## All On Cycling Club Safety Brief: Week 2 - Rider Visibility

For the second installment of the Safety Brief we are going to talk about the cyclist's visibility to other traffic, and how we can increase our chances of being seen. Let's start by defining Inattentional Blindness: Inattentional blindness is a cognitive phenomenon in which individuals fail to perceive unexpected objects or events in their visual field, even though they are fully capable of perceiving other aspects of their surroundings. This phenomenon occurs due to the limited capacity of our attention and the overwhelming number of stimuli in the environment. When drivers are focused on specific tasks such as monitoring traffic, pedestrians, and road signs; their attention may inadvertently ignore the presence of cyclists, leading to potential accidents and catastrophic injuries. **NEVER ASSUME A DRIVER SEES YOU EVEN IF THEY MAKE EYE CONTACT!!!** 

## **Contributing Factors to Inattentional Blindness**

- 1. **Cognitive Overload:** Drivers face an array of distractions, such as smartphones, in-car technologies, and conversations. These distractions can overload the driver's cognitive capacity, making it more challenging to notice bikers on the road.
- 2. **Cyclist Visibility:** Bicycles are smaller and less visible than motor vehicles. In certain weather conditions or low-light environments, cyclists may become even more challenging for drivers to actually see.
- 3. **Expectation Bias:** Drivers are often more accustomed to the presence of other cars, trucks, and larger vehicles on the road. As a result, they may subconsciously expect to encounter these vehicles, causing them to overlook cyclists who do not fit their typical mental model of traffic. Another car is a threat to an auto, a bicycle isn't so the driver may not be looking for you.

## Next let's talk about what we as cyclists can do to be more visible.

Clothing: What we wear matters, certain colors can make the rider more distinguishable at distance than
other colors. Dark colors and natural colors are less recognizable at a distance, especially as the light
conditions decrease. Another solid tip is to wear clothing that has reflective elements integrated into
the clothing on the legs, arms, or head – the movement of these body parts helps a driver to recognize
you are a cyclist.



In the above picture we can see that yellow, white, and green clothing can be seen at a significantly farther distance than blacks, blues, and reds. In the below photo we see a rider wearing mostly black and without lights on the bicycle but pay attention to the reflective elements of the clothing and how they make the rider visible when light is directed in their direction. It is important to recognize that reflective clothing and reflectors on the bicycle can never replace lights on a bike.



If it weren't for the reflective clothing this cyclist would be almost invisible at night.

2. Bicycle and helmet mounted lights: "When in use at nighttime every bicycle must be equipped with: 1) A front headlamp emitting a white light visible from a distance of at least 500 feet to the front; 2) A rear lamp emitting a red light visible from a distance of at least 500 feet to the rear (N.J.S.A. 39:4-10). Reflective material can further increase your visibility and can be used on your helmet, shoes and clothing." (NJ Cycling Manual). If you look at the statistics about when bicycle/vehicle collisions occur, 40%-60% of injuries and fatalities happen during darkness, although far less cycling occurs at dark. There are at least two primary reasons for you, a bicycle rider, to use lights at night. First, the front headlight illuminates the area in front of you, so you can ride safely, by being able to detect any hazards you approach. Second, bicycle lights make you visible to others using the roads, so they will not collide with you. It has been argued that cyclists with lights are even more visible at night than cyclists during daylight without lights. Check out the next picture for an example of how lights can make a difference in rider visibility at night.



Lights aren't only useful at night, bright flashy lights during the day can help drivers recognize you are a cyclist.

3. **Ride defensively!:** Ride in a safe and predictable manner, follow traffic laws, and don't swerve in front of traffic or weave through traffic. We should ride on the right side of the road whenever practical. **Be your own advocate and ride defensively!** 

Next time we will talk about riding safely in a group! In the meantime, ride safe!