PREVENTABLE DEATHS INVOLVING CYCLISTS IN ENGLAND AND WALES: SOLUTIONS TO IMPROVE THEIR SAFETY





Preventable deaths involving cyclists in England and Wales: Solutions to improve their safety

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Overview

Cycling in the UK has <u>surged during the Covid-19 pandemic</u>, and cycling is being encouraged by the Government as a healthier and more sustainable means of transport. However, deaths involving pedal cyclists also increased by <u>40% during the pandemic</u>. In this report, we analyse coronial <u>Prevention of Future Deaths</u> (PFD) reports involving cyclists in England and Wales between July 2013 and April 2021.

We identified 33 preventable deaths involving cyclists, summarised in 32 reports. All deaths involved pedal cycles, except for one that involved a motorised electric bicycle. Reports were sent to 53 addressees, most (43%; n=23) sent to local councils. However, compliance with <u>regulation 29 of The Coroners (Investigations) Regulation 2013</u>, which mandates a response within 56 days, was poor; 26 reports (49%) sent by coroners had responses posted on the <u>Courts and Tribunals Judiciary website</u> at the time of analysis (July 2021). Across England and Wales, there was substantial geographical variation in the writing of reports; coroners in London (21%; n=7) and Dorset (9%; n=3) reported the most deaths, and many areas reported none.

In 10 cases (30%), coroners raised concerns regarding cycle lanes—either that there was an absence of cycle lanes or that such lanes were in an inadequate condition or had confusing information. In several cases, coroners raised concerns that the location of the accident was structurally dangerous (18%; n=6) and that inspection and classification of defects on carriageways were inappropriate (12%; n=4). In three cases, the coroners had concerns about poor practices at cycling events, and in two cases, the coroners highlighted a lack of education on cycling safely. In one case, regulations for electric bicycles were highlighted.

PFDs highlight important lessons, and addressees comply poorly with their duty to respond to coroners' concerns. We created a publicly available tool, <u>https://preventabledeathstracker.net/</u>, displaying coroners' reports in England and Wales to streamline access and identify important lessons to prevent future deaths. Local councils, which received most cycling-related reports, are responsible for implementing policies set out in national guidelines or dependent on funding from the Government. To prevent future cycling-related deaths, PFDs ought to be addressed both locally and nationally to improve the safety of roads and their design so that cycling can be encouraged as a healthy, sustainable, and safe mode of transport.

Introduction

To combat climate change, improve air quality, reduce road congestion, and improve society's health and wellbeing of society, the UK Government offered a <u>£50 subsidy</u> to encourage bicycle repairs during the Covid-19 pandemic.¹ The cycling market increased by 45% in the UK between 2019 and 2020.² However, the increase in cycle usage in 2020 was also accompanied by a <u>40%</u> <u>increase</u> (from 100 to 140 deaths) in pedal cyclist deaths in 2020 compared with 2019, despite a 21% reduction in road traffic.³ Transport for London has set an ambitious target of eliminating all deaths and serious injuries by 2041 as part of its *Vision Zero* project.⁴ To sustain the increase in cycling as a mode of transport, an investigation into cycling-related deaths should be conducted to identify how road safety can be improved.

Coroners in England and Wales have a duty to report and communicate details of deaths when they believe that actions should be taken to prevent future deaths.⁵⁶⁷ These reports, named <u>Prevention of Future Deaths reports (PFDs</u>), involve three processes: 1) coroners generate PFDs; 2) addressees respond to concerns raised in PFDs within 56 days, 3) reporting actions taken (or proposed). PFDs have been analysed to examine preventable deaths involving <u>covid-19</u>, <u>cardiovascular disease</u>, <u>medicines</u>, and <u>suicides</u>. However, an analysis of PFDs involving cyclists has not previously been conducted.

Analysis

We conducted a retrospective observational study using the <u>Preventable Deaths Database</u>, created using <u>web scraping</u>,⁸ to identify preventable deaths from cycling. We screened 2767 PFDs dated between July 2013 and April 2021 and extracted relevant information reported by coroners.

Findings

We found 32 PFDs involving cyclists, representing 33 deaths (Table 1). The median age at death was 43 years (IQR: 28-52; range 15-84), and most (76%; n=25) were male. All the deaths involved pedal cycles, except one that involved a motorised (electric) bicycle. The most common purpose for riding the bicycle was for transport (79%; n=26); the other reasons were cycling events (n=3), leisure (n=3), and test riding a bike in store (n=1). The causes of deaths were reported in 79% of cases; the most common cause was multiple injuries (46%; n=12). The coroner verdicts were "road traffic collision"

² Bicycle Association, 2021: <u>https://www.bicycleassociation.org.uk/news-press/ba-report-covid-cycling-boom-will-triple-e-bike-sales-by-2023/</u>

¹ Department for Transport, 2020: <u>https://www.gov.uk/guidance/fix-your-bike-voucher-scheme-apply-for-a-voucher</u>

³ Department for Transport, 2021: <u>https://www.gov.uk/government/statistics/reported-road-casualties-great-britain-provisional-results-2020/reported-road-casualties-great-britain-provisional-results-2020</u>

⁴ https://tfl.gov.uk/corporate/safety-and-security/road-safety/vision-zero-for-london

⁵ The Coroners Rules 1964: <u>https://www.legislation.gov.uk/uksi/1984/552/article/43/made</u>

⁶ Coroners and Justice Act 2009:

https://www.legislation.gov.uk/ukpga/2009/25/pdfs/ukpga_20090025_en.pdf ⁷ The Coroners (Investigations) Regulations 2013:

https://www.legislation.gov.uk/uksi/2013/1629/pdfs/uksi 20131629 en.pdf

⁸ DeVito, Richards & Inglesby, 2020: <u>https://www.nature.com/articles/d41586-020-02558-0</u>

in 13 cases (39%), followed by "accidental" (36%; n=12) and "misadventure' (3% n = 1). The type of verdict was "narrative" in 15% of cases (n = 5), while a verdict was not reported in two cases (6%).

The 32 reports came from 22 Jurisdictions of which only London (21% n = 7), Dorset (9% n = 3), Cornwall and the Isle of Scilly (6% n = 2), Leicester (6% n = 2), Manchester (6% n = 2), Portsmouth and Southeast Hampshire (6% n = 2) supplied more than one each.

Concerns raised by coroners in Prevention of Future Deaths reports

Coroners frequently highlighted insufficiencies of cycling infrastructure. In 10 cases (30%), they raised concerns about cycle lanes; they reported either an absence of cycle lanes or that such lanes were in an inadequate condition or had confusing information. In these cases, there were limited policy implications at a national level; local solutions were possible (e.g. cycle lanes were resurfaced) or solutions were said to be not possible owing to poor design and the needs of other transport vehicles in the area. In three cases, corners highlighted poor practices at cycling events, which do not directly affect road safety.

Coroners raised several other concerns in PFDs that have implications for policy beyond the local level, which is the focus of this report. These concerns include:

- 1. Issues with classifying potholes on carriageways
- 2. Structurally dangerous junctions
- 3. Insufficient education about safe cycling practices
- 4. Problems with electric-bike (e-bike) regulations.

1: Issues with classifying defects on carriageways

In four cases (12%), the presence of potholes caused or significantly contributed to the death, and in three of these, the coroner stated that local authorities had prior knowledge of the defects. Along with the four fatalities identified in the PFDs, it was reported that between 2007-2016, 390 cyclists have been killed or seriously injured because of potholes (this is an upwards trend with 64 in 2016 compared to 17 in 2007).⁹

Case report 1: A 52-year-old man died from fracture dislocation of the upper cervical spine after being thrown from his bike as it hit a pothole on the road. The coroner raised concerns about the classification of the pothole, which had been reported to the local council before the death, highlighting that the defect would have been scheduled for repair much sooner if it had been on a cycle lane and not a highway*. The coroner noted that priority should also be applied to highways used by cyclists. The local council who received the report stressed that their highway policy is based on national guidelines from the Department for Transport's Code of Conduct and noted that the highway inspector did consider cyclists when categorising the defect.

*A defect on a carriageway is classified as a pothole if it has a maximum horizontal width of 250mm or greater and a depth of 40mm or greater. A defect on a footway is classified as a pothole if it has a maximum horizontal width of 75mm or greater and a depth of 20mm or greater. On carriageways, the pothole is automatically classified as a category one defect if it has a depth > 75mm, whereas a pothole on a footway is automatically classified as a category one defect if it has a depth > 40mm. In the case above, the pothole which contributed to the death had a depth between 40mm and 75mm

⁹ https://www.cyclinguk.org/press-release/390-cyclists-killed-or-seriously-injured-2007-due-potholes

but was on a carriageway, so it did not automatically meet the criteria for the highest category of the defect (whereas it would have been if it was on a footway).¹⁰

This case highlights how national guidance for classifying and repairing potholes varies depending on the type of road user the pothole is likely to affect. It is accepted that potholes are more dangerous to pedestrians than cars (hence potholes on footways need only to be 40mm deep to be classified as category one compared to 75mm deep for roads). This differentiation makes sense in the case of pedestrians, and car users as the thickness of car wheels means that small potholes which might be hazardous to pedestrians are unlikely to be dangerous to cars. However, the same logic does not apply to bicycles, which are much lighter and have thinner wheels. It seems that any defect which poses a risk to a pedestrian will also pose a risk to a pedal cyclist - perhaps even more so due to the risk of flipping the bicycle or losing control and ending up in the path of a car. Therefore, the existing guidance which differentiates between footways and highways with regards to pothole classification seems to neglect the fact that cyclists (unless there is a separate cycle lane) must use the highways and are therefore put at risk by the fact that potholes which would be classified as in urgent need of repair on footways can be left unrepaired or have a slow response on roads. It is therefore unsurprising that fatality rates were nine times higher for cyclists than car users in 2020¹¹ and that between 2007-2016, there were 390 cyclists were killed or seriously injured because of potholes.

Given that the Government is making a concerted effort to encourage cycling, it is incumbent on them to ensure that any guidance they offer protects the most at-risk group (cyclists) instead of catering for the modal vehicle (cars), as is the problem with the existing guidelines. This case also highlights the importance of addressing PFDs to national bodies as well as local councils because local highways policies are based on national guidance. Therefore, if a policy change is appropriate, it will be most effective if included in the national guidance instead of any specific area.

2: Structurally dangerous junctions

In six cases (18%), the coroner highlighted structural factors that made a particular road or junction dangerous to cyclists. In two PFDs, they noted that there had been previous accidents at the same locations.

Case report 2: A 59-year-old man in London died in a road traffic accident when the pedal cycle he was riding collided with a left-turning coach. The coroner noted that there had been three fatalities at this junction in the previous ten years and that the junction would benefit from review by the local council. The council reported that the central location and heavy traffic of all types made the junction a hotspot for such incidents and asserted that they have limited space to implement arrangements and facilities that balance competing uses.

This case highlights the limitations of road design and infrastructure in busy cities, which can be difficult, costly, or not feasible to change. It also demonstrates the conflicting priorities of users that councils must consider. When unsafe junctions cause repeated fatalities and redesigning or expanding infrastructure is not possible, initiatives such as increased signage, road markings, regular maintenance, and lower speed limits should be considered.

¹⁰ <u>https://www-uat.northamptonshire.gov.uk/councilservices/northamptonshire-highways/roads-and-streets/Documents/Categorisation%20of%20Potholes.pdf</u>

file:///C:/Users/odger/Downloads/CoP%20for%20Highway%20Safety%20Inspections%20December%202019% 20version%204.7%20Final%20-%20web%20version.pdf p29-31

¹¹ <u>https://www.gov.uk/government/statistics/reported-road-casualties-great-britain-provisional-results-</u> 2020/reported-road-casualties-great-britain-provisional-results-2020#casualty-rates-by-road-user-type

3: Education

In two cases (6%), lack of education about safe cycling practices was explicitly mentioned as a concern.

Case report 3: A man died after a collision with a heavy goods vehicle turning left while riding his pedal cycle. He was cycling on an unbordered blue strip which the coroner noted the deceased may have mistaken for a cycle lane and consequently believed he had priority. The coroner also called for more education of cyclists and motor vehicle drivers, noting that often the safest option for a cyclist can be counter-intuitive - for example, riding in the centre of a carriageway is generally safer than riding far the left, as the cyclist is more visible. The Mayor of London agreed that research should be commissioned on the potential dangers of unbordered blue strips. The Mayor recognised that a lack of awareness of good cycle practices may have contributed to the death in this instance and also stressed his commitment to the education of cyclists and vehicle drivers and stated that 37 500 primary school children had received bicycle training in 2012.

While lack of education on safe cycle practices was only explicitly mentioned in one PFD (covering two cases), it is safe to assume that greater education of cyclists and motor vehicles drivers would have reduced the likelihood of a fatality in many other cases. Furthermore, two of the 33 deaths were of schoolchildren, demonstrating the need for education on how to cycle safely to be available to all from a young age. The UK Government recently announced that it was providing £18 million for cycle training for children and families.¹² The grant, which aims 'to provide Bikeability training to all children by 2025', is undoubtedly a positive step, but whether enough money has been provided to fulfil this target remains to be seen – extra funding should be made available if this proves necessary. Furthermore, additional educational schemes for adults learning to cycle on roads for the first time may still be needed, especially given the increase in uptake in cycling observed in 2020.

4: Electric-bike (e-bike) regulations

Although only one death involved using an electric bicycle, this nevertheless has significant policy implications, as the electric bicycle market is growing rapidly.

Case report 4: A 84-year-old man succumbed to a blunt head injury after being thrown from his electric bicycle, which caught the edge of a parked vehicle. The coroner raised concerns that there was no requirement for riders of e-bikes to wear helmets, even though they can reach speeds of 15 mph or higher. The Royal Society of Preventable Accidents (RoSPA), who was sent the PFD, noted that a recent report showed that 10-16% of cyclist fatalities would have been prevented if the cyclist had been wearing a helmet. However, they also raised concerns that it would be very difficult for the Police to enforce helmet-wearing for cyclists and that a mandatory requirement to wear a helmet might discourage people from cycling. They also thought it unlikely that the Government would introduce separate laws for electric bicycles and pedal cycles.

The e-bike market is predicted to triple by 2023¹³, and the potential for harm should be investigated. The legal requirements for wearing a helmet on mopeds or motorcycles may be a better comparator than pedal bikes, as e-bikes can achieve higher speeds. In addition, the increased

¹² https://www.gov.uk/government/news/18-million-announced-for-cycle-training-for-children-and-their-families

¹³ https://www.bicycleassociation.org.uk/news-press/ba-report-covid-cycling-boom-will-triple-e-bike-sales-by-2023/

size of the e-bike market will attract a broader demographic, so any previous research may need to be updated. Guidelines (such as speed limits and helmet requirements), road designs, and infrastructure that previously accounted for pedalled cycles should also consider the increased usage of e-bikes.

Responses to Prevention of Future Deaths reports

Reports were sent to 53 addressees; most (43%; n=23) were sent to local councils, followed by the Department for Transport (11%; n=6), Transport for London (8%; n=4), and governing bodies for cycling (8%; n=4; Table 2). However, compliance with <u>regulation 29 of The Coroners (Investigations)</u> Regulation 2013, which mandates a response within 56 days, was poor. There were only 26 responses posted on the Courts and Tribunals website at the time of analysis. Local councils responded in 61% of occasions they were addressed – Cumbria County Council had the worst record it did not respond in either of the two cases it was addressed. The Department for Transport only responded in 33% of cases when it was addressed, but Transport for London had a response rate of 100%.

Limitations of PFDs

Important information is often missing from PFDs, which can limit their usefulness. For example, the age of the deceased and cause of death was not stated in 36% and 21% of deaths, respectively. There is often a significant delay between the date of death and the date of the report; one report was published four years after the date of death. This lag can delay policy implications and the ability of PFDs to prevent deaths. A further limitation of PFDs is that they underestimate the incidence of any particular outcome. For example, in the case of cycle-related deaths, although there were roughly 800 fatalities in Great Britain from 2012-2019¹⁴, only 33 deaths were found when PFDs for England and Wales were screened in this period. Therefore, even when the addition of pedal cyclist deaths in Scotland is accounted for, there is still a discrepancy between these two figures. As a result, there may well be other structural factors contributing to cycling deaths in the UK which are not apparent from the PFDs alone.

Conclusions

Several repeated concerns highlighted in PFDs, if addressed, could prevent future cycling-related deaths. First, defects on carriageways that put cyclists in danger should be assessed and afforded the same priority as defects that put pedestrians at risk on footways. Secondly, while large-scale changes to historically dangerous junctions may be practically impossible or financially unviable, local councils should take steps to minimise risks to cyclists – these could include increasing signage and road markings or lowering speed limits in dangerous zones. Thirdly, the UK government initiative to expand cycle training for children should be systematically implemented to include training opportunities for all beginner cyclists on a nationwide scale to be fully effective. Finally, further research into the safety of electronic bikes is required to determine their regulatory status compared with pedal- and motor-cycles. To ensure that PFDs are used most effectively, coroners should address reports to both the relevant national body and local councils so that policies to prevent cycling-related deaths have sufficient funding and are appropriately implemented.

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https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/922717/ reported-road-casualties-annual-report-2019.pdf p13

			Dates					Responses	to PFDs
Age	Sex	death	End of inquest	report	Cause(s) of death	Summary of concerns	Addressee(s)	Date of reply	Actions
-	М	-	6 Nov 2019	14 Nov 2019	Multiple injuries	Repeated incident at the junction; Many cyclists and motorised vehicles operate in the area so greater risk of collision; cycle lanes encourage cyclists to ride on the inside of vehicles waiting to turn left, meaning they may not be visible to vehicles as they turn left; increased risks when it is dark	Slough Borough Council	Not yet received	-
43	M	3 Mar 2019	6 Oct 2020	16 Nov 2020	Multiple injuries	Eight tipper lorries had stopped on the highway, which had no parking restrictions, requirements, or signage to alert others of the presence of the tipper lorries	1.Kent County Council; 2.TARMAC	1. Responded but not dated 2. 12 Feb 2021	The council stated that there are now 'clearway' signs at both ends of the specified section of the dulled carriageway; Tarmac asserted that actions would need to be driven by the council
-	F	9 Oct 2017	-	29 Nov 2019	Multiple injuries	The dashboard tray on the lorry had created a blind spot; no warnings that the tray could create a blind spot or advising lorry drivers against having dashboard trays or that trays should only be used when the vehicle is stationary	1.employee 2.employers 3.manufacturer; 4. RHA; 5.DFT	1.Overdue 2. Overdue 3. Overdue 4. 13 Feb 2020 5.24 Jan 2020	RHA posted a blog detailing the circumstances of the death to a distribution list of 68,000 to remind those that their vehicle's windscreen is clear of obstruction; RHA confirmed that they carry out roadside checks of vehicles and drivers found to be transgressing guidelines will be penalised; DFT confirmed that a letter would be sent to RHA's distribution list to remove dashboard trays which breach testing rules

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-	M	29 Nov 2018	21 May 2019	25 May 2019	Multiple injuries	Cycle lanes were in very poor condition; cyclists have to swerve in cycle lanes to avoid defects, including swerving closer towards the white line, which separates cyclists from traffic	Gloucestershire County Council	12 Jun 2019	The safety team was sent out, and there were no actionable defects; inspections will continue to be carried out and resurfacing of cycle lane to be carried out as initially planned in 2020/21
30	М	3 Oct 2017	22 Mar 2019	25 Mar 2019	Head & chest injury	No cycle lane on either side of the carriageway; no warning signs to drivers about the potential presence of cyclists	1.Dorset, County Council 2.Bournemouth Borough Council	1.8 May 2019 2.Overdue	The council ruled out the coroner suggestion to add a cycle warning sign
15	М	6 Jun 2018	29 Nov 2018	11 Dec 2018	Multiple chest, abdominal & pelvic injuries	No infrastructure for cyclists; cycle lanes and/or advanced stop lines for cyclists recommended; no barrier between pavement and road, which encourages pedestrians and cyclists to cross between stationary vehicles; no dedicated crossing for pedestrians, they have to 'guess' when the lights are in their favour	Dorset Highways Department	9 Apr 2019	Concerns were raised about whether there would be enough funding for pedestrian and advanced stop lines for cyclists; proposed hatched lining on footways have been completed
-	F	24 Oct 2016	-	16 May 2018	Multiple traumatic injuries	Inadequate cycle lanes & protection for cyclists; yellow box in the middle of junction causes problems as cyclists cannot legally stop there; no cycle lane after the junction; narrow aspect after the junction; dip in the road which caused the accident	1.TFL 2.Wandsworth, Merton, Richmond and Sutton Borough Council	1.25ul 2018 2.Overdue	TFL investigated traffic modelling and the possibility of reducing traffic lanes from 3 to 2, thus allowing more space for a footway; pothole was repaired; it was determined the yellow box needed to be retained

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21	Μ	13 Oct 2016	24 Jan 2018	31 Jan 2018	Head & chest injuries	Drivers regularly exceed the speed limit; school children nearby often do not use the designated crossing and run into the road; barriers between road and pavement could encourage crossing at correct point; implementation of speed cameras could prevent speeding; poor & confusing signage around cycle lanes; recommended a review into safety measures in the area	Dorset County Council	22 Mar 2018	Training on how to cycle safely was given in local schools in 2017, and more training is planned for 2018 (2 in 2017 at Christchurch Junior School); private landowners of vegetation obscuring visibility were contacted and told to cut hedges
52	F	3 Jan 2016	28 Sep 2017	28 Sep 2017	Lung & splenic lacerations	Pothole identified first as a category 2, which usually takes three months for the council to repair; repair was conducted on the wrong pothole; 7+ month delay between identification of pothole and when it was supposedly repaired; Council had no quality control checks	Warwickshire County Council	22 Dec 2017	The council detailed steps that they had taken to improve the speed with which potholes are repaired, including the use of electronic databases to record defects
-	Μ	11 Mar 2017	24 Oct 2017	10 Nov 2017	Fatal injuries	Absence signage warning road users of steep incline & limited visibility ahead; the inappropriate speed limit on single carriageway	Cumbria County Council	Overdue	-
48	Μ	2 Jun 2017	26 Oct 2017	9 Nov 2017	Head injury	Shared cyclist & pedestrian pavement is narrow with no safety barrier; safety standards should be improved	Portsmouth City Council	15 Dec 2017	Work was commissioned to widen and straighten the Eastern Road cycle path; the kerb will be realigned, and the central reservation and crossing point will be repositioned

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Age	Sex	death	End of inquest	report	Cause(s) of death	Summary of concerns	Addressee(s)	Date of reply	Actions
83	Μ	5 Mar 2016	11 Aug 2017	21 Aug 2017	Traumatic brain injury	Highway inspector did not photograph, measure, or record any details of the carriageway, making it difficult to assess its condition; lack of paint markings around the pothole; no processes for learning from previous incidents; potholes under 40mm are potentially ignored in inspections	1.Bury Council 2.Secretary of State of Transport	1.11 Oct 2017 2.20 Sep 2017	The council asserted that the inspection protocol employed in this instance complied with the Code of Practice Highway Management; The transport minister highlighted that £6 billion was being provided to local councils from 2015-21 to ensure the upkeep of local roads with an extra £250 million for potholes
52	M	1 Mar 2016	2 Mar 2017	20 Mar 2017	Fracture & dislocation of the upper cervical spine	Classification of potholes did not consider that cyclists also use highways, delaying their priority for repair; councils don't sufficiently account for cyclists when considering pothole repairs	Surrey County Council	Responded but not dated	The council referenced the Code of Practice published by DFT and claimed that all inspections had adhered to the guidelines set out in the Code of Practice
-	F	28 May 2015	16 Feb 2017	20 Feb 2017	Multiple injuries	Issues with the structure on the juncture; there had been 18 collisions in 5 years ending June 2016 at this juncture, but no action was taken	1.London Borough of Southwark; 2.TFL	1.13 Apr 2017 2.19 Apr 2017	The council provided plans to introduce cycle markings at the junction of the accident & install entry treatment to encourage vehicles turning to slow down & resurface the road to introduce arrows; TFL recognised that the area around the location of the accident had a very high collision record and committed to providing financial and technical support to the council to improve road safety

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-	M	30 Apr 2017	Aug 2018	29 Aug 2018	-	Risk assessment did not identify the bend as a risk; signage was being ignored; plank gate where the coach was coming from was busy on the day of the event; review of how risk assessments are conducted was recommended	Typhoon Business Centre	19 Oct 2018	Typhoon stressed that they had completed a thorough risk assessment and argued that the incident in this particular case was not 'reasonably foreseeable.'
38	М	13 Jul 2016	9 Jan 2017	30 Jan 2017	-	no cycle lane and deceased was cycling on pavement due to busy road; dip in kerb's edge, and road sign obstructed the pavement	Cheshire East Council	7 Mar 2017	Road sign under works to be moved elsewhere to prevent obstruction & kerb remodelled
53	Μ	17 Jun 2017	3 May 2018	14 May 2018	Multiple injuries	lack of maintenance of temporary rope barriers at two hotspots; lack of permanent barriers at these two hotspots; lack of warning signs for foreign tourists; lack of uptake by the resort of training; the role of council to ensure the resort employs appropriate safety measures	1.Heritage Attractions 2.Lands End Resort 3.Cornwall Council	1.Overdue 2.Overdue 3.Overdue	-
33	М	9 Mar 2014	12 Feb 2018	-	Head and chest injuries	Methods to stop the race after numerous cyclists were lying on the road were deficient, so cyclists continued to ride through this area; there were no formal, effective procedures to stop a race in the event of an accident; cycle organisations should outline effective procedures & not leave it to others	 British Cycling Welsh Cycling Scottish Cycling Cycling Time Trials League of Veteran Racing Cyclists League International 	17 Apr 2018 (response from the Welsh and Scottish Cycling was combined with British Cycling) 4. Overdue 5. Overdue 6. Overdue	British Cycling noted that there were both visible signals (flags) and audible signals (whistles and pistols) which are routinely used to alert cyclists of accidents; British cycling also intends to make the guidelines about how to slow or stop a race clearer by additional education and training of event officials

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49	М	3 Jul 2015	21 Jul 2016	30 Aug 2016	Head injury	An issue with the anti-glare equipment in the vehicle prevented the driver from seeing the cyclist	DFT	Overdue	-
49	F	2 Jan 2015	30 Jun 2015	15 Sep 2015	Traumatic subdural haematoma	There was mixed traffic at the location & insufficient room for the traffic to be properly segregated (too narrow); mostly one-way flow of traffic but cyclists can contraflow which is confusing; signage unclear & confusing; the obvious crossing route for pedestrians involves the cycle path; guidance is weak and should be reinforced	1.Trafford Metropolitan Borough Council 2.Secretary of State for Transport	1.17 Nov 2015 2.Overdue	The council denied that there was insufficient space for the three forms of traffic and asserted that the layout was designed following governmental guidelines; they also alluded to the fact that there had previously been no accidents at this location
15	М	15 May 2015	-	22 Jun 2015	-	Hedge overgrown on both sides of the road obscuring vision for both driver and cyclist; no signage to indicate a junction was approaching; speed limit not lower than national speed limit despite there being a junction	Leicestershire County Council	Overdue	-
28	M	2 Aug 2014	4 Jun 2015	4 Jun 2015	Multiple injuries	The driver was speeding; increased signage may remind drivers of the speed limit; cyclists should be separated from other traffic by cycle lanes	1.TFL 2.Corporation of the City of London	1.11 Aug 2015 2.Overdue	Additional signs reminding of speed limit have been introduced; damaged speed limit signs have been replaced

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Age	Sex	death	End of inquest	report	Cause(s) of death	Summary of concerns	Addressee(s)	Date of reply	Actions
22	F	16 Nov 2014	17 Mar 2015	18 Mar 2015	Cerebral infarction due to traumatic brain injury	Road traffic junction inherently dangerous; poor visibility at the junction; absent or inadequate filter lanes	 1.Leicester City Council; 2.Leicester Campaign Cycling Group 	1.3 Apr 2015 2.Overdue	A review of accidents at this junction was carried out, and it was determined that there were no common theme linking casualties of the accidents & adjudged to be significantly safer than other junctions in the area; additional road markings will be considered
79	M	24 Sep 2016	9 Mar 2017	9 Mar 2017	Traumatic brain injury	absence of guidance or policy for test riding bikes in-store; absence of safe in-store area for test riding bikes; absence of guidance about the use of helmets in-store; absence of risk assessment for test riding in- store; application of best practice for accident reporting	Halfords Group PLC	Overdue	-
-	M	12 Nov 2013	2 Oct 2014	16 Oct 2014	-	Tramlines present a significant danger for cyclists; confusing design & appearance of cycle lanes; cyclists on pavement come into contact with pedestrians; confusing signage at the junction	London Borough of Croydon	10 Dec 2014	A detailed review of junction ordered

			Dates					Responses	to PFDs
Age	Sex	death	End of inquest	report	Cause(s) of death	Summary of concerns	Addressee(s)	Date of reply	Actions
84	М	-	23 Apr 2014	5 May 2014	Acute subdural haematoma & cerebral contusion	Helmets are not compulsory while riding an electric bike that can reach speeds of 15 mph; injuries could have been reduced by wearing a helmet	 Royal Society for the Prevention of Accidents; Secretary of State for Transport 	1.6 Jun 2014 2.Overdue	The Royal Society stated that while they recommended that all cyclists wear helmets, they would not campaign for this to be made into law because they are concerned that this would discourage uptake in cycling and enforcement would be too difficult. They also noted that it is unlikely that the Government would introduce separate laws for pedal cycles & electronic bicycles.
59	F	5 Nov 2013	7 Apr 2014	14 Apr 2014	-	Three fatalities at this junction in the last ten years; oncoming bus lane does not leave space for cycles; remodelling of the junction has been proposed but concerned that the commitment to do this by authorities is vague	Camden Council	May 2014	The council asserted that the Police found no significant issues associated with the layout of the junction which caused the accident and that there was no obvious action to be taken in response to this accident; The council stressed that they had a responsibility to consider all forms of traffic when making decisions about road layout and that they believed the existing layout provided the optimal balance between the interests of different forms of traffic

			Dates					Responses	to PFDs
Age	Sex	death	End of inquest	report	Cause(s) of death	Summary of concerns	Addressee(s)	Date of reply	Actions
27	M	9 Jul 2013	13 Feb 2014	20 Feb 2014	Multiple injuries	The adjacent road remained open for traffic even though there were marshals with the power to stop/direct traffic	Welsh Cycling	2 Apr 2014	Competition regulations are governed by British Cycling and cannot be changed by Welsh cycling alone; they do, however, continue to monitor safety standards
-	М	-	1 Jun 2016	2 Jun 2016	Injuries sustained from the accident	Shortcomings in recall notices; Recall notice should be improved and re-issued	Trading standards	Overdue	-
	F/M	-	15 and 16 Oct 2013	17 Oct 2013	-	Unbordered blue strips do not represent cycle lanes but confuse cyclists and motorists with significant consequences; more education on cycle safety; problematic junction	Mayor of London	16 Dec 2013	Research commissioned on the use of unbordered blue on cycle behaviour; TFL recognised that a lack of awareness of the safest way to cycle on roads had contributed to the death in this instance and alluded to several education programmes both for cyclists and motorised vehicle drivers on how to avoid cycle-related accidents; full segregation of cyclists from traffic is planned in the area of the accident

			Dates					Responses	to PFDs
Age	Sex	death	End of inquest	report	Cause(s) of death	Summary of concerns	Addressee(s)	Date of reply	Actions
-	M	2 Sep 2012	2 Aug 2013	8 Aug 2013	Neck and chest injuries	No barrier or restriction at the end of the footpath; the pavement is very narrow; restricted visibility for those using the footpath & road	Cumbria County Council	Overdue	-
42	M	31 Jul 2013	4 Feb 2014	4 Feb 2014	Chest injury	Questions what oversight had been given to the supply of pedal cleats and shoes and whether appropriate warning had been given of the risks and dangers	1.Secretary of State for Transport 2.Shimano Inc.	1.Overdue 2.Overdue	-

- missing data; DFT: Department for Transport; RHA: Road Haulage Association; TFL: Transport for London

Table 2: Recipients of Prevention of Future Death reports involving cyclists in England and Walesbetween July 2013 and April 2021

Addressee	No. of PFDs sent (% sent)	No. of responses (response rate, %)			
Governmental	34 (64)	21 (62)			
Transport for London $^{\alpha}$	4 (8)	4 (100)			
Local council	23 (43)	14 (61)			
Department for Transport ^{β}	6 (11)	2 (33)			
Trading Standards	1 (1.9)	0 (0)			
Driver and Vehicle Standards Agency	0*	1			
Professional bodies	5 (9)	2 (40)			
Governing bodies for cycling	4 (8)	2 (50)			
Racing organisation	1 (1.9)	0 (0)			
Private companies	8 (15)	2 (25)			
Business centre	1 (1.9)	1 (100)			
Construction company	1 (1.9)	1 (100)			
Manufacturer	2 (4)	0 (0)			
Employer	1 (1.9)	0 (0)			
Retailer	1 (1.9)	0 (0)			
Tourism group	1 (1.9)	0 (0)			
Resort	1 (1.9)	0 (0)			
Societies and associations	5 (9)	1 (20)			
Royal Society for the Prevention of Accidents	1 (1.9)	1 (100)			
Trade association	1 (1.9)	0 (0)			
Campaign group	1 (1.9)	0 (0)			
Voluntary sports organisation	1 (1.9)	0 (0)			
Independent cycling body	1 (1.9)	0 (0)			
The public	1 (3)	0 (0)			
Employee	1 (3)	0 (0)			
Total	53	26			

^{α} reports sent to the Mayor of London were grouped with Transport for London; ^{β} reports sent to the Secretary of State for Transport were classified as the Department of Transport; *the coroner did not address the report to this addressee, but a response letter was available.



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