



Shopping for a

safer car

2017



Insurance Institute for Highway Safety
Highway Loss Data Institute



Selecting a safer vehicle is a lot easier than it used to be. Most new cars, minivans, pickups and SUVs perform well in a range of crash tests conducted by the Insurance Institute for Highway Safety (IIHS), as well as the federal government. Still, some models could do a better job of protecting people in rollovers, rear crashes and certain front crashes. Crash avoidance technology is available on many mainstream and luxury models, so safety-conscious buyers also should look for these systems when weighing options.

Whether you are in the market for a new or used vehicle, here are some things to consider:

- ▶ Vehicle size and weight matter. Smaller, lighter vehicles generally offer less protection than larger, heavier ones. There is less structure to absorb crash energy, so deaths and injuries are more likely. People in lighter vehicles also experience higher crash forces when struck by heavier vehicles. If safety is a major consideration, **pass up very small, light vehicles.**
- ▶ A crashworthy design reduces death and injury risk. **Structure and restraints help determine crashworthiness.** Good structure means a strong occupant compartment, crumple zones to absorb the force of a serious crash, side structure to manage the force of a striking vehicle or struck object and a strong roof that won't collapse in a rollover. Safety belts keep people in their seats and spread crash forces across the upper body's stronger bony parts. Airbags protect people from hitting things inside the vehicle or objects outside it.





VEHICLE RATINGS AND CRASH TESTS

A good place to start your research is with vehicle ratings at iihs.org. IIHS rates new models based on how well they protect people in front, side, rollover and rear crashes. IIHS also evaluates the performance of headlights and front crash prevention systems with automatic braking. Models with the highest ratings qualify for an IIHS safety accolade.

To win either IIHS award, vehicles must earn good ratings in the small overlap front, moderate overlap front, side, roof strength and head restraint tests and also earn an advanced or superior rating for front crash prevention. To earn the highest award, *TOP SAFETY PICK+*, models also must have good- or acceptable-rated headlights.



Check IIHS ratings for individual vehicles at iihs.org/ratings. Find results of federal crash tests at safercar.gov.



CRASH AVOIDANCE TECHNOLOGIES

Protecting people in crashes is vital. Avoiding them altogether is ideal. Crash avoidance systems can help. Most automakers offer them on 2017 models. So far two features — front crash prevention and adaptive headlights — are reducing crashes, based on HLDI analysis of insurance losses.

Front crash prevention systems include forward collision warning and autobrake. Warning systems alert you if you get too close to a car in front. Autobrake systems can brake if you don't respond in time. **Curve-adaptive headlights** shift direction as you steer to help you see better on curves in the dark. **High-beam assist** technology automatically switches between high beams and low beams. **Lane-departure warning, lane-keeping assist** and **blind-spot detection** are other technologies intended to help drivers avoid crashes. So far, IIHS and HLDI haven't been able to quantify their benefits.



High-beam assist



Pedestrian detection



Front crash prevention with autobrake



Front crash prevention



Adaptive headlights

Go to [iihs.org/crash_avoidance](https://www.iihs.org/crash_avoidance) to find vehicles with these features. To see headlight and front crash prevention ratings go to [iihs.org/ratings](https://www.iihs.org/ratings).

NHTSA also identifies models with advanced features such as lane-departure warning and rear-view cameras. Go to [safercar.gov](https://www.safercar.gov) to learn more.

BUYING A USED VEHICLE

If a brand-new car isn't in your budget, keep in mind that late-model vehicles in general are safer than older ones. Our list of recommended used vehicles for teenagers is a good resource for drivers of any age ([iihs.org/teenvehicles](https://www.iihs.org/teenvehicles)). Here are some tips for choosing a previously owned vehicle:

- ▶ Frontal crashworthiness — **Look for good ratings in frontal crash tests.** Most newer models earn top marks for frontal crashworthiness in the federal government's 35 mph test head-on into a rigid barrier and the IIHS 40 mph moderate overlap test into a deformable barrier. Many but not all late-model vehicles earn acceptable or good ratings from IIHS for protection in a small overlap front crash.
- ▶ Side crashworthiness — **Choose a vehicle with good side ratings plus side airbags that protect your head.** IIHS and NHTSA rate models based on tests that simulate front-into-side crashes. The tests represent different side-impact dangers. Drivers of vehicles with good ratings in the IIHS side-barrier test are 70 percent less likely to die in a driver-side crash compared with drivers in vehicles rated poor. The majority of 2008 and newer models have side airbags as standard equipment.
- ▶ Roof strength — **Look for a strong roof.** IIHS rates roof strength to help consumers pick vehicles with roofs that will hold up in a rollover crash. Strong roofs reduce the risk of fatal or incapacitating injury in a rollover. Ratings began with 2008-09 models.
- ▶ Head restraints — **Pick a model with a good seat/head restraint rating** to reduce whiplash injuries in a rear-end collision. Vehicles with seat/head restraint combinations rated good by IIHS have 15 percent fewer insurance claims



RESOURCES

Used vehicles for teens [iihs.org/teenvehicles](https://www.iihs.org/teenvehicles)

Vehicle ratings and awards [iihs.org/ratings](https://www.iihs.org/ratings)

ESC and side airbags [iihs.org/safety-features](https://www.iihs.org/safety-features)

Crash avoidance [iihs.org/crash_avoidance](https://www.iihs.org/crash_avoidance)

for neck injuries than vehicles with poor ratings. You can help increase protection by **adjusting the head restraint** to correctly fit your head.

- ▶ Electronic stability control – **Buy a vehicle with ESC.** It's standard on 2012 and newer models and available on many earlier ones. An extension of antilock brake technology, ESC engages automatically to help drivers maintain control on curves and slippery roads. ESC lowers the risk of a fatal single-vehicle crash by about half and the risk of a fatal rollover by as much as 80 percent.
- ▶ Recalls – **Check for recalls** before buying, and make sure repairs are made (www-odi.nhtsa.dot.gov/owners/SearchSafetyIssues).



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iihs.org



youtube.com/IIHS

iihs.org/rss



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MEMBER GROUPS

- AAA Carolinas
- Acceptance Insurance
- Alfa Alliance Insurance Corporation
- Alfa Insurance
- Allstate Insurance Group
- American Family Mutual Insurance Company
- American National
- Ameriprise Auto & Home
- Amica Mutual Insurance Company
- Auto Club Enterprises
- Auto Club Group
- Auto-Owners Insurance
- Bitco Insurance Companies
- California Casualty Group
- Censtat Casualty Company
- CHUBB
- Colorado Farm Bureau Mutual Insurance Company
- Concord Group Insurance Companies
- COUNTRY Financial
- CSAA Insurance Group
- CSE Insurance Group
- Desjardins General Insurance Group
- Direct General Corporation
- Elephant Insurance Company
- EMC Insurance Companies
- Erie Insurance Group
- Esurance
- Farm Bureau Financial Services
- Farm Bureau Insurance of Michigan
- Farm Bureau Mutual Insurance Company of Idaho
- Farmers Insurance Group
- Farmers Mutual Hail Insurance Company of Iowa
- Farmers Mutual of Nebraska
- Florida Farm Bureau Insurance Companies
- Frankenmuth Insurance
- Gainsco Insurance
- GEICO Corporation
- The General Insurance
- Georgia Farm Bureau Mutual Insurance Company
- Goodville Mutual Casualty Company
- Grange Insurance
- Hallmark Financial Services
- Hanover Insurance Group
- The Hartford
- Haulers Insurance Company, Inc.
- Horace Mann Insurance Companies
- Imperial Fire & Casualty Insurance Company
- Indiana Farmers Mutual Insurance Company
- Infinity Property & Casualty
- Kemper Corporation
- Kentucky Farm Bureau Mutual Insurance Companies
- Liberty Mutual Insurance Company
- Louisiana Farm Bureau Mutual Insurance Company
- The Main Street America Group
- Mercury Insurance Group
- MetLife Auto & Home
- Mississippi Farm Bureau Casualty Insurance Company
- MMG Insurance
- Munich Reinsurance America, Inc.
- Mutual Benefit Group
- Mutual of Enumclaw Insurance Company
- Nationwide
- New Jersey Manufacturers Insurance Group
- Nodak Mutual Insurance Company
- Norfolk & Dedham Group
- North Carolina Farm Bureau Mutual Insurance Company
- Northern Neck Insurance Company
- Ohio Mutual Insurance Group
- Old American County Mutual Fire Insurance Company
- Old American Indemnity Company
- Oregon Mutual Insurance Company
- Paramount Insurance Company
- Pekin Insurance
- PEMCO Insurance
- Plymouth Rock Assurance
- Progressive Insurance
- PURE Insurance
- Qualitas Insurance Company
- Redpoint County Mutual Insurance Company
- The Responsive Auto Insurance Company
- Rider Insurance
- Rockingham Group
- RSA Canada
- Safe Auto Insurance Company
- Safeco Insurance
- Samsung Fire & Marine Insurance Company
- SECURA Insurance
- Sentry Insurance
- Shelter Insurance Companies
- Sompo America
- South Carolina Farm Bureau Mutual Insurance Company
- Southern Farm Bureau Casualty Insurance Company
- State Auto Insurance Companies
- State Farm Insurance Companies
- Tennessee Farmers Mutual Insurance Company
- Texas Farm Bureau Insurance Companies
- The Travelers Companies
- United Educators
- USAA
- Utica National Insurance Group
- Virginia Farm Bureau Mutual Insurance
- West Bend Mutual Insurance Company
- Western National Insurance Group
- Westfield Insurance
- XL Group plc

FUNDING ASSOCIATIONS

- American Insurance Association
- National Association of Mutual Insurance Companies
- Property Casualty Insurers Association of America

