

MEDICAL SERVICES/REQUIREMENTS

Medical Services at Motorsport Events

1. BACKGROUND

At every motorsport event there exists the potential for accidents which could result in injury or death to individuals, be they competitors, drivers, officials, spectators or others.

Whilst the rules, regulations and approved procedures which govern the conduct of motorsport are designed to minimise the potential for accidents and injury, it is necessary that each and every motorsport event be conducted in a manner designed to reduce risk. Insofar as minimising risk to persons in the case of injury being sustained Motorsport Australia requires each organiser to have in place not only personnel and facilities on site commensurate with the risk profile of the event but also an appropriate and considered response plan to be activated if an incident requiring a medical response occurs.

Different disciplines and events within these disciplines of motorsport present different potentials for injury to persons. The service provided by the Organiser to provide for assistance in the case of personal injury must reflect the potential risk associated with the type and status of event.

Accordingly, the requirements set by Motorsport Australia for medical services at a race meeting are generally more demanding than for those for a motorkhana; and those for a major international event are generally more demanding than those for a club event.

2. MEDICAL RESPONSE PLAN

Motorsport Australia has considered each of the various types of motorsport activity, and determined the level of medical service planning and medical response capacity which is required for each type and status of event as follows:

	Current Activity				Road Events					Off Road Events		Motorkhana	
	Motor Racing	Regularity Trials	Multi-car Speed Event Multi-car Drifting	Single-car Speed Event Single-car Drifting	Special Stage Rally	Non-Special Stage Rally	Rallysprint	Touring Road Event	Touring Assembly	Field	Stadium	Khanacross	Motorkhana
International	FIA	FIA	FIA	FIA	FIA	FIA	FIA	FIA	FIA	FIA	FIA	FIA	FIA
National Championship	A	A	A	A	A	NA	NA	NA	NA	A	A	B	B
National – other	A	A	A	A	A	A	A	*A/B	C	B	A	B	B
State Championship	A	A	B	B	B	B	B	*A/B	C	B	A	C	C
Multi-Club	A	B	B	B	B	B	B	*A/B	C	B	A	C	C
Club	A	B	C	C	B	B	B	*A/B	C	B	B	C	C

KEY TO TABLE

- A A detailed event/venue specific Medical Response Plan is required. The plan must be documented in the format specified (an example is included at Attachment A)
 - B A pro forma Medical Response Plan/Checklist is required (see Attachment B)
 - C A pro forma Medical Response/Emergency Information Sheet is required (see Attachment C)
 - FIA Requirements for Medical Services are set by the FIA for these events
 - NA This type/status of event is not held
- * If a closed road section is incorporated in the event, the requirement is A; otherwise it is B

The Medical response plans and the resources required to give effect to the Plan are not considered overly onerous on organisers and reflect common sense and community standards.

The objective of the plan is to ensure that proper planning and forethought have been undertaken prior to the conduct of an event and to guide the practical response to any incident resulting in injury that may occur during an event.

3. SPECIFIC REQUIREMENTS

In addition to the requirements of the Medical Response Plan appropriate for the status of the event as outlined above, Motorsport Australia requires that various types and status of events meet specific additional requirements as follows:

3.1 RACE MEETINGS

3.1.1 General

At each meeting there must be a medical service which is able to provide at the scene of any incident within the minimum possible time, appropriately skilled personnel and equipment to assess and treat any injured or potentially injured competitor or official. Such personnel and equipment must be either in a suitable vehicle to enable them to reach the scene or so deployed that access can be gained to any scene on foot. An efficient radio communication system is essential to this response.

Following assessment and initiation of treatment at the scene, a suitable vehicle must be available to transport patients including those on a stretcher to the circuit Medical Centre while ensuring that the level of care initiated at the track side is maintained during transport.

On a trial basis, as an alternative to the prescriptions in 3.1 the requirements of the Motorsport Australia Alternative Medical Services/Requirements may be utilised for the following race meetings:

- National Championship;
- National Historic;
- Non-International race meetings at Mt Panorama, and
- Muscle Car Masters at Sydney Motorsport Park.

Note: that for race meetings of Supercars status the provisions of Motorsport Australia Alternative Medical Services/Requirements do not apply. For race meetings which include a race entered on the FIA calendar the relevant regulations of the FIA (see FIA Appendix H) will apply.

*To access the Motorsport Australia Alternative Medical Service Requirements refer to:
General Regulations of Motorsport Australia on the Motorsport Australia Manual –
motorsport.org.au/regulations/manual*

3.1.2 Medical Centre

A Medical Centre must be provided at each circuit. It may be a permanent or a temporary building. It must be readily accessible from the track and have ready access to public roads for subsequent transport of patients to hospital. It must be so situated to ensure security and privacy.

The Medical Centre must be so constructed that patients on stretchers can be readily taken into and out of the centre and must contain adequate space and an appropriate clinical environment for further assessment, treatment, stabilisation, and preparation for transport. It must include climate control, specialised lighting and hot water supply.

The Medical Centre must be also able to accommodate ambulatory patients and have facilities for the assessment of fitness to compete.

3.1.3 Communications

Communication facilities must include radio communication with the trackside and with Race Control. A direct telephone line for contact with the receiving hospital is necessary.

3.1.4 Personnel

3.1.4.1 Medical Officer/s

At each meeting at least one medical practitioner who is registered in Australia shall be appointed and on duty during any track activity. A medical practitioner shall be appointed as the Chief Medical Officer (CMO). The CMO shall have full responsibility for the organisation and operation of the medical services. At each meeting of Major National status there shall be at least two medical practitioners appointed. For an international meeting, refer to FIA regulations. The CMO shall be responsible to determine any question of medical fitness to compete in respect of NCR 140 and 175.

3.1.4.2 Paramedical Personnel

Initial trackside response may be provided by paramedical personnel, qualified in Advanced Life Support, who are authorised by a statutory authority to initiate Advanced Life Support treatments.

The CMO shall be responsible for the deployment and operation of the medical service under the authority of the Clerk of the Course. Paramedical personnel are not authorised to determine medical fitness to compete.

3.1.4.3 Alternative for Club, Multi-Club or State Championship race meetings

As an alternative to 3.1.4.1 (above), it is permitted to conduct a meeting of Club, Multi-Club or State Championship status without a CMO. At least two medical professionals having current specialised skills in Advanced Life Support shall be appointed and on duty during any track activity. An example of appropriate training would be authorisation by the relevant statutory authority to:

- act as an ambulance paramedic and to initiate Advanced Life Support treatments and,
- operate equipment commensurate with their competencies for initial assessment and the treatment of patients and their care during transport.

If this option is adopted, the provisions of Article 3.1.4.1 will not apply in respect of determinations in regard to medical fitness to compete.

The responsibility for the organisation and operation of the event's medical services shall lie with the Clerk of the Course who shall discharge this responsibility in consultation with the paramedics on site.

If the alternative to a CMO, as prescribed in Article 3.1.4.3 is implemented, the following additional restrictions shall apply:

- (a) The driver of any vehicle which is involved in an incident resulting in:
 - car-to-car contact
 - car-to-barrier contact
 - any form of rollover
 which renders the vehicle unable to continue in the session or race, will be considered to have retired from the remainder of the day's activities.
- (b) Any driver meeting the criteria in 3.1.4.3 (a) may be permitted to continue to participate in the meeting following the incident with the approval of the Clerk of the Course who shall consider such permission only following the receipt of a written report from a registered medical practitioner. The Clerk of the Course shall report any decision(s) to the Stewards of the Meeting.
- (c) A medical professional complying with this article must be stationed in a Medical Intervention Vehicle (MIV) (see Article 3.1.5.3) located at or near the pit lane entry to the circuit. The medical professional must be in communication with Race Control at all times. The MIV shall only move onto the circuit on instruction from Race Control.
- (d) The Medical Response Plan shall specifically note these alternative arrangements.
- (e) The alternative arrangement shall be advised in the Supplementary Regulations. If the medical arrangements change, after the publication of Supplementary Regulations, the conditions of NCR 69 must be applied.

3.1.5 Vehicles

3.1.5.1 Ambulances

For each meetings each ambulance shall have radio communication with Race Control and the Medical Centre. For each meeting of National Championship or higher, there must be present at all times at least one ambulance legally authorised to transport patients on public roads under emergency conditions.

3.1.5.2 Patient transport vehicles

For each meetings other than that identified in Article 3.1.5.1 or otherwise approved by Motorsport Australia, there must be present at all times at least one vehicle equipped to the standard of an ambulance.

3.1.5.3 Medical Intervention Vehicles (MIVs)

An MIV is a vehicle used to convey medical personnel and equipment to the scene of any incident where a medical response may be required. The MIV must be suitable to be driven on the track during competition and must be driven by a suitably skilled and experienced driver.

The MIV driver and medical personnel shall remain in the vehicle at all times during practice, qualifying and racing. Where more than one MIV is necessary to ensure adequate response times to any scene on the circuit they should be positioned in consultation with the Clerk of the Course and (where appropriate) the CMO.

Each MIV must have radio communication with Race Control and with the Medical Centre.

3.1.6 Medical Equipment

At each meeting medical equipment to support the level of medical, paramedical, ambulance and first aid facilities designated for the meeting shall be provided.

The equipment must be adequate to deal with the range of injuries likely to be encountered and be commensurate with the skills of and be familiar to the medical or paramedical personnel using it.

Ideally all equipment should be supplied and maintained by the attending doctor/s or paramedic/s as a part of an arrangement with the race organiser. Equipment for the Medical Centre should be provided and maintained under a similar arrangement.

3.1.7 General

At each meeting no practice, qualifying or competition may commence unless the specified medical officer/s, paramedical personnel, ambulances, other vehicles and equipment are in attendance. If during a competition the required personnel or vehicles have left the circuit then practice or competition must be suspended until the required personnel and vehicles are again present.

3.1.8 Medical Response Plans

The pro forma medical response plan for meetings (see Attachment A) is designed to prompt consideration by organisers of the skills, resources and procedures which will be required to provide effective medical response capacity at an event and to provide an indication of how the medical response system will operate in a practical way. Each meeting is required to lodge a completed copy of the Medical Response Plan prior to receiving a permit.

However, if an organiser of a meeting plans to conduct more than one meeting of the same status and at the same venue, they may lodge a common Medical Response Plan if the contents of that plan, following review at suitable intervals, remains unchanged during a calendar year.

3.1.9 Medical service for the Public at Race Meetings

Each meeting of Major National status shall be provided with a medical service separate from and complementary to, the service organised for the on-track activities and which conforms to the civil legislation relevant to the state.

The CMO shall be responsible for the trackside medical services and must approve the separate and independent medical service provided for the public.

Even if the medical service intended for the public is organised by a different body to that provided for the track, it must remain under the supervision of the CMO of the event. The details of the public service must be included in the Medical Response Plan for the event.

No vehicle from the public medical service may enter the competition area of the race track without authorisation from Race Control.

3.2 ROAD EVENTS

For each Australian Rally Championship events, the Medical Requirements are defined in Medical and Safety Requirements in Part 3 of the Australian Rally Championship Regulations as approved by the Australian Rally Commission (ARCom).

For a Tarmac Rally, the Medical Requirements are defined in the Tarmac Rally Standing Regulations.

For a Touring Road Event, the Medical Requirements at each special test are either:

- (a) the requirement for each special test were it to be run as a 'stand alone' event of the equivalent status or as outlined in the Touring Road Event Regulations; or
- (b) those defined in the Medical and Safety Requirements of Part 3 of the Australian Rally Championship Regulations.

The medical requirements of certain events may require individual assessment and shall be determined in conjunction with the ARCom, the National Medical Advisory Committee and the Event Organisers.

Specific requirements for other road events shall be the subject of consideration by ARCom and the National Medical Advisory Committee. As an interim measure, State Council may approve medical requirements for road events where standards have not yet been set by ARCom. In this case, requirements for specific events will be available from State Offices.

3.3 OFF ROAD EVENTS AND SPEED EVENTS

3.3.1 Club and Multi-Club Level Off Road Events and Speed Events

At least one Patient Transport Vehicle shall be provided. Consideration should be given to the terrain of the venue. The vehicle must have adequate space for at least one stretcher and an attendant adjacent to the stretcher; a crew (apart from the driver) of at least one first aid attendant qualified in basic life support competencies and the appropriate equipment for initial assessment and treatment of patients and their care during transport consistent with their competencies.

3.3.2 State and National Level Off Road Events and Speed Events

3.3.2.1 At least one Patient Transport Vehicle equipped to the standard of an ambulance with at least one stretcher, a crew of medical professionals, at least one of whom must have specialised skills in Advanced Life Support and on duty during any track activity. An example of appropriate training would be the authorisation by the relevant statutory authority to:

- act as an ambulance paramedic and to initiate Advanced Life Support treatments and
- operate equipment commensurate with their competencies for initial assessment and treatment of patients and their care during transport.

This Patient Transport Vehicle must be authorised by the relevant State authority to transport patients on public roads.

3.3.2.2 Where medical personnel and equipment are to be conveyed to the scene of any incident, the vehicle must be suitable to be driven on the course during competition and must be driven by a skilled and experienced driver.

3.4 OTHER EVENTS

All other events, such as motorkhanas, should be the subject of a Medical Plan/Emergency Information Sheet approved by the Motorsport Australia office which issues the permit for the event. Depending on the event type and location, that plan should be in accordance with Attachment C hereto (Medical Response/Emergency Information Sheet).

4. PLANNING OF MEDICAL SERVICES AT MOTORSPORT EVENTS

4.1 MEDICAL RESPONSE PLANS

The pro forma medical response plans provided elsewhere in this section are designed to prompt consideration by organisers of the skills, resources and procedures which will be required to provide effective medical response capacity at an event and to provide an indication of how the medical response system will operate in a practical way.

4.2 STANDARDS

Event organisers are encouraged to meet standards higher than the minimum requirements for their particular event. In planning medical services, organisers should give consideration to the following:

- An effective medical service must be able to provide, at the scene of any incident within the minimum possible time, appropriately skilled personnel and equipment to assess and treat any injured or potentially injured person.
- A suitable vehicle (see specific requirements for some events) to enable the personnel to reach the scene. Alternatively, personnel could be so deployed that they can readily reach any scene on foot.

- A communication system is essential to successful response. This system will need to reflect the size and nature of the venue and the complexity of the medical plan.
- A “Medical Centre” may be a suitable vehicle or a permanent or temporary building accessible from the course, and to the public road to enable transport of patients to hospital.
- The Medical Centre will be staffed by appropriate people with direct contact with the CMO.

5. MEDICAL EQUIPMENT

At all events medical equipment is required to support the level of medical, paramedical, ambulance and first aid personnel and facilities designated for the meeting.

The equipment must be adequate to deal with the range of injuries likely to be encountered and be commensurate with the skills of, and be familiar to, the medical or paramedical personnel using it.

ATTACHMENT A – Example Medical Response Plan

1. PURPOSE

The purpose of the Medical Response Plan is to ensure that appropriate and compliant medical service to support this event has been considered by the Organisers in consultation with the Chief Medical Officer (CMO) in order to provide a structure whereby medical and/or paramedical personnel with the necessary skills and equipment can reach the scene of any incident in order to ensure that any patients receive optimal care.

This Medical Response Plan is also used as a communication tool and shall be provided to each key event Official prior to the event, including:

- Clerk of the Course
- Secretary of the Meeting
- Stewards
- Team Chief/s
- All medical personnel
- All MIV team personnel

(Include others whom you believe ought to be aware of or are involved in the emergency processes at this event)

A copy of this Medical Response Plan is available at:

- The Medical Centre
- Race Control/Headquarters
- Secretary of the Meeting's Office

2. PERSONNEL

- The CMO is in charge of all medical services and is responsible to the Clerk of the Course.
- A minimum of [*insert the number*] other medical officers will be present and on duty during any on-track activity (note: if there will be no other Medical Officers (ie, Doctors) present, delete this paragraph).
- [*Insert the number*] paramedics as staff of ambulance vehicle/s will be present and on duty during any on-track activity.
- Paramedic/s and a driver in each MIV *(if there will be no other paramedics in MIVs present, delete this paragraph)*.

3. VEHICLES

- A minimum of one MIV will be present at all times when any on-track activity occurs.
- [*Insert the number*] ambulance/s, one of which [*is/is not*] authorised to transport patients under emergency conditions on public roads, will be present at all times during practice and racing.
- If an ambulance (where required) leaves the circuit it will be replaced by another from [*identify where the replacement ambulance will be sourced from and insert*] and will be expected to arrive at the circuit within [*insert the number*] minutes. The replacement ambulance shall be in place at the venue before any competition activity is resumed.

4. DEPLOYMENT

(a) Personnel

- The CMO is located either in Race Control, the Medical Centre or in an MIV (in which case they shall maintain constant radio contact with Race Control and with the Medical Centre).
- [*Insert the level of staffing of the MIV(s), eg, a medical officer, paramedic and driver*] crew each MIV.
- [*Insert the level of staffing of the Medical Centre, eg, a medical officer and paramedic*] staff the Medical Centre.
- Each ambulance has a crew of two paramedics.

(b) Vehicles

- The MIV will be stationed at Pit Lane Exit with rapid access to the track.
- Other MIV/s will be stationed at [*insert locations, eg, Turn 9, driver's left*].

5. THE MEDICAL CENTRE

- The Medical Centre is located at [*insert where the Medical Centre is located, eg, Pit Lane Entry*].
It is readily accessible from the track and has dedicated all-weather road access to the public road. It has a security fence with a lockable gate. It complies with Appendix T to the NCR.

6. EQUIPMENT

The MIV/s and Medical Centre are equipped to provide [*insert the appropriate level of life support to be provided, eg, Advanced Trauma Life Support*].

Each ambulance is equipped to maintain patient care during transport.

7. COMMUNICATION

A dedicated radio channel links all medical facilities and personnel with Race Control. A direct telephone line links the Medical Centre to General Hospital and to the Trauma Centre.

8. OPERATION

When an incident occurs on the track, the nearest trackside official makes an assessment and manually signals if medical assistance is required.

Race Control is advised by radio or land line communication loop and an MIV is either placed on standby pending further assessment or is dispatched to the scene.

In exceptional circumstances, particularly if a red flag has been displayed, an ambulance may be dispatched to the scene to provide further assistance. In any case, when a patient is ready for transport an ambulance is dispatched to the scene to load the patient.

The Medical Centre is kept informed of the patient's condition during trackside management and when transport commences.

In exceptional circumstances, a patient may be transported directly from the trackside to the appropriate hospital / trauma care facility as decided by the CMO in consultation with the doctor/s and /or paramedics at the scene.

MIV and ambulances may move from their 'behind the barrier' trackside positions ONLY on instruction from Race Control.

OTHER DETAILS

- The [*insert name of most likely patient receiving facility*] is [*insert number*] minutes by road from the circuit.
- The [*insert name of most likely major trauma centre*] is [*insert number*] minutes by road, but is [*insert number*] minutes' response time by helicopter.
- The [*insert name of service*] helicopter is based at the [*insert name of facility where the helicopter is based*], and can reach the circuit in [*insert number*] minutes.
- If an ambulance leaves the circuit it will be replaced by another from [*insert where the replacement ambulance will be sourced from*] and can be expected to arrive at the circuit within [*insert number*] minutes.
- The above applies to patients which effect the competition, eg, competitors, officials or pit crew. The [*insert details of the medical service provided for spectators*] will be engaged to manage spectator medical needs.

ATTACHMENTS (NOT INCLUDED WITH THIS EXAMPLE)

1. A diagram of the circuit showing the positions of all medical personnel and facilities.
2. A map of the venue showing access routes to and from the Medical Centre.
3. An organisational chart showing that the CMO is responsible to the Clerk of the Course and that they are in charge of all medical, paramedical and ambulance facilities.

ATTACHMENT B – Pro Forma Medical Response Plan/Checklist

Available from motorsport.org.au

ATTACHMENT C – Medical Response / Emergency Services Information Sheet

Available from motorsport.org.au