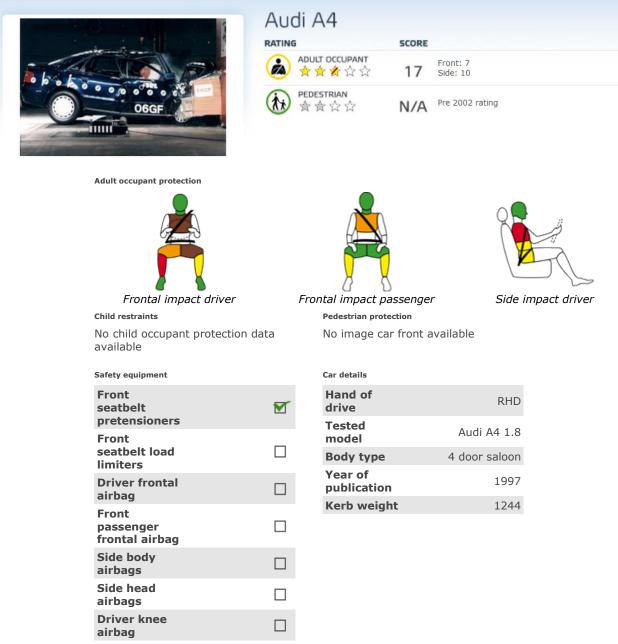
# **TEST RESULTS**



GOOD ADEQUATE MARGINAL WEAK POOR



#### Comments

The A4 earned three stars for frontal- and side-impact protection but the last star is flagged to indicate that the driver faced an unacceptably high risk of chest injury in the side impact. The car would not meet the new side-impact legislation effective from October 1998. In the frontal impact, seat belt loading of the chest was downrated because of intrusion at facia level. The presence of hard structures in the knee impact area posed a serious risk of injury to his knees, thighs and pelvis.

# **Front impact**

The driver's screen pillar was pushed back by 104mm (4.1in) during the impact. The A4's bodyshell remained structurally stable – the driver's door needed moderate force to open it but the passenger's door could be opened normally. The steering wheel was pushed backwards by 71mm (2.8in) and upwards by just 2mm (0.1in). Footwell intrusion was modest and the brake pedal was displaced rearwards by only 77mm (3.0in). The A4 offered good head protection, and the head's contact on the airbag was stable. The steering moved back by only a small amount. Neck protection was also good. Forces transmitted to the driver's chest by the seat belt presented an injury risk that was worsened by cabin intrusion at facia level. The driver's left knee struck the cladding directly below the steering column, causing the cladding to 'bottom out' against the steering lock. Protection of his knee, thigh and pelvis was down-rated: if the knee had penetrated deeper into the cladding, it could have struck the steering lock directly. Also, a bracket supporting the facia could have led to localised knee injury. Contact in a slightly different position would not have given worse results. The driver's right knee hit the facia above the oddments bin. Again, the protection for his knee, thigh and pelvis was down-rated: if the knee had penetrated slightly further, the steering column could also have been hit. The facia support bracket could have produced localised injury to the knee itself. However, the limited footwell intrusion provided good protection for his feet and ankles. Protection for the



passenger was generally good, although forces transmitted by the seat belt posed a risk of injury to his chest. There was also some risk of injury to the passenger's lower legs. No modification of readings taken from the dummy's instrumentation were necessary to take account of different sized passengers, different seating positions or slight variations in the impact.

# Side impact

Head protection was good, but high levels of force were measured by all of the dummy's ribs which meant that protection of the chest was rated as poor. Forces measured by the dummy's instrumentation indicated that protection for the abdomen and pelvis was adequate, though.

## **Child occupant**

Instruction labels are not clear but the instruction leaflet is easy to understand.

## Pedestrian

Child head impact Two of the six locations met proposed legislation: one above the rocker cover filler cap, the other was on a bonnet area with no obviously hazardous structure beneath it. One other point came close, and three were better than average. One, situated at the join between bonnet and wing, was worse. Upper leg impact None of the three tests met the proposed requirements. One was better than average, two were worse, one at the centre-line of the car, the other in line with the centre of the headlight. Adult head impact No tests met proposed legislation although one, above the windscreen wiper hinge, came close. Three were better than average, three were worse, the worst found at the corner of the bonnet, just above the hinge. Leg impact None of the three tests met the proposed requirements. All three test locations gave results that were worse than average.