

# INSURANCE INSTITUTE FOR HIGHWAY SAFETY

## NEWS RELEASE

### **LATEST HIGH-SPEED CRASH TEST RESULTS: NISSAN PATHFINDER, MITSUBISHI MONTERO FALL SHORT ON OCCUPANT PROTECTION; NO 'BEST PICK' AMONG 8 UTILITY VEHICLES**

ARLINGTON, VA – March 13, 1997 – There's still no "best pick" or even a vehicle with a good overall rating among midsize utility vehicles evaluated for crashworthiness. This is the case even after adding new crash test results for the 1997 Nissan Pathfinder and 1996 Mitsubishi Montero. The Insurance Institute for Highway Safety now has evaluated eight midsize utility vehicles, comparing how well they protect people in crashes.

"Results for the new Pathfinder are disappointing," Institute President Brian O'Neill points out. "Nissan completely redesigned this vehicle for the 1996 model year and then modified it again beginning with early 1997s specifically to improve crashworthiness. But the structural performance in our 40 mph frontal offset crash test was poor. The test dummy's foot was trapped in the vehicle by intrusion, and the Pathfinder's overall evaluation is marginal."

Frontal offset crash test results for the Pathfinder and Montero add to earlier results for six other midsize utility vehicles (see attached list). The Montero's performance was better than the Pathfinder's but still not good. O'Neill explains that "reasonably good structural performance was marred by too much upward movement of the steering column during the frontal offset test. This contributed to the risk of head and/or neck injury."

Although none of the midsize utility vehicles evaluated by the Institute earned a good overall rating, there's a wide range of performance. The Toyota 4Runner, Land Rover Discovery, Mitsubishi Montero, and Ford Explorer/Mercury Mountaineer earned evaluations of acceptable. The Jeep Grand Cherokee and Nissan Pathfinder/Infiniti QX4 are marginal overall, and the Isuzu Rodeo/Honda Passport and Chevrolet Blazer/GMC Jimmy/Oldsmobile Bravada are poor. The principal component of these evaluations is a 40 mph frontal offset crash test of each model.

Crash test results for midsize utility vehicles are important because the popularity of these vehicles is growing. They accounted for about one in every eight new passenger vehicles sold last year.

### **How Researchers Assess Vehicle Performance in the Frontal Offset Test**

Institute researchers use 40 mph offset crash tests to evaluate three important aspects of crashworthiness – how well vehicle structure manages the energy of the crash, injury risk measured on a dummy representing an average-size male driver, and how well dummy movement is controlled during impact.

Essentially the same test is used to evaluate new cars by the British and Swedish governments in cooperation with motor clubs and by a consortium of state governments and motor clubs in Australia. In addition, the Institute's crashworthiness evaluations reflect the adequacy of front-seat head restraint designs and bumper performance in a series of four low-speed (5 mph) impacts. Poor results in the federal government's crash test also may influence a vehicle's overall evaluation.

Vehicle structure, restraints, and injury measures in the 40 mph frontal offset test are evaluated separately – even though they're related – because good performance for any one of the three by itself in a single test isn't sufficient to reliably indicate good crashworthiness.

### **Institute and Government Crash Tests Complement Each Other**

The federal government has been testing new passenger vehicles in 35 mph crash tests since 1978. This New Car Assessment Program has been a major contributor to crashworthiness improvements – in particular, improved restraint systems in new passenger vehicles. The Institute's offset test, which involves 40 percent of a vehicle's front end hitting a deformable barrier at 40 mph, complements the federal test involving the full width of the front end hitting a rigid barrier. The government test is especially demanding of vehicles' restraint systems but not so much so of vehicle structure. An offset test is more demanding of vehicle structure.

**Broadcast-quality video footage of the crash tests is available.  
Write to: Crashworthiness, P.O. Box 1420, Arlington, VA 22210  
Evaluations also are on the Internet: <http://www.hwysafety.org>.**