This material was developed by the League of American Bicyclists for the Smart Cycling course. We are grateful to the League for being a strong advocate for cycling in the USA for more than 125 years. Consider becoming a member. Visit http://www.bikeleague.org for a lot of good bicycling information.

Bicycling 101- What you Need to Know

Always ...

- Practice bike handling skills to better control your bike
- Wear a helmet, fitted correctly
- Perform ABC Quick Check on your bike before each ride
- Ride on the right and obey all traffic control devices
- Ride predictably; be visible at all times
- Scan for traffic; signal lane changes and turns
- Drink before you are thirsty; eat before you are hungry

Wear a helmet...

- A helmet is your first line of defense in a crash or fall
- Helmets can reduce serious head injuries by about 85%
- Make sure the helmet fits snugly and is adjusted correctly (level and not tilted, straps joined just under each ear, buckle snug while your mouth is completely open)
- After any impact that affects your helmet, replace it immediately

ABC Quick Check

- Always check your bicycle before taking a ride; this may prevent any surprises in the middle of your ride.
- A is for air
- B is for brakes
- C is for cranks, chain and cassette
- Quick is for quick releases
- Check is for the final, overall inspection

Air

- Tires lose air over time; if you don't pump them up they can go flat.
- Inflate tires to the rated pressure listed on the tire sidewall. Most pumps now can work with both presta and Shraeder valves. (carry an adapter just in case)
- Use a pressure gauge to insure proper pressure.
- Check for damage to tire tread and sidewall; replace if damaged.
- Carry an extra tube (and perhaps a patch kit) for insurance.

Brakes

- Inspect pads for wear; replace if less than 1/4-inch of pad left.
- Make sure pads do not rub tire or dive into spokes.
- Check your brake lever travel: there should be at least 1" between the bar and lever when applied.
- If you have disc brakes, become familiar with your specific type.

Cranks, chain, cassette

- Make sure your crank bolts are tight; lube the threads only
- Check your chain for wear: 12 links should measure no more than 12-1/8"
- If your chain skips on your cassette, you might need a derailleur adjustment or a new chain

Quick releases

- Make sure your hubs are tight in the frame and that your quick release is re-engaged
- The quick release should engage at 90°, pointing to the rear of the bike so that nothing catches on it.
- Inspect brake quick releases to insure that they have been re-engaged

Check

- Check it over
- Take a quick ride to check if derailleurs and brakes are working properly
- Inspect your bike for loose or broken or cracked parts; tighten, fix or replace if necessary
- Pay extra attention to your bike during the first few miles of the ride

Bicycles are part of traffic

- Check for oncoming traffic before entering any street or intersection
- Ride on the right, with the flow of traffic. Use the lane furthest to the right that heads in the direction that you are traveling.
- Ride in the right third of the right-most lane that goes in the direction you are going. Take the lane if there is insufficient road width for cyclists and cars to share.

Follow traffic laws

- Obey traffic control devices: stop signs, stop lights, lane markings
- Use hand signals to let pedestrians, other cyclists and motor vehicle drivers know your intention to stop or turn

- Anticipate hazards and adjust your position in traffic accordingly
- Ride in a straight line not in and out of parked cars on the side of the street/road

Ride safely

- Ride far enough away from parked cars to avoid hitting a surprise open door. Don't ride in the door zone!
- Ride far enough away from the curb or edge of the roadway to avoid hazards and debris
- Check, signal and move into the adjacent lane if there are hazards in a bike lane
- Take the lane before intersections and turns to assert your position on the roadway
- Take the lane if traveling the same speed as other traffic or if hazards narrow the usable width.

Bike Lanes/Paths

- Courtesy
- Yield to slower users, especially children
- Obey speed limits posted for the safety of all users.
- Announce when passing
- Clearly indicate your intention to pass other users
- Warn other trail users in advance so you do not startle them
- Use a bell, horn, or say "On your left" or "Passing on your left" when passing
- Yield when entering and crossing– Slow down before intersections and when entering a trail from the road
- Keep Right- Stay as close to the right as possible, except when passing.
- Give yourself enough room to maneuver around any hazards.
- Pass on left
- Scan ahead and behind before announcing your intention to pass
- Allow plenty of room, about two bike lengths, before moving back to the right
- Do not pass when visibility ahead is limited
- Be Predictable
- Travel in a straight line, except to avoid hazards or to pass.
- Always indicate your intention to turn or pass
- Be Visible
- Wear brightly colored clothing
- Make eye contact with motorists to let them know you are there (but don't always expect them to see you)
- Always ride in or near a travel lane

– Stay visible by riding where drivers are looking, i.e., do not pass on the right

At night – conspicuity

- Legally, cyclists must have a front white light and a red rear reflector and/ or a rear red light
- A bright red [blinking] light is much more conspicuous than a passive reflector
- Make sure that your lights are visible to motorists, and not pointing up or down
- Clear obstructions from the back of the bike that might block the light

Riding Comfort: Body Position

- Change hand positions often
- Slightly bend your elbows and stretch your neck while riding
- Make sure your saddle/seat height is adjusted properly
- There should be a slight bend in your knee at the bottom of the pedal stroke
- If your saddle is too high, your hips rock; if too low, it might cause knee pain

Riding Comfort: Gears

- Many beginning cyclists push too big a gear
- Down-shift and spin a smaller gear (try to spin between 75–95 revolutions per minute)

Riding Comfort: Hydration/Nutrition

- Maintain your body's water level by drinking often; one water bottle per hour
- Consume low-fat snacks: fruit or energy bars, especially on long rides
- To avoid fatigue, eat before you are hungry; drink before you are thirsty