



Health and Fitness for Officials

Information to promote the
physical and mental wellbeing
of Motorsport Australia
Volunteer Officials



DISCLAIMER:

Motorsport Australia and the AOC provides this information as a guide to assisting Motorsport Australia volunteer Officials develop their fitness, health and well-being, so as to enjoy as fully as possible, their experiences as motorsport officials.

As with any exercise program, Officials are advised that this information is general in nature and advisory. Officials, particularly if they have pre-existing medical or exercise conditions, should seek the advice and guidance of their medical practitioner before embarking on an exercise program.

Planning and preparation for the new motorsport season

'Officials are responsible for their own actions' — you've probably heard this many times. It means being responsible for more than the decisions we make and the way we conduct ourselves during a race meeting: more than just the procedures and protocols we use. Being responsible for your own actions is also about the responsibility to be prepared for the motorsport season and how you:

- manage your time
- set goals
- mentally and physically prepare, and
- make sure you stay up-to-date on the current management and rules of your game.

To manage all of this well you should put in place a professional and personal development plan. There are a number of 'elements of development' which should give you an idea of the responsibilities that officials should be thinking about.

Elements of development

- technical
- skills
- mental
- physical
- performance, with specific focus in each of these elements on:
 - concentration
 - preparation
 - fitness
 - training
 - vision and timing
 - positioning

All these elements are about 'consistency' and they are all as important in pre-season as during the games.

Time management and Organisation

Good life balance factors in work, family time, study, personal time, training and game time. Stress and poor training and performance are usually good indicators that things are not in balance.

Develop a timetable that integrates your training and match time with your normal day and other activities.

Nutrition and hydration: eat well and follow a recognised plan for the amount of training you do. Know when and what to eat to ensure good results.

Be planned and organised but always be prepared for when things don't go according to plan.



Equipment: make sure any equipment you need for officiating is clean, working and in good order.

Travel: know what is best for your own body when you travel. Some basic things to consider are:

- stretching sufficiently after officiating
- staying hydrated and eating well, and
- wearing compression clothing when travelling to aid recovery.

Mental and physical

The type of sport you are officiating will dictate when you start your training and what type of training you do. In sports that require officials to have a high fitness level, you don't really stop training, but lessen the load at the end of the season and build back into more specific training as the season comes closer.

All-year-round general fitness training will lead into more strength and sprint training, approximately ten weeks out from competition. It is essential that training is always specific to what you do in competition.

Mental toughness and how you cope and focus starts well before the season begins. Physical and mental training go together pre-season, particularly when doing practice matches. It is important that the way you officiate in practice matches is no different to the way you would perform in a competition or big game - this will build your confidence. Procedures and protocols should come naturally during games, which allows you more time to work on other skills and techniques which affect your decision-making.

Currency and rules

Attend any courses and rule discussions to update your knowledge prior to and during the motorsport season. Even if you have completed the same course the year before, it is always good to refresh your knowledge, quite often you will learn at least one new thing.

Find a mentor who can assist you with your preparation and skill development as a Motorsport Australia Accredited official. Use the knowledge of more experienced officials or your mentors: they are a great resource.

Reading the Motorsport Australia Manual and event regulations is the obvious way of staying current but even more important is learning how to apply the rules, having an understanding of their application and their interaction with other rules is essential. Aim to prepare well in the pre-season, work hard to maintain and improve your performance every time you officiate, and always aim for consistency.

Officials need to make time to be at their best

Motorsport Australia Officials are like drivers in that they have to perform at their best in every motorsport event. Staying focused, making correct decisions, managing equipment and personnel, are essential roles. To perform these tasks consistently and reliably officials must be fresh and well organised. This is especially so for officials who have demanding physical roles such as long days in either the heat, cold or rain, and for officials who need to make precise decisions over one to four days at events such as Bathurst and the Australian Formula 1 Grand Prix.

Monitoring fatigue and stress levels and learning how to minimise their effects is something that both athletes and officials have in common. Doing this will help officials to be reliable and consistent in their performances and hopefully lead to more enjoyment of their officiating roles. Here are some simple suggestions to achieve this:

Daily: Listen to your body to find out how tired or stressed you are. Keep a simple checklist or diary to register your responses for:

- Quality of sleep - a good sleep is invaluable
- Energy levels - start the day with plenty of energy
- Personal stress, for example, lifestyle issues. Plan how to manage these
- Enjoyment for your officiating role - enjoyment and satisfaction are important monitors of your stress levels
- Any illness or injury concerns - manage these and note any patterns
- Eat a balanced diet and plan appropriate meals and post event snacks
- Stay hydrated and make sure that you have fluid and fuel for the whole day
- Shower before bed and stretch after the shower - start to relax physically
- Practice a relaxation technique before bed, for example, visualize a happy place, listen to relaxing music, or do some light reading
- Switch off from the day's events

Weekly: Spend 5-10 minutes planning ahead for the week. Use a weekly planning template or electronic diary to identify and prioritize any weekly commitments for work, study, and officiating. Make sure you include family time, and relaxation time for yourself. Try to maintain a balanced life.

Annually: Review, revisit and re-focus. Review your last year's performances and adaptation to stress. Identify any changes and how and when to make these. Have an annual medical check-up that includes vision testing, and muscular-skeletal screening - prevention is better than cure. Reset your goals for the year.

Your Diet and Weight

Australian health authorities recommend 30 minutes of activity on most days (that is, five–six days per week). However, this is the amount required to maintain a healthy weight. To lose weight, it is likely that you will need to be doing more than this. The amount of exercise you need to do depends on many factors, including how much you have to lose, your current regime and your exercise history and, of course, any injuries that need accounting for. Consult a sports dietician or exercise physiologist to find out what will work for you.

Sleep it off: As crazy as this idea sounds, it is likely that if you sleep more, your weight will come off more easily.

Medical researchers have established a clear link between sleep and body weight. How so? Let's take a few steps back and look at what our hormones do:

- Leptin is produced in your fat cells and sends a signal to the brain when you are full
- Ghrelin is produced in the gastrointestinal tract and stimulates your appetite

When you do not get enough sleep, leptin levels drop, which means you do not feel as satisfied after you eat. Lack of sleep also causes ghrelin levels to rise, which means your appetite is stimulated, and you want more food. This makes for a dangerous overeating environment.

If you want to shed some kilos, logging a few extra hours of sleep is not a bad idea, particularly if you currently get less than six hours of sleep a night. Most people need seven to nine hours a night. Some more, some less. Give it a try. You may just discover that you are not as hungry, or that you have fewer cravings for sugary, calorie-dense foods.

Ask an expert

Having a meal plan that is designed for your unique needs is invaluable. Have you ever followed a magazine diet but found it hard to stick to for longer than a few weeks? This is common and keeps the dieting industry on its feet. You can beat it by seeking specific advice for you. A sports dietician can account for your training and officiating and other work and life commitments and tailor a meal plan to your life. This gives you the best chance at success.

Meal times need official management

Travel is often a large part of any Motorsport Australia motorsport official's life. This often means eating away from home, eating on the run and sometimes hoping that there will be something 'reasonable' to eat at the motorsport event.

You should always plan to have sufficient additional healthy food and drinks to supplement what may be provided by the promoter.

Eating patterns such as this can translate to unwanted kilos. Officials need quality and consistency in their daily fuel to allow for optimum energy and health. Following are some tips to help you in choosing the most nutritious meals when your officiating takes you "on the run". In the car or at work, have long-life snacks stored. These may include:

- quick oat sachets apricots, prunes or other dried fruits mixed nuts and seeds (single serve packets)
- protein bars, healthy muesli bars or corn thins, with flavoured tuna or vegemite, and
- bottled water

Fluid and hydration

Sweating rates during long days as a Motorsport Australia volunteer official can vary considerably between individuals. Being aware of sweat losses is the first way of determining how much fluid needs to be replaced. One kilogram of weight loss during exercise equates to one litre of fluid loss. Losses also vary depending on the environmental conditions: the hotter the environment, the greater the rate of sweating.

Good hydration is necessary for officials even if the level of activity is low in comparison with for example, a Rugby League referee. Dehydration, the result of poor fluid intake, will affect reaction time and decision-making, crucial skills in being a competent and effective motorsport official.

During motorsport events, officials' opportunities to drink may be limited, so it is important that they begin the day well hydrated, and take every opportunity to drink during breaks. Sports drinks encourage better fluid intake because of their taste, as well as supplying extra fuel during a session, but it remains hard to beat water as the best consistent fluid to be consuming.

Nutrition and hydration can be just as important for officials as for the drivers themselves. Aim to stay healthy, well fuelled and well hydrated for best performance.

Warm up

Why Warm Up?

- to increase heat throughout the body, and
- to reduce the risk of straining or tearing muscles and tendons by increasing their flexibility and suppleness.

How to Warm Up

- your warm up should gradually build up in intensity and should be within your health capability and also be similar to the activities likely to be performed during the day
- the types of warm up activity should include major muscle groups that will be again replicated activities likely to be performed during the day
- a brisk walk is an effective way to start warming up, so on your way to your position on the circuit, walk briskly.

Tips for warming up

When the temperature is cooler, you should spend a little more time warming up (e.g. Bathurst). When the temperature is much warmer, less time is generally needed (e.g. Clipsal).

Try to retain the heat as much as possible generated by the warm up. This can be done by wearing appropriate clothing or making the effort to keep moving when not directly performing an active task. Standing for long periods, can cause muscles to shorten and become tight and this can lead to tiredness and injury risk if suddenly you need to respond to activities on the track or in your area of work.

Warm up and stretching guidelines for officials

Warm-up routines are widely adopted by players in most individual and team sports. Officials performing physically active duties should also consider the benefits of a well-structured warm-up routine prior to competition and fitness training sessions.

Although there is some debate in scientific and medical circles on whether warm-up and stretching routines actually decrease the risk of injury, there are several other benefits of a proper warm-up. These benefits include elevating the metabolic rate, muscle temperature and cardio-respiratory function, the opportunity to gauge court/field surfaces and environmental conditions, and to finalise aspects of mental preparation including focus, attention and concentration. The warm-up also permits practice of motorsport specific activities e.g. flag waving, hand signals used during the event etc. An equivalent in Rugby League would be ball passing skills.

Use morning sector briefings to practice hand signals in a fun aerobic way each day.

When training, the basic elements of a warm-up and stretching routine typically include some easy jogging or running, stretching and some sports-specific drills to prepare the body for demands of the game or competition. One approach is to alternate short periods of running with a few stretches with a gradual increase in intensity from easy to firm. The final few running drills should involve some short acceleration from standing and jogging starts to near maximal speed. There is no need to overload the intensity or length of the warm-up and officials should feel warm, with a light sweat, and ready to go. The running drills should also include some acceleration/decelerations, agility work with changes of direction and where appropriate balance and coordination exercises.

Here is a typical 12 minute warm-up:

- easy running (2 mins)
- stretching (2 mins)
- running drills – moderate intensity (2 mins)
- stretching (2 mins)
- running drills – moderate/firm intensity (2 mins)
- individual stretching (2 mins)

The order, number and duration of drills can be modified to suit individual circumstances.

The following list details various stretches that can be used for different areas of the body:

- lower back (standing or seated spinal twists)
- hamstrings (seated or standing)
- quads (standing one leg pull backs)
- glutes (seated one leg pull backs)
- calf (against wall, on step)
- groin (seated or standing)
- trunk twists and rotations
- pecs/triceps (single arm)

Each stretch should be performed three to four times and held for approximately 10 - 20 seconds. Individuals should be instructed not to force a stretch beyond comfortable limits and to breathe normally. The best approach is to undertake a three-quarter stretch on the first effort and then increase the intensity to a full stretch by the third or fourth repetition.

In relation to the timing of the warm-up it is best to conduct the warm-up a few minutes before the start of the game. This will vary depending on other pre-game activities and responsibilities of officials. It is important not to leave the warm-up too late or officials may feel a little rushed in the important minute before the start of the game. It might also be prudent to conduct a short warm-up at the end of the half-time break depending on the time available and the weather conditions.

Cool Down

Why Cool Down?

- to help remove the waste produced by your muscles during the day
- to assist in reducing muscle tightness and soreness, and
- to enable you to continue to participate effectively during all days of the event.

How to Cool Down

Just as a brisk walk to your position in the circuit helps you to warm up, a brisk walk back to the muster area is also an effective warm down.

5-10 minutes of stretching of the major muscle groups used is also important and can assist with flexibility and recover.

Stretching

Why Stretch?

The major purpose of stretching is to increase flexibility and maintain muscle balance on both sides of a joint. Without stretching, muscles lose their flexibility and may fail to respond effectively during sporting activity. Stretching enables both physical and mental preparation for the range of activities that may occur during the course of your race weekend. Stretching can also reduce tension and relax the body, enhance body awareness, promote circulation and assist with co-ordination by allowing free and easy movement.

When to Stretch

Stretching should be performed once the muscles have been warmed, as the stretching of cold muscles is less effective and may lead to injury strains. It is important to stretch after your day's activity as well to assist with recovery and your activities for the next day.

Stretching Tips

- Don't stretch to the point of pain – although some tension should be felt.
- Stretch after warming up and after cooling down.
- Stretch slowly and gently.
- Avoid holding your breath during stretching.
- Try to hold stretches for between 10-20 seconds.
- Entire stretching sessions should last 5-10 minutes.
- Try and stretch each muscle group 2-3 times.
- When stretching – don't bouncy or stretch rapidly.

Keeping your mind on the job

Very few roles are as highly scrutinised as motorsport officiating. Motorsport Australia Accredited volunteer officials give their time to officiate at various levels of competition, and as a result open themselves to a degree of scrutiny. This judgment comes from media, friends, family, complete strangers and often most harshly from the other officials themselves and competitors, as they strive for excellence in their performance.

It will come as no surprise then that in the face of this intense analysis, the ability to stay focused on the job at hand plays a major role in determining the quality of an official's performance. Irrespective of whether the event lasts five laps or four days, successful officials must possess skills in two key areas relating to attention: selectivity and mental effort.

The selectivity of attention refers to the ability to exclude irrelevant stimulation while focusing on what is deemed to be important and relevant to the task at hand — that is, focusing on the right things. Considerable mental effort is required to selectively focus at the appropriate moment or for prolonged periods of time — that is, focusing on the right things at the right time.

Most officials recognise the difficulty of concentrating for the duration of an event – particularly long events such as the Bathurst 1000. These difficulties are usually caused by insufficient mental effort and/or an attention mismatch — that is, rather than focusing on appropriate cues, officials become distracted by thoughts, other events and emotions. These distractions can be both internal and external in nature, and can include:

Internal distracters

- getting stuck in the past (for example, an earlier decision/call)
- worrying about the future (for example, how a decision may impact on the outcome)
- negative self-talk (for example, questioning one's own ability)
- increased anxiety (for example, general worry about one's performance)
- fatigue (for example, general depletion of mental and physical energy systems, and associated deficits)

External distracters

- visual distracters (for example, crowd, media, environment)
- auditory distracters (for example, crowd noise, PA system, environmental noise)
- physical interactions/distracters (for example, replacement players, team officials, weather conditions)

Successful officials are more aware of these distracters, and understand that their attention has limitations and requires training and management, similar to their physical and skill-based abilities. There are a number of strategies that officials can employ to improve their focus and concentration. These include:

- simulation training (including imagery)
- being more aware of current attention habits and patterns
- identifying and employing performance cues
- positive/effective self-talk
- performance routines
- staying in the present
- concentration exercises (for example, shifting attention - internal/external, broad/narrow; mindfulness exercises; concentration grids; playing video/computer games; etc.).



With the right training and an appreciation of the fact that mental skills (like physical skills) need to be practiced, officials can achieve a number of improvements in their ability to manage their attention and performance. These improvements can include:

- being less likely to become distracted by irrelevant factors
- maintaining a more task-oriented attention focus
- developing enhanced focus control and concentration for their performance
- having a greater 'present' focus
- being more mentally relaxed
- analysing the performance situation more efficiently and accurately
- greater decision-making consistency based on the information available.

References and Acknowledgements

The following sources of information are acknowledged and any existing copyright remains with the original owner/s.

PLEASE NOTE: Some of the text has been modified to provide more of a motorsport perspective to the information.

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- Australian Government Department of Health and Ageing
- Sports Medicine Australia
- Smartplay
- Various magazine and health related articles in public circulation
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