

Here we go... **Again!**

Every year about this time, our rides start becoming increasingly uncomfortable. The reason???... **the hot weather**. I know you have all read and heard about the ways we can help beat the heat while riding, but in keeping with a tradition... here we go again... our annual hot weather riding "refresher."



First, let's go over what happens to our bodies in high temperatures and how our bodies try to take care of themselves.

Your body has automatic "thermostats" to protect the core organs from heat stress, including sweating, vasodilatation (the widening of blood vessels resulting from relaxation of the muscular wall of the vessels - what widens is actually the diameter of the interior of the vessel), increase in heart rate and reduction of blood pressure. If these tactics don't keep core temperature within the red line, the body gives you warnings such as heat cramps. If you don't take care of the problem, it gets more serious, including heat exhaustion and/or heat stroke.

Sweating. The body has sweat glands to keep the skin damp. The evaporating sweat sucks heat from the skin, and transfers it to the air. Of course sweat is primarily water, so it's critical to keep replenishing the supply. That's one reason why we need to drink about **a pint of water every hour** during hot, dry conditions. One problem for motorcyclists is that at highway speed, the sweat glands may not keep up with the evaporation. Or, if the sweating uses up too much water, your body temperature regulating system goes on the fritz.

Vasodilatation. To help cool down the core, blood vessels enlarge to circulate more blood (and therefore body heat) towards the skin. If ambient air temperature is lower than body temperature, excess heat can be absorbed by the air. But if the air gets hotter than the skin, the increased blood flow simply soaks up more heat from the air and pumps it back to the core.

Heart rate and blood pressure. The heart responds to increasing heat ("hyperthermia") by increasing the heart rate to pump more blood into those enlarged blood vessels. As the air temperature rises, heart rate (pulse) can increase 50% to 70% faster than the normal resting rate. The increased flow causes blood pressure to drop, and blood flow is shunted away from muscles and brain, towards the skin. Consider the implications of those changes on a motorcyclist. The lowered blood pressure reduces muscle control and brain activity, and more blood is pumped towards the skin --where it is vulnerable to road rash.

Second... symptoms of trouble. The human body won't take much of an increase in core temperature without complaining. The symptoms of overheating are leg cramps, tired muscles, headaches, dizziness, and even fainting. The various symptoms are trying to tell you how overcooked you're getting.

Heat Cramps. Muscle cramps caused by heat usually affect the legs and lower abdomen first, then the arms. Heat cramps are a symptom that the body's electrolytes are running low. It's not smart to ignore muscle cramps. Find some shade and take a break. Sip water or an "exercise" drink. Exert firm pressure or massage the cramped muscles to relieve the spasms. If you're still in pain, the recommended first aid dose is ½ teaspoon of table salt per half glass of water every 15 minutes.

Heat Exhaustion. Heat exhaustion occurs as the body continues to shunt blood away from the brain and muscles. Symptoms of heat exhaustion include:

1. Headaches, dizziness, nausea, momentary fainting
2. Cramps
3. Tiredness, weakness
4. Profuse sweating

5. Pale, clammy skin
6. Approximately normal body temperature

If you begin to feel these symptoms, take immediate action before you pass out.

1. Get into some shade, preferably into an air-conditioned room.
2. Loosen clothing and wet down skin or undershirt to increase evaporative cooling.
3. Slowly sip water, or salt water solution, same dose as for heat cramps. Avoid alcohol or caffeine.
4. If you feel faint, lie down and get feet raised above head level.
5. If you can't keep the salt water down, get emergency medical aid. You may need an intravenous salt solution.
6. Even after you begin to feel normal again, consider staying out of the heat for a day or two. Your body needs some time to recuperate. If you are on a long trip, consider a 24-hour layover in the next air-conditioned motel.

Heat Stroke. If you experience heat exhaustion and just try to "tough it out" without getting cooled down and rehydrated, the body thermostats will begin to fail. Core temperature continues to rise (may go as high as 106 or 107 degrees), sweating stops, the heart beats even faster, and you may pass out. If you are coherent enough to recognize the symptoms, immediately get medical help while you're still mobile. And watch your riding buddies for any of the following heat stroke symptoms.

1. Victim incoherent, staring vacantly, blanking out, or unresponsive
2. Skin hot, red, dry (no perspiration)
3. Rapid pulse
4. Body temperature elevated

Yes, heat stroke is life threatening. It's a medical emergency. Don't be bashful about letting your co-riders know that you are experiencing heat exhaustion/stroke symptoms or calling 911 for help. In the meantime,

1. Get the victim into some shade, out of riding gear, and cooled down by any means available. If possible, get the victim into an air-conditioned room, or use fans to help provide evaporative cooling.
2. Repeatedly sponge skin with cool water or rubbing alcohol. Apply cold packs or ice cubes if you can get them. The goal is to get body temperature below 102 degrees F.
3. Don't give the victim any stimulants, especially not any alcoholic beverages.
4. If the victim's temperature begins to rise again, repeat the cooling process.
5. As soon as possible, get the victim to emergency treatment.

Third, avoid the ugliness. Even after a heat stroke victim has been cooled down and rested, the ugliness isn't over. It's not uncommon to have intestinal upset for a week or so. We know you'd rather avoid that sort of ugliness.

Fourth, there are things we can do to help ourselves. Read on...

1. **Stay hydrated, stay hydrated, stay hydrated!** Carry water with you and drink it while you're moving. The Butler cups are great for this and mount right on your handlebar so it's easy to drink from them. If you're a diabetic (or even if you're not), mix ½ water to ½ Gatorade. Gatorade contains the electrolytes that our bodies are losing through sweating. It is imperative that we keep our bodies hydrated and replenish the electrolytes and nutrients we are losing. Above all, **avoid alcohol and/or caffeine.**

2. Stop more often for breaks – we think at least every 100 miles. When we stop for gas, we take a few extra minutes to replenish our cold water and sit in the shade for a while.
3. Open all the vents on your helmet to get as much air moving through it as possible. This is where the more expensive helmets help because their ventilation tends to work better.
4. The extra air flow will dry out your lips so wear some sort of lip balm otherwise your lips will dry out and start cracking and bleeding. You're miserable enough just being hot, you don't need chapped lips too.
5. If you have a tall windshield that reduces the air flow to your helmet, the best helmet ventilation system in the world is useless. You might consider a shorter windshield for the hot months or one of the newer windshields with a vent so that you have adequate air flow.
6. Keep as much of your body covered as possible. In hot weather we see a lot of riders with tee-shirts. Skin directly exposed to the sun evaporates water much faster than skin which is covered, plus you are exposing your skin to all that UV light.
7. Wear a long-sleeved cotton tee-shirt under your jacket. Just before you leave from a gas or rest stop, completely soak your long-sleeve tee-shirt in water. Then, immediately put on your jacket and zip up the jacket and front vents. The water will slowly evaporate through the neck opening and cool you. If you open the front vents the water will evaporate faster and cool you better but the shirt will dry faster and the effect won't last as long. After the tee-shirt dries, open all the jacket vents all the way. Repeat at the next stop.
8. Carry at least 2 cool collars (each)... these are very inexpensive and easily found at Walmart or Academy. Wear one and keep one soaking in a cooler for change -out.
9. Invest a few dollars in a cool vest (approx \$40-\$50 will get you a good one). We bought ours at the TX District Rally a couple of years ago. The older ones were mighty heavy (approx. 40 lbs.), but the newer ones are a lot more comfortable. You can order them from www.ridecool.com. Let us know if you would like to take a look at ours before you invest.

This is a long article, but we think it's worth the time it will take you to read it. We've learned how our body tries to help itself and we've learned how we can help our bodies to avoid overheating. It's a bit more work and effort, but our hot weather rides **can be enjoyable and safe**, in other words, knowledge is a good thing.

As always, we welcome and encourage your questions and comments. Please don't ever hesitate to contact us if we can be of help.

Ride safe, have fun and always take the long way home.

Gene and Carolyn Tice

ATGATT Master Tour Riders #5088 & #5089

