



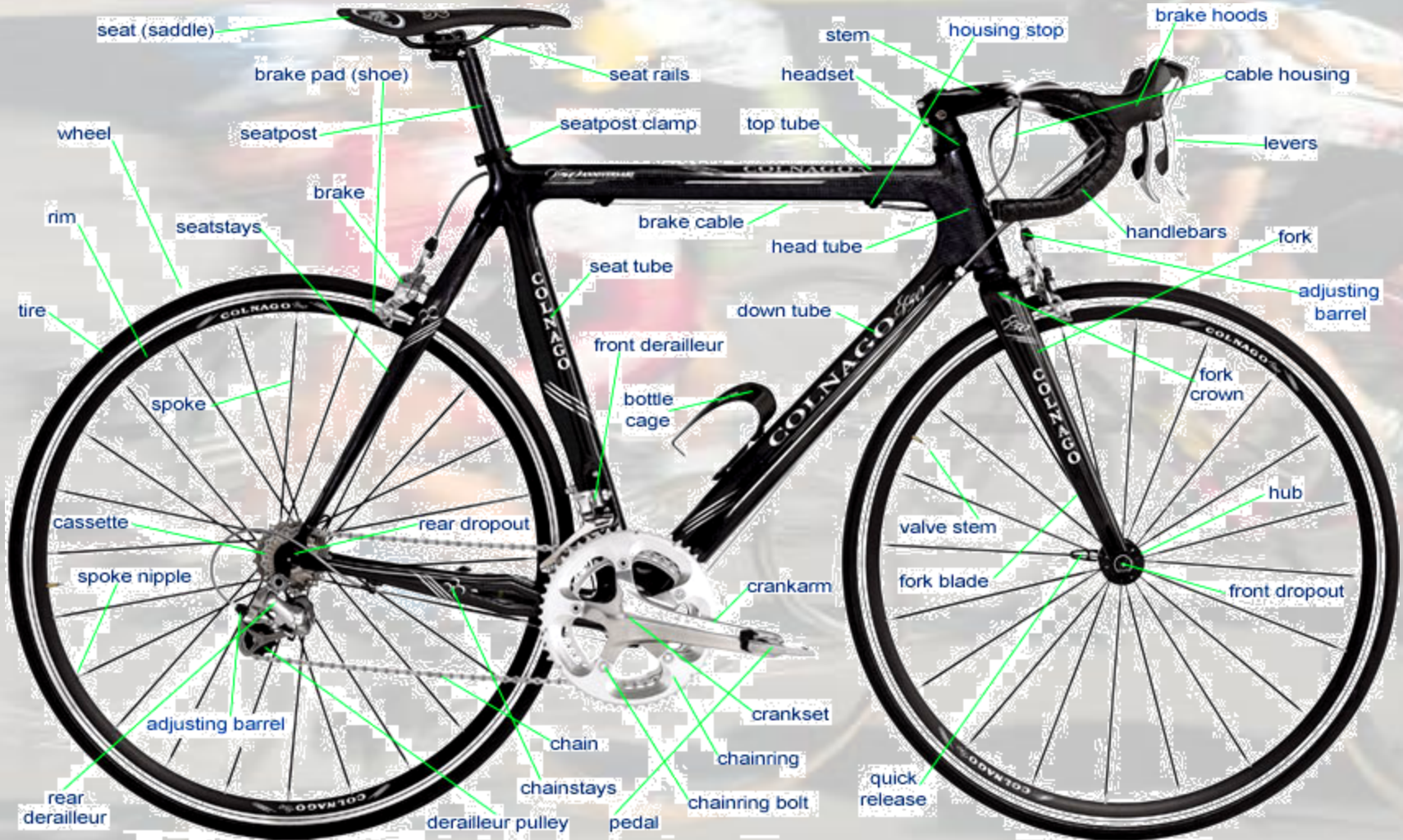
ALL ABOUT THE BIKE

Topics

A blurred background image showing several cyclists in a race, wearing helmets and colorful jerseys, riding their road bikes on a paved road. The image is out of focus, emphasizing motion.

- 1. Overview of the modern road bike**
- 2. Group cycling and cycling etiquette**
- 3. Self sufficiency on the road**
- 4. Cycling kit and clothing**
- 5. Basics of road bike maintenance**


What's On Your Bike?



Frame

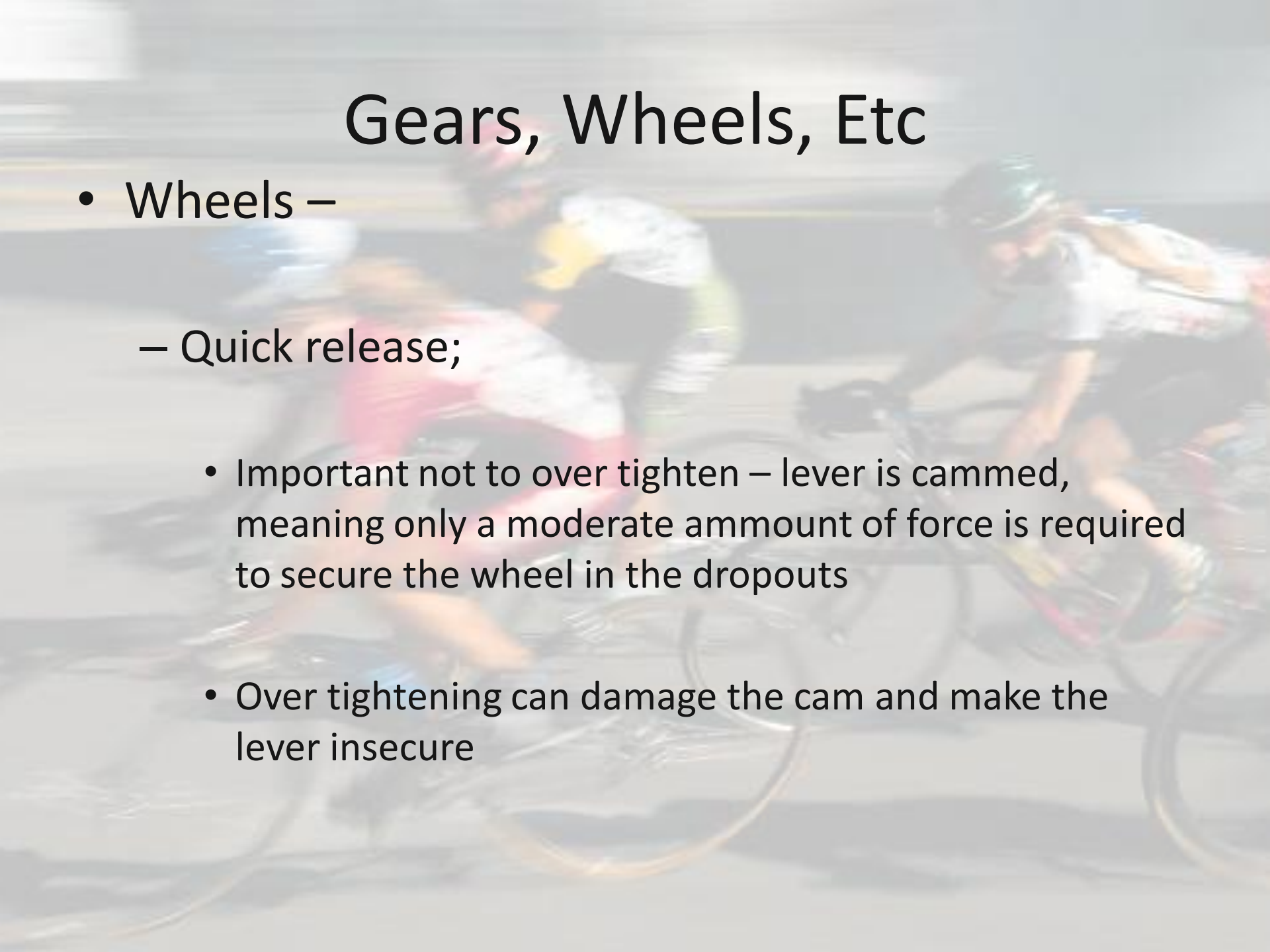
- Design more or less unchanged in ~100yrs, materials radically changed however
 - Steel: original material bikes, comfortable frames, heavy(er) but durable
 - Aluminium: lighter frames, not as strong as steel but stiffer
 - Carbon Fibre: the current 'it' material, superlight and stiff but at the cost of long term durability
 - Titanium: the most expensive frame material, advantages being lightweight (not as light as CF) but very strong and makes comfortable frames

Gears, Wheels, Etc

A blurred background image showing several cyclists in motion, likely during a race. The cyclists are wearing various colored jerseys (red, white, blue) and helmets. The image is out of focus, emphasizing the speed and movement of the race.

- Gears –
 - Campagnolo & Shimano; most common. Similar integrated brake lever/shifter units. SRAM also available
- Wheels –
 - Shallow vs Deep section; shallow are lighter & better for hills but deep provide aero advantage for flat routes despite weight penalty* *unless you go carbon rims
 - Quick release; slight differences in Campag. & Shimano
 - Lever on shimano brakes to let wheel past brake blocks
 - Button on Campag levers to let wheel past brake blocks

Gears, Wheels, Etc

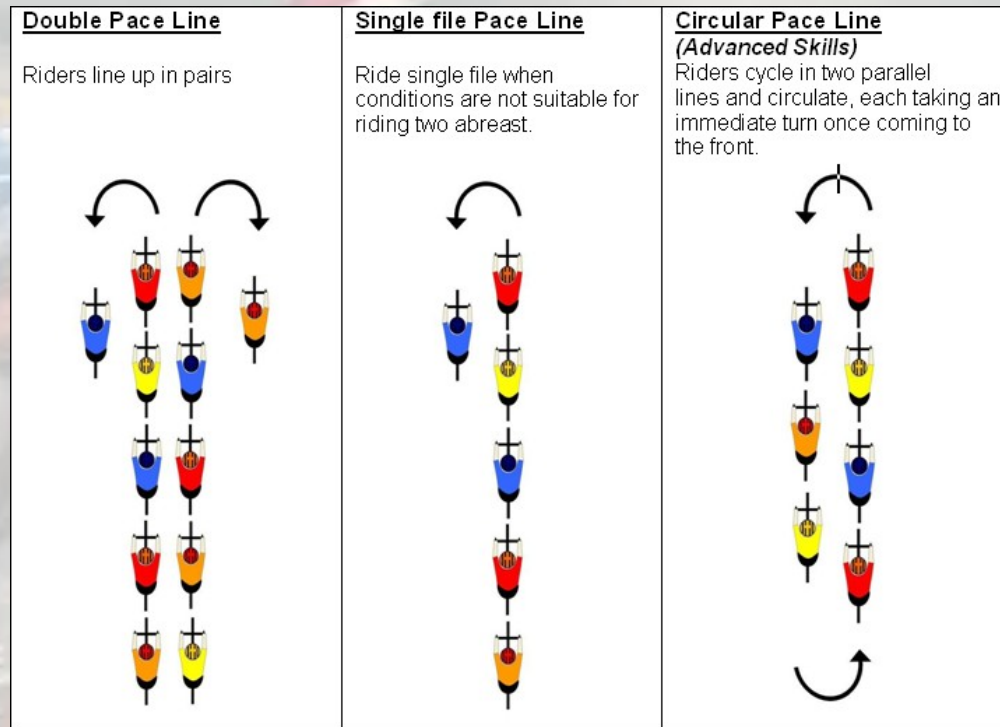
A blurred background image showing several cyclists in motion, likely during a race. The cyclists are wearing colorful jerseys and helmets, and their bicycles are visible. The image is out of focus, emphasizing the speed and movement of the scene.

- Wheels –

- Quick release;

- Important not to over tighten – lever is cammed, meaning only a moderate amount of force is required to secure the wheel in the dropouts
 - Over tightening can damage the cam and make the lever insecure

Group Cycling and Cycling Etiquette



Common Cycling Formations

Above are the most common cycling formations used in the club with the Chain Gang (AKA circular pace line being the most prevalent).

This form of training allows better progress against the wind, helps increase pace (over time) and maintains a large group of riders in a more compactive, cohesive group.

Group Cycling and Cycling Etiquette



1. Training - It's Not a Race

A group ride is NOT a race. You are not to “Attack” off the front or try to show everyone how strong you are. That’s what races are for.

On climbs where abilities differ it may be acceptable to attack a hill, contingent on establishing a re-group at either the summit or foot of the following descent

Group Cycling and Cycling Etiquette

2. Bar-to-Bar

Whenever riding in a group you should be riding 2 by 2 NO MORE, side by side (with only a few cm between you) and be perfectly handlebar to handlebar.

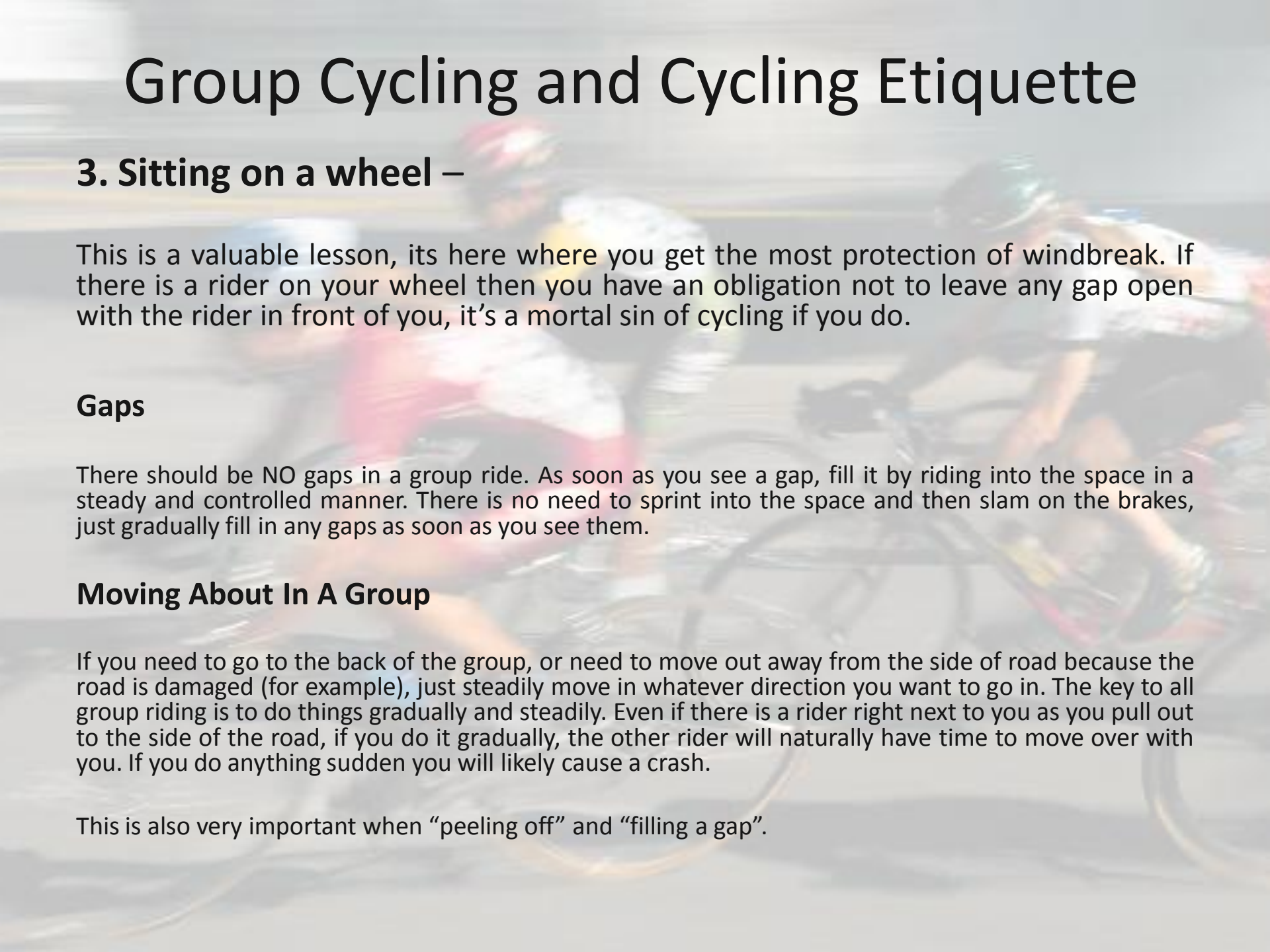
You should not be able to fit a bus between you and rider beside you or be tearing 'along the dotted line'.

Riding with your bars ahead of the rider beside you is called "half-wheeling" and is a major faux pas.

Do not at any time sprint ahead and disrupt the flow. Even if there is a corner coming up, stay side by side, or if needs be the rider to the inside of the bend can fall *slightly* back and go through the corner like a well oiled machine.

If there is an uneven number of riders in the group and you don't have anyone to ride along side, you should place yourself in between the two riders ahead of you, with your front wheel between their two rear wheels. This allows the riders ahead of you to remain bar to bar and to keep the group tightly together.

Group Cycling and Cycling Etiquette



3. Sitting on a wheel –

This is a valuable lesson, it's here where you get the most protection of windbreak. If there is a rider on your wheel then you have an obligation not to leave any gap open with the rider in front of you, it's a mortal sin of cycling if you do.

Gaps

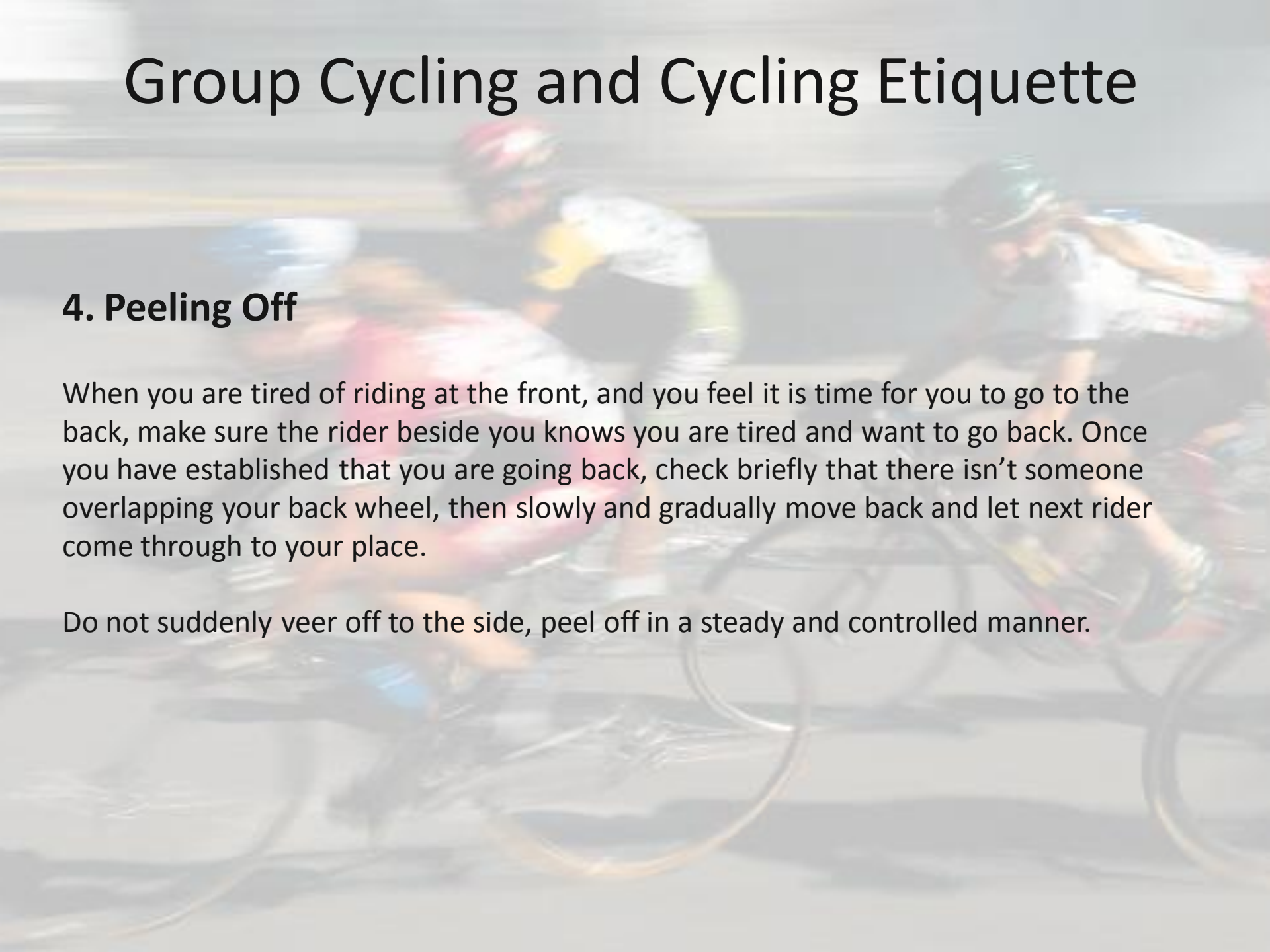
There should be NO gaps in a group ride. As soon as you see a gap, fill it by riding into the space in a steady and controlled manner. There is no need to sprint into the space and then slam on the brakes, just gradually fill in any gaps as soon as you see them.

Moving About In A Group

If you need to go to the back of the group, or need to move out away from the side of road because the road is damaged (for example), just steadily move in whatever direction you want to go in. The key to all group riding is to do things gradually and steadily. Even if there is a rider right next to you as you pull out to the side of the road, if you do it gradually, the other rider will naturally have time to move over with you. If you do anything sudden you will likely cause a crash.

This is also very important when “peeling off” and “filling a gap”.

Group Cycling and Cycling Etiquette

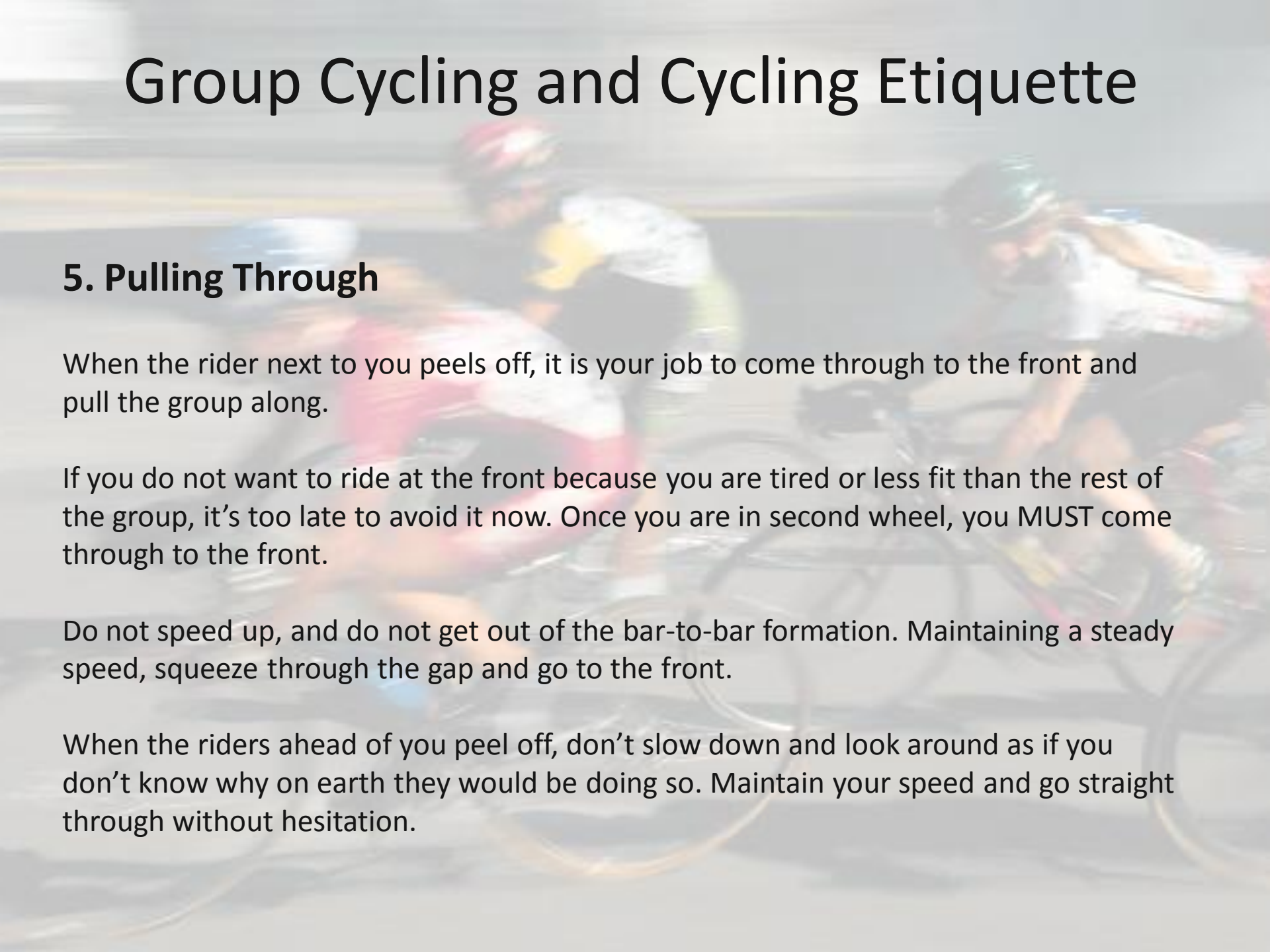


4. Peeling Off

When you are tired of riding at the front, and you feel it is time for you to go to the back, make sure the rider beside you knows you are tired and want to go back. Once you have established that you are going back, check briefly that there isn't someone overlapping your back wheel, then slowly and gradually move back and let next rider come through to your place.

Do not suddenly veer off to the side, peel off in a steady and controlled manner.

Group Cycling and Cycling Etiquette



5. Pulling Through


When the rider next to you peels off, it is your job to come through to the front and pull the group along.

If you do not want to ride at the front because you are tired or less fit than the rest of the group, it's too late to avoid it now. Once you are in second wheel, you **MUST** come through to the front.

Do not speed up, and do not get out of the bar-to-bar formation. Maintaining a steady speed, squeeze through the gap and go to the front.

When the riders ahead of you peel off, don't slow down and look around as if you don't know why on earth they would be doing so. Maintain your speed and go straight through without hesitation.

Group Cycling and Cycling Etiquette



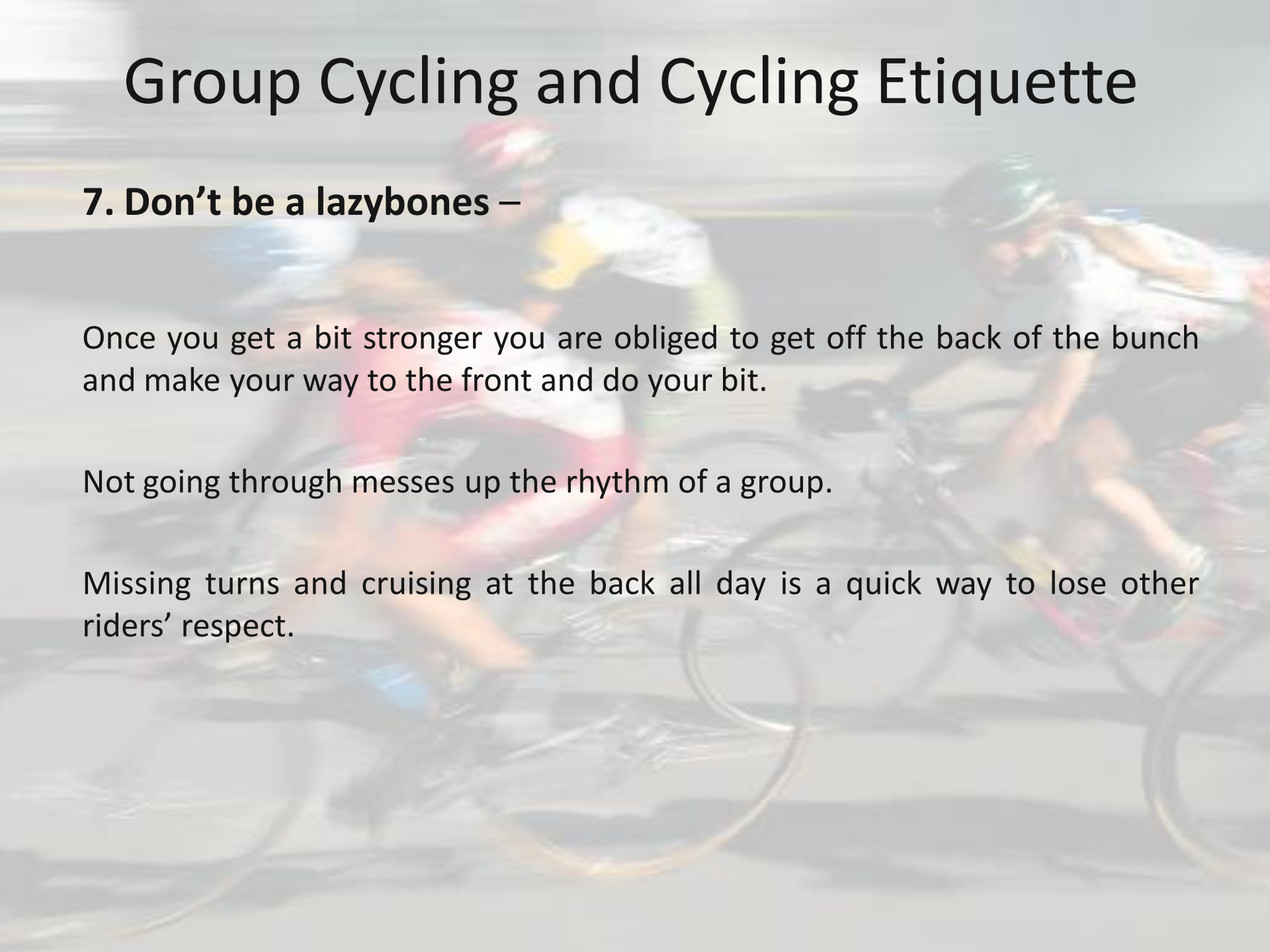
6. IF You Are Too Tired To Go To The Front

If you do not want to go to the front, sit at the back and let the riders coming back from the front of the group slot in ahead of you.

It is not acceptable to work your way up to the front of the group and then look around acting lost and confused, slowing down because you don't feel strong enough to be at the front.

If for whatever reason you do find yourself at the front, go through and take what is known as a "token pull". This is just a brief stint where you go to the front for a couple seconds, agree with the rider beside you that you are both peeling off, and go to the back.

Group Cycling and Cycling Etiquette



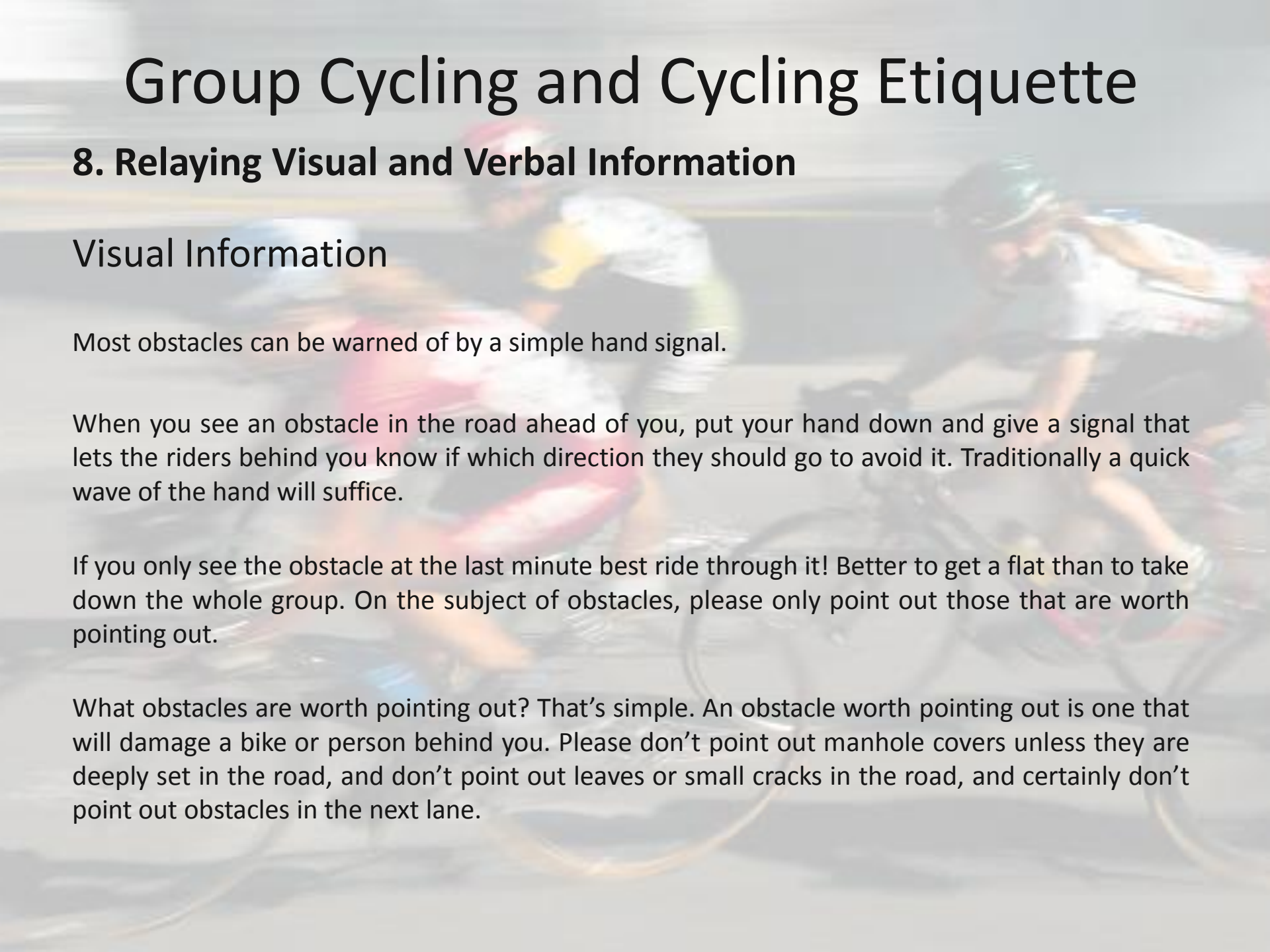
7. Don't be a lazybones –

Once you get a bit stronger you are obliged to get off the back of the bunch and make your way to the front and do your bit.

Not going through messes up the rhythm of a group.

Missing turns and cruising at the back all day is a quick way to lose other riders' respect.

Group Cycling and Cycling Etiquette



8. Relaying Visual and Verbal Information

Visual Information

Most obstacles can be warned of by a simple hand signal.

When you see an obstacle in the road ahead of you, put your hand down and give a signal that lets the riders behind you know in which direction they should go to avoid it. Traditionally a quick wave of the hand will suffice.

If you only see the obstacle at the last minute best ride through it! Better to get a flat than to take down the whole group. On the subject of obstacles, please only point out those that are worth pointing out.

What obstacles are worth pointing out? That's simple. An obstacle worth pointing out is one that will damage a bike or person behind you. Please don't point out manhole covers unless they are deeply set in the road, and don't point out leaves or small cracks in the road, and certainly don't point out obstacles in the next lane.

Group Cycling and Cycling Etiquette

8. Relaying Visual and Verbal Information

Verbal Information

It's important that you let everyone behind know what's coming up. Those at the back won't be able to see, so are relying on you to give them adequate warning and keep them safe.

Try not to shout too frequently or unnecessarily. The problem with this is: when you are more than two riders behind the person yelling, all you can actually hear is a general "BLURRRRR" being yelled and so while everyone should be keeping their eyes peeled for general speed changes and obstacles, suddenly the majority of riders are looking around wondering what the obstacle is that has just been yelled out. No one actually knows if you have just yelled "HOLE" and have not pointed it out, meaning some riders are scanning the ground left right and center looking for an imaginary hole. Other riders are craning their necks thinking you yelled "CAR", while yet more riders are looking behind them thinking you yelled "George has a FLAAAT!"

Important things to tell the group are when you are stopping, (otherwise you risk a pile-up), that a car is coming head-on with little space so riders need to single out, that there is a car trying to overtake from the rear, and that you are approaching a tight turn or gravel on a turn.

'Car up' - is a car coming from behind the group and

'Car down' - is one heading towards you.

Group Cycling and Cycling Etiquette

9. Brakes – VERY IMPORTANT

The biggest hazard in group riding is people stopping quickly and unexpectedly.

More accidents and mass pile-ups are caused by people panicking and grabbing a handful of brake than anything else. If you stop suddenly, the person behind is just going to run into you, and a collision is likely to bring down other riders as well. If something happens in front, look for ways to avoid it while maintaining speed and shouting back a warning, rather than simply slamming on the anchors.

You should be riding ever so slightly to the side of the rider in front of you; so when they slow down, you either stop pedalling and start to slightly overlap your front wheel with their rear wheel, or you touch the brakes gradually, once again using the “wheel overlap” as a buffer zone so as not to slow down too suddenly for the riders behind you.

Unwritten Rules of Group Cycling



Be aware that everything you do has a knock-on effect on everyone behind and beside you.

You are responsible for the safety of everyone around you as you are for your own wellbeing.

Don't half wheel. When you hit the front, keep the pace consistent and matched to your riding partner. Most groups allow the cyclist on the **left-hand side** dictate the pace.

When you hit a hill, maintain your effort level, not your speed.

When you come through for your turn and move over to the recovering line, do so smoothly and close to the rider you are taking over from. Don't leave them with a massive gap.

Don't leave gaps. Full stop.

If you are struggling to close a gap, wave the rider behind you through.

Unwritten Rules of Group Cycling

Do your fair share of work at the front. If you are hanging and can't take a turn, stay back rather than disrupt the rhythm of those who are working.

Don't ever sit at the back on a group ride doing nothing all day and then break cover simply to win a town-sign sprint or hill climb. If you are that strong, get yourself to the front. You are there to work and get fitter.

If you are feeling strong and someone else is suffering, give them a gentle shove on the back to help them back onto a wheel. Keeping gaps closed will ensure the group stays together and you'll maintain the pace better.

If someone gives you a shove, accept it graciously. Everyone has bad moments.

Always carry the tubes, pumps, food and tools you need to look after yourself and your bike.

Don't nail yourself trying to do super-hard turns if the pace is above what you are capable of or you know you are tiring. If you start to get exhausted and dropped, it works against you and the group.

Unwritten Rules of Group Cycling



If someone is repeatedly making mistakes, tell them discreetly towards/at the end of the ride. Don't shout at them in the heat of the moment. No one started out knowing all the right things to do, try to remember that. If it's you being given constructive criticism, just try to learn from it.

Show your respect for other cyclists and the drivers with whom we share the road. A wave goes a long way if a driver has waited for a cyclist to get through a junction. Say hello to other cyclists on the road as you pass. We're all at the same game.

Oh yeah,

Never spit when other riders are too close behind you. It's just nasty and gross.

DOGS

1. Shout at the Dog

Many riders have found that shouting an authoritative "NO!" or "BAD DOG" will make a dog give up (people have shouted worse, I know).

Frequently dogs have no intention to bite, and are just acting fierce, trying to get you to move out of their territory. If you can trigger a little submissive behaviour with a loud voice and an authoritative glare, many times they will turn back and go home.

DOGS

2. Stop and Walk

Though this may seem counterintuitive, sometimes all you need to do to get a dog to stop chasing you is to dismount from the bike. Be sure to climb off so that you can keep the bike between yourself and the dog.

Then just walk on by. You are then neither threatening to the dog, nor fun to chase, and the dog will frequently lose interest and return to its yard.

DOGS

The background of the slide is a blurred photograph of several cyclists in motion, wearing helmets and colorful jerseys, riding on a road. The image is out of focus, creating a sense of speed and movement.

3. Squirt the Dog

When you see a dog up ahead, get ready with your water bottle. If the dog starts to close in, give it a good squirt of water in the face.

It can confuse them and put them off their attack enough for you to get by. Frequently they'll just stop, and the problem is solved.

DOGS

4. Outrun the Dog

Once you're going past a dog, sometimes your best option is to just hit the jets for all you're worth and hopefully be able to outrun the dog.

I'd suggest combining this with several of the other options like shouting at the dog and/or spraying it with water, because taking this action is going to challenge the dog to chase, which is what he lives for.

If you choose to do this, you want to be out from the edge of the road in the centre of your lane, where the dog will have a harder time getting good traction than if he is able to follow you alongside in grass or gravel.

DOGS

IT IS IMPORTANT NOT TO SWERVE OUT INTO THE MIDDLE OF THE ROAD TO AVOID A DOG

TRY TO HOLD YOUR COURSE IF POSSIBLE

A SWIFT CHANGE OF DIRECTION MAY NOT ALLOW TRAFFIC ENOUGH TIME/SPACE TO MOVE TO AVOID YOU IN TIME TO ESCAPE ACCIDENT

5 Things to Check Before Each Cycle

The background of the slide is a blurred photograph of two cyclists riding on a road. The cyclist in the foreground is wearing a white and red jersey and a red helmet. The cyclist in the background is wearing a white and blue jersey and a blue helmet. The image is intentionally blurred to create a sense of motion.

- 1. Tyres & Wheels
- 2. Brakes
- 3. Seatpost & Stem/handlebars
- 4. Helmet
- 5. Gears & chain

Self Sufficiency On The Road

- What you need to carry on you or the bike that can get you out of an emergency and home
- On the bike –
 - Mini pump
 - Saddle bag with
 - 1. Spare tube (not a punctured one)
 - 2. Tyre levers (plastic are good and won't damage rims)
 - 3. Puncture repair kit
 - 4. Mobile phone in water proof (e.g. sandwich) bag
 - 5. Small amount of money for phone call, food or repair equipment

Cycling Kit

The background of the slide is a blurred photograph of several cyclists riding their bikes on a road. The cyclists are wearing various colored jerseys and helmets, and the image is intentionally out of focus to create a sense of motion and speed.

- Always try to kit out appropriate for the weather – difficult in Ireland but do your best.
- Different requirements for different seasons but generally can get away with spring/summer kit and autumn/winter kit
- The list overleaf is just suggested not required and does not include a helmet as it is **NOT AN OPTIONAL ITEM**

Cycling Kit



- Spring/summer kit
 - Light base layer
 - Short sleeve jersey
 - Bib-shorts
 - Arm warmers
 - Knee/leg warmers
 - Regular gloves
- Autumn Winter kit
 - Heavier base layer (Ls)
 - Long sleeve jersey
 - Bib-longs
 - Rainproof jacket
 - Heavy duty overshoes
 - Fullfinger gloves (if cold)
 - Thicker socks
 - Polar/microfleece cap

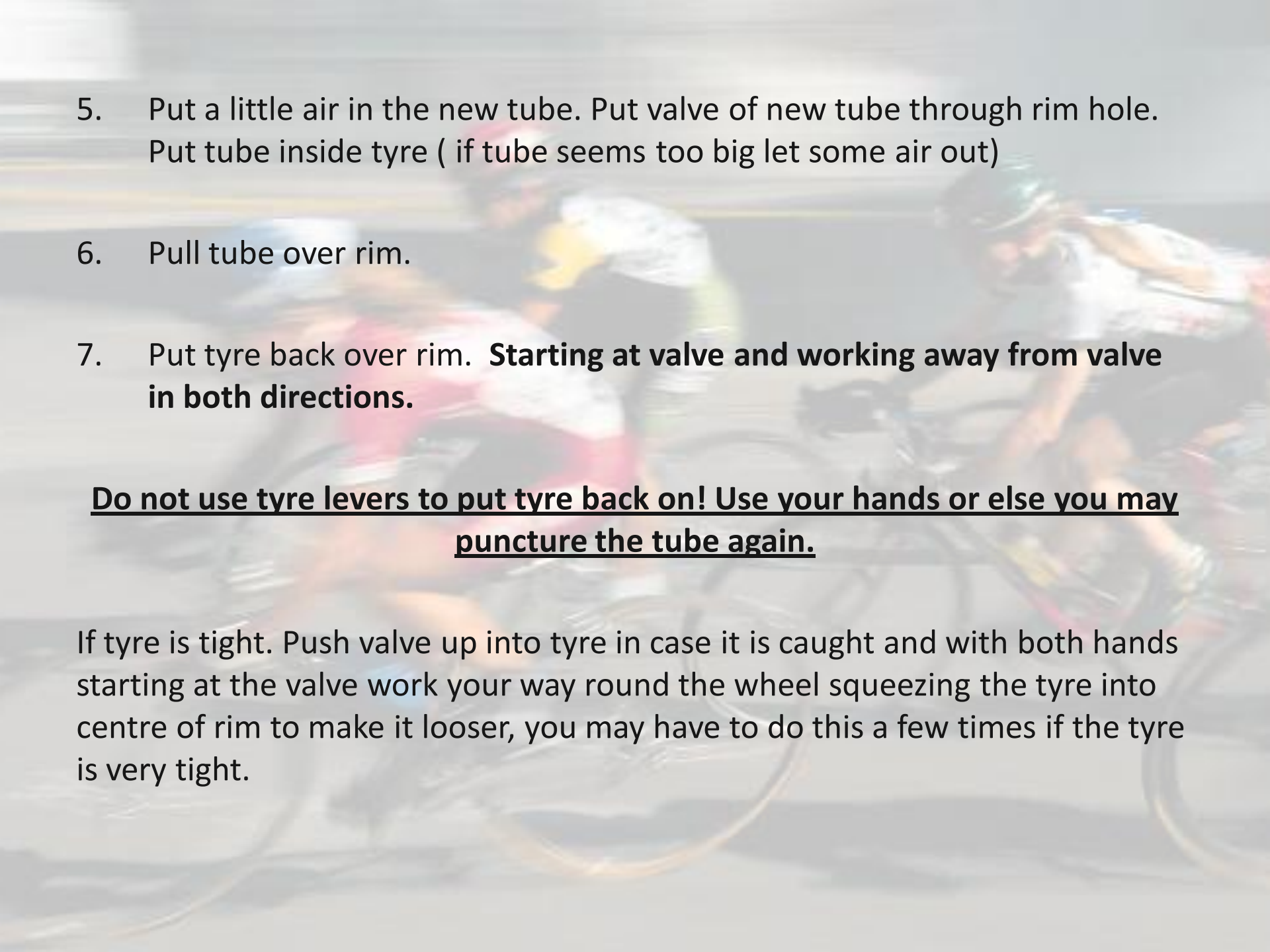
Basic Road Bike Maintenance

- Most basic but integral skill

–HOW TO **CORRECTLY** FIX A PUNCTURE

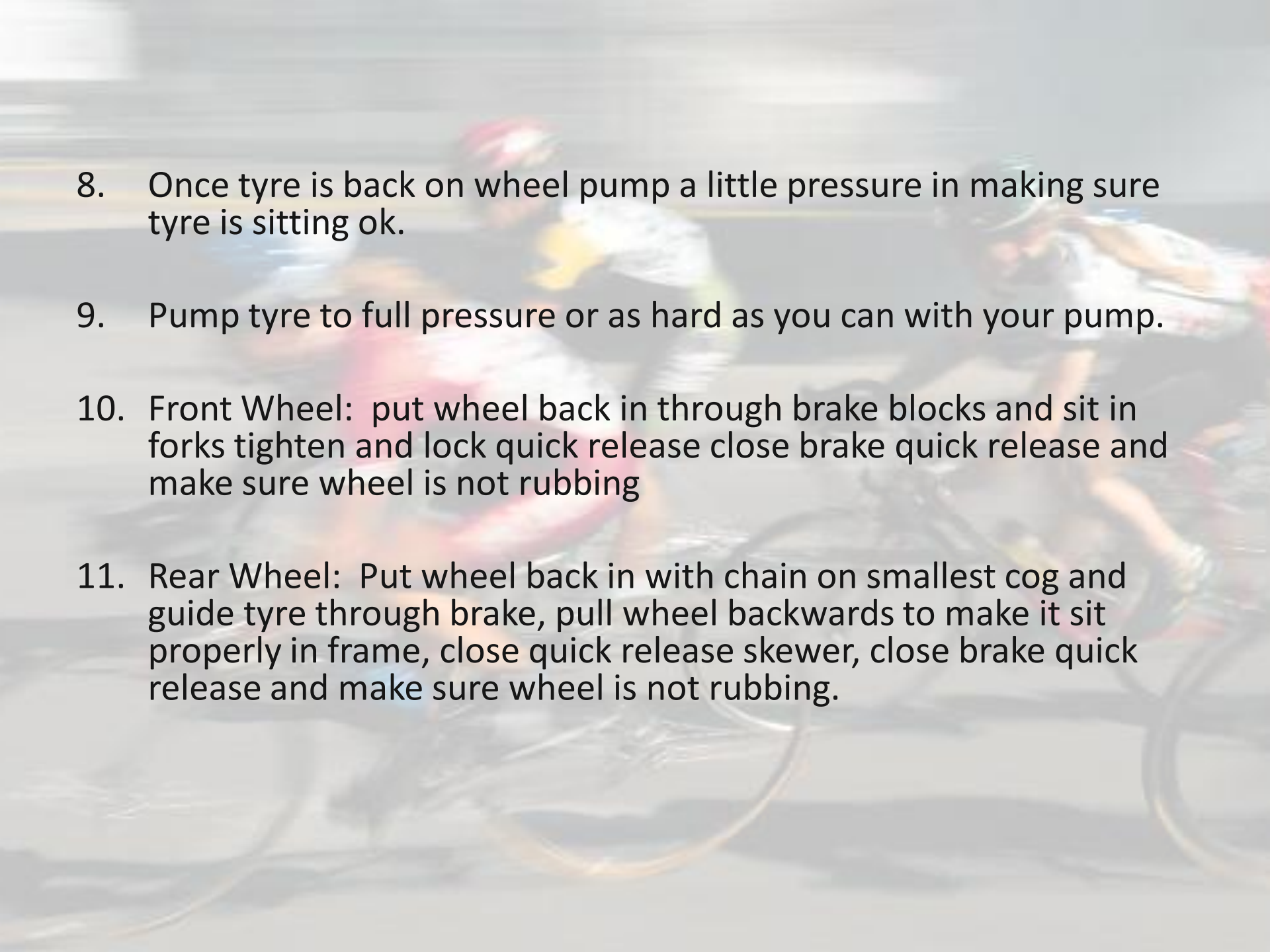
Changing a punctured tube

1. Don't turn your bike upside down (you may damage your bike computer), if you feel you must invert bike remove computer first.
2. Let off the brake quick release.
 - A. Front Wheel: Loosen quick release skewer (don't lose springs)& pull wheel out
 - B. Back Wheel: Put chain in smallest cog, open quick release skewer, lever lift bike and tap wheel downwards to release.
3. Using tyre levers take one side of the tyre off. Remove punctured tube.
4. Check tyre and rim for glass, stones etc. and remove.

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- The background of the slide is a blurred photograph of several cyclists in motion, wearing colorful racing gear and helmets, riding their bicycles on a road. The image is out of focus, emphasizing the text in the foreground.
5. Put a little air in the new tube. Put valve of new tube through rim hole. Put tube inside tyre (if tube seems too big let some air out)
 6. Pull tube over rim.
 7. Put tyre back over rim. **Starting at valve and working away from valve in both directions.**

Do not use tyre levers to put tyre back on! Use your hands or else you may puncture the tube again.

If tyre is tight. Push valve up into tyre in case it is caught and with both hands starting at the valve work your way round the wheel squeezing the tyre into centre of rim to make it looser, you may have to do this a few times if the tyre is very tight.

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8. Once tyre is back on wheel pump a little pressure in making sure tyre is sitting ok.
 9. Pump tyre to full pressure or as hard as you can with your pump.
 10. Front Wheel: put wheel back in through brake blocks and sit in forks tighten and lock quick release close brake quick release and make sure wheel is not rubbing
 11. Rear Wheel: Put wheel back in with chain on smallest cog and guide tyre through brake, pull wheel backwards to make it sit properly in frame, close quick release skewer, close brake quick release and make sure wheel is not rubbing.

Basic Road Bike Maintenance



How to clean, and maintain a bike *(some black bike owners might take notes)*

FRAME & FORK

- Easiest to do after the bike gets dirty – before dirt dries onto the paint
- Soft brush
- Mild detergent or products such as MucOff Bike cleaner

WHEELS

- Stiffer brush
- Clean thoroughly with mild detergent (same as used on the frame)

DRIVE CHAIN

- Small brush (toothbrush is good), old rags
- Clean and degrease chainrings and derailleur jockey wheels
- Degrease & clean chain (using a specific chain cleaner works best, just follow instructions) dry thoroughly, apply oil, allow to soak in for ~1hr & wipe off excess.

Note WD40 is not a lubricant, it is a water disperser/degreaser.

Basic Road Bike Maintenance

A blurred background image showing several cyclists in motion, likely during a race or training session. The cyclists are wearing helmets and cycling gear, and their bicycles are visible. The image is out of focus, emphasizing the text in the foreground.

Gears

Frequently visits to bike shops are to re-tune gears that are jumping.

This can be due to wear of chain and cassette, requiring replacement, but often due to stretch in the gear cable.

If the chain is at fault continuing to use a worn chain is false economy as they will shorten the life of sprockets and chain rings. It's notable that a new chain is much cheaper than a new cassette.

Basic Road Bike Maintenance

Short Guide to tuning jumping gears

1. Place bike on stand or if necessary invert bike
2. Put chain into middle (if 3 chainrings) or small (if 2 chain rings) chain ring and 4th or 5th sprocket on the cassette
3. Twist barrel adjuster at back of derailleur anticlockwise to tighten cable $\frac{1}{4}$ turn and turn cranks. Continue to make small $\frac{1}{4}$ turns of the adjuster until gear is correctly engaging
4. Assess correct engagement in largest and smallest sprockets.

A similar system is used on the front derailleur using a barrel adjuster on the downtube of the bike.

Basic Road Bike Maintenance

Short Guide to tuning jumping gears

On front and rear derailleurs there are also LIMIT STOPS

These small screws control the amount of movement of the derailleur cage, usually labeled 'H' & 'L'

If the stops are incorrectly adjusted the derailleur cage may:

"Over travel" allowing the chain to jump off the cassette's high or low cogs into the spokes/frame.

Or **"undertravel"** so that you can't select the highest or lowest cogs

These normally do not need to be adjusted.

Don't change change them unless it's necessary to re-set them - usually due to damage to the derailleur, e.g a bent cage