

the outriders

----- CYCLE CLUB

## 5 Max Heart Rate Training Myths – Busted

By: AC Shilton

For decades, athletes have used maximum heart rate as a way to figure out which zones they should be training in. The most common wisdom was to subtract your age from 220, and – voilà! – you had your max HR, a figure representing the greatest number of beats per minute your heart can achieve safely. Then, from that number, you could, in theory, calculate your recovery, fat-burning, lactate threshold, and anaerobic heart-rate training zones.

However, it's a rudimentary system – like, "might as well use an abacus as a bike computer" rudimentary, says sports medicine physician Cherie Miner. "It's been the standard for years, but there are a lot of variables that can throw off your max HR." She adds that how fit you are, how hot it is, and how much stress you're under can all affect your max HR at any given time.

Like the 220-minus-age rule, there are a lot of other myths surrounding max HR. Here, we debunk the worst of them.

### 1. If You Exceed Your Max HR, Your Heart Explodes

You've got to admit: This is equally horrifying and comical. But you can rest easy because it won't actually happen.

"Your heart gets to the point where it can't eject blood effectively enough, where it's not productive anymore," says Dean Golich, head performance physiologist for Carmichael Training Systems. When

this happens, self-preservation kicks in and you slow down. If you're in a race, that means you'll either just get dropped or toss your cookies.

"Most people have one to two minutes at their max HR – highly trained athletes may have more," Miner says. Expect to see your performance suffer very quickly if you try and maintain your max HR for more than just a short burst. Fortunately, years of evolving to survive prevents us from actually killing ourselves.

## **2. Max HR Is the Same For Everyone Your Age**

That's what the old-school formulas assume, but Golich says it's much more nuanced than that. Max HR is largely untrainable and determined by genetics – some of us have hearts tuned like humming birds' while others have the slow-and-steady type.

Although not perfectly accurate, age-based formulas give athletes an easy and accessible way to find a rough baseline of their max without undergoing rigorous (or sometimes dangerous, in the case of a sedentary person) testing. That said, The American College of Sports Medicine suggests age-based formulas with a lower standard deviation, for example, the Gelish equation:  $207 - (0.7 \times \text{age})$  or Tanaka:  $208 - (0.7 \times \text{age})$ .

No matter which way you calculate it, your max HR is not an indication of performance, Golich says. "If your max is 200, and someone else's is 190, it doesn't mean one of you is the better athlete." In fact, Golich has worked with numerous talented athletes at both ends of the spectrum.

It's good to remember that everyone's max HR does drop as they age – but again, that doesn't mean you're losing fitness. Regular training and good nutrition will affect performance more than the fact that your max HR is now slightly lower than it was three years ago.

In reality, it's not your max HR that determines your fitness level. Being able to hold your max HR for longer and longer sessions is what's key.

## **3. Heart Rate Is a Measurement of How Hard You're Working**

Heart rate is a reaction to work being done, not a measurement of actual work. For example, Golich says that if you ratchet yourself up to 200 watts for three minutes for the first minute, your heart may tick along at 170 beats per minute (bpm). By minute two it may be at 180, and by minute three you could be pushing 189. But you're doing the same amount of work the whole time: 200 watts.

If you were to ride for three minutes with the intention of maintaining the same heart rate, things would look different. Say you ramped up to 180 bpm to start – you might ride at 200 watts for the first minute, but you'd likely have to drop your watts to sustain that heart rate for minutes two and three.

Golich says he prefers to have his clients train with power meters or using Rate of Perceived Exertion (RPE) – a personal appraisal of how hard you feel you're working – rather than HR.

"There are a lot of grey areas with heart rate," he says, adding that being overheated, under-fuelled, or even just hopped up on caffeine will throw your heart rate numbers off for the day.

Furthermore, the number displayed by your heart rate monitor or the screen on a gym treadmill may not be accurate. Sure, using a computer is certainly more accurate than the 220-minus-age formula, but Golich adds says that since these devices take measurements every few seconds, they're probably not dead-on. If you really want to know your true max heart rate, an EKG is the best way to go, though Golich believes it's not an expense worth taking on.

And if you think that unless you're hitting your max HR on every ride, you're not working hard enough, here's your license to chill. Max heart rate workouts should be done sparingly, Miner says, since the ultra-high intensity can lead to injuries, extreme fatigue, and other symptoms of overtraining. Plus, there's merit to working in many different heart rate zones – from increasing your base fitness with low-intensity sessions to pushing the boundaries at your lactate threshold, and even tipping into some anaerobic work. If you only have two speeds – hard and harder – you're doing yourself a disservice.

#### **4. If Your HR Is Below Max, You Don't Have to Worry About a Cardiac Incident**

Not true. Heart attacks, while rare, happen to athletes at all different workloads. Even so, cardiologist James Beckerman, M.D., says you're slightly more at risk when working at very high intensities.

"This is likely related to a combination of high heart rate, higher blood pressure with exercise (which is normal), and higher levels of catecholamine (a hormone produced by the adrenal gland)," he says. "For people without heart disease, exercising at higher intensity is generally safe."

If you're someone with heart disease or who has exhibited risk factors, however, it's a good idea to talk to your doctor about safe heart rate ranges for exercise and even get a stress test, he says.

#### **5. Your Max HR Is the Same for All Sports**

You're not mistaken – your max for cycling really may be different than your max for another sport. Again, this is indicative of how variable heart rate is, Golich says. Things that are load bearing – like running – will generally push your heart rate higher, since you have to do more work to overcome gravity. Cycling, because it has the mechanical assistance of the bike, will generally produce a lower

max heart rate. And swimming, which happens in a pool with zero-impact, may be lower still – since the water is keeping you cool, Golich says, heat will be less of a factor in raising your HR.

## The Koeberg Sunset Cruise News

Just a reminder that the Sunset Cruises officially ends on 15 August. With the days getting longer from 22 August the entry & exit rules are more relaxed and there is no need for strict group riding as we are doing with the Sunset Cruises. I trust that everyone who participated so far has had an enjoyable time and to those who have not made it yet – from next week there are only 4 more Sunset Cruises left over. The Sunset Cruises have been great and its truly really encouraging to see how everyone bought into the group riding, stayed together and respected the rules

The current riding format plus meeting times are working well so the proposal is that from 22 August the times of 16H30 at the wall and from 17H00 in the parking lot will remain. We would recommend that those cycling from the wall to Koeberg and back still ride with their lights for the homeward journey. From 22 August we will advertise the Koeberg rides on the Dirty Derailleur WhatsApp Group and you will only have to RSVP on the day. Please contact me if you need to be added to the Dirty Derailleur Group.

If there any riders who want to meet later then let everyone know as there might be more that would like to join you. Remember that the general thumb rule is that it should be lightish for about a half hour after Sunset subject to cloud cover. You should however be off the reserve roads by Sunset.

Thanks to Adi & Erica who assisted with the famous list when I could not make it, to all who supported the Sunset Cruises and here's looking forward to lots more Koeberg rides.

Regards

Michael de Kock

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# Cycles Direct - Outriders Deal Of The Month July 2018

## CYCLES DIRECT OUTRIDER DEAL OF THE MONTH JULY

Specialized Thermal Arm Warmers – RRP R415 Outrider Members R349

Specialized Thermal Leg Warmers – RRP R640 Outrider Members R549

### **THERMAL ARM WARMER**

Advertised MSRP **415.00**



**Black**

## **FEATURES**

Arm warmers fully made of soft and stretchy Lombardia fleece.

- Fully made of soft and stretchy Lombardia fleece. Unisex. Silver logo.
- Elastic band at the top with internal anti slip feature.

## THERMINAL LEG WARMERS W/ZIP

Advertised MSRP 640.00



Black

## FEATURES

Fleece leg warmers for both men and women (available in small sizes) with ankle zipper.

- Fully made of soft and resistant Lombardia fleece which stretches in two directions for comfort and easy care.
- The jacquard elastic band at the top keeps the warmer in place. Ankle zippers for easy on and off.

PPA Calendar

### EVENTS AT A GLANCE

Please see the [PPA website](#) for more information on these events.

Please note that PPA Marshals are there to secure the safety of our riders at events so please

remember to bring your own tubes and spares when participating in an event as the PPA does not supply these to riders.

| <b>Date</b>         | <b>Event</b>                        | <b>Category</b>                  | <b>Location</b>            | <b>Distance/Notes</b>                          |
|---------------------|-------------------------------------|----------------------------------|----------------------------|--|
| Sat 04 Aug          | 2018 Worcester Rotary MTB           | MTB funride                      | Celmor Winery              | 77 km; 47km; 25 km; 7 km                       |
| Sat 11 Aug          | 2018 Wolseley MTB                   | MTB funride                      | Mountain Ridge Wine Cellar | 60 km; 40 km; 25 km; 8 km                      |
| Sun 19 Aug          | 2018 Backsberg Dischem Rotary MTB   | MTB funride                      | Backsberg Wine Estate      | 45 km; 30 km; 15 km; 5 km                      |
| Sun 26 Aug          | 2018 Tiletoria Elgin Valley MTB     | PPA-own MTB funride. All welcome | Paul Cluver Wine Estate    | 70 km; 45 km; 30 km; 15 km                     |
| Sat 1 Sep           | 2018 Tip Trans Cederberg Experience | MTB- listed event                | Citrusdal                  | 105 km; 65 km; 45 km; 15 km Trail Run          |
| Sun 9 Sep           | West Coast Express                  | Road funride                     | West Coast                 | TBC  |
| Sun 16 Sep          | Cyclo Sportif #5                    | PPA-own Road                     | Simonsvlei Cellar, Paarl   | 98 km; 38 km                                   |
| Thu 20 – Sat 22 Sep | Buco Dr Evil Classic                | Other                            | Plettenberg Bay            | Stage 1: 72 km; Stage 2: 45 km; Stage 3: 51 km |
| Sat 5 – Mon 7 Oct   | Cpe Duo Challenge                   | Other                            | Wellington                 | 125km, 65km, 50km and 40km                     |
| Sat 13 Oct          | Java MTB                            | MTB funride                      | Van Loveren Wine Estate    | 80 km; 45 km; 20 km; 6 km and 10 km Trail Run  |
| Sun 14 Oct          | Cyclo Sportif #6                    | PPA-own Road                     | Perdeberg Winery, Paarl    | 109 km; 38 km                                  |
| Sun 28 Oct          | 2018 PPA One Tonner                 | PPA-own Road                     | Stellenbosch High School   | 170 km team and ind 109 km and 42 km           |

# Club Rides

**Club Rides : All club rides will leave from in front of Cycles Direct (Builders warehouse car park) on Sandown Road**

Ride Times:

Saturdays - 7:30am from in front of Cycles Direct

Sundays & public holidays - 7:30am from in front of Cycles Direct

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Saturday  
Leg Breaker

7.30AM +/- 60km @ an average of +/-32km/h  
Out on R27 to Link road, Turn left onto N7, take Philadelphia turnoff, back onto N7 south link, Link rd, left onto R27

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Saturday  
Leg Shaker

7.30AM +/- 50KM @ an average of 28km/h  
Out on R27 to Link road, Turn right. At the top (N7) Turn around, back down Link, left onto R27

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Saturday  
Leg Loosener

7.30AM +/- 40km @ an average of +/-26km/h  
Up the R27 to Duynfontein and back.

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Saturday  
Leg Warmer

7.30AM +/- 35km @ an average of +/-22km/h  
Up the R27 to Melkbos/Duynfontein and back.

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Tuesday & Thursday  
'Mothers & Others'

8:00AM (Meet at Beachfront Opposite Doodles) - Join a very social group for a relaxed ride to I or N7 Link Road and back. This group can advise on all the local coffee shops better than Platte about local wines!

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Wednesday Koeburg

ride (MTB)

5pm Meet at the top car park

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Sunday 29th July 7:30AM

Sundays &

Public Holidays

Long ride

Top of Chappies, turn and back home +-100km

Slightly shorter route

up Victoria rd to Llandudno,+80km

## Club Details

Web site: <http://www.outriderscyclingclub.co.za/>

Bank account details: The Outriders ABSA (632005)

Acc No. 90 97 10 54 56

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