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The Australasian Society for Motorsports Medicine and Rescue

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Welcome note

Welcome to the first edition of the newsletter for the Australasian Society for Motorsports Medicine and Rescue. As some of you will be aware, I recently proposed the establishment of the Society in order to promote the development and advancement of medicine and rescue in motor sports at a professional level. At present there is no formal membership process and contributions from anyone interested in the field are welcome. The aims of the Society are:

- To act as a meeting point and facilitate the sharing of experience, information and resources
- Maintenance of up to date information on clinical assessment, interventions and disposition as it pertains to our specific field of practice
- Maintenance of up to date information on regulations and technical developments across all categories of motor sports that influence the practice of motor sports medicine
- The collection of data from the full spectrum of motor sports categories in Australia, for the purpose of generating evidence based practice
- Generation of practice guidelines freely available to those involved in the provision of medical services at motor sports events

At present, given that there is no formal membership process, there is also no formal article submission process. Therefore, if anyone would like to contribute to future editions of the newsletter, simply forward them to me at my e-mail address (mmacpartlin@ausdoctors.net). In the meantime, I will try to keep the ball rolling, though at this stage, I do not know what the frequency of output will be.

Good luck.

Matthew Mac Partlin



Clinical review

From Current Sports Medicine Reports 2003: (3) 134 – 140: a U.S. review article that summarises many of the important aspects of our emerging specialty.

As of 2004:

Motorsports was the fastest growing professional sport in the US.

Driving a two hour competitive road course is equivalent to running fifteen 8-minute miles.

14 driver deaths per year.

27% of those killed at motorsports events are track officials, spectators or journalists.

Historically, burns were the major cause of driver mortality. More recently, traumatic brain injury / cervical spine injury and blunt chest trauma have become the top two killers. (*The HANS device appears to be reducing the former and there are developments online targeting the latter.*)

Due to the unique environment, an altered approach to traditional emergency medical service provision is required to remain effective and avoid exposure of drivers, spectators and medical workers to varied dangers.

Specific motorsports medical challenges include:

- Provision of care on a live circuit
- Provision of care in hazardous environments – heat, cold, wet, distance, isolation, noise
- Requirement of knowledge regarding the structures, deformation characteristics and fuel types of a broad variety of vehicles
- Requirement of knowledge of constantly changing regulations and technical specifications of a broad variety of vehicles
- Ability to adapt extrication, treatment and patient packaging procedures to the vehicle type, driver safety equipment and environment
- Rapid scene arrival time may enhance salvageability, but may also mean clinical findings are not yet apparent
- The patients being managed are usually very fit, but often difficult to manage initially due to frustration arising from the competitive environment
- Awareness of rescue teams of live race time constraints and potential media attention

Only one recent study has examined the question of staffing skill mix at motorsports events (Grange et al, Prehosp Emerg Care, 2003:7, 322 – 326). In their population, 52% of incidents could be managed by a paramedic, 39% by a nurse and only 9% required intervention that only a physician could provide. However, they also showed that the presence of a physician could prevent 89% of ambulance transports (*....Retrieval crewing trials anyone?*)

The majority of published papers on motorsports medicine, of which there are not many, focus on injury pattern audits and facility setup for specific events.

This review article supports the system of having a locally licensed physician to oversee the organisation and delivery of medical care at an event, liaising with a medical director and safety team that travel with a specific marque, providing a consultative, hands-off (due to licensing regulations) role with knowledge of the characteristics of that category and specifics of competitor medical histories.

In general, the basic minimum provision considered acceptable by most experts is an Advanced Life

Support ambulance.

The review article summarises the major points to consider when constructing an event medical response plan. In general, it should cater for a worst case scenario, with reference to the history of the specific event. Aspects of the plan to particularly consider are:

- medical oversight
- the level of care (skill mix, accreditation and licensing) to be provided
- the equipment that will be required (protective, extrication and treatment)
- emergency medical operations (protocols for extrication, treatment, safety procedures, disposition, security, media handling, disaster response, on-track death)
- treatment and transport facilities
- communication
- command and control
- documentation
- continuous quality improvement (...yes, even here. *There's no escape*)

Not specifically mentioned in this article, but a consideration I would think also important to include is attention to staff amenities.

Finally, beware of the driver who is cleared within the first 5 to 10 minutes of an impact. It takes time for injuries to manifest and for the adrenalin to subside. Clinical tools, such as NEXUS, are not validated for motorsports-related injuries.



Recent race results

A1 Grand Prix

1 Ireland 112	9 Monaco 35	17 Lebanon 8
2 Switzerland 95	10 Great Britain 28	18 China 7
3 Portugal 92	11 USA 24	19 Korea 4
4 Netherlands 75	12 India 19	20 Indonesia 3
5 France 47	13 Mexico 19	21 Germany 2
6 Malaysia 43	14 South Africa 19	Canada 0
7 New Zealand 36	15 Brazil 18	Pakistan 0
8 Australia 36	16 Italy 17	

So the fourth season of the A1 GP closes with the Irish team as the outright winners; well done lads (... *not that I'm biased!*). The last race was held at Brand's Hatch between the 1st and 3rd of May. The opening event of the fifth season will be held on the Gold Coast on the 22nd - 25th of October 2009, in conjunction with Round 12 of the V8 Supercars. Hands up for volunteers!



World Rally Championship

1 S. Loeb 50 2 D. Sordo 31 3 M. Hirvonen 30	4 H. Solberg 20 5 P. Solberg 14 6 M. Wilson 12	7 J-M. Latvala 9 8 F. Villagra 9 9 S. Ogier 5
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Next event: Rally d'Italia-Sardegna, 22nd - 24th of May. It's all starting to get a bit F1 2005 ... can someone please step up to Loeb. And could Jari-Matti please try to stay on the road!

Formula 1 Grand Prix

1 Jenson Button (Brawn-Mercedes) 41 2 Rubens Barrichello (Brawn-Mercedes) 27 3 Sebastian Vettel (RBR-Renault) 23 4 Mark Webber (RBR-Renault) 15.5 5 Jarno Trulli (Toyota) 14.5 6 Timo Glock (Toyota) 12 7 Lewis Hamilton (McLaren-Mercedes) 9	8 Fernando Alonso (Renault) 9 9 Nick Heidfeld (BMW Sauber) 6 10 Nico Rosberg (Williams-Toyota) 4.5 11 Heikki Kovalainen (McLaren-Mercedes) 4 12 Felipe Massa (Ferrari) 3 13 Kimi Räikkönen (Ferrari) 3 14 Sebastien Buemi (STR-Ferrari) 3	15 Sebastien Bourdais (STR-Ferrari) 1 16 Adrian Sutil (Force India-Mercedes) 0 17 Nelsinho Piquet (Renault) 0 18 Robert Kubica (BMW Sauber) 0 19 Giancarlo Fisichella (Force India-Mercedes) 0 20 Kazuki Nakajima (Williams-Toyota) 0
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Next round: Grand Prix de Monaco, 21st - 24th of May

V8 Supercars

With four rounds completed, here's the top ten driver positions:

1 Jamie Whincup 804 2 Will Davison 690 3 Steven Johnson 573 4 Lee Holdsworth 534	5 Rick Kelly 531 6 Garth Tander 504 7 Craig Lowndes 501	8 Shane Van Gisbergen 453 9 Jason Richards 417 10 Fabian Coulthard 414
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He next round is the Falken Tasmania Challenge, at Symmons Plains Raceway, on the 29th - 31st of May.

Australian Rally Chamionship

1 S. Evans 267 2 N. Bates 259 3 G. Raymond 242 4 J. Dowel 150	5 E. Evans 142 6 S. Shephard 100 7 R. Smart 86	8 D. Herridge 74 9 B. Reaves 72 10 B. Kipling 60
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Next round: Daikin Coffs Coast Rally, 27th - 28th of June.



FIA update

The FIA announced in March the establishment of a fund (<http://www.fia.com/en-GB/automotive/issue-15/institute/Pages/article-15.aspx>), derived from a fine imposed on McLaren-Mercedes in 2007. The fund will be used as grants for safety projects targeting young driver safety, facility safety and officials' skills safety training. It was not stated in the article how the fund is being advertised or how to apply, but projects in various countries have apparently already been approved. Maybe someone out there knows, or has a project that might qualify for some FIA Institute funding.



Points of interest

The International Council of Motorsports Sciences, a medical, scientific and allied health agency that aims to promote the generation of “research and discussion relating to safety and performance in motorsport and to disseminate that information to the motorsport participant, race team management, organizing bodies and federations”, is holding an annual congress at the end of July. Check out the curriculum at <http://www.icmsmotorsportsafety.org/congress.php>



Caught by the cameras

Robert Kubica's Canadian Grand Prix 2007 crash check below your ankles once the car stops spinning Rob!

