

P35 MEDICAL STANDARDS AND CONCUSSION PROTOCOLS

Scheduled Reviewed Triennially or as required

Date of Board Approval 11 November 2019

INTRODUCTION

KA takes its responsibilities towards the safety of all who participate in Australian Karting very seriously. Amongst other things, it has developed medical standards that shall apply to all Licence holders and applicants for a KA Licence.

PURPOSE

KA has developed medical standards that are to ensure the safety of all individuals who participate in karting activity including: Drivers, Officials and spectators.

APPLIES TO

The policy applies to all Licence holders and applicants for any form of KA Licence (“**Applicants**”).

POLICY

KARTING AUSTRALIA MEDICAL STANDARDS

Refer: Competition Rules Chapter 4 Rule 19

a) Introduction

- i. KA has developed medical standards that are to ensure the safety of all individuals who participate in karting activity including: Drivers, Officials and spectators.

b) Medical Requirements

- i. There are three (3) components to the medical requirements prior to the issuing of a KA Drivers Licence.
- ii. These Medical Requirements do not apply to a person driving a Kart in a Bring A Mate activity and/or a Come and Try Day activity.

c) Medical Questionnaire

- i. The Medical Questionnaire must be completed by any person applying for a Drivers Licence to drive any type of Kart (the Applicant).
- ii. The Medical Questionnaire is a series of questions that the Applicant is required to answer fully and truthfully to general health questions on your Licence application on CMS.
- iii. If the Applicant answers ‘Yes’ to any of the questions on the Medical Questionnaire, they will be required to undergo a full Medical Examination.

d) Medical Examination

- i. A Medical Examination is required for:
 - 1) any Applicant who ticked ‘Yes’ to any of the questions in the Medical Questionnaire; and
 - 2) any Applicant applying for and/or renewing an A Grade Senior Licence in accordance with the requirements of the Medical Standards.
- ii. A Medical Examination of an Applicant must be completed by a Licensed Medical Practitioner.
- iii. It is strongly recommended that the medical examination be performed by a Medical Practitioner who is familiar with the Applicant’s medical history.
- iv. The examining Medical Practitioner must be aware that the Applicant is applying for a Licence to participate in Karting activities and events.

e) Medical Fitness To Control A Kart

- i. The purpose of the Medical Examination is to determine whether the Applicant is physically and mentally FIT to control a Kart in order to ensure the safety of the Driver, other Drivers, Officials and spectators during a Karting activity.
- ii. All medical clearances of the Applicant by a treating doctor or doctors and/or or a specialist or specialists must be in writing and clearly state:
 - 1) the medical diagnosis; and
 - 2) the severity/degree of impairment; and
 - 3) whether, in the opinion of that doctor, the Applicant is:

- a. FIT; or
- b. UNFIT; or
- c. Unable to Comment on;

the Applicant's suitability to control a Kart

f) Medical Outcome and Grant of Licence

- i. Depending upon an Applicant's medical history or current medical status, KA may not be able to issue them with a Driver's Licence.
- ii. In all circumstances, the final decision to grant a Drivers Licence to an Applicant is at the sole discretion of KA.

g) International Licence

- i. An Applicant for any International Licence are required to fulfil the Medical Requirements of the FIA International Sporting Code.
- ii. An Applicant exchanging a driver's Licence issued by a foreign ASN are still required to undergo a KA Medical Examination in accordance with the FIA International Sporting Code.



CONCUSSION

Concussion assessment and return to competition should be consistent with Concussion in Sport Australia. The overlying rule is ***“If in doubt, sit them out”***.

For further information on concussion assessment and Return-to-Kart, please see:

<https://www.concussioninsport.gov.au>

CONCUSSION ASSESSMENT

Concussion Recognition Tool

Initial assessment should be with the Concussion Recognition Tool

<https://bjsm.bmj.com/content/bjsports/early/2017/04/26/bjsports-2017-097508CRT5.full.pdf>

Trackside Concussion Management

https://www.concussioninsport.gov.au/_data/assets/pdf_file/0004/684553/Concussion_Management_Flow_Chart_-_parents,_coaches,_teachers,_team-mates,_support_staff_-_on_field.pdf

Paddock Concussion Management

https://www.concussioninsport.gov.au/_data/assets/pdf_file/0004/685669/Concussion_Management_Flow_Chart_-_parents,_coaches,_teachers,_team-mates,_support_staff_-_off_field.pdf

RETURN-TO-KART PROTOCOL

Driver's Over 18 Years Old

https://www.concussioninsport.gov.au/_data/assets/pdf_file/0008/683648/Return_to_Sport_Protocol_-_adults_over_18_years_of_age.pdf

Children and Adolescents 18 Years Old and Under

https://www.concussioninsport.gov.au/_data/assets/pdf_file/0009/683649/Return_to_Sport_Protocol_-_children_18_years_of_age_and_under.pdf

A graduated Return-to-Kart (Return to Play) protocol should be initiated with written evidence of specialist or neuropsychological assessment and return to baseline function. Return-to-kart protocols should be supervised by a doctor or specialist experienced in concussion. Extended periods (over 14 days) of exclusion from sport may be appropriate for drivers under the age of 21 or those with significant “modifiers”. Notification to their place of education should also be considered for these drivers.

Return to Learn Fact Sheet

https://www.concussioninsport.gov.au/_data/assets/pdf_file/0010/683641/Return_to_Learn_Fact_Sheet.pdf

Drivers 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. Drivers suffering multiple concussions may be at long term risk of significant complications.

MEDICAL EXAMINATION

Notes to Assist the Licensed Medical Practitioner Conducting the Medical Examination

PHYSICAL STATE

The driver's physical state, including height and weight should be recorded.

GENERAL MEDICAL

Cardiovascular System

- A full assessment of the Applicant's cardiovascular status should be completed.
 - This includes a full history, examination and pertinent investigations. Driver's should also be assessed for risk factors for Sudden Cardiac Death including HOCM, Long Qt and other arrhythmias.
- A Driver with a history of significant cardiovascular disease or cardiac failure will be generally be declared UNFIT.
- Risk factors for ischaemic cardiac disease including hypertension, cholesterol and diabetes should be well controlled.
- An Applicant with multiple risk factors should undergo formal cardiac risk assessment (e.g. Framingham, SCORE or Reynolds CVD Risk assessment) and undertake further investigation as appropriate.
- A Driver with stable rhythm disorders or corrected coronary artery disease may be declared FIT after assessment by a cardiologist and clearance in writing (including providing appropriate tests).
- A Driver will not be granted a Licence within 6 months of an ischaemic cardiac event.
- Valvular disease that has any impact on exercise tolerance will declare drivers UNFIT.
- ECG testing must occur every 2 years in all individuals <45 years old.
- All Applicants age >45 years old must undergo a cardiology review +/- cardiac stress testing every three years.

Anti-platelet or Anti-coagulation Medication

- All antiplatelet (e.g. aspirin / clopidogrel / ticagrelor) or anticoagulation (e.g. warfarin / rivaroxaban / dabigatran / etc.) place a Driver at higher risk of severe injury after an incident.
- A Driver taking these medications should have an in-depth discussion of the risks and benefits of the medications they are taking, the alternatives and the heightened risk of a poor outcome after an incident (especially in the context of a head injury).

Respiratory System

- A Driver with significant respiratory disease, including obstructive or restrictive lung disease, will generally be declared UNFIT.
- A Driver with stable, controlled lung disease may be declared FIT once cleared by their treating doctor/specialist.
- Consideration should be given to the type of medication the Driver is taking and the medications must be consistent with the ASADA/WADA anti-doping code.

Central Nervous System

- A Driver with a history of seizures, epilepsy or episodes of loss of consciousness is UNFIT for a Licence.
- A Driver with a history of a single, childhood febrile convulsion may be considered for a Licence.
- Epilepsy of any type, under treatment or not, with clinical manifestations confirmed during the 10 previous years is an absolute exclusion to a Licence. A Driver with seizures/epilepsy may be issued with a Licence if their disorder is well controlled with a seizure free period of no less than 10 years.
- A Driver that have suffered a head injury with the loss of bone or integrity of the skull will be declared UNFIT.
- A Driver with severe head injuries, including but not limited to traumatic or spontaneous intracerebral haemorrhage, will be declared UNFIT for a period of no less than 6 months. A Driver may be cleared by a neurosurgical specialist after that period if they have no ongoing symptoms or deficits after this time.
- All psychological conditions including Attention Deficit Hyperactivity Disorder (ADHD) liable to lead to behavioral problems and/or under the care of a specialist practitioner requires assessment and clearance by a specialist.

Gastrointestinal

- Any significant abdominal or gastrointestinal pathology will generally declare the Driver UNFIT.

- This includes recent abdominal trauma, significant hepatomegaly for splenomegaly.

Endocrine

- A Driver with well controlled diabetes not subject to occasional hypoglycaemic events may be declared FIT only after being cleared by their Endocrinologist.
- A Driver with poorly controlled diabetes or those with complications including neuropathy, retinopathy or vascular complications will be declared UNFIT.
- Other endocrine disorders must be stable and a Driver will only be declared FIT after being cleared in writing by their Endocrinologist.

Hearing and Balance

- Any Driver with impaired hearing must be clearly identified to officials.
 - They must be accompanied at all briefings by a person that can sign/write the information required.
- A Driver must have normal balance.
 - Any Driver with vestibular dysfunction or balance disturbance may be declared UNFIT.

Visual System

- Has the Applicant any evident abnormality of the eyes?
- Are contact lenses worn? (Certificate of Ophthalmic Prac. required if YES)
- Has the Applicant undergone refractive surgery? (Certificate of Ophthalmic Practitioner required if YES).

Visual Fields

- Do a confrontation test for each eye separately.
 - Is there any ocular or general medical history that suggests the possibility of visual field loss?
 - Does the confrontation test suggest a loss of visual fields in either eye?

Visual Acuity:

- Before or after correction, at least 9/10 for each eye, or 8/10 for one eye and 10/10 for the other;
- Any Driver whose visual acuity in one eye only is diminished but not totally absent and cannot be improved and who necessarily has contralateral vision, whether corrected or not, equal to or greater than 10/10, may obtain a driver's Licence under the following conditions:
 - conformity with points b, c and d below;
 - condition of the fundus excluding pigmentary retinal damage;
 - any old or congenital damage shall be strictly unilateral.

Colour Vision:

- Normal (method of analysis: the Ishihara Table or an analogous screening test).
 - In case of any anomaly, recourse to the Farnsworth test "Panel D15" or to an analogous system.
- In every case, there must be no risk of any errors in the perception of the colours of the flags used in international competitions.

Static Field Of Vision:

- At least 120°; the central 20° must be free from any alteration.
- A perimetry must be carried out.

Stereoscopic vision:

- Functional.
- In case of doubt it must be assessed using Wirth, Bagolini (striated lenses) or similar tests.

Sight Correction:

- The wearing of contact lenses is permitted provided that:
 - these shall have been worn for at least 12 months and for a significant period every day;
 - they are certified as satisfactory for motor racing by the ophthalmic specialist who supplied them.

Functional

- Physical deformity, amputation or use of any orthopaedic appliance?
- Has the Applicant impaired use or movement of any limb, joint, hand or foot which might impair or compromise control of a kart?
- The following are compatible with the granting of a Licence:



- amputations of fingers, where the gripping function in both hands is unimpaired;
- prosthetic limbs, if the functional result is equal or near to normal;
- free movement of the limbs impeded by less than 50%.

Significant Injuries

- A Driver with significant injuries, including but not limited to: fractured bones, abdominal, head or chest injuries, and major ligament injuries, will be declared UNFIT until they have written clearance from their medical practitioner.

Surgery With Sedation, General Or Regional Anaesthesia

- A Driver will be UNFIT for at least 48 hours after surgery with sedation, general or regional anaesthesia.

Medication

- A Driver may not be granted a Licence if they are taking any medication that may impair their ability to control a kart, due to sedation, psychomotor impairment, visual changes, tremor or other side effects.
 - This includes both prescription and non-prescription medications.
- Some medications may place the Driver at increased risk of significant injury after an incident. This must be balanced by the risk of alternative medications or stopping the medication. This discussion should occur between the treating doctor and the Driver.
- Medical Practitioners are strongly encouraged to be familiar with the ASADA/WADA Anti-doping codes when treating athletes in any discipline. If in doubt, Medical Practitioners should check the prohibited list on the WADA website.
- A Driver themselves is ultimately responsible for checking ALL substances they are taking are consistent the ASADA/WADA anti-doping code.

