

The **Volvo XC90** was introduced in the 2003 model year.

The Insurance Institute for Highway Safety has evaluated the crashworthiness of the XC90 in a 40 mph frontal offset crash test into a deformable barrier. Head restraint and bumper designs are evaluated separately.

OVERALL EVALUATION: GOOD The driver space was maintained well in the frontal offset crash test, and measures indicate that significant injury was unlikely. Advanced frontal airbags and front and rear safety belts, side airbags with head protection, front seats designed to minimize whiplash injuries, daytime running lights, and a stability control system that includes rollover sensing are pluses.

STRUCTURE/SAFETY CAGE: GOOD There was minimal intrusion into the driver footwell area and minimal rearward movement of the instrument panel.

RESTRAINTS/DUMMY KINEMATICS: GOOD Dummy movement was well controlled. During rebound, the head contacted the A-pillar and the roof rail.

INJURY MEASURES: GOOD Measures taken from the head, neck, chest, and both legs indicate low risk of injuries to these body regions. Head acceleration from the A-pillar/roof rail contact was low.

SPECIAL SAFETY FEATURES:

- Frontal airbags: deploy at one of two force levels, depending on crash severity, and deploy at higher crash speeds when occupants are belted than when they are unbelted
- Side airbags: for drivers' and front passengers' chests; separate side curtain airbags for front and rear occupants' heads (including occupants of the third row seats, when so equipped)
- Safety belts: crash tensioners prevent slack in all belts from allowing excessive forward movement in a crash; devices on front belts limit belt forces on occupants
- Rollover protection system: activates side curtain airbags and belt tensioners in the event of a rollover
- Front seats: designed to minimize the possibility of whiplash injuries to occupants in low-speed rear impacts
- Built-in child restraints (optional)
- Electronic stability control system to minimize possibility of sideways skidding; includes roll stability control to minimize the possibility of rollover
- Antilock brakes
- Daytime running lights