

Group Riding Behavior, Strategy and Skills



By following some simple rules to create a predictable group riding environment, safety is enhanced and the speed increases with less effort expended by the individual rider. The natural order of the echelon is safer than the amorphous road blob as it creates a regular, predictable pattern of movement on the road that is universally recognized among cyclists.

Danger! Danger!

The most common cause of the group riding crash is touching the rear wheel of the rider in front of you. This causes what is described as a “diverting fall,” as your front wheel is diverted from its path and the bike steers right out from under you. This is a very hard and violent fall with considerable impact. Wheel overlap, unstable riding and variable speeds are the main causes of such falls and they are all easily avoided by good communication and reasonable riding skill level.

General rules related to road surface: If you are one of the front riders you need to signal for road debris, potholes, ice, pea gravel, road kill, etc. The general rule is to not signal for something you can ride over while having one hand on the bar. Generally a hand signal indicating the general location will suffice. **Do not** make sudden lateral moves to avoid minor obstacles, if you must change your line do so smoothly and slowly, if you are at the front a very slight acceleration will prevent any chance of knocking the following wheel.

If there is an intersection coming up, the front cyclist must indicate the direction of the turn with clear hand signals and also indicate a stop as needed.

General rules related to wind:

Pull smoothly off the front of the group **into the windward side**, do not slow until you are clear of the echelon

Details: When the second rider finds one side or another to be optimal it is helpful to then tell the lead rider to either pull off to the right or left as the lead rider may not know which side the echelon has strung out on.

The stronger the wind, the more critical finding the draft and staying in it becomes.

Where is the wind from?

There needs to be agreement within the group on the functional wind vector. This establishes the direction and angle of the echelon.

There are three critical elements to a good group ride.

- 1) Individual bike handling skill,
- 2) Communication in the group while riding
- 3) A generally agreed upon speed and group dynamic

There are five general ways a group of riders can move down the road.

- 1) The **amorphous blob**, this happens at low speeds at the start of many rides and even the beginning of a long race. As long as the speed is low the reaction time and space to make a correction issues are minimal. As the speed increases this becomes a dangerously unstable group because each rider could move in any direction reacting to potholes, wanting to get out of the wind or wiggling around trying to take off a jacket, etc.
- 2) The **strung out line** where nobody is moving up or back. This happens when one or more riders go to the front and jam away for awhile and everyone goes into draft to survive mode. This is also a somewhat less predictable situation as someone far down the line will jump out and move up or a gap will open and there will be riders passing to catch up and fill the gap. Not as chaotic as the Amorphous Blob but dicey.
- 3) **Single paceline** occurs when the rider reaches the front of the line and the drops back to the end as a solo rider. This is the basic pattern for a group up to 6 or 7.
- 4) **Double pacelines** work best with a group of 8 or more. As the name implies it is composed of two distinct lines of riders, one moving up on protected side and the other moving back on the windward side. The key element of this is to keep in the draft both up and back in the lines. This is very efficient and fast but requires more attention from each rider. Particular attention must be paid to smooth transitions at the front and also as you get back onto the faster line going up the protected side. The time spent at the front is very short, really getting just to the front and

sliding smoothly over to the descending line. The key here is that you are drafting as you go to the back as well and the economy is even greater than a single line.

- 5) The **conversational double paceline** is something I have seen evolve on occasion. This involves the two front riders peeling off in unison, either both to the windward side or one down each side. This allows a trading of pace while being able to chat. This tends to operate at moderate speeds depending on pair at the front. The rotation is slower and prolonged pulls at the front are requisite.

More Basic Rules:

Always look past the rider directly in front of you while keeping an eye on the gap between your front wheel and the rear wheel in front of you. Changes in speed are more easily detected by watching up the line a bit instead of staring at the rear hub of the rider in front of you.

It is very helpful if the **cadence is similar** throughout the group. The higher cadence riders will tend to accelerate more quickly than a low cadence cyclist, causing variations in speed that can make it difficult to stay together.

When you reach the front of the group **do not speed up or slow down**, keep the pace until you are clear to drop back and rejoin the back of the line. There is no need to touch the brakes to get to the back of the group, the wind will blow you there soon enough.

The amount of time spent at the front of a paceline is variable but generally short and the bigger the group the shorter the pull. If you feel you are the weakest in the group at the moment, take a “no pull” at the front and just rotate through. If you do not want to pull at the front do not try to stay behind the rider in front of you as they pull off this creates a break in the rhythm and is a surprise to the rider directly behind you.

At The Back: When **getting to the back of the line accelerate slightly** as you see the last rider come into view. This keeps you from having to drop too far back and having jump hard to catch back on.

As you become the last rider in the line it helps to say “I’m last” to the rider who will drop in behind you so they can do so without having to see if they need to drop back further.

Dangling particples, ticket collectors and hangers on. If the group has too high a pace for one or two individual riders they are often able to sit at the back of the line, out of rotation. The critical aspect here is for them to make it very clear that they will stay out of the rotation so that each time the last rider comes around they do not have to worry about cutting off the last rider. This is preferable to riders not pulling through at the front if they are too tired as this brings the entire rotation to a halt causing more variation in speed and a more dangerous situation.

When an echeloned group rounds a corner the angle and the direction of the echelon will change. It is up to the second and third riders to establish the side to draft on. The moment of rounding the corner is the dangerous time and each cyclist is expected to separate a bit to allow the reorganization to occur.

Any drinking, adjustment of clothing etc is done at the back or off the paceline NEVER at the front or in the line.

Drills

Forming groups of 5-8 riders of similar size.

The goal here is to keep each group together and in a functional echelon

1-form a small group and draft without any rotation settle on a pace that works for everyone and

2-Begin with forming a single paceline with a slow rotation and a speed that everyone can maintain. Slow rotation means perhaps 40 to 50 pedal strokes at the front and then rotate off into the wind and drop back to the last position. This is the easiest rhythm to establish and as the group gets comfortable the rotation rate can be increased. Talk to each other about the pace and the relative positions on the road. Keeping as far right as possible and making sure the last rider is not in the gutter or at the yellow line. Ride only as close as you are comfortable!

If there is a heavy cross wind break into smaller groups and work an even slower rotation.

3-Stop and discuss the problems at the end of the first lap. If the group feels ready to tackle a double paceline, and the wind and traffic conditions permit then join up with another group to have 8-14 riders and work through the double format.