The transition from bay racing to coastal and offshore racing brings with it the need for an increased degree of self sufficiency including managing medical emergencies at sea. Transoceanic voyages to other nations adds a further degree of complexity with the need to consider personal fitness, pre-existing medical conditions, limited access to outside medical assistance and preparation for exposure to a range of environmental elements as well as endemic diseases within the areas to be visited. As a result, the Cat 1-4 requirements for offshore racing activities differ from the Cat 5-6 events sailed inshore.

The **YA Blue Book 2013-16** outlines the various categories of Yacht Racing and will be your guide for training requirements, Medical Kit contents and storage. However, always check the **Notice of Race**, particularly for ORCV Cat 1 & 2 races, as the Medical Kit list will often be modified to more appropriately reflect possible medical incidents and rationalise the cost of drugs and other medical supplies. The following table indicates the race Category for each of the events run by the ORCV.

YA 2.01		Distance	Waters	Day/night	Rescue	ORCV Races
Cat 1	Offshore	Long distance	Well offshore	Yes	Self sufficiency	M2O (1+)*
						M2V
Cat 2	Offshore	Extended	Not far offshore	Yes	Self sufficiency	M2H E
						M2H W
						M2KI
						M2L
						M2P
						M2PF
						M2S
Cat 3	Offshore		Protected	Yes	Limited	Latitude Series (3+) *
						M2AB
Cat 4	Offshore	Short	Close to shore	Generally daylight	Limited	Latitude Pursuit
						BDD
						Double-handed Bay
						race
Cat 5	Inshore			Protected (day)	Limited	M2G
				Sheltered (night)		G2M
Cat 6	Inshore	Short	Protected	Daylight only	Available	Winter Series

*Additional requirements over and above YA requirements for these events as per NOR

In the state of Victoria, there are also **additional legislative requirements** to be met with regards to access, storage, administration and disposal of drugs for the Medical Kit. The *Drugs, Poisons and Controlled Substances Act 1981* (the Act) and the *Drugs, Poisons and Controlled Substances Regulations 2006* (the Regulations) require secure storage of both -

• Schedule 8 (Drugs of dependence) including morphine, pethidine, proladone,

• Schedule 4 drugs (labelled Prescription Only Medicine) which includes all other drugs for which prescriptions are generally required, e.g. antibiotics, Panadeine Forte, Tramadol, Stemetil, etc

Hence there is a "*Protocol for Lawful Supply of Schedule 4 & Schedule 8 Poisons to Racing Yachts in Victoria*" which requires accessing of these listed drugs directly from a registered pharmacist (not the internet!). It is also illegal to request your local medical practicioner to write a prescription for drugs for the purpose of the boat Medical Kit. A medical practitioner can only write a prescription for drugs after having made a medical diagnosis with regards to the patient presenting to them and scripts can only be written in that patient's name and administered to the identified patient according to the written instructions. Further information is provided under **Medical Kit**.

PRE RACE PREPARATION

Pre race planning and training is critical for a successful voyage and planning can never be commenced too early.

CREW

Fitness to race

Ocean Racing is not a short sprint around the sticks, but an endurance event which requires you to manage your sleep, nutrition, hydration, physical and mental activity under a whole range of weather and environmental conditions. Regular watches which roll over like clockwork can rapidly become prolonged periods of exposure to the elements, sleep and food deprivation, dealing with sea sickness or injury in either yourself or other crew members, with a limited capacity for respite, so starting fit, fresh and informed is crucial.

1. GP check up

Visit your GP at least 6 weeks prior to any major race for a general check up and access adequate supplies of personal regular medications to cover you for the duration of your trip. Regular personal medication is best managed via with a weekly set up either in a dosette box or sheets of medication stored in a sealable plastic box. To ensure you do not lose all your medication supplies, it is wise to pack each week's requirements separately into cryovacced bags and open as needed.

If you have any chronic medical conditions (heart disease, diabetes, asthma, epilepsy,etc), ensure you have adequate amounts of emergency medications and a written Action Plan for managing any events, as other crew will need to be aware of the problem or needed to assist with managing the issue. A check for skin cancer is also advised to identify any potential lesions which should be attended to.

2. Travel Consult

For the longer distance transoceanic races, either as racing crew or return delivery crew, a travel consult is essential to discuss Immunisations, prophylaxis for mosquito borne diseases including Malaria, Rabies risk and the management of Traveller's diarrhoea. Some immunisations require several doses of vaccine given at monthly intervals for protection, so consult your GP or travel clinic at least 6 weeks prior to the race.

3. Dental check:

Dental pain is significant and often requires potent analgesics to minimise pain. There is also significant risk of spread of infection to other parts of the body which could potentially cause life threatening illness in susceptible people, so minimise the risk by having a thorough dental check well prior to departure.

4. Personal seasickness remedies:

Take your own personal supplies. Do not rely on what may be in the boat Medical Kit or medication you have not previously tested for yourself. Test out what works for you before the big race and ensure you do not have any side effects from medications which could impair your ability to function on the boat. Be aware that patches containing Scopolamine and some oral medications containing related substances can cause blurring of vision in some people, making it impossible to read charts or instruments or judge distances when working on deck. Drowsiness can also be a problem with some medications derived from antihistamines.

If you are prone to seasickness, start taking your medication **before** you get on the boat and take regularly for the first 48hrs until you are settled in. In long distance races, with impending bad weather, start medication before the storm arrives so that you will not be hampered by seasickness when you are most needed. You can safely assume that if you vomit within 20 minutes of taking oral medication, that it has not been absorbed and administration should be repeated. The alternative Stemetil suppositories are administered a good 12 metres away from the stomach and are often the best solution for repeated vomiting!

Rehydration is essential to stop the vomiting / dehydration cycle. Even if you continue to vomit, keep sipping on electrolyte replacement drinks (Gastrolyte,Hydralyte) or sports drinks (Gatorade, Powerade, etc) as these increase the absorption of fluid from the gut.

5. Sunscreen:

Take your own supply and apply a minimum of 20 mins prior to sun exposure to allow binding to the skin. In hot weather reapply every 2 hours. A sunscreen chapstick is also very useful for yachties who are constantly looking up to trim sails and your lower face is not protected by your hat or cap.

6. Water:

Carry your own water bottle to reduce the risk of spread of infectious diseases. In hot weather, increase your fluid intake accordingly.

Crew Confidential Medical Questionnaire

For Cat 1,2&3 races where racing yachts are required to be self sufficient for purposes of rescue, the ORCV require that each crew member completes a Crew Confidential Medical Questionnaire. For Cat 1 races, access to this information is restricted to -

- Boat Skipper & First Aid Officer and
- ORCV Medical Officer and duty Race Medical Officers

The information provided by crew members will be reviewed by the ORCV Medical Officer prior to the race and crew contacted prior to departure for further information if needed. If there are any particular medical issues or risks identified which may require access to additional resources (medical specialists, hospitals, liason with police or SAR), the Race Director will be informed of the risk (not personal details of the crew) and protocols will be included in the Race Plan for managing such risks or incidents. For Cat 2&3 races, it is strongly recommended that the Crew Confidential Medical Questionnaire be held

by –

- Boat Skipper /owner & First Aid Officer to be aware of medical issues and location of personal emergency medication and Action plan for administration
- Voluntary submission by the crew member of their own Crew Confidential Medical Questionnaire to the ORCV Medical Officer or duty Race Medical Officer for crew who wish their information to be readily available in the event of a medical incident.

All duty Race Medical Officers are members of the ORCV Medical Incident Medical Management Team and are qualified Medical Practitioners or Nurses with training in Trauma and Emergency Medicine. For incidents where medical evacuation or specialist access is required, personal medical information may also be shared with other medical specialists, hospitals, police or other SAR authorities.

BOAT EQUIPMENT

Medical Manuals

For Cats 2-6 races, the standard First Aid Manuals are sufficient, but for Cat 1 a more detailed Medical Guide is required, either the Ship's Captain Medical Guide or WHO International Medical Guide for Ships or equivalent.

Medical Kit

Depending on your category of race and number of crew, Medical Kit contents need to reflect the areas being sailed through, the number of crew onboard and access to external resources in the event of an emergency at sea. The YA Blue Book Section 4.07 gives the prescribed list of contents but always read in conjunction with NOR so that you are not purchasing medications which are not mandated for your race.

Simplified "Day" Medical Kit

As the contents of the mandated Medical kit are often expensive and dressings and drugs can be damaged by exposure to moisture, it is a good idea to set up a small simple "day" kit, readily accessible for managing minor injuries, pain, seasickness, etc, which keeps your main Medical Kit intact until needed for more complex issues.

Dental Kits

Dental kits with an accompanying guide for use will be made available through the ORCV office. Practical training in the use of the contents of these kits will be provided prior to Cat 1 races.

Suturing Kits, Instruments & general medical supplies:

Contact the ORCV office for advice on accessing these items.

Accessing Drug Supplies for Racing Yachts in Victoria

(1) Find a registered Pharmacist

The ORCV website lists appropriately qualified pharmacists who are familiar with the legal requirements for dispensing prescription drugs for Medical Kits for Racing Yachts.

If you have another pharmacist who is happy to provide the listed drugs, it would be advisable to include a copy of the "Protocol for Lawful Supply of Schedule 4 or Schedule 8 Poisons to Racing Yachts in Victoria" with the other documentation listed below, as not all are familiar with the details of the requirements.

(2) Documentation Required to be sighted by Pharmacist

- YA Blue Book 2013-2016
- Copy of Notice of Race indicating race category and any changes to the Medical Kit requirements compared to those stated in the YA Blue Book
- Proof of entry of the yacht into the Race
- Personal identification of boat representative, to provide proof of boat ownership or crew membership of the yacht entered in the race

(3) Storage of Drugs:

- All medications must be stored in a locked container securely attached to a fixed internal structure of the yacht. The keys to this container must be kept by the appointed First Aid officer and another crew member.
- Therapeutic storage of medications is usually below 25°C.
- (4) Record of Drugs:
- The yacht owner or crew member must keep a record of the purchase, administration and disposal of any Schedule 4 or Schedule 8 drugs. Proformas for these records can be downloaded from the ORCV website.
- In the event of any drugs reaching their expiry date or having been exposed to prolonged high temperatures, they should be returned to the pharmacist for appropriate disposal and this action be recorded in the Yacht's Drug Register.

MEDICAL INCIDENTS AT SEA

Race Medical Officer Role

For all ORCV races beyond Port Phillip Heads (Cat 1,2 & 3 races), the ORCV include a Race Medical Officer in their Race Management Team. All designated medical officers are qualified medical practitioners or nurses trained in Trauma and Emergency Medicine. Their role is to provide support and medical expertise in the event of illness or injury at sea and if medical evacuation is required, liason with hospital emergency specialists and Search and Rescue authorities.

ORCV Medical Incident Form

The ORCV IMT (Incident Management Team) have developed their own Medical Incident Form for recording details of any significant illness or injury whilst racing and for ongoing documentation of observations and treatment given, particularly for the longer Cat 1&2 races.

The form also requests your current position and current reliable methods of communication. To protect patient privacy, we will always endeavour to use mobile or satphone as first contact for dealing with medical emergencies, but the experience with satphones in the recent M20 race highlighted difficulties with access to satellite time and problems with signal drop out. In an emergency, it is

essential that we have alternative avenues of contact, so please indicate a current HF frequency or VHF relay station when initial contact is made.

Depending on the nature of the incident, the nominated NOK contact on the ORCV crew details form is not always the most appropriate person to be contacted by the duty Medical Race Officer. At the time of initial reporting of the incident to the duty Race Medical Officer, please give contact details of the person to be informed of the event so this can be recorded on the duty Race Medical Officer's form. A copy of the ORCV Medical Incident Form is illustrated below and copies can be downloaded from

Notifying a Medical Incident to Race Management

In the event of a medical incident occurring during a race, the following protocol should generally be followed, unless altered by the NOR.

- The duties of the attendant First Aid Officer are as follows -
- (1) Assess and stabilise the casualty
- (2) Complete the ORCV Medical Incident Form as accurately as possible
- (3) Make contact with the Race Director who will contact the Race Medical Officer

(4) Race Medical Officer will contact the First Aid Officer to obtain the recorded details on the Medical Incident Form and advise a course of action.

Medical Conditions and Drug Administration requiring Medical Advice

Please note that the YA Blue Book clause 4.07.09 under "Warning", mandates seeking advice in an emergency under certain listed circumstances as inappropriate initial management can worsen the outcome for the patient. These conditions are summarised in the table at the end of this document.

Developing a Medical Risk Register for Ocean Racing

To promote improved safety and harm minimisation for all participants in ocean racing, the ORCV IMT will be developing a "Risk Register" for all incidents that have occurred related to boat (rig /hull), communications, crew, medical or other whilst racing or deliveries home.

As from October 1 2013, an additional section will be included in the standard Race Declaration form, requesting the skipper / owner/ signatory to indicate to simply "tick the box" for the relevant category. In the event of any Medical incidents, a member of the Medical IMT will contact you on your return from racing and will discuss and document the information needed. Any information obtained for the purpose of the "risk register" will be stored as de-identified data and the outcomes of the aggregated data will be used for purposes of directing further education and training.

If you have any queries about Medical Kits or other medical issues, please contact Dr Rosie Colahan davros@bigpond.net.au or mobile 0409 865 283.

Documents: as per attached spreadsheet summary