircar, iPod control, upgraded stereo
TESTED PRICE	\$48,045

■ DID YOU KNOW?

Fabric tops are faster

Soft top or hard? Each has pros and cons. The fabric tops on the Porsche Boxster and Audi TT, for example, operate almost twice as fast as the retractable hard-tops on the Mercedes-Benz SLK and BMW Z4. The Boxster takes 10 seconds to open or close; the TT drops in 11 seconds and raises in 13. By contrast, the SLK takes 18 seconds to retract and 19 to close, and the Z4 takes 22 and 18. The SLK and Z4 are quieter with the hard-top up, but they can't open or close as the car is moving, and the folded roof takes up a lot of trunk space.

SOLID OPENING

Though not quick to open or close, the SLK's hard-top keeps outside noise at bay.





Audi TT

ROAD-TEST
SCORE
80

The TT convertible is not only a nimble, fun-to-drive roadster but also one of the few convertibles available with all-wheel drive. That said, the summer tires in the S line package will need to be swapped for winter rubber if you plan to drive in snowy conditions.

Handling is sporty but less engaging than the Boxster's or SLK's. Stops are very short, but the stiff ride can be somewhat taxing. A lot of noise comes through the soft top. At its high handling limits, the TT showed tenacious cornering grip. It aced our avoidance maneuver, giving drivers a lot of

confidence while they threaded the cones.

The 211-hp turbocharged four-cylinder engine is plenty punchy, sounds invigorating, and gets a respectable 25 mpg overall. The slick automated-manual transmission shifts quickly and smoothly.

Unlike the others here, the TT is relatively roomy inside and you don't feel like you're sitting on the ground. The cabin is nicely finished, with stylish details and comfortable but snug seats. Access is difficult.

The cloth top can be opened and closed at low speeds. But despite a wind blocker, there's quite a bit of wind buffeting with the top down.



Tested vehicle

HIGHS	Handling, transmission, braking, fit and finish, all-wheel drive, top operates at low speeds
LOWS	Ride, noise, rear visibility, access
TRIM LINE	Premium Plus convertible
DRIVETRAIN	211-hp, 2.0-liter turbocharged four-cylinder engine; 6-speed automated-manual transmission; all-wheel drive
MAJOR OPTIONS	S line package: 19-inch wheels, summer tires, Alcantara trim
TESTED PRICE	\$45,300



SPEED WING The TT's rear-deck spoiler rises up at highway speeds.



Scan for video.



HOT SEATS The red leather adds to the Z4's character.

BMW Z4

ROAD-TEST
SCORE
76

Going by the numbers, the Z4 performs well, accelerating faster than many competitors. It also garners better fuel economy, an impressive 28 mpg overall from its 2.0-liter turbocharged four-cylinder engine.

Another big draw is the retractable hard-top. It operates slowly but keeps the cabin relatively quiet, compared with soft-top roadsters.

But the Z4 isn't as fun to drive as the others here. Braking is excellent, and handling is secure, but more body lean and a penchant for running wide when pushed makes it less engaging. The taut ride often becomes jarring. And the diesel-like clatter of the idling engine

is not the purr that enthusiasts crave.

The six-speed manual transmission is precise but notchy; an eight-speed automatic is optional, as are two powerful six-cylinder engines that come with a seven-speed automated manual.

The interior is well finished, with firmly padded and supportive but very snug seats. And because you sit very low in the Z4, it's hard getting into the cabin.

The small trunk can hold only two duffel bags, but a shelf limits what you can put in when the top is down.



Tested vehicle

HIGHS	Acceleration, fuel economy, braking
LOWS	Steering feel, ride, noise, tight quarters, access
TRIM LINE	sDrive2.8i
DRIVETRAIN	240-hp, 2.0-liter turbocharged four-cylinder engine; six-speed manual transmission; rear-wheel drive
MAJOR OPTIONS	Leather, heated seats and steering wheel, power seats, automatic climate control, start/stop system
TESTED PRICE	\$55,225



Scan for video.



Mazda6

ROAD-TEST
SCORE
85

In a crowded, competitive class, the Mazda6 often gets overlooked by people shopping for a midsize sedan. But with a 2014 redesign, it makes a strong case for the spotlight by blending eye-catching, coupelike styling, a sporty driving character, and excellent fuel efficiency.

The Mazda6's 184-hp, 2.5-liter four-cylinder engine delivers a frugal 32 mpg overall and a diesel-like 44 mpg on the highway. That's the best we've measured in a conventional midsize sedan, edging out the four-cylinder Nissan Altima (31 mpg) and Honda Accord (30) as well as many compact and subcompact cars.

The key is Mazda's suite of Skyactiv technologies, including direct fuel injection and a higher compression ratio. An optional diesel engine arrives later this year, for another fuel-efficient choice.

Fun and frisky

While breezing past gas stations, you can enjoy the responsive acceleration and taut, agile handling that make the 6 more engaging to drive than most other sedans. When pushed to its handling limits, the Mazda6 provided strong grip and balanced, predictable behavior. The firm ride is compliant and well controlled but far from plush. Optional 19-inch tires and wheels make the ride slightly stiffer.

The front seats are very supportive, but the 6 falls a bit short on roominess and refinement. It's somewhat snug and quite loud, and it lacks the substantive, quality feel of some higher-rated competitors. Controls are straightforward, but those on the door are scantily lit. The coupelike silhouette impedes access slightly. And the rear seat, though decent, doesn't have the room of most competitors.

Reliability is likely to be very good.

Tested vehicle

HIGHS	Fuel economy, agility, transmission
LOWS	Noise, ride, snug interior, low dash vents, Sport lacks power seat
TRIM LINE	Sport
DRIVETRAIN	184-hp, 2.5-liter four-cylinder engine; six-speed automatic trans.; front-wheel drive
MAJOR OPTIONS	Soul red paint
TESTED PRICE	\$23,590

More test findings

BRAKING	Very good overall.
HEADLIGHTS	Good visibility and intensity from low beams, slightly improved intensity with high beams
ACCESS	Low roof, wide sills, and sloping pillars impede access a bit.
CABIN STORAGE	Sparse.
VISIBILITY	A low roof, small windows, and a high rear shelf impede visibility, but thin front pillars and large side mirrors help. A backup camera is standard on most versions.
HEAD RESTRAINTS	The center rear restraint must be raised to provide adequate protection.
CHILD SEATS	Outboard rear LATCH anchors are recessed and awkward to access.



STRETCH OUT The Mazda6's cabin is a bit snug, but rear-seat room is decent.

✓ Recommended



Compare

VERSION	Mazda6
TRIM LINE	Sport
PRICE: BASE/TESTED ⁽¹⁾	\$22,495/\$23,590
DRIVETRAIN	
Engine	2.5-liter 4-cyl. (184 hp)
Transmission	6-speed automatic
Drive wheels	Front
TIRES TESTED	Yokohama ADVAN A83,
Model & size	size P225/55R17 95V

RATINGS

PERFORMANCE

Acceleration	⊖
0 to 60 mph, sec.	7.5
45 to 65 mph, sec.	4.8
Quarter-mile, sec.	15.9
Transmission	⊖
Routine handling	⊖
Emergency handling	⊖
Avoid. maneuver, speed, mph	53.0
Braking	⊖
From 60 mph, dry/wet, ft.	132/141
Headlights	○

COMFORT AND CONVENIENCE

Ride	○
Noise	○
Driving position	⊖
Front-seat comfort	⊖
Rear-seat comfort	⊖
Access	⊖
Controls and displays	⊖
Interior fit and finish	○
Trunk/cargo area	⊖
PREDICTED RELIABILITY	⊖

FUEL

Overall mpg	32
City/highway mpg	22/44
Type	regular
Capacity, gal./Cruising range, mi.	16.4/525
Annual cost, 12K mi. at \$3.80/gal.	\$1,420

SAFETY

CRASH TESTS

IIHS frontal offset	Good
IIHS side	Good
IIHS rear	Good
IIHS roof strength	Good
NHTSA front, driver/pass.	NA/NA
NHTSA side, driver/rear	NA/NA
NHTSA rollover 2WD/4WD	NA/NA

AIR BAGS

Side, front/rear	std./no
Head protection	standard

SPECIFICATIONS

DIMENSIONS AND WEIGHT

Length/width/height, in.	192/72/57
Wheelbase, in.	111
Turning circle, ft.	40
Ground clearance, in.	5.5
Curb weight, lb. (% front/rear)	3,185 (59/41)
Maximum load, lb.	850
Luggage, suitcases+duffels	3+2
Cargo volume, cu. ft.	—
Towing capacity, lb.	NR

INTERIOR ROOM

Front shoulder room, in.	57.0
Front leg room, in.	41.0
Front head room, in. ⁽²⁾	4.0
Rear shoulder room, in.	53.5
Rear leg room, in.	29.0
Rear head room, in. ⁽²⁾	3.0

⁽¹⁾ Based on sticker price at time of purchase. ⁽²⁾ Above a person 5'9" tall.

✓ Recommended

✓ Recommended



Mazda CX-5	Toyota RAV4	Porsche Boxster	Mercedes-Benz SLK	Audi TT	BMW Z4
Touring	XLE	Base	SLK250	Premium Plus	sDrive28i
\$25,865/\$28,090	\$25,690/\$26,802	\$49,500/\$59,600	\$42,500/\$48,045	\$41,300/\$45,300	\$48,650/\$55,225
2.5-liter 4-cyl. (184 hp)	2.5-liter 4-cyl. (176 hp)	2.7-liter 6-cyl. (265 hp)	1.8-liter 4-cyl. (201 hp) turbo	2.0-liter 4-cyl. (211 hp) turbo	2.0-liter 4-cyl. (240 hp) turbo
6-speed automatic	6-speed automatic	6-speed manual	6-speed manual	6-speed sequential	6-speed manual
AWD	AWD	Rear	Rear	AWD	Rear
Yokohama Geolandar G91, size P225/65R17 100H	Dunlop ST30 Grandtrek, size 225/65R17 102H	Pirelli P Zero, size 235/35ZR20 88Y (front), 265/35ZR20 95Y (rear)	Continental ContiSportContact 5, size 225/45R17 91W (front), 245/40R17 91W (rear)	Toyo Proxes T1 Sport, size 255/35R19 96Y	Bridgestone Potenza RE050A I RFT, size 225/45R17 91V
⊖	⊖	⊕	⊕	⊕	⊕
8.0	9.0	6.1	7.0	6.7	6.1
5.0	5.7	4.3	3.8	4.5	4.1
16.2	16.9	14.5	15.2	15.2	14.7
⊖	⊕	⊖	⊖	⊕	⊖
⊖	⊖	⊕	⊕	⊕	⊖
○	○	⊕	⊖	⊖	⊖
52.5	51.5	58.0	54.0	54.5	54.5
⊖	⊖	⊕	⊕	⊕	⊕
133/142	135/145	112/128	115/130	120/127	122/130
○	○	⊖	●	⊖	⊖
○	○	○	○	○	○
○	○	⊖	○	○	○
⊖	⊖	○	⊖	⊖	⊖
⊖	⊖	NA	NA	NA	NA
⊖	⊖	○	⊖	⊖	⊖
⊖	⊖	○	○	⊖	○
○	○	⊕	⊕	⊕	⊖
○	○	⊖	●	●	●
⊕	⊖	New	NA	NA	NA
25	24	23	26	25	28
19/32	18/31	17/30	19/34	18/33	19/38
regular	regular	premium	premium	premium	premium
15.3/385	15.9/385	16.9/390	18.5/485	14.5/365	14.5/405
\$1,810	\$1,875	\$2,085 @\$4.00/gallon	\$1,825 @\$4.00/gallon	\$1,905 @\$4.00/gallon	\$1,720 @\$4.00/gallon
Good	Good	NA	NA	NA	NA
Good	Good	NA	NA	NA	NA
Good	Good	NA	NA	NA	NA
Good	Good	NA	NA	NA	NA
⊕/⊖	NA/NA	NA/NA	NA/NA	NA/NA	NA/NA
⊕/⊕	NA/NA	NA/NA	NA/NA	NA/NA	NA/NA
⊖/⊖	NA/NA	NA/NA	NA/NA	NA/NA	NA/NA
std./no	std./no	std./NA	std./NA	std./NA	std./NA
std. w/rollover	std. w/rollover	standard	standard	no	no
179/72/66	180/73/65	172/71/51	163/72/51	165/73/54	167/71/51
106	105	97	96	97	96
38	40	36	35	36	36
7.0	5.5	4.5	4.0	4.0	4.5
3,435 (57/43)	3,535 (58/42)	3,035 (46/54)	3,225 (51/49)	3,305 (58/42)	3,240 (47/53)
850	900	485	560	550	560
—	—	1+2	1+0	1+1	0+2
33.0	37.0	—	—	—	—
2,000	1,500	NR	NR	NR	NR
56.5	57.0	50.0	50.5	52.0	52.0
42.0	42.0	42.5	42.5	41.0	41.5
4.0	2.5	3.5	4.5	4.0	4.5
54.0	54.0	—	—	—	—
28.5	31.0	—	—	—	—
4.5	5.0	—	—	—	—

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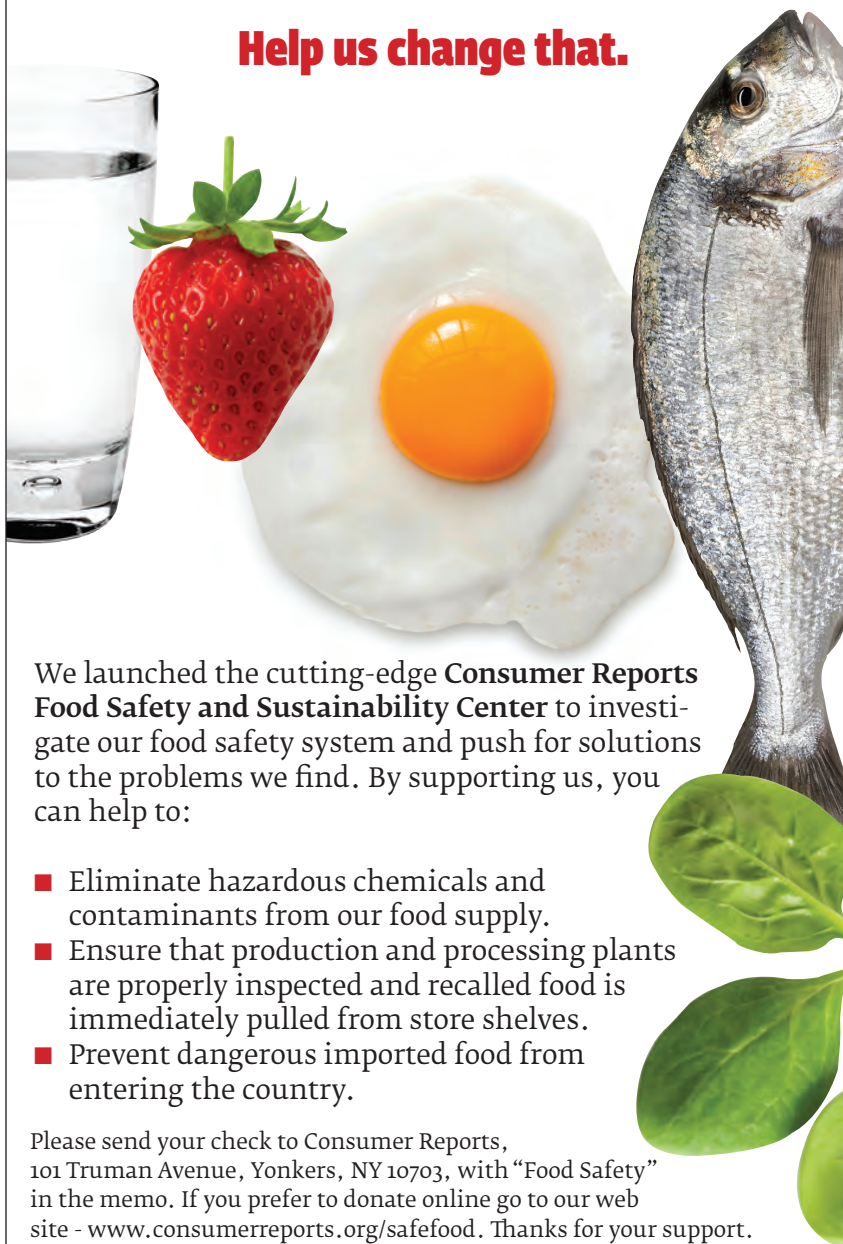
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Wipe or save?

These, um, coupons can be found in the ladies room in a New York library. If you use them for the usual purpose, please don't redeem them.



Another Sharpie wannabee

After sightings of the Shoupie and the Sharpei, Selling It readers are on the lookout. Here, the Shonrie or Shourie or ... well, you can guess.



Between the bread

A reader flying US Airways from Charlotte, N.C., to San Francisco last fall ordered the attractive \$8 in-flight sandwich he'd seen in an airline e-mail (above left): smoked turkey with brie and cranberry chutney. Mmm. He received the item above right. Grrr.



You say tomato; we say, "Huh?"

"My family and I noticed an odd difference," a reader wrote, "between two similar ketchup bottles." Both held 32 ounces and had a serving size of 1 tablespoon (17 grams). But Classic Heinz had 33 servings and Simply Heinz 53. "I do believe Simply Heinz is made with sugar cane," a customer rep told us, "and sugar swells so it makes more servings." As we tried to puzzle that out, she concluded, "Basically, it's because of the ingredients." Now there's more to puzzle: Simply's weight recently grew to 34 ounces.



Surprise

At a Walmart in Leshan, China, a reader bought what he thought were three full-sized chocolate bars—until he opened the clever packaging.

1 Room: Suite	
1 Night: Dec/30/2012 - Dec/31/2012	
Mandatory Hotel Fees: Collected by hotel	
Details	
Room 1: 2 Adults, 2 Children	avg./night
1 night	\$200.00
Extra Guest Charge	\$1,060,002.60
Taxes & Fees	\$164,331.40
Total: \$1,224,534.00	
BEST PRICE GUARANTEE	
Rates are quoted in US dollars.	

Can we get the worst price?

Expedia didn't convert Vietnamese currency to dollars, a reader explained: "In the end I just booked two rooms for \$160 each, saving myself more than a million dollars."

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Canada Extra

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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 32D, 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.

- ☒ **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.

Blood pressure monitors Report and Ratings, page 44

Recommended models only, from 21 tested.

Rec.	Rank	Brand & model	Price	Overall score
				0 100 P F G VG E

A ARM MONITORS

<input checked="" type="checkbox"/>	2	Omron 10 Series BP785CAN	\$140	89
<input checked="" type="checkbox"/>	4	iHealth Dock BP3	100*	84
<input checked="" type="checkbox"/>	5	LifeSource Advanced One Step UA-767PlusAC	90	81

Rec.	Rank	Brand & model	Price	Overall score
				0 100 P F G VG E

B WRIST MONITOR

<input checked="" type="checkbox"/>	1	Omron 7 Series BP652CAN	\$120	84
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Security software

Report, page 23, and Ratings, page 24

All of the tested free anti-malware programs and pay security suites are available.

Rec.	Rank	Product	Price		Overall score
			Download	Renewal fee/yr.	
					0 100
					P F G VG E

FREE ANTI-MALWARE PROGRAMS Protect against viruses, spyware, and other malicious software. ^[1]

✓	1	Avast Free Antivirus	free	NA	58
✓	2	Avira Free Antivirus	free	NA	55
	3	AVG AntiVirus Free 2013	free	NA	49
	4	Microsoft Security Essentials	free	NA	43

PAY SECURITY SUITES Protect against malware and spam, and include a firewall. ^[2]

✓	1	G Data InternetSecurity 2013	\$45	\$45	67
✓	2	ESET Smart Security 6	80	60	66
✓	3	F-Secure Internet Security 2013	60	46	64
✓	4	Kaspersky Internet Security 2013	80	80	63
✓	5	Avira Internet Security 2013	90	90	62

Rec.	Rank	Product	Price		Overall score
			Download	Renewal fee/yr.	
					0 100
					P F G VG E

B PAY SECURITY SUITES continued

	6	Avast Internet Security 7	\$60	\$60	57
	7	Bitdefender Internet Security 2013	70	70	56
	8	Trend Micro Titanium Internet Security 2013	80	80	54
	9	BullGuard Internet Security 2013	60	60	53
	10	McAfee Internet Security 2013	80	80	53
	11	AVG Internet Security 2013	60	60	51
	12	Norton Internet Security 2013	80	80	50
	13	ZoneAlarm Internet Security Suite 2013	80	80	45
	14	Panda Internet Security 2013	70	70	43

^[1] Windows Firewall used. ^[2] All suites provide a unified user interface and automatic updating of all components, are compatible with Windows XP or higher, and have a time-limited trial version available.

Wine chillers

Report and Ratings, page 43

Recommended models only, from 14 tested.

Rec.	Rank	Brand & model	Price	Overall score
				0 100
				P F G VG E

A UNDERCOUNTER

✓	1	Electrolux IQ-Touch EI24WC65GS	\$2,300	71
✓	2	Haier WC200GS	NA	68
✓	3	Vinotemp VT-46TS-2Z	NA	67
✓	4	GE Profile PCRO6WAT[SS]	1,500	67

Grills Report, page 32, and Ratings, pages 34-35

Thirty-six of the tested grills are available, including 10 of the recommended models.

Rec.	Rank	Brand & model	Price	Overall score
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A MEDIUM These have 370 to 520 square inches of cooking area, room for 16 to 30 burgers.

✓	1	Weber Spirit SP-320 46700401 ¹	\$ 700	83
✓	2	Vermont Castings Signature Series VCS323SSP ¹ ²	NA	80
✓	3	Weber Genesis S-330 ¹	1,050	79
✓	4	Char-Broil Gourmet TRU-Infrared 463251713 ¹ (Home Depot)	480	78
✓	5	Weber Spirit E-310 46510001 ¹	900	77
✓	7	Weber Genesis E-330 ¹	1,000	75
✓	8	Kenmore 690342	500	74
	9	Char-Broil Gourmet TRU-Infrared 463251913 ¹	580	74
	10	Blue Ember BE50070-584	900	72
	13	Vermont Castings Signature Series VCS423SSP ¹	NA	71
	17	Kenmore 690346	700	67
	18	Kenmore 690340	300	67
	20	KitchenAid 720-0745A [Item #6702] (Lowe's)	900	67
	22	Weber Summit S-470 ¹	2,200	66
	23	Grill Master 720-0697 [Item #134489] (Lowe's)	230	66
	30	Char-Broil TRU-Infrared Commercial 463241313 [Item #404324] (Lowe's) ¹	500	62
	32	Broil King Signet 90 986784 LP	NA	60
	33	Black & Decker JXG4103A (Walmart)	250	60
	35	Saber R50CC0312 ¹	NA	60
	38	Ultra Chef U05RBPSS3 ¹ ²	NA	58

Rec.	Rank	Brand & model	Price	Overall score
------	------	---------------	-------	---------------

A MEDIUM continued

	39	Brinkmann 810-2410-F (Home Depot)	\$ 260	58
	40	Napoleon Prestige P500RSIB ¹	NA	58
	47	Black & Decker JXG4604A (Walmart)	400	54
	50	Napoleon Prestige P500 ¹ ²	NA	51
	52	Char-Griller Grillin Pro 3001 [Item #296447] (Lowe's)	140	51
	54	Black & Decker JXF5105A (Walmart)	500	50
	56	Stok Quattro SGP4330 (Home Depot) ²	400	46

B LARGE These have more than 520 square inches of cooking area, room for 30 or more burgers.

	5	Master Forge 3218LTN [Item #6554] (Lowe's)	700	73
	7	Weber Summit E-670 ¹	2,700	71
	9	Blue Ember BE65078-584 (Home Depot)	1,000	67
	10	Weber Summit S-650 ¹	2,200	66
	11	Char-Broil TRU-Infrared Commercial 463241413 (Lowe's) ¹	600	66
	13	Saber R67SC0012 ¹	NA	60
	16	Brinkmann 810-4580-F (Home Depot) ¹	500	53

C SMALL These have less than 370 square inches of cooking area, room for 10 to 15 burgers.

✓	1	Weber Spirit E-210 46110001 ¹ ²	550	79
✓	2	Napoleon Terrace SE325PK ¹ ²	700	72

¹ Burners have warranty for 10 years or more. ² Lacks side burner.

Canada Extra on the Web

Canada Extra information can be found on ConsumerReports.org, our website, along with the current issue of the magazine and more. The address is www.ConsumerReports.org. Once there, click on the "Canada Extra" link on the opening screen. There you can see which reports have Canadian information available.

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Canada Extra turns 10

- Cars
- Road tests
- Budget cars
- Compact pickups
- Convertibles
- Crew-cab pickup trucks
- Family sedans
- Hatchbacks
- Large sedans
- Luxury coupes
- Luxury sedans
- Luxury SUVs
- Mercedes-Benz B200
- Mid-sized SUVs

CONSUMER REPORTS CANADIAN RATINGS

Video

- Camcorders
- Conventional tube TVs
- DVD recorders

FREE HIGHLIGHTS

Cars & transportation
We list government, industry, and manufacturer auto information and resources.

Better Business Bureaus
These non-profit organizations handle complaints, settle disputes, and more.

Government consumer offices
Here, federal and provincial offices that can help with a range of consumer concerns.

Government safety offices
These offices handle consumer issues including product safety and bankruptcy.

Autos

Report and Ratings, pages 52-59

All of the tested vehicles are available in Canada.

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
ROADSTERS								
Porsche Boxster	\$57,500-\$70,900	2.5	6.5	3.3	16.6	14.2	7.8	10.2
Mercedes-Benz SLK	52,200-80,500	2.4	7.4	2.7	17.4	12.5	6.8	9.0
Audi TT	48,600-67,600	2.6	7.0	3.5	17.4	13.2	7.0	9.3
BMW Z4	54,300-77,900	2.5	6.4	2.8	16.9	12.1	6.2	8.4
ENTRY-LEVEL MIDSIZED SEDAN								
Mazda6	24,495-32,195	3.0	8.0	3.6	18.2	10.8	5.3	7.3
SMALL SUVs								
Mazda CX-5	22,995-33,250	3.0	8.4	3.7	18.7	12.6	7.4	9.3
Toyota RAV4	23,790-31,700	3.4	9.6	4.0	19.5	13.1	7.6	9.7

Contact info

How to reach manufacturers in Canada.

Avast

avast.com/en-ca/index

AVG

avg.com/ca-en/homepage

Avira

avira.com/en/for-home

Bitdefender

bitdefender.com

Black & Decker

Contact local Walmart
walmart.ca

Blue Ember

800-265-2150
blueembergrills.com

Brinkmann

brinkmann.net

Broil King

800-265-2150
broilkingbbq.com

BullGuard

bullguardcanada.ca

Char-Broil

charbroil.com

Char-Griller

Contact local Lowe's
lowes.ca

Electrolux

905-813-7700
electroluxappliances.ca

ESET

eset.com

F-Secure

f-secure.com

G-Data

gdatasoftware.com

GE

877-994-5366
geappliances.ca

Grill Master

Contact local Lowe's
lowes.ca

Haier

877-337-3639
haieramerica.com

iHealth

855-816-7705
ihealth99.com

Kaspersky

kaspersky.ca

KitchenAid

Contact local Lowe's
lowes.ca

LifeSource

800-461-0991
autocontrolmedical.com

Master Forge

Contact local Lowe's
lowes.ca

McAfee

mcafee.com/ca

Microsoft

microsoft.com/en-ca

Napoleon

705-726-4278
napoleongrills.ca

Omron

877-216-1333
omronhealthcare.ca

Panda

pandasecurity.com/canada-eng

Saber

888-947-2237
sabergrills.com

Stok

Contact local Home Depot
homedepot.ca

Symantec

symantec.com/en/ca

Trend Micro

trendmicro.ca

Ultra Chef

napoleongrills.com

Vermont Castings

vermontcastings.ca

Vinotemp

800-777-8466
vinotemp.com

Weber

800-265-2150
weber.com

ZoneAlarm

zonealarm.com