



## SPORTING / TECHNICAL BULLETIN

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**From:** *Andy Beaven Director of Motorsport*

**Date:** 7<sup>th</sup> December 2019

**To:** *Kart Circuit Owners /Operators / Senior EMSO Officials*

**Subject:** *Medical Response Standards for Karting Events in the UAE*

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In the absence of any current regulatory requirements relating to the standards of medical personnel and ambulances required by EMSO for karting events, it has been decided to issue formal guidance in the form of the attached EMSO policy and procedure.

This standard, policy and supporting procedures have been reviewed and approved by both National Ambulance and Dr. Sean Petherbridge, Chief Medical Officer, EMSO on the 6<sup>th</sup> December 2019.

Consequently, with effect from the 1<sup>st</sup> January 2020, the following minimum standards are to be complied with at all EMSO sanctioned karting events in the UAE.



## **Medical Facilities & Response Standards for EMSO Sanctioned Kart Racing Events**

Version 1.0 Issued 7<sup>th</sup> December 2019 / Effective 1<sup>st</sup> January 2020

### **Introduction**

EMSO has developed this medical standard to ensure the health and safety of all individuals including, competitors, officials and team personnel, who participate in EMSO sanctioned kart racing events.

As the ASN, EMSO has the overriding authority to approve Medical Standards and adjudicate on their compliance with the requirements of motor sport (in this case karting), providing that such standards, as a minimum, comply with all statutory UAE government requirements.

### **Policy**

In consideration of the foregoing, it is the policy of EMSO that all sanctioned kart racing events (that is racing events run under an EMSO permit) shall have satisfactory standards of medical response coverage in terms of ambulance, medical personnel, and equipment, as specified herein.

### **Objective**

The objective of introducing this standard is to ensure that each circuit and event provides a consistent standard of pre-hospital trauma care appropriate for the risks and potential injuries that may occur in kart racing.

Excerpts from these guidelines may also be used by circuits / venues / organisers as a 'Specification / Scope of Work' for the sourcing and procurement of Ambulance services.

### **Responsibilities**

The names of the person responsible for the medical arrangements at the circuit, shall be notified to EMSO in writing. This person shall be responsible for supervising the supply and safekeeping of any medical equipment specified in these regulations, which are permanently located at the circuit, (excluding any medical equipment provided by an authorised ambulance provider).

Circuit and venue owners are reminded of their responsibility to inform the appropriate authorities of any serious incidents and injuries.

It shall be the responsibility of the Clerk of the Course to ensure that the Ambulance and the medical facilities at the circuit are equipped to the minimum level specified herein.

Furthermore, it shall also be the responsibility of the Clerk of the Course to ensure that the Ambulance crew are suitably qualified and experienced in accordance with these guidelines and able to provide satisfactory levels of pre-hospital trauma care at the circuit and enroute to the local hospital.

It shall be the responsibility of the Clerk of the Course to ensure that no track activities commence before the Ambulance, crew and all other medical facilities are in a state of readiness and able to receive casualties.

The Clerk of the Course shall immediately suspend all track activities when the Ambulance and crew are (for any reason) unable to provide the necessary medical support and/or the Ambulance is required to leave the circuit with a casualty or required to leave the circuit to attend an external incident.

### **National Regulatory Requirements**

In all cases, the national regulatory standards and licencing requirements for ambulances and crew, minimum equipment, and manning levels as prescribed by the relevant authority in the UAE must be maintained.

### **Relevant Authorities**

The following area authorities have jurisdiction concerning Ambulance and crew licencing and other related matters;

Abu Dhabi & Al Ain	Department of Health (DOH)
Dubai	Dubai Health Authority (DHA) / Corporation for Ambulance Services (CAS)
Ras al-Khaimah	Ministry of Health (MOH)

### **Records**

The holder of the Track Licence is responsible for maintaining a permanent medical record book detailing all incidents involving injury or illness.

## **Pre-Event Preparations**

The Ambulance provider and the event organiser must jointly designate a suitable hospital with A & E facilities and staff to receive any casualties.

The appropriate local hospitals must be notified by the event organisers of venue, number of competitors, the event date, and times of the event at least 7 days in advance.

The Ambulance crew shall be familiar with the quickest route from the circuit to the designated hospital.

## **Circuit Medical Facilities**

Each circuit shall have a first aid / medical room, which should have easy and level access for ambulance and stretchers and offer security from the public.

Medical facilities shall consist of a room(s) of sufficient size to accommodate a single bed for the observation and treatment of a single casualty, and with adequate air conditioning, lighting, water supply and wash hand basin.

As a minimum it must be equipped with first aid equipment, supplies and consumables suitable for an organisation of 21 to 50 people, including an eye wash station with 2 x 500ml of sterile saline solution, a set of stiff neck extraction collars, including paediatric sizes, and portable resuscitation equipment.

The first aid / medical room shall be suitable for observation and the treatment of minor injuries and conducting minor medical procedures.

All equipment must be checked, serviced, and stored according to the manufacturer's recommendations. There should be sufficient equipment and supplies for the immediate treatment of a minimum of two casualties.

## **Ambulances**

The following minimum Ambulance requirements shall apply for EMSO sanctioned kart events;

- National Status Events – One licenced Ambulance must be in attendance at all times during track activities – including any sessions which are not specifically included on the permit.
- International Status Events – Less than 100 competitors – One licenced Ambulance must be in attendance at all times during track activities – including any sessions which are not specifically included on the permit.

- International Status Events – More than 100 competitors – Two licenced Ambulances must be in attendance at all times during track activities – including any sessions which are not specifically included on the permit.

It is strongly recommended that these requirements are also fulfilled for practice and test sessions, which may not be included in the event permit, but which are directly associated with the event.

If only one ambulance is present and it has to leave the circuit for any reason, practice or qualifying or racing must not continue until it returns, unless alternative suitable transport approved, by the Clerk of the Course or the circuit's designated medical representative, is present and available with sufficient trained staff to man it.

The contracted Ambulance service shall be required to either replace it with another Ambulance, equipped and crewed to the same standard as soon as possible.

Ambulance vehicles should be large enough to permit medical attendants to work without restriction and of a body type that is suitable to carry at least two casualties. The vehicle should be a late model, in good roadworthy condition.

All ambulances and equipment are at all times to be of appropriate specification, well maintained and kept serviceable, clean, tidy and in a hygienic condition. Where appropriate, test certificates are to be 'in date', with good quality copies of current certificates carried on-board the vehicle.

Vehicles should be clearly marked "AMBULANCE" as required and be fitted with red / blue flashing roof light bars or beacons that are visible through 360° and equipped with a suitable siren.

### **Vehicle Licensing**

All ambulances are to be licensed by the DOH or MOH or DHA or other appropriate area authority having jurisdiction and be suitable for the particular tasks required of them. These vehicles, when licensed, are only acceptable at EMSO sanctioned karting events when crewed by DOH licensed crew members in accordance with the requirements detailed in these guidelines.

Circuit Owners / Operators and Organisers should satisfy themselves that they only operate with licensed Ambulances that are suitable for the type and status of the event.

## **Ambulance Crews**

All Ambulance crews, doctors and other medical professionals providing medical services at an EMSO sanctioned motorsports event (including karting) must be in possession of a valid DOH or MOH or DHA licence to practice in the UAE, be a members of a recognised medical organisation and covered by insurance for the provision of medical services outside of a hospital. Ambulance crew and other medical personnel must also be in possession of adequate valid medical malpractice and professional indemnity insurance.

All Ambulances shall be at least double crewed.

While UAE licenced Paramedic and Advance Paramedics are particularly welcome and recommended as Ambulance crews at motorsport events, the minimum Ambulance EMT crew (Emergency Medical Technician) requirements are:

- One EMT – A - (Advanced), OR;
- One EMT – I – Intermediate, AND;
- ONE EMT - B – (Basic)

In exceptional circumstances and by prior agreement with EMSO, an EMT – B may be replaced by a Registered Nurse, providing that person is trained and experienced in Pre-Hospital Trauma Care and holds at least a current ACLS (Advanced Cardiac Life Support) certification.

Ambulance drivers not holding the above licences are NOT to be considered as part of the minimum crew.

Ambulance crews shall be trained and demonstrably competent in crash helmet removal techniques.

All Ambulance crew MUST be fluent in English.

It is recommended that all Ambulance crews should wear a readily identifiable uniform or protective overalls or tabards. The backs should display the word Medic, or similar.

At no time, at any event, may the crew of a Licensed Ambulance include trainees.

## Equipment & Supplies

All ambulances shall be equipped to Class III Advanced Life Support (ALS) standards. All equipment carried onboard the Ambulance, shall comply with DOH standard for *'Minimum Preparedness for Common Medical Emergencies Inpatient Care Setting, Outpatient Care Setting, Ambulance Services, and Interfacility Patient Transfer as listed in Appendix 6 BLS AMB Cabinet Inventory as prescribed by the Department of Health'*.

The EMSO recommended minimum list is summarised below;

- M1 Stryker or equivalent roll-in stretcher trolley
  - Lucas mechanical CPR device
  - Automated external defibrillator with monitoring capability
  - Pulse Oximeter
  - Resuscitator with Oxygen Reservoir and Mask / pocket mask or similar device with non-breathing valve and O2 inlet. O2 tubing and facemask
- Note: it is strongly recommended that a device is carried which allows the operator to perform resuscitation whilst isolated from the casualty's oral secretions*
- 4 oropharyngeal airways to include nos. 2, 3, 4
  - Portable suction apparatus (battery, manual or foot operated capable of 300 Hg vacuum) with a selection of catheters and wide bore suction
  - Laryngoscope with spare battery and bulb
  - Endotracheal tube cuffed (7.0mm x 1, 8.0mm x 1)
  - Nasopharyngeal tubes (6.0mm and 7.0mm)
  - Cricothyrotomy / Cricothyroidotomy kit (or "mini trach")
  - 1 sphygmomanometer
  - 6 cuffed endotracheal tubes (2 x 7.0, 2 x 8.0, 2 x 9.0) with syringes to inflate
  - Full selection of suction catheters including Yankauers
  - 'i-gel' Supraglottic airways (in sizes 3, 4 & 5)
  - 1 portable Entonox set with demand valve apparatus (and one spare Entonox cylinder)

- 1 portable oxygen set (900 litres in not more than 3 cylinders). Regulator to be capable of delivering 15 litres/min with reducing valves and flowmeter
- Supply of non-re-breathing masks
- 2 sets of rigid cervical collar, adjustable x 2, including paediatric sizes
- 12 intravenous cannulae (three each 14, 16, 18, 20) and suitable fixation
- IV administration / giving sets x 2
- 4 x 500ml 0.9% Sodium Chloride or equivalent
- Needles and syringes assorted
- Disposable sharps container and plastic bag (for clinical waste)
- A sterile solution for eye irrigation
- Selection of splints
- Pelvic sling
- 1 stretcher (ambulance cot type)
- 1 scoop stretcher
- 1 Vacuum Mattress
- 2 Spinal Immobilisers (e.g., KED, RED, TED)
- 1 Long Board c/w head immobilisation system and straps
- Adhesive tape
- Large field dressings x 5.
- Non-absorbent wound dressings x 5
- Heavy duty scissors
- Chest drain kit
- Sphygmomanometer aneroid
- Stethoscope
- Combat Application Tourniquet (CAT)
- A comprehensive selection of dressings including large sizes (e.g. 20cm x 40cm) and bandages
- Basic first aid kit – (contents suitable for up to 21-50 personnel)



All equipment shall be maintained in accordance with manufacturers recommendations. All consumables and drugs shall be within their intended shelf-life expiry date.

### Drugs

A list of drugs is not listed; however, the Ambulance is expected to carry those drugs that are deemed necessary by national and local regulations alongwith a supply of analgesic drugs for parenteral and oral administration.

### **Operational Readiness**

The Ambulance crew must 'sign-on' and produce a valid copy (in English) of their Licence for verification by the Clerk of the Course or his/her delegated representative at the event.

The Ambulance shall be in its standby position at the circuit, as early as possible, but in any case, no less than 15 minutes prior to the commencement of track activities.

The Ambulance crew (and any other medical professionals present) shall report to the Clerk of the Course or his/her delegated representative immediately upon arrival at the circuit and remain under the control of the Clerk of the Course at all times.

The Clerk of the Course or his/her delegated representative shall conduct an inspection of the Ambulance and its equipment immediately upon arrival to ensure that the vehicle, its equipment, supplies, and consumables meet the minimum standards set out in these guidelines.

Such inspections shall be conducted using a formal pre-prepared equipment and personnel checklist completed by the Ambulance crew.

The Ambulance crew must receive a safety briefing from the Clerk of the Course or his/her delegated representative prior to the commencement of track activities. The content of this briefing shall include but not be limited to;

- Track layout – including Turn Numbers and other key facilities
- Track access and egress
- Venue access and egress
- Track infrastructure which may cause a hazard to the Ambulance. (e.g. overhead gantries, signage, gates, soft ground etc.)

The Ambulance crew should be made familiar with the circuit's layout and characteristics and their standby location.

The Ambulance crew should be issued with a track map / safety plan for the circuit and wherever possible should conduct a walking or driving lap of the circuit, checking that the Ambulance can manoeuvre through all access / egress gates and other areas.

It is the responsibility of the Clerk of the Course in conjunction with the event organiser to ensure that unhindered access/egress is established and maintained both to/from the circuit's racing surface and to/from the venue itself.

The Ambulance crew shall be issued with a circuit provided radio, operating on the same operational channel as the Clerk of the Course. A formal call-sign shall be assigned to the Ambulance and this must be used in all radio communications.

The Clerk of the Course and Race Control shall conduct radio checks with the Ambulance crew prior to the commencement of track activities.

The Ambulance crew must remain alert and be ready to respond to an incident at all times by maintain an active radio listening watch throughout the event (even during breaks). The Ambulance crew should also notify the Clerk of the Course and the Secretary of the Event of their mobile phone numbers.

The standby location for the Ambulance shall be selected by the Clerk of the Course. The standby location must be well back from the track edge and the vehicle completely protected by at least one line of barriers (tyre wall or Safeguard type barriers)

### **Command, Control & Communications**

The Ambulance crew shall always remain under the control of the Clerk of the Course.

Only the Clerk of the Course or his/her nominated deputy shall have the authority to instruct the ambulance to enter the racing surface of the circuit.

### **Incident Response**

When at their standby location at the circuit Ambulances are required to transport licensed crew and medical equipment and provide medical facilities at the scene of an accident within approximately 90 seconds of leaving the stand-by location.

At the scene of the incident, medical control will be established by the most senior Paramedic who will co-ordinate the treatment of casualties without causing further harm or injury.

Under no circumstances shall the Ambulance enter the racing surface of the circuit without a clear and unequivocal radio instruction from the Clerk of the Course or his/her Deputy and IN ANY CASE NOT UNTIL ALL KARTS HAVE COME TO A COMPLETE HALT.

When the Ambulance is occupied by a casualty, who is being examined, observed, or treated by the crew, all track activities must be suspended for the duration the ambulance is occupied, unless the senior Paramedic gives permission for track activities to continue. Such permission must only be given if the nature of the casualty's injury / illness is minor and that he / she can be evacuated immediately from the vehicle should a more serious incident occur.

Where an individual presents themselves to the Ambulance from the paddock, pits or other area with an injury or illness, it is important that the Ambulance crew notifies the Clerk of the Course that they are occupied.

In all cases the examination or observation or treatment of an existing casualty must not hinder or delay the deployment of the Ambulance to the scene of a subsequent incident.

### **Injuries & Illness**

Any competitor involved in an incident from which he / she has sustained injuries or who is otherwise injured or appears to be injured, may not drive again without the written approval in the form of a 'Medical Clearance' of the most senior medical professional at the event or a suitably qualified medical practitioner at a recognised hospital or medical clinic.

The Clerk of the Course shall have the authority to require a competitor to be examined by a qualified Medical Practitioner at any time during the event, either at the circuit or alternatively to seek a medical examination at a local hospital or clinic before being allowed to continue competition.

In all such cases the competitor will be required to present the written medical clearance to the Stewards to allow them to decide, at their absolute discretion, if the competitor is to be permitted to continue to compete. The decision of the Stewards in such matters cannot be appealed.

If a competitor is injured in an accident or presents with other medical conditions, such that it is considered inappropriate for them to continue to compete, then, the most senior medical professional in attendance will request the Clerk of the Course to withdraw the competitor's licence upon medical grounds.

The senior medical professional in attendance shall submit a report to the Clerk of the Course detailing the nature of the injuries/medical condition. The Stewards shall retain the competitor's licence for the remaining duration of the event and submit the licence to EMSO thereafter. EMSO shall hold such a suspended licence until the holder is medically cleared.

In cases, where a competitor has not been permitted to continue driving following an injury or illness, but subsequently obtains a clearance from an external medical agency should be allowed to resume competing, providing the Medical Practitioner making such an assessment has done so on sound clinical grounds and holds a higher and appropriate medical qualification than the medical professional who made the original assessment.

Any person at the event who has been injured or becomes ill should be encouraged to seek medical advice.

### **Injury Reporting**

A person who has been injured at a circuit during an EMSO sanctioned event, is, insofar as they may be able, is responsible for ensuring that the incident and their resultant injury is promptly reported in the required manner. If the competitor as a result of the injuries sustained is unable to submit such injury report, it shall become the responsibility of their next of kin to do so.

Any injury which occurs at a circuit during an EMSO sanctioned event must be reported to the Stewards of the Meeting and the Ambulance crew on duty. Details of any incident resulting in injury must be entered in the circuit's Medical Record Book.

Any injury which occurs at a circuit, outwith a sanctioned event (e.g. a Test Session or Practice Day) must be reported to the Club Secretary and in turn to EMSO.

## Concussion Injuries

Concussive injury can be serious, especially if repeated within a short period or when it occurs in younger competitors. For this reason, EMSO has introduced this policy restricting activity following this type of injury.

Concussion is diagnosed following an incident including the following symptoms:

- Transient unconsciousness (not always present)
- Confusion / disorientation
- Amnesia
- Fatigue
- Headache
- Dizziness / nausea

Following diagnosis of one or more of these symptoms this policy must be instituted by the senior medical professional at the event. The competitor must not compete further in the meeting/event (including subsequent days).

The competitor's licence should be suspended and retained by the Clerk of the Course, then forwarded to EMSO together with a note explaining the reason for the suspension.

Upon receiving the licence EMSO will send the licence holder an explanatory letter with a pro forma for them to take to their General Medical Practitioner, or licence medical issuing doctor. This letter should ask the doctor to confirm the absence of symptoms.

A second episode of concussion, occurring within a period of three months will require specialist referral prior to the return of the licence.

***The overlying rule is "If in doubt, sit them out".***

A competitor suffering two concussions in a 6-month period or three or more concussions in their lifetime require written clearance by a specialist neurologist before they are cleared to ride after each concussion. A competitor suffering multiple concussions may be at long term risk of significant complications.

## **Impounding of Crash Helmets**

If during an EMSO sanctioned event a competitor is injured and their helmet is damaged, the Chief Scrutineer will impound the helmet and then seek the advice of the Chief Steward as to further action.

Where a competitor is evacuated to hospital with head injuries, the Chief Scrutineer will ensure that the helmet accompanies the competitor to hospital. The Chief Scrutineer will then arrange to have the helmet impounded upon the casualty's discharge from hospital. (The extent and location of the damage to a helmet can provide key injury information to the doctors at the hospital).

Unless the competitor specifically requests the damaged helmet be returned to them, it will be disposed of by EMSO after six weeks. Returned helmets shall have the chin straps cut so as to prevent further use.