

# Tri County EMS Association Safety Guides



## Bicycle Safety

In 2001, 134 children ages 14 and under died in bicycle-related crashes. In 2002, nearly 288,900 were treated in hospital emergency rooms for bicycle-related injuries, according to the National SAFE KIDS Campaign. The good news is there are numerous precautions you and your children can take to avoid potential bicycling injuries. Whether you are riding with your children or they are riding unsupervised with their friends, make sure everyone learns, understands and abides by the following **Bicycle Safety tips**.

Your bicycle is a vehicle. When you cycle on public roadways in any country, you assume all the same rights and responsibilities, and are subject to the same laws and local ordinances as the driver of an automobile.

### **Be predictable**

Traffic flows smoothly when all drivers of vehicles can predict what each other will do. When you bicycle predictably, act like a vehicle and show your intentions so motorists have time to respond accordingly. However when you ride unpredictably, motorists cannot be certain of what you will do next. Making a "surprise appearance" in the path of an oncoming vehicle greatly reduces the drivers response time, and profoundly increases your chances of having a collision.

Never ride against traffic. Motorists aren't looking for bicyclists riding on the wrong side of the road. Many other hazards threaten the wrong-way rider.

Obey traffic signs and signals, and basic right-of-way rules. Cyclists must ride like motorists if they want to be taken seriously. Doing so is the safest behavior. When approaching a stop sign or red light, you are required to come to a complete stop and proceed only when safe to do so.

Use hand signals to tell other road users what you intend to do. Signal as a matter of law, of courtesy, and of self-protection.

Ride in a straight line. Whenever possible, ride in a straight line, to the right of traffic but about a car door's width away from parked cars.

Don't weave between parked cars. Don't ride to the curb between parked cars, unless they are far apart. Motorists may not see you when you try to move back into traffic.

Follow lane markings. Don't turn left from the right lane. Don't go straight in a lane marked "right-turn-only." Stay to the left of the right-turn-only lane if you are going straight.

Your hands and arms are valuable tools in communicating your intentions to others. Motorist, pedestrians and other cyclists, can't read your mind. Don't surprise them, always use hand signals when you turn a corner or change lanes.

Choose the best way to turn left. There are two ways to make a left turn. 1) Like an automobile. Signal, move into the left lane and turn left. 2) Like a pedestrian. If you are within a designated crosswalk, dismount and walk your bike across.

Bicyclists are entitled to ride at least three feet from the curb. Gutters contain accident-causing hazards like large sewer openings, rocks, sticks, loose gravel and cracks. Riding in the gutter is very dangerous and can cause you to lose control of your bike and fall into traffic.

### **Be alert**

Watch for right-turning traffic. Motorists turning right may not notice cyclists on their right. Watch for any indications that a motorist may turn into your path.

When approaching an intersection try to stay far enough from the curb to allow cars to turn right on your right. Motorists may not look for or see a bicycle passing on the right.

Look back before you pass or merge. If you scan for traffic, briefly turn your head, (it helps if you touch your chin to your shoulder), and take a quick over-your-shoulder and glance at the situation behind you. Always scan before changing lanes, and turning corners. Leave a good three to four feet when passing a pedestrian or another bicyclist. A rearview

mirror is a good idea, but don't rely on it alone.

Motorists and cyclists will never expect you to pass them on their right. So don't. Always pass on their left, giving them at least three feet of clearance.

Respect pedestrians' rights. Pedestrians always have the right of way. Don't cross sidewalks via driveways without yielding to pedestrians. Don't ride on sidewalks. Use the street, bike lane, or bike path. Give a warning: use your bike bell, or call out "Passing on your left."

Keep both hands ready to brake. You may not stop in time if you brake one-handed. Never break only with your front brake; it will send you flying over your handlebars. Allow extra distance for stopping in rain, since brakes are less efficient when wet.

Avoid road hazards. Watch out for street-car tracks and old railroad tracks. Cross them perpendicularly. Avoid parallel-slat sewer grates, slippery manhole covers, oily pavement, gravel, potholes. All are hazardous, especially when wet.

Always, ride at least three feet (the width of a car door) from parked cars. Biking into an open car door can be a very painful experience. Never swerve in and out of park cars.

Watch your speed. Observe posted speed limits and obey the basic speed law: Never ride faster than is safe under the existing conditions.

### **Safe braking techniques.**

Figure out which brake handle, controls which brake (usually right = rear, but not always)

Never use **only** the front brake (or you'll launch yourself off the front of your bike).

In an emergency stop, squeeze your rear brake lever with moderate force and your front lever firmly, aiming for a 3:1 ratio of front brake force to rear brake force.

### **Be equipped**

Wear light-colored or reflective clothing.

Always wear a helmet when you ride. Helmets that have passed Snell Foundation or ANSI Z90.4 standard crash tests are best. Bike helmets must be replaced after a fall.

Maintain your rental bike in good working condition. Keep tires properly inflated, check and them daily. Let us know if any adjustments need to be made that you cannot make yourself.

Stretch before you start riding, spend a few minutes stretching your legs and body.

### **Parking and locking tips**

Bicycle parking should not interfere with pedestrian and vehicle movements. Use bike racks properly, so there is plenty of room for more bikes to park.

Always lock your bicycle.

Bring a U lock or a thick combo cable lock and use it correctly. U-shaped locks offer the best security when locked through a tire, the bike frame and a post. If the U portion of the lock is completely filled with the wheels and frame, the lock has less chance of being broken open. Tall signposts and ironwork are the best objects to lock your bike against. Small trees are easily cut, permitting thieves to lift a locked bike away from its support. Be sure to secure both wheels and the frame, and never leave the padlock resting on the ground.

### **Heads up- Don't be hard-headed; wear your helmet**

Here's some information that helps take the guesswork out of bike helmets.

#### **How they work**

The bicycle helmet is composed of a foam liner that acts like a shock absorber. When your head hits a hard surface, the helmet reduces the force of impact to your head by increasing the duration of impact time between your head and the

pavement i.e. (longer time, less injury). The plastic skin on the outside of the helmet is more than just for looks. It is designed to cause your head to skid if it strikes the pavement. This disperses the energy of the impact and also lessens the blow to your head. However your helmet needs to be worn properly, to work correctly.

### How they fit

1. A helmet should be level on your head and cover the majority of your forehead, with only an inch or so of forehead exposed above your eyebrows.
2. Wait, don't buckle it just yet. Without the straps fastened, move the helmet from side to side and front to back. Is there any movement? If so, then in the front of the helmet replace the pads, with the thicker pads provided. Did that snug it up enough? If not, try a smaller size helmet and repeat step one.
3. Ok, now it's time to adjust the straps. Stay calm, this can take a little time. (Standing in front of a mirror can help). There are four straps that need adjusting to get a proper fit. Each ear strap is made up of two straps front and back. When adjusted correctly, each ear strap should meet at the buckle (or snap lock) just beneath your ear lobes, without any slack in the straps.
4. Next adjust the chin strap. It should be snug, and allow room for one or two fingers between the strap and your chin. Open your mouth wide (like when you yawn). Is the strap or buckle pinching your neck? If so, slightly loosen the strap and try again. When you have the chin strap where you want it, move the loose end of the strap through the rubber "O" ring, and snug it up to keep the strap from slipping.
5. Check your helmet by moving your head from side to side, backward and forwards. Then try to push the helmet backward over your head by placing the palm of your hand on the helmet and pushing back. If it slides back, then slightly tighten only the front ear straps, and test it again.

### When to replace?

Always replace your helmet after a crash. The foam is designed to withstand only one impact. Also replace your helmet when it's five years old. The foam decomposes over time and its ability to absorb an impact is greatly reduced. When you buy a helmet, look for the Snell, ANSI or ASTM stickers, which are proof of a rigorous safety testing.

### Statistically speaking

According to Consumer Reports, April '98 reported, "Of the 757 bicyclist killed in motor-vehicle accidents in 1996, 96 percent reportedly weren't wearing a helmet". Whenever you get on your bike, even for short trips, always wear a helmet. But remember that wearing a helmet is not an excuse to disobey traffic laws!

*"It was a very damp November morning. I was on my way to school, bicycling down a quite side street. In the process of turning a corner, I rode through a small, seemingly innocent patch of wet leaves. Next, my rear bike tire went into a skid, and my entire bike seemed to just slide out from under me. In a split second, I went from an upright sitting position, to lying on my side in the middle of the street. Even four years later, I still vividly recall how it felt to hit my helmet on the pavement. When my head hit the blacktop, it bounced (like a basketball) at least twice, before coming to a rest. It happened so fast, that it was virtually impossible to shelter my head from the impact, with either my arms or hands. I was very lucky. My helmet, stayed in place and took the brunt of the impact. I was able to get up and bike away with only a broken collarbone. I'm sure that if I hadn't had a helmet on, I really doubt if I'd be biking today."*

*Kathy Schramm*