



F1 Safety – Medical Facilities

Hello and welcome to F1 Safety, a mini series from Sidepodcast. We're covering the big and small of Formula 1 safety, with helmets, clothing, cars and circuits already completed. Today we're going to focus in on medical facilities.

We've already looked at a lot of the preventative measures Formula 1 instigates to keep drivers safe. However, sometimes accidents happen, and there are medical facilities and procedures at circuits to try and control any situation.

Around the circuit, there are several rapid response vehicles, including salvage cars known as S-cars, rescue cars known as R-cars, plus plenty of cranes and tractors to extricate stricken cars. There are four S-cars, who have fire rescue equipment on board, such as extinguishers and cutters. There are two R-cars which can bring one doctor and four paramedics to any point on the track within 30 seconds.

The FIA employ a chief medical delegate, currently Doctor Gary Hartstein. He is on call in the medical car, sitting at the end of the pitlane. If there is a big crash that requires medical intervention, the medical car will be employed, along with the safety car. To quickly assess an accident, every F1 car has a warning light which immediately shows the doctor how serious the crash has been.

The Medical Car actually follows the pack around on the first lap, as they vie for position in the opening corners. These are considered to be the most dangerous and crash-prone corners of the entire race, so the medical car is nearby if the worst happens. It will pull into the pitlane at the end of the first lap and hopefully the race would continue unimpeded.

If a driver requires immediate attention, then he will be taken to the medical centre at the circuit. Although these vary in size, and can be relatively small, they are as equally equipped as most hospitals emergency department. It is staffed 24 hours a day during a race weekend, with a surgeon and anaesthetist who have their own operating theatre, plus several paramedics, and resuscitation equipment if the worst should happen. Drivers will often be sent to the medical centre for checks, even if they emerge from an accident unscathed. It is up to the FIA to clear a driver to race and ensure he is physically fit to do so.

The majority of concern surrounds head injuries, as these are harder to diagnose from the outside and can seriously affect a drivers ability. The doctors also need to ensure that if the driver suffered a secondary head trauma without allowing time for a full recovery, the implications could be far worse. Several drivers have had to sit out the rest of a weekend if they crash early on, and are sometimes even forced to sit out the next race if they have a particularly bad accident.

Toyota actually have their own doctor travelling with them, Dr Riccardo Ceccarelli, who turns up to every race weekend. He works with the drivers and all within the team to make sure they are fully fit. He concentrates on general wellbeing as well, for example, keeping hydrated during the hotter races. He will also decide whether any Toyota personnel need to be transferred to the medical centre, and he'll keep an eye on their treatment. Dr Ceccarelli has also helped with other teams, for example, if there is an incident in the pitlane, however his duty is with Toyota.

There will be at least one hospital in the surrounding area that is on stand-by as the weekend progresses. There are ambulances stationed at the medical centre to make their way to the nearby hospitals, but the preferred method of



transportation is helicopter. Within the circuit there is a MedEvac chopper ready to go at all times, with a doctor, paramedics and pilot on standby. There is also a spare helicopter outside the track just in case. This is a vital part of the safety procedures, as a session will not go ahead if the helicopter cannot take off or land at the hospital. Normally, this is a weather issue, fog or extreme rain, and we saw this happen in Fuji 2007. That supremely wet weekend saw Saturday practice delayed by thirty minutes, and in the end there were only four minutes of running before it was red flagged. Race Control were not happy with the low-lying clouds.

As long as the weather holds, though, there are enough procedures in place to cover every eventuality, and first class medical treatment is available throughout an entire race weekend.

That's it for this episode of F1 Safety. As ever, I'd love to hear your feedback about the topics we've covered so far in this mini series – email me Christine@sidepodcast.com. I'll be back tomorrow with the fifth episode of F1 Safety.

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