

IN THE CORONERS COURT
OF VICTORIA
AT MELBOURNE

COR 2024 000595

FINDING INTO DEATH WITHOUT INQUEST

Form 38 Rule 63(2)

Section 67 of the Coroners Act 2008

Findings of:	AUDREY JAMIESON, Coroner
Deceased:	Nitin Haldipur Prabhu
Date of birth:	20 June 1982
Date of death:	30 January 2024
Cause of death:	1a: Head injury in the setting of an e-bicycle collision (rider)
Place of death:	The Royal Melbourne Hospital 300 Grattan Street Parkville Victoria 3052
Keywords:	E-bicycle, e-bike, motorcycle, regulation of e-bicycles

INTRODUCTION

1. On 30 January 2024, Nitin Haldipur Prabhu (**Nitin**) was 41 years old when he died following an e-bicycle collision. At the time of his death, Nitin lived in Balwyn, Victoria, with his wife, Soni Nitin Prabhu (**Soni**).
2. Nitin was actively involved in his local community. He organised school events and fundraisers, including for a boys' orphanage in India to support their education.
3. Soni described Nitin as a keen and '*accomplished*' cyclist. In addition to cycling to work, he regularly rode his bicycle on the weekends with their daughter. Three or four days prior to his death, Nitin purchased a new e-bicycle for his commute to and from work.
4. The e-bicycle was a hybrid commuter bicycle fitted with a seven speed, chain driver bicycle drivetrain and hand-controlled gear selection. There was a rear hub mounted electric motor. According to the manufacturer's specifications, the motor has a power output of 250 watts and a top speed of 32 kilometres per hour (**km/h**).

THE CORONIAL INVESTIGATION

5. Nitin's death was reported to the coroner as it fell within the definition of a reportable death in the *Coroners Act 2008* (**the Act**). Reportable deaths include deaths that are unexpected, unnatural or violent or result from accident or injury.
6. The role of a coroner is to independently investigate reportable deaths to establish, if possible, identity, medical cause of death, and surrounding circumstances. Surrounding circumstances are limited to events which are sufficiently proximate and causally related to the death. The purpose of a coronial investigation is to establish the facts, not to cast blame or determine criminal or civil liability.
7. Under the Act, coroners also have the important functions of helping to prevent deaths and promoting public health and safety and the administration of justice through the making of comments or recommendations in appropriate cases about any matter connected to the death under investigation.
8. Victoria Police assigned an officer to be the Coronal Investigator for the investigation of Nitin's death. The Coronal Investigator conducted inquiries on my behalf, including taking statements from witnesses – such as family, the forensic pathologist, treating clinicians and investigating officers – and submitted a coronial brief of evidence.

9. This finding draws on the totality of the coronial investigation into the death of Nitin Haldipur Prabhu including evidence contained in the coronial brief. Whilst I have reviewed all the material, I will only refer to that which is directly relevant to my findings or necessary for narrative clarity. In the coronial jurisdiction, facts must be established on the balance of probabilities.¹

MATTERS IN RELATION TO WHICH A FINDING MUST, IF POSSIBLE, BE MADE

Circumstances in which the death occurred

10. On 29 January 2024, at approximately 6:30pm, Nitin was returning home from work on his e-bicycle. At the time, Nitin was wearing his work attire and a standard bicycle helmet.
11. Nitin was riding in the bicycle lane of Mont Albert Road. Behind him, was another e-bicycle rider (**the other rider**). At the intersection of Mont Albert Road and Balwyn Road, Nitin and the other rider came to a stop at the red light.
12. On the green light, Nitin and the other rider continued along Mont Albert Road and maintained speed with traffic. A nearby pedestrian who observed the other rider in the lead up to the collision, described that he '*was riding really aggressive[ly]*'. As they approached the intersection with Rochester Road, Nitin slowed and was positioned in the right-hand side of the bicycle lane. However, the other rider maintained speed and attempted to overtake Nitin on the left-hand side, along the kerb. According to a nearby motorist, Nitin '*got a bit of a fright*' and swerved left into the other rider, causing their wheels to collide.
13. Nitin was ejected from his e-bicycle and landed on the bitumen. The other rider was also ejected and continued along the road before coming to rest by a driveway. Witnesses tended to Nitin and observed he was bleeding from his mouth and ears, and contacted emergency services. A nearby nurse assessed him and determined his Glasgow Coma Scale score was a 3.² At approximately 6:45pm, paramedics arrived at the scene and confirmed this assessment. Paramedics identified a severe traumatic head injury, evidenced by unconsciousness and abnormal limb posturing.

¹ Subject to the principles enunciated in *Briginshaw v Briginshaw* (1938) 60 CLR 336. The effect of this and similar authorities is that coroners should not make adverse findings against, or comments about, individuals unless the evidence provides a comfortable level of satisfaction as to those matters taking into account the consequences of such findings or comments.

² The Glasgow Coma Scale (GCS) is a neurological assessment tool used to evaluate an individual's consciousness in response to external stimuli. A GCS of 3 is the lowest possible score and indicates the individual is unconscious and unresponsive.

14. Paramedics transported Nitin to the Royal Melbourne Hospital. A computed tomography (CT) scan demonstrated a '*substantial traumatic brain injury with considerable intracranial bleeding*'. Clinicians consulted with the Neurosurgery Team and concluded that Nitin's injury was not survivable. He was commenced on end-of-life care.
15. The following day, 30 January 2024, at 1:02pm, clinicians declared Nitin deceased.

Identity of the deceased

16. On 2 February 2024, Nitin Haldipur Prabhu, born 20 June 1982, was visually identified by his spouse, Soni Nitin Prabhu, who completed a formal Statement of Identification.
17. Identity is not in dispute and requires no further investigation.

Medical cause of death

18. Forensic Pathologist Dr Victoria Francis (**Dr Francis**) of the Victorian Institute of Forensic Medicine (**VIFM**) conducted an examination on the body of Nitin Prabhu on 6 February 2024. Dr Francis considered materials including the Victoria Police Report of Death for the Coroner (**Form 83**), post-mortem computed tomography (CT) scan and e-Medical Deposition Form completed by the Royal Melbourne Hospital and provided a written report of her findings dated 12 February 2024.
19. The post-mortem examination revealed several areas of bruising including to the face, neck, right shoulder and right hip. The post-mortem CT scan demonstrated a right-sided skull fracture with subarachnoid haemorrhage and central oedema, with some Duret haemorrhages. There was a right sided clavicle fracture and right rib fractures.
20. Toxicological analysis of post-mortem samples did not identify the presence of any alcohol or other common drugs or poisons.
21. Dr Francis provided an opinion that the medical cause of death was 1(a) HEAD INJURY IN THE SETTING OF AN E-BICYCLE COLLISION (RIDER).

MECHANICAL INSPECTION OF THE E-BICYCLES

22. On 15 March 2024, Senior Constable Daniel Pearce (**SC Pearce**) of the Collision Reconstruction and Mechanical Investigation Unit of Victoria Police conducted mechanical inspections of both e-bicycles involved in the collision.

Nitin's e-bicycle

23. In a test ride, SC Pearce noted that the e-bicycle's three functions (pedal powered, electric motor only and electric motor assistance) worked correctly. Using the thumb throttle, without pedalling and travelling on a slight incline, the e-bicycle reached a speed of approximately 30 km/h.
24. There were no faults or failures identified which may have caused or contributed to the collision.

The other rider's e-bicycle

25. The other rider was riding a 22 speed, chain driven bicycle drivetrain with hand-controlled gear selection. There was a rear hub mounted electric motor. According to the manufacturer's specifications the motor has a power output of 55 Nm (Newton metre) and a top speed of 25 km/h.
26. In a test ride, SC Pearce noted the e-bicycle's two functions (pedal power only and pedal-assist mode with electric power assistance) worked correctly. Set to the highest pedal assistance setting, and climbing a slight incline, the electric motor vehicle assisted SC Pearce until a speed of 25 km/h.

CONDUCT OF THE OTHER RIDER

27. As noted above, a pedestrian described that the other rider was riding in an '*aggressive*' manner and labelled the overtake as a '*power play*'. While the other rider's precise speed at the time of the overtake is unknown, they were described as travelling '*so quick*' and was maintaining speed with nearby drivers.
28. At the time of writing, there are no guidelines regarding cyclist overtaking³, and the other rider's actions were therefore permissible, despite being perceived by a witness as being aggressive. I am unable to make an assessment as to the conduct of the other rider myself, noting there is no footage of the incident, and the other rider has not provided a statement.
29. Blood samples obtained from the other rider were tested and did not detect the presence of alcohol or other common drugs or poisons.

³ Save for circumstances of two cyclists riding side-by-side, being overtaken by a third cyclist.

30. The other rider was not charged with any offences in respect of Nitin's death.

CURRENT REGULATION OF E-BICYCLES IN VICTORIA

31. I sought the assistance of the Coroners Prevention Unit (CPU),⁴ to understand the regulation of e-bicycles in Victoria at the time of Nitin's death.

32. As with bicycles, e-bicycles do not need to be registered provided that they are:

- i. An electrically power-assisted cycle (EPAC); or,
- ii. A power assisted bicycle with a power output of 200 watts or less.

33. EPACs are the most common form of e-bicycles today. They have:

- i. At least one auxiliary propulsion motor
- ii. A maximum continuous rated power of 250 watts
- iii. A motor that provides power assistance when the rider is pedalling and only up to 25 km/h; and
- iv. A motor that does not provide power at speeds higher than 25 km/h.

34. The CPU advised me that e-bicycles which do not meet the above criteria are considered motorcycles. Accordingly, the relevant requirements including licensing, registration and safety equipment must be adhered to.

35. At face value, Nitin's e-bicycle did not meet the criteria of an EPAC given that it could reach speeds in excess of 25 km/h. Further, according to the manufacturer's specifications it had a power output of 250 watts – in excess of the prescribed 200 watts.

36. However, during his mechanical investigation, SC Pearce was *'not able to test the power output of the electric motor'* and therefore, confirm the manufacturer's specifications. The CPU stated that, from their experience, the only certain method of establishing an e-bicycle's power output is through using a dynamometer. A dynamometer is a device used to measure

⁴ The Coroners Prevention Unit (CPU) was established in 2008 to strengthen the prevention role of the coroner. The unit assists the Coroner with research in matters related to public health and safety and in relation to the formulation of prevention recommendations. The CPU also reviews medical care and treatment in cases referred by the coroner. The CPU is comprised of health professionals with training in a range of areas including medicine, nursing, public health and mental health.

the torque, force, speed and power required to drive a motor, in or to determine its instantaneous power output.

37. At the time of writing, the Collision Reconstruction and Mechanical Investigation Unit of Victoria Police does not possess a dynamometer. SC Pearce explained that some years ago, he and a colleague enquired into the construction of a purpose-built dynamometer to determine power outputs and top speeds of e-bicycles and e-scooters. The proposals were escalated to senior management of Victoria Police but were denied due to cost.
38. SC Pearce maintained, however, that the testing he completed on both e-bicycles provided an accurate assessment as to whether they met the relevant regulations for e-bicycle classification.
39. As such, on the information before me, Nitin's e-bicycle did not meet the criteria of an 'e-bicycle'. Rather, it is most appropriately classified as a 'motorcycle'. As such, Nitin ought to have been wearing additional safety clothing, including a motorcycle helmet which meets Australian requirements. This would have provided greater protection from injury, including head injury, upon contact with the road surface.
40. From the evidence available, the other rider's e-bicycle met the Victorian regulations.

THE REGULATION OF E-BICYCLES FROM A CORONIAL PERSPECTIVE

41. The Court has previously engaged with the issue of regulating e-bicycles across Victoria. In 2018, I handed down my finding relating to the death of Albert May, who was struck on the footpath by a cyclist on an e-bicycle.⁵ Similar to the current instance, the e-bicycle involved was in excess of the regulations was indeed, a 'motorcycle'. I recommended that:

'With the aim of improving public health and safety and preventing like deaths, I recommend that the Vehicle Safety Standards Bureau, Victoria Police, Bicycle Industries Australian and VicRoads collaboratively consider the circumstances in which Albert May's death occurred and attempt to identify any new countermeasures that could be implemented to improve compliance with laws regarding the operation of electric bicycles, including but not limited to establishing how best to detect and

⁵ Finding into the Death of Albert May, dated 29 November 2018. Accessible at: https://www.coronerscourt.vic.gov.au/sites/default/files/2018-12/AlbertDeanMay_423715.pdf.

prevent people operating high-powered electric bicycles without licence or registration as if they were power-assisted pedal cycles.'

42. On 8 March 2019, a representative of the then-Department of Infrastructure, Regional Development and Cities⁶ responded to the recommendation and stated importation regulations relating to e-bicycles and e-scooters had been amended.⁷
43. On 12 March 2019, then-Chief Commissioner of Victoria Police responded that following a meeting with the then- Department of Infrastructure, Regional Development and Cities and VicRoads, they intended '*a variety of potential countermeasures to be taken to reduce risks to public safety by improved regulation of electric bicycles and means of detection of non-compliant bicycles*'.⁸
44. On 10 May 2019, Robyn Seymour, CEO of VicRoads responded that they would '*continued to lobby for a harmonised national approach to the regulation of power-assisted cycles*'.⁹
45. In recent years, Victorians have experienced an increase in injuries and fatalities associated with e-bicycles – both as riders and pedestrians. However, it is apparent that despite the tenor of the three responses outlined above, the regulation of e-bicycles in Victoria, including to ensure they fit within the prescribed parameters, appears suboptimal.
46. Given that e-bicycles do not need to be registered, it is often the case that whether an e-bicycle meets the regulations – or is indeed a 'motorcycle' – is not apparent until an injury or fatality occurs. Even then, that Victoria Police does not possess a dynamometer during its mechanical inspections represents another short coming in the detection of e-bicycles with impermissibly high power outputs and maximum speeds. Indeed, this is an issue that I discussed seven years ago and which, concerningly, persists today:

'This represents a major obstacle to enforcing legislation around electric bicycles, as electric motorcycles being operated as power-assisted pedal cycles are likely to be detected only when involved in an incident such as the one that contributed to the

⁶ Now the Department of Infrastructure, Transport, Regional Development, Communications and the Arts.

⁷ Response of the then-Commonwealth Department of Infrastructure, Regional Development and Cities, dated 8 March 2019. Accessible at: [2015 4237 Response to recommendations received from Department of Infrastructure, Regional Development and Cities MAY.pdf](#),

⁸ Response of Victoria Police, dated 12 March 2019. Accessible at: [2015 4237 Response to recommendations received from Victoria Police MAY.pdf](#).

⁹ Response of VicRoads, dated 10 May 2019. Accessible at: https://www.coronerscourt.vic.gov.au/sites/default/files/2019-05/2015%204237%20Response%20to%20recommendation%20received%20from%20VicRoads_MAY.pdf,

death of Albert May, or when the rider is witnessed by law enforcement officials engaging in prohibited behaviour such as speeding’.

47. Additionally, this is exacerbated by inconsistencies in regulations across Australian States and Territories. In New South Wales, an EPAC can have a maximum continued rated power of up to 500 watts. However, the same vehicle in Victoria would be classified as a motorcycle. While this represents difficulties for residents in border towns, it also has ramifications for the sale of e-bicycles in Australia.
48. According to the CPU, there is ample evidence that Australian e-bicycle retailers import and sell vehicles that would be too powerful to be classified as e-bicycles in some jurisdictions, such as Victoria. In doing so, retailers can advertise vehicles as for ‘off road’ or disengage certain features to reduce their maximum speed – which can be easily re-engaged by consumers. Indeed, evidence indicates that Nitin purchased his vehicle from a NSW-based retailer, where it would have been considered an EPAC.
49. On this basis, I consider it feasible that, at present, a substantial number of e-bicycles across Victoria are in fact, unregistered motorcycles – likely unbeknownst to their riders. Consequently, these vehicles are regularly being ridden on cycle paths and shared footpaths while the rider is unaware of the risks posed to others, and to themselves, given that they are wearing protective gear not appropriate for motorcycle use.

RECOMMENDATIONS

Pursuant to section 72(2) of the Act, I make the following recommendations:

- (i) With the aim of improving public health and safety and preventing like deaths, I recommend that **Victoria Police** obtain a dynamometer capable of testing e-bicycles and similar vehicles to determine whether they comply with Victorian regulations, including in instances where those vehicles are substantially damaged in an incident.
- (ii) With the aim of improving public health and safety and preventing like deaths, I recommend that representatives of **Victoria Police**, the **Victorian Department of Transport** and of **VicRoads** convene to discuss the issue of non-compliant e-bicycles. Specifically, this conference ought to be used to consider methods to identify non-compliant e-bicycles, including those which may seem radical – such as requiring the registration of all e-bicycles.

FINDINGS AND CONCLUSION

50. Pursuant to section 67(1) of the *Coroners Act 2008* I make the following findings:

- a) the identity of the deceased was Nitin Haldipur Prabhu, born 20 June 1982;
- b) the death occurred on 30 January 2024 at The Royal Melbourne Hospital 300 Grattan Street, Parkville Victoria 3052, from 1(a) HEAD INJURY IN THE SETTING OF AN E-BICYCLE COLLISION (RIDER); and

51. AND, having commented on the appropriate classification of Nitin Haldipur Prabhu's vehicle, I find that he was, in fact, riding a motorcycle and as such, the bicycle helmet he was wearing may not have afforded him the optimal protection from injury.

52. AND FURTHER, I consider Nitin Haldipur Prabhu's death is a tragic reminder of the importance for greater regulations of e-bicycles and I hope that with a concerted effort, such fatalities may be avoided in the future.

I convey my sincere condolences to Nitin's family for their loss and acknowledge their generosity by donating his organs.

Pursuant to section 73(1A) of the Act, I order that this finding be published on the Coroners Court of Victoria website in accordance with the rules.

I direct that a copy of this finding be provided to the following:

Soni Prabhu, Senior Next of Kin

Royal Melbourne Hospital

DonateLife Victoria

Victoria Police

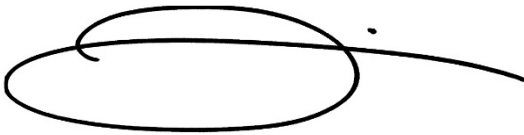
Victorian Department of Transport

VicRoads

Transport Accident Commission

Senior Constable Paul Nichols, Coronial Investigator

Signature:

A handwritten signature in black ink, consisting of a large, loopy 'A' followed by a horizontal line and a small dot.

AUDREY JAMIESON

CORONER

Date: 14 July 2025



NOTE: Under section 83 of the *Coroners Act 2008* ('the Act'), a person with sufficient interest in an investigation may appeal to the Trial Division of the Supreme Court against the findings of a coroner in respect of a death after an investigation. An appeal must be made within 6 months after the day on which the determination is made, unless the Supreme Court grants leave to appeal out of time under section 86 of the Act.
