MotoAmerica
A KRAVE Group Company
18004 Sky Park Circle, Ste 110
Irvine, CA 92614

Managing Texas heat

Texas is hot. Temperatures for this year's event look cooler than previous years but the heat index will still be close to 100 degrees. Working and competing in high heat requires planning and care to avoid heat related illness. Adequate measures also will help prevent deterioration in athletic performance but is also important for crew, staff and guests.

1. Hydration, hydration, hydration

Drink before you are thirsty. Hydration needs increase with heat and activity. Sweat loss can increase to 3-4 liters per hour in athletes. Making a hydration plan is preferable to winging it.

2. **Electrolytes are important! A rule of thumb is 1 bottle electrolytes to 2 bottles of water.**

Sweat contains electrolytes (mainly Sodium and Potassium) and drinking water without electrolyte replacement can be dangerous. I recommend **Pedilyte®**. It is the best oral electrolyte replacement. Pedilyte® well tolerated and palatable (it was formulated for pediatric hydration). It can be purchased in powder form in packets or in premixed liter bottles *everywhere*. There are other products available like Gatorlye® and Liquid IV®. Avoid sport drinks, generally they have few electrolytes and too much sugar.

3. **Urine color and frequency is a good indication of hydration status**

Frequent urination is good. Urine color should be light yellow to almost clear. Darker urine indicates inadequate hydration.

4. **Cooling off is important**

Have a cool place to get out of the sun and heat. In the absence of AC…. shade, fans and evaporative cooling can suffice. While acclimatization can be important in the weeks before an event, during the event keeping core temps down is a better strategy and can enhance performance.

5. S**ymptoms of mild to moderate dehydration**

Dry sticky mouth. Decreased urine, Dark urine, Cool dry skin, Headache, Muscle cramps

Please note that IV fluids are prohibited for competitors for hydration per FIM/WADA rules (see attached)

INTRAVENOUS INFUSIONS AND/OR INJECTIONS

1. Introduction

Intravenous (IV) infusions have been included on the WADA List of Prohibited Substances and Methods under section *M2. Prohibited Methods; Chemical and Physical Manipulation* since 2005[1]. An IV infusion or injection is the supply of fluid and/or prescribed medication by drip or push directly into a vein.

The wording in the 2022 Prohibited List (section M2.2) states that the following is prohibited: *Intravenous infusions and/or injections of more than a total of 100 ml per 12-hour period except for those legitimately received in the course of hospital treatments, surgical procedures or clinical diagnostic investigations*[1].The wording in the Prohibited List for IV infusions is unique in that the method is not prohibited under the three exceptions stated above. However, a TUE would be necessary for a Prohibited Substance delivered by intravenous infusion even if the infusion itself is delivered in the setting of one of the three exceptions.

IV infusions are included on the Prohibited List mainly because some athletes could use this Prohibited Method to a) enhance their performance by increasing plasma volume levels; b) mask the use of a Prohibited Substance or c) distort the values of their Athlete Biological Passport.

Reiterating what has been stated above: Infusions or injections of more than 100 ml within a 12-hour period are prohibited unless the infused/injected substance is administered during a 1) hospital treatment, 2) surgical procedure or 3) clinical diagnostic investigation. Therefore, athletes should always apply for a TUE, if they are administered an intravenous treatment (more than 100 ml/12hrs), in any of the following environments which under regular circumstances will not comply with the three exemptions listed above.

a) medical practitioner's office, a hotel room, in a home, tent or vehicle
b) event organizers' medical facility, tent, first aid station, or start-finish line facility
c) IV clinics or any clinic/treatment room or centre outside of a hospital facility unless a clinical diagnostic investigation or surgical procedure has been performed

Please note that these are guiding examples and not an exhaustive list of settings where infusions of more than 100 ml of fluid in a 12-hour period would normally require a TUE.

The Tables in the Appendix contain more details on the principles and examples of when IV infusion/injections are permitted or prohibited.