# Cars As Weapons

Forensic Science

- Cars as weapons are less common for murder than for road accidents, but do occur from time to time. Whether the driver was drunk, on drugs or simply a reckless and homicidal driver, cars can become weapons just as fearful as loaded guns.

# Recorded at the Scene

- Forensic scientists play a vital role when it comes to collecting and analysing evidence to reconstruct exactly what happened. Investigators look for evidence to verify how fast the car was going, in what direction the car was moving, and whether the driver tried to brake.
- Evidence missed during the investigation is lost forever, because if the incident occurred on a busy highway, investigators are under intense pressure to complete the investigation and allow traffic to flow again. Sketches of the road, detailing of the measurements and recording of the locations of skid-marks must be done.
- Photos taken from an angle can be used in certain computer software to reveal the distance of the marks left on the road. The type of car and its mass are logged for further reconstruction of the crash.

# The Driver

- Identifying who was driving the car is sometimes a difficult task, as passengers can be thrown from their seats and a surviving driver may attempt to switch the blame to a passenger that died.
- These claims are analysed in the laboratory, where with the help of medical examiners, the truth as to who was driving can be found out.
- During a crash, the airbag is expelled and traces of evidence such as hair, make-up, skin and blood are left behind. Airbags tend to cause distinct facial injuries. The pedals in the car and the driver's shoes mark each other and if the occupants of the car were wearing seatbelts, bruising on the shoulder can reveal which side of the car an occupant was sitting on.

# Computer Reconstruction

- Reconstruction of the crash involves a complex computer program, for example, PC-Crash, which recreates the crash scene.
- The program works backwards with the data it receives, so the operator enters information such as the vehicles resting position, the mass of the vehicle, the type of vehicle, the radius and the length of the tyre-marks found on the road.
- The program is then able to use the calculations to estimate the speed and direction of all the vehicles involved before the final impact.
- This reconstructed animation can be used as evidence in a court of law.