

Failure Modes and Effects

<u>Failure Mode</u>	Local Effect/s	Global Effect/s
<i>Unpredictable mechanical failure resulting in halting of vehicle</i>	Causes vehicle to veer off track	Car crashes
	Whiplash is caused to the driver	Driver injured
	Crash with other nearby drivers	
<i>Unpredictable mechanical failure without vehicle stop</i>	Drivers don't realise the car is malfunctioning	As above but with potential increased probability if not alerted of malfunction
	Other's as above	
<i>Incorrect tyre fitting in pit lane</i>	Tyre come loose, reducing steering	Crash
	Tyre comes off completely	Pit crew injured
<i>Spectator movement outside of permitted area</i>	Spectator distracts driver	Terrorist attack
	Spectator aids in terrorist attack	Spectator injured
	Spectator enters an unsafe area	Crash
<i>Speeding in pit lane</i>	Less time to react to sudden activity change in the outer pit lane	Pit crew injured
	Harder to judge entry speed into inner pit lane	Crash
<i>Statistical feedback (ect) broken</i>	Little or no meaningful feedback from car to team	Higher chance of other faults not being detected
<i>Team radio broken</i>	Little or no meaningful feedback from car to team	Higher chance of other incidents not being noticed by driver
<i>Poorly executed overtaking manoeuvre</i>	Structural damage to car creating debris	Crash
	Driver placed in compromising situation	Debris damage other vehicle indirectly causing another crash
	Car veers off track	
<i>Punctured tyre</i>	Reduced steering	Crash with another car
	Tyre debris on road	Car beached
		Car impacts with debris
		Debris injure someone in the vicinity
<i>Safety car mechanical failure</i>	Car continue at high speed	Crash due to high speed
		Crash due to not knowing about the track danger

Failure Modes and Effects

<i>Driver fatigue</i>	Driver's reactions slowed	Crash
<i>False start</i>	Close cars travelling at very different speeds	Crash
<i>Terrorist attack</i>	N/a	Ranging from zero consequence to large number of deaths and damage to track