How to Come Back from the Dead on Climbs

Chris Carmichael and Beth Lamie

With four huge climbs packed into just 124 kilometers (77 miles) of racing, Stage 17 of the 2014 Tour de France was a brutal test. On a long stage that features big climbs, the distance and the terrain cause the selection even if the racing isn't very aggressive. But when a mountain stage is short, racers ratchet up the intensity to force the critical selections. With such aggressive racing groups constantly formed and split up and many riders experienced both periods of brilliance and collapse – sometimes within the same climb! Fans sometimes struggle to understand how riders can be strong one moment, off the back the next, and then ride themselves back into the group. So here's an inside look at how that works, and how you can manage your efforts on big climbs.

The Reasons Riders Blow Up

It's easy to say that riders blow up because they push themselves above a sustainable power output and they have to slow down to recover. While that's true, there's also more to it than lactate threshold power.

Core Temperature

Core temperature is one of the big factors that doesn't get that much attention in mountain stages (or in epic triathlons!). When you descend a big mountain pass you cool down significantly. As riders start up the next climb, especially when there is not a big valley between the climbs, they often feel quite strong. Their core temperature has come down, they've fueled up on the descent, and they're raring to go. But then the high-intensity effort, slower speeds on the climb, and the heat of the day combine to spike an athlete's core temperature. The effect isn't immediate, but after about 10-15 minutes on the climb it can catch up on you. *When you overheat your power output drops significantly*, you feel awful, and your motivation to ride aggressively disappears. The same is true for any race in a warm and/or humid climate, regardless of whether or not you've had time to acclimatize.

Core temperature is one of the reasons you see dropped riders almost immediately reaching for bottles from spectators to dump over their heads and bodies. It's difficult to cool yourself on a hot day when you're moving slowly up a big climb, simply because there's not that much airflow. But if a rider can bring his core temperature down a bit the power and motivation can return relatively quickly and he might be able to make a comeback.

Nutrition Mistakes

Food – or lack of it – is another reason riders blow up. It seems like an elementary problem that pro athletes should be able to avoid, but every rider out there has made a nutrition mistake at some point in their racing career. In the heat of racing you sometimes eat less frequently than you should. A nutrition mistake can definitely lead to a sudden loss of power, but if you can quickly consume some food and you're still hydrated you can sometimes turn a caloric mistake around within as little as five minutes. If you don't recognize and correct this soon enough, however, the damage will be exponential.

Remember, nutrition mistakes are often pacing mistakes in disguise. If you go out too hard and your heart rate is elevated or your core temperature too high, your body is going to do everything it can to cool you down and bring the heart rate down – it's a matter of life and death. Your bloodflow will be diverted away from your extremities and stomach in an effort to cool you off, so that vital nutrition might not get digested and converted into glycogen fast enough to prevent a nutritional collapse.

Surges and Accelerations
Repeated surges and accelerations wear down riders sooner than maintaining a steadier pace on big climbs. Riders who are already on the ropes aim to find a pace they can maintain, and riders who have the strength use surges to crack their rivals. Unless you are in a draft-legal bike race or triathlon, you NEVER want power surges. You want to keep your normalized power and average power as close to the same as possible

How to Come Back from the Dead

Throughout Stage 17 we saw riders get tailed off the back of a group only to see them return later, and in some cases drop the people who had previously dropped them. The strategies the pros use to come back from the dead are the same ones you can use in your own group rides and competitions:

Don't Panic
There's no worse feeling than watching the wheel ahead of you slip away, or to attempt to run off the bike only to realize you spent too much. But if the climb is long you need to stay calm and work the problem. Your chances of rejoining the group or saving your race are greater when you can minimize the initial loss of ground. But if you feel yourself failing, the worst thing you can do is push harder – you are only burning more matches!

Sometimes your comeback will involve dialing back your effort before you reach the point of no return. The deeper you dig that hole (ie, the more matches you burn), the slower you'll have to go in order to recover before you feel good again.

Bring your breathing under control.
Many times riders are working at an unsustainable rate right before they get dropped, and that means effort level is high and their breathing is often uncontrollable panting. As you slow down, get your breathing under control. In order to reel the group back in you will need to ramp your effort back up until your power output is sustainable and your breathing is labored but controlled.

Cool Off
Open your jersey (check the race rules before you bare your chest, however), pour water over your head and body, and take a drink. If your effort to stay with the group has led you to overheat then you need to get your core temperature under control in order for your power output to come back up.

Decide on a Strategy
The best way back to the group depends a little bit on the terrain and the type of rider you are. If you're a punchy, sprinter type then you may be better off with a short, high-intensity effort that gets you onto the group right before the summit of a climb. This effort can't be too long, though, because if it turns into a time trial you'll fatigue and you won't make it. As you watch the Tour, this is the rider who gets tailed off the group and dangles 30 seconds or so off the back for most of the climb, but then surges back to the group right at the top or just over the top.

If you're more of a diesel engine time trial type rider, you'll want to avoid the need for that aforementioned acceleration. Instead you'll benefit from gradually reeling in the group. You have to be patient, but you can't afford to be too conservative because otherwise you'll get close but not all the way back on. In the Tour you'll often see this strategy from riders who gradually close the gap by the summit or bring it down to 30-60 seconds by the summit and then use their descending skills to rejoin the group on the descent.

In triathlon, you don't need to reel the group in. You need to conserve energy for the run. Let the lead group thrash away at each other. You've made your mistake, and now you are correcting it. If the faster group doesn't fall apart, they were better riders than you anyway. But if they do, and you've stopped the hemorrhaging early enough, you will catch and pass them on the run.

Regardless of how you salvage your day, always remember that where there's a wheel there's a way, and it's usually not the fastest athlete, but the smartest athlete who wins the race.