

Editing

It may seem odd to compare race-car drivers to astronauts but as you learn about how the force of gravity affects people in these two high/speed professions, the similarities become more obvious. This force, known as "G-force" is a feeling of increased weight that occurs during acceleration. You have probably felt it when you've gone downhill on a roller coaster and your stomach seemed to drop to your knees?

The force of three G's feels something like two men sitting on your chest during blastoff, astronauts may experience from three to seven G's of acceleration. Race-car drivers on the other hand experience more than four G's, often for as long as two solid hours. G-force can push on any side of the driver's body driver's feel G force on the front of their bodies when they accelerate on the back when they brake and on either side when they turn.

During takeoff, an astronaut's heart usually beats around 100 times per minute. A race-car driver's heart can beat up to 200 times per minute, similar to the 175 beats per minute averaged by a marathon runner's during a race. By contrast, the resting heartbeat for a typical adult is 60 to 80 beats per minute. This is one reason why physical conditioning has become almost as important for race-car drivers as it is for astronauts'.

Like astronauts, race-car drivers now use a sophisticated assortment of protective gear for both, protective helmets also contain two-way communication systems. Astronauts stay in touch with Mission Control, while drivers can talk to race engineers. Astronaut suits are fireproof waterproof airtight ventilated, and protect against extreme temperatures. Drivers' suits can withstand up to 1,300 degrees Fahrenheit! Ready set go...blast off?

