## Expert advice



YOUR TECHNICAL, LEGAL, HEALTH, AND POLICY QUESTIONS ANSWERED. **THIS ISSUE:** LYME DISEASE, LUGGAGE RACKS, TRAMLINE DANGERS, AND MORE



A TICK-ING BOMB?

I have been unable to cycle for 18 months now and may never cycle again because of Lyme disease. This is a tick-borne disease and I most likely caught the tick while mountain biking across moorland or in woods. It might be worth warning members to take precautions. (I'll never wear shorts again.) This disease seems to be on the increase and can have serious consequences. Nicky King

A Lyme disease is a bacterial infection caused by Borrelia burgdorferi, transmitted to humans following a bite from an infected tick. It may cause a characteristic erythema migrans rash, flulike symptoms including fatigue, and sometimes neurological, joint and cardiac issues. Prognosis is very good if treated early with appropriate antibiotics.

True incidence is unknown but estimated to be 1,000-3,000 people each year in the UK, with many cases being undiagnosed. In the UK, infection occurs in areas of woodland and heath including the New Forest, Exmoor, South Downs, Lake District, and the Scottish Highlands.

In people with erythema migrans rash and a history of a recent tick bite or possible exposure to ticks, a clinical diagnosis of Lyme disease can be made without testing. In those without a rash, where the diagnosis is less certain, a blood test may be required.

The classic erythema migrans rash is a central red spot surrounded by clear skin that is ringed by an expanding red rash (like a bullseye) though this appearance can vary. It usually starts 7-10 days following the tick bite but can be anywhere from 3-33 days.

Minimise risk of tick bites by avoiding long grass and vegetation. If you can tolerate it, wear long sleeves and long trousers or tights tucked into socks. Light-coloured clothing can make it easier to identify ticks on your clothes. Consider using an insect repellent (some clothing is treated with this), inspect skin frequently, and remove any attached ticks as soon as possible, checking that ticks are not brought home on clothing.

To remove a tick, gently grip it close to the point of skin attachment using finetoothed tweezers or a tick removal device, then pull slowly. Prophylactic antibiotics are

# MEET THE EXPERTS



DR MATT BROOKS Cycling GP {Health}



RICHARD HALLETT Cycle's Technical Editor {Technical}



PAUL KITSON Partner from Slater + Gordon Lawyers {Legal}

not routinely needed following tick bite but seek medical advice if symptoms of Lyme disease develop. Dr Matt Brooks

#### Technical

RACK AND RUIN The three-year-old frame of my electrically-assisted mountain bike cracked where the top tube meets the seat tube. The dealer and manufacturer replaced the frame. However, the dealer noticed I use a seatpost rack and suggested it could have been responsible. I use the bike for commuting, dropping off the odd kerb. I carry 6-10kg on the rack. Should I switch to a permanently mounted rack with stays attached to the frame? Phil Wilson

Seatpost racks are fine for lighter loads but can cause problems with heavy ones





rear derailleurs mix well with road shifters

In short, yes. Seatpost-mounted racks of the type you describe are very popular for plenty of reasons, including ease of fitting, especially where a frame has no provision for mounting a conventional pannier rack. Compared with said conventional rack, they and the practice of hanging a large bag from the saddle - are an inferior structural solution that puts a large bending load on the seatpost and, in turn, on the frame. Given the reliability of most seatposts today, this should not be a problem with a light load of, say, 2.5kg and gentle riding style. But dropping off a kerb with 10kg on the rack is asking a lot of the frame. A conventional frame-mounted rack attached at the rear dropouts will reliably take a lot more weight (check rack specification for precise figure) without over-stressing the frame. Inspect fixings often if you do lots of kerb drop-offs. **Richard Hallett** 

## Technical DIY TOURING GEARING

I would like to build a 'tracks and paths' tourer with a double chainset (possibly 24-38) and bar-end shifters on drop bars, with a gear range of under 20in to over 90in. What's the most effective way of achieving this? I don't mind if it's eight, nine or ten speed. lan Todd

I run something similar on one of my bikes, matching Shimano 10-speed barend shifters with a 10-speed Ultegra front, a 9-speed RD-M771 Deore XT MTB rear mech, and 10-speed CS-M771 mountain bike cassette. The cassette is available in 11-32, 11-34 and 11-36t options; the latter would work with a 40-26 chainset to give you the ratios you want. Sugino's OX601D crankset would fit the bill, equipped with aftermarket 74mm and 110mm BCD chainrings by a manufacturer such as Gebhardt. **Richard Hallett** 

Legal TRAMLINE DANGERS I was cycling in Edinburgh recently and came across a lot of new tram tracks in the city centre. In places, the road design obliged me to cross them at a shallow angle. Knowing the risks, I crossed them as perpendicularly as I could and avoided any mishap. But I understand that there have been many incidents of cyclists falling on these tram tracks, breaking both bones and bikes. Had I fallen too, what recourse would I have? Is the council liable? Name supplied

Tramlines, particularly when they are poorly designed, represent a real hazard to cyclists. Tramlines can cause bicycle wheels to skid, especially when wet or icy. The risks are reduced if the tramlines are flush with the road surface and if cycle traffic is designed to cross at a 90-degree angle. Warning signs also help to reduce risk. Ideally, tramlines ought to be segregated from cyclists but this is often not feasible.

The Edinburgh tram system has been extremely unpopular due to massively running over budget and the enormous disruption that the overrunning construction caused. There also has been much criticism of the design of the city's tramlines, which have resulted in many cyclists suffering injuries. Many civil claims brought against Edinburgh City Council by injured cyclists are proceeding through the courts and await resolution.

In 2004 the Court of Appeal upheld an appeal brought by William Roe against four defendants: Sheffield City Council, South Yorkshire Light Rail Ltd, South Yorkshire Supertram Ltd, and Balfour Beatty Power Construction Ltd. In 1995, Mr Roe suffered serious injuries when he lost control of his car when it skidded on the wet tramline which was proud of the road surface by between 5mm and 10mm. In that case, proceedings were brought on the basis that all the defendants knew or ought to have known that the protruding rails were



trouble for cyclists. Cross with care



### Q&A | EXPERT ADVICE



dangerous and slippery, particularly in wet weather.

It was alleged that the council were in breach of their statutory duty under section 41 of the Highways Act 1980 to maintain the road so that it was level. Similar allegations were made against the Supertram companies but with reliance on statutory requirements to lay the tracks level, which are contained in The South Yorkshire Light Rail Transit Act 1988 (incorporating part of the Tramways Act 1870).

This is a complex area of the law and each case turns on its own facts. However, it is possible, in my opinion, to establish breach of duty against a council on the basis that a road was poorly designed and/ or a tramline was constructed in a way which caused a risk to road users. Liability, in my view, could be established on the basis that the design of the tramline, or a road or cycle path which crosses it, had created a hazard to road users.

Cyclists need to exercise extreme caution when crossing tramlines. Cross them slowly at a 90-degree angle. Take the primary riding position to deter motorists overtaking so that the tracks can be crossed safely. If the tracks are oblique to the direction of travel, then move further out to enable them to be crossed a 90-degree angle.

In the event of injuries caused by a spill in these circumstances, Cycling UK members can contact Slater and Gordon through the Cycling UK Legal Services Scheme for free advice. Paul Kitson

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#### Technical FREEWHEELING INDEPENDENTLY My daughter Nicole

(aged 12) has Down's Syndrome and loves to

go out cycling with us as a family. For the last few years we have used a Piggy Back 24in-wheel trailer trike by Mission cycles. Now Nicole is getting older, we are thinking of investing in a tandem.

We don't wish to buy a special disability tandem. It must be capable of going on a roof rack (for a tandem), and the front top tube should be low enough to allow my wife to ride out with Nicole, not just me.

Most importantly, the setup should allow for Nicole to freewheel at any time and not have to pedal constantly. She loves cycling but can only pedal in bursts. Michael Armstrong

A The Hase Pino or Circe Morpheus (above) look like suitable candidates, but 'upright' independent-pedalling tandems are thin on the ground. You may be able to find an engineering company willing to experiment in this area. See the website **davincitandems.com** for ideas. **Richard Hallett** 

### Technical SHIMMY SHOCK

I have twice experienced a very scary wheel wobble on my new carbon Cube Agree. It seems to occur on a fast descent (probaby over 30mph) when I am braking and steering through a relatively minor bend. I am 178cm tall and weigh about 73kg. I am a fairly experienced rider. Why does this happen, how common is it and what can I do to avoid it happening again? At the moment I do not feel confident on any major descent. Tim Herring

Cube bicycles are well made and employ fairly conventional geometry, so can therefore be expected to provide secure, reliable handling. Even today there is some dispute over the causes of shimmy in a bicycle, with lack of adequate stiffness somewhere in the system a strong candidate. I would start by checking wheel and headset bearings for play and then ensure that the front wheel in particular is correctly installed and the quick-release mechanism secure. You might also get the outlet from which you bought it to check the bike for potential manufacturing defects.

Beyond that, the complexity of the issue is such that it is impossible to give a definitive explanation. Tyre pressure may have a bearing and should be checked frequently. I have known a motorcycling 'tankslapper' (a similar effect to cycling's shimmy) be provoked by a change of road surface while cornering. You might try to avoid 'trail-braking' – braking and steering together – as far as possible, but that is good advice whether your bike wobbles or not.

Many cyclists who have experienced a speed wobble report that pressing a knee against the top tube, or gripping it with both as you rise off the saddle (pictured), cures it. Knowing this solution may help you ride the bike with confidence. If not, your only option may be to change it.

**Richard Hallett** 



## Contact the experts

Email your technical, health, legal or policy questions to **editor@cyclinguk.org** or write to **Cycle Q&A**, **PO Box 313**, **Scarborough**, **Y012 6WZ**. We regret that Cycle magazine cannot answer unpublished queries. But don't forget that Cycling UK operates a free-to-members advice line for personal injury claims, tel: **0844 736 8452**.