## **Cold Weather Safety Tips**

### Dressing



- Check the forecast. Sounds silly, but knowing what's ahead as far as weather is concerned will help you dress appropriately.
- Dress in layers, especially when the mornings are cool (or downright COLD) and the afternoons warm up. We've seen 40 degree temperature variations over a normal ride!
- Pack your rain gear. While rain gear is designed to protect you from rain, it can also act as another layer of protection and warmth.
- Keep your hands and feet warm and dry!

#### Tires

Pressure at 20°C (68°F)	10 psi	20 psi	30 psi	40 psi	50 psi
°F					
104 °F	11.7 psi	22.4 psi	33.1 psi	43.7 psi	54.4 psi
86 °F	10.8 psi	21.2 psi	31.5 psi	41.9 psi	52.2 psi
68 °F	10.0 psi	20.0 psi	30.0 psi	40.0 psi	50.0 psi
50 °F	9.2 psi	18.8 psi	28.5 psi	38.1 psi	47.8 psi
32 °F	8.3 psi	17.6 psi	26.9 psi	36.3 psi	45.6 psi
14 °F	7.5 psi	16.4 psi	25.4 psi	34.4 psi	43.4 psi

# Variation of Tire Pressure with Temperature

- How many people here checked their tires this morning?
- Every 10 degrees in temperature change results in about a 1 pound change in your tire's pressure. When it cools down, you will lose pressure; when it heats up, you will actually gain pressure. Even checking your pressure one afternoon and coming out the next morning can result in a 3-5 lb loss.
- Also, your tires lose pressure over time. Every 30 days, you can expect to see, in average temperatures, a loss of about 1-2 lbs in your tires.
- Underinflated tires result in poor handling as well as excessive damage to the tires themselves.
- Overinflated tires result in hard rides and decreases the tire's ability to withstand road impacts.

#### **Batteries**



- Most of us have what's called AGM batteries, or Absorbed Glass Mat (also known as maintenance-free, or sealed batteries). Some of us may have lithium ion batteries. No matter the type of battery you have in your ride, as with tires, your battery is also affected by temperature.
- The ideal temperature for your batteries operation is 80 degrees F.
- Cold weather affects the chemical reactions in your battery causing a "sluggish" performance. That's why we look for batteries with a high Cold Cranking Amp (CCA) output. The higher the number, the lower the temperature can reach while not adversely affecting your batteries ability to turn over your bike.
- You also lose about 0.5-1.0% of the batteries overall charge every day they sit "idle" (not being used). If you have advanced electronics like alarms or accessories, they will drain even faster. If you have a trickle charger, put it on and keep it on if you ride your bike less than once pre week.
- The myth of starting the bike up and letting it run/idle for a few minutes may be enough to keep your battery from dying, but it will not fully recharge your bike. You need to ride your bike at least at cruising speed – about 3K RPMs – to produce the voltage needed to recharge your battery.
- High temperatures can also affect your bike's battery. Temperatures over 130 degrees F will dramatically reduce the life of your battery and a battery stored at 95 degrees (which is like from June through November here) will discharge TWICE as fast as a battery stored at 75 degrees.