



IN THE CORONERS COURT
OF VICTORIA
AT MELBOURNE

Court Reference: COR 2015 4237

FINDING INTO DEATH WITHOUT INQUEST

Form 38 Rule 60(2)

Section 67 of the Coroners Act 2008

I, AUDREY JAMIESON, Coroner having investigated the death of ALBERT DEAN MAY

without holding an inquest:

find that the identity of the deceased was ALBERT DEAN MAY

born 16 February 1929

and the death occurred on 19 August 2015

at Peninsula Private Hospital, 525 McClelland Drive, Frankston, Victoria 3199

from:

- 1 (a) RESPIRATORY COMPLICATIONS IN A MAN WITH CHRONIC LUNG DISEASE AND RIB AND PELVIC FRACTURES FROM RECENT MOTORISED VEHICLE COLLISION

Pursuant to section 67(1) of the **Coroners Act 2008**, I make findings with respect to **the following circumstances:**

1. Albert Dean May was 86 years of age and resided in Mt Martha at the time of his death. He had a daughter, Judith Maloney, as well as a son who resided in Darwin. Despite suffering Chronic Obstructive Pulmonary Disease (**COPD**), osteoporosis and peripheral

neuropathy in his feet, Mr May was mobile and managed to live independently in his own home. He was active in his garden and home duties.

2. On 8 July 2015, Mr May was struck by an electric bicycle as he was exiting a shop on Point Nepean Road in Rye. The electric bicycle was driven by Peter Katonin along the shopfront footpath. Due to the collision, Mr May sustained life-threatening injuries and was airlifted to the Royal Melbourne Hospital, spending 12 days in the Intensive Care Unit, before being transferred to St John of God Hospital on 28 July 2015, and later Peninsula Private Hospital on 14 August 2015. Despite long term hospital admission and sustained medical intervention, Mr May died on 19 August 2015.

INVESTIGATIONS

Forensic pathology investigation

3. Dr Jacqueline Lee, Forensic Pathologist at the Victorian Institute of Forensic Medicine (VIFM), performed an external examination upon the body of Albert May, reviewed a post mortem computed tomography (CT) scan, referred to the Victoria Police Report of Death, Form 83, and referred to the E-Medical Deposition Form from Peninsular Private Hospital.
4. Dr Lee commented that post mortem inspection showed a frail, elderly man. CT scanning identified: healing fractures to the left lateral aspects of left ribs 5-10 and the left acetabulum,¹ pulmonary emphysematous changes,² pulmonary infiltrates,³ pleural calcification,⁴ coronary artery calcifications and fatty liver. In the absence of a full autopsy, Dr Lee formulated the cause of Albert May's death as respiratory complications in a man with chronic lung disease and rib and pelvic fractures from recent motorised vehicle collision.

¹ The acetabulum is a concave surface of a pelvis. The head of the femur meets with the pelvis at the acetabulum, forming the hip joint.

² Pulmonary emphysema is a type of COPD, usually associated with smoking but it may also be hereditary.

³ A pulmonary infiltrate is a substance denser than air, such as pus, blood, or protein, which lingers within the lungs. They are associated with pneumonia, tuberculosis, and nocardiosis.

⁴ Pleural calcification involves the hardening of the membrane which covers each lung and is often associated with asbestos exposure.

Police investigation

5. Upon attending Point Nepean Road, Victoria Police identified that Mr Katonin was unlicensed and the electric bicycle itself was not registered. Subsequent tests established that the power output of the motor on the electric bicycle was such that it should have been registered as a motorcycle, and Mr Katonin required a licence to ride it.
6. On 9 August 2017, Mr Katonin appeared at the Melbourne County Court where he pleaded guilty to a charge of Dangerous Driving Causing Death.
7. His Honour Judge Dean sentenced Mr Katonin to two years imprisonment with a non-parole period of one year. All of Mr Katonin motor vehicle licences were cancelled and disqualified for a period of two years. His Honour determined Mr Katonin's sentence with reference to several factors, including his: criminal and personal history, psychological state, remorse and prospects for rehabilitation as well as other sentences passed in respect of the same offence.
8. During sentencing, Judge Dean made, *inter alia*, the following remarks:⁵
 - vi. *On Wednesday 8 July 2017 at approximately 8.30 am, you were driving a Bicicletta electric scooter on Point Nepean Road in Rye. You had a pillion passenger, a woman who you are responsible for as her carer. You were taking her to a pharmacy to purchase medication.*
 - vii. *The scooter is fitted with pedals. You were each wearing bicycle helmets. The scooter is regarded as a motor vehicle, as defined by s.3 of the Road Safety Act, as it is built to be propelled by motor and used on a highway. The offence that you have pleaded guilty to concerns the driving of a motor vehicle as so defined.*
 - viii. *At the intersection of Dundas Street and Point Nepean Road you left the roadway and drove along the footpath for approximately 200 m at speed but less than 25 km/h. The deceased, Albert May, a fit man of 86, walked from a shop onto the footpath and was struck by you. He suffered multiple serious injuries, from which he died on 19 August 2015 after protracted and difficult medical treatment.*

⁵ DPP v Katonin [2017] VCC 1090 [6 - 11].

- ix. *You and your passenger assisted him following the collision, and you made full admissions and were cooperative with police when interviewed by them.*
- x. *The scooter you were riding was not registered, and you were unlicensed at that time. Whilst I accept that the motor vehicle was a type of hybrid bicycle/motorbike, it must have been apparent to you that it would be dangerous to pedestrian if it was ridden on a footpath, and you must have disregarded this obvious fact.*
- xi. *However, in my opinion, your offending falls at the lower end of seriousness for offending of this type, but the offence that you have pleaded guilty to is a serious one. The sentence I impose must be calculated to deter you and others from offending in this manner, and you must be punished for what you have done. You caused the death of a fit, elderly, well-loved man, who was going about his normal daily activities.*

9. Leading Senior Constable (LSC) Michael Philistin was the nominated Coronial Investigator.⁶ LCS Philistin produced the coronial brief which contained much of the material which had formed part of the prosecution brief. My Investigator opined that there was a legislative gap in relation to power assisted bicycles, which created difficulties in: identifying vehicles which do not comply with road safety legislation, the enforcement of current laws in relation to these vehicles, and appropriately informing the public of their responsibilities in relation to owning and operating these vehicles. He suggested the coronial jurisdiction was best placed to identify the role, if any, these issues played in the circumstances leading to Mr May's death and whether any improvements could be made in the way of increasing public health and safety.

Coroners Prevention Unit

10. Upon reviewing the available evidence, I requested that the Coroners Prevention Unit (CPU)⁷ complete a review of the material. The CPU were provided with the coronial

⁶ A coroner's investigator is a police officer nominated by the Chief Commissioner of Police or any other person nominated by the coroner to assist the coroner with his/her investigation into a reportable death. The coroner's investigator takes instructions direction from a coroner and carries out the role subject to the direction of a coroner.

⁷ The Coroners Prevention Unit 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

case file, including the coronial brief and Victorian Institute of Forensic Medicine (VIFM) inspection and supplementary reports.

11. During their review, the CPU adopted “electric bicycle” as a generic term to describe all bicycles that have an electric motor fitted to assist with pedal propulsion and/or to provide propulsion without pedalling.
12. The CPU further distinguished between two types of electric bicycles: power-assisted pedal cycles and electric motorcycles. The distinction between these is based on the legislative framework for regulating the operation of electric bicycles. Under the *Road Safety Act 1986* (Vic), an electric bicycle is not considered to be a motor vehicle if it meets the following specifications:
 - (a) it is fitted with one or more auxiliary motors that has or have a combined maximum ungoverned continuous rated power output of 200 watts or less; or
 - (b) It is a Pedalec fitted with an auxiliary motor producing no more than 250 watts.
13. These electric bicycles are referred to by VicRoads and other organisations as “power-assisted pedal cycles”. They do not need to be registered, and riders are not required to be licenced. All other electric bicycles that do not meet the definition of a power-assisted pedal cycle, are considered by VicRoads to be a type of motorcycle and must be registered, with riders required to be licenced. For clarity, the CPU refers to these as electric motorcycles, though this is not a term used by VicRoads.

Coronial Investigator’s concerns

14. The CPU reviewed LSC Philistin’s summary statement to catalogue the main issues he identified regarding how electric bicycles are regulated in Victoria and throughout Australia. According to LSC Philistin, inadequacies in the current legislation regarding electric bicycles contribute to the following:
 - i. The importation of electric bicycles purporting to be power-assisted pedal cycles, but which are electric motorcycles;

formulation of prevention recommendations, as well as assisting in monitoring and evaluating the effectiveness of the recommendations. The CPU comprises a team with training in medicine, nursing, law, public health and the social sciences.

- ii. The ability of a person to purchase and use an electric motorcycle as though it is a power-assisted pedal cycle not requiring registration or licence; and
 - iii. The difficulty entailed in police establishing that an electric bicycle is an electric motorcycle rather than a power-assisted pedal cycle. (Police were required to perform dynamometer tests on the vehicle that struck Albert May, to establish that it did not meet the legal definition of being a power-assisted pedal cycle and was instead a motorcycle.)
15. LSC Philistin suggested that the Coroner could make recommendations to better manage the importation, sale and use of electric bicycles in Australia to reduce the risks of death involving their use.

Classification of the vehicle which struck Albert May

16. The Coronial Brief indicated that Peter Katonin was riding a Hangzhou Feichen TDP878Z electric bicycle when he struck Albert May.
17. The Coronial Brief included details of seven dynamometer tests on the vehicle (conducted for Victoria Police by John Phelan, the owner of Mornington Motorcycles, at his premises), which revealed it output an average maximum power of 586 watts from the motor. On this basis, the CPU agreed with LSC Philistin's conclusion that the Hangzhou Feichen TDP878Z was in fact a motor vehicle, and not a power-assisted pedal cycle. To ride it, Peter Katonin should have held a motorcycle licence, and the vehicle should have been registered. The Coronial Brief revealed that Peter Katonin held no motorcycle licence, and that the vehicle was not registered.

Distinguishing power-assisted pedal cycles from electric motorcycles

18. LSC Philistin noted in his summary statement that:

[...] there are inadequacies in the current legislation regarding power-assisted pedal cycles, which create difficulties in identifying vehicles which do not comply.

19. However, he did not explain what the inadequacies are, nor identify the specific legislation that was inadequate. The CPU reviewed the Coronial material and was unable to identify any inadequacy in legislation as such. Clear legislation exists (and is

discussed further into this memorandum) regulating the importation and operation of electric bicycles. However, the CPU concurred with the second part of LSC Philistin's concern, that in practice police and other authorities face a very difficult task in applying the legislation to identify whether an electric bicycle meets the standard for being a power-assisted pedal cycle or an electric motorcycle.

20. This issue is illustrated very clearly with respect to the vehicle ridden by Peter Katonin which struck Albert May:
 - i. The first page of the manual for the Hangzhou Feichen TDP878Z (the model Peter Katonin owned) stated that this model has a motor power of 200 watts, despite its tested output being well over 500 watts;
 - ii. One of the included photographs in the Coronial Brief highlighted an inscription on the rear hub (which encases the motor of the electric bicycle), rating the motor as being 200 watts;
 - iii. A Vehicle Import Approval document issued by the Department of Infrastructure and Transport stated that approval for importation was '*given on the basis that the vehicle(s) are powered by one or more motors having a combined maximum power of 200 watts or less*'.
 - iv. Investigating police were only able to establish the vehicle was not a power-assisted pedal cycle through dynamometer testing.
21. Extending these issues from Peter Katonin's vehicle to electric bicycles more generally, the CPU's concern is that police members and customs staff and other regulatory bodies cannot rely on manuals or motor inscriptions or import documentation or the like to determine whether an electric bicycle is a power-assisted pedal cycle or not. Dynamometer testing is the only way to be certain, but this requires specialist equipment.

Rider awareness of electric bicycle classification

22. LSC Philistin raised the issue of electric bicycles being purchased by people who believe they are power-assisted pedal cycles, when they are electric motorcycles. Again, and

with respect to the vehicle ridden by Peter Katonin, the CPU identified the following issues from evidence provided in the Coronial Brief:

- i. The vehicle in question was one of 16 of the same type imported into Australia in 2011 by Tas Simonides. In 2011, Tas Simonides operated a business from his own home in Patterson Lakes, called Sourced Imports. He sold electric scooters to members of the public via advertisements in Thursday Ad, a free weekly classified advertising publication;
- ii. No formal statement from Tas Simonides was provided, but LSC Philistin's own statement said that Simonides *had imported electric scooters which he sold through these ads and he had done so until he was charged for using an unregistered motorcycle when he was intercepted by police in January 2012 riding the same type of electric scooter*;
- iii. Tas Simonides did provide a copy of the Vehicle Import Approval document from 2011, and of the user manual for the Hangzhou Feichen TDP878Z, to LSC Philistin. Both documents described the vehicle in question as being a motorised scooter/power-assisted pedal cycle with a maximum power of 200 watts.
- iv. LSC Philistin's statement added that Simonides then sold the scooters to a *Tim Flynn who lived in Rye or Rosebud*. It was not made clear in any of the available evidence if Simonides sold them as motorcycles or electric bicycles;
- v. Tony Sim provided a statement to LSC Philistin, in which he stated that in approximately 2011 or 2012 he bought an *electric scooter from a private house [...] somewhere along the highway in Rye* which had been advertised in Thursday Ad. Sim stated that he did not recall the name of the seller or have a receipt, but added that he believed that the vehicle he bought was classified as a bicycle, and later sold it in the belief that it was a bicycle;
- vi. It was established from LSC Philistin's statement that Peter Katonin bought the vehicle in question from Tony Sim; and
- vii. No formal statement from Peter Katonin was provided, but a statement from Leading Senior Constable Brian Smith (who initially investigated the incident involving Albert May alongside LSC Philistin) was obtained. LSC Smith's statement recorded Katonin as having first claimed he was pedalling the vehicle at the time of the collision, before changing his account in the light of CCTV

evidence which showed he was under motor power. When asked by LSC Smith why Katonin had lied about the pedalling, Smith claimed that Katonin '*stated he wasn't sure and that he didn't have a driver's licence*'.

23. Based on the available evidence, the CPU noted that the vehicle that Peter Katonin was riding when he collided with Albert May had been imported or traded by individuals who claimed they were unaware that it did not comply with power-assisted pedal cycle definitions. It was also operated by at least one individual who did not have a driving licence.

Addressing the issues identified by the Coronial Investigator

24. Insofar as the vehicle that collided with Albert May is concerned, the CPU concurred with LSC Philistin's assertions that it was difficult to identify as being an electric motorcycle, and that it was imported and sold as a power-assisted pedal cycle.

Further Investigation

25. The CPU identified a number of issues regarding the importation, sale and use of electric bicycles in Australia.

The Importation Process

26. The importation of vehicles is regulated by the *Motor Vehicle Standards Act 1989* (Cth). This legislation is directly analogous to the *Road Safety Act 1986* (Vic) in how it defines electric bicycles, save for the fact that it uses the terms "road vehicles" and "non-road vehicles", rather than "motor vehicles" and "non-motor vehicles". Under the Act and its associated legislative instrument, the *Motor Vehicle Standards (Road Vehicles) Determination 2017* (Cth), an electric bicycle is not considered to be a road vehicle if it meets the same specifications as a power-assisted pedal cycle under the *Road Safety Act 1986* (Vic).

27. The process for importing a road vehicle into Australia is as follows:
 - a) The importer obtains a Vehicle Import Approval from the Commonwealth Department of Infrastructure, Regional Development and Cities (**DIRDC**), using their online portal.

- b) Once obtained, the importer then seeks customs clearance for the vehicle through the Commonwealth Department of Home Affairs by lodging an Import Declaration, and later paying the relevant customs duty and GST.
 - c) The importer must also lodge a Quarantine Entry and arrange an inspection appointment with the Commonwealth Department of Agriculture and Water Resources.
28. The importation of a road vehicle without a Vehicle Import Approval is prohibited under the *Motor Vehicle Standards Act 1989* (Cth) and is an offence with a maximum penalty of 120 penalty units.
29. In 2011, when the electric bicycle that struck Albert May was imported, it appears that all electric bicycles were treated as road vehicles and therefore importation followed the above process and required a Vehicle Import Approval. The Vehicle Import Approval for the electric bicycle that struck Albert May was granted on the basis that:
- [...] the vehicle(s) are powered by one or more motors having a combined maximum power output of 200 watts or less.*
30. The CPU checked the DIRDC website and contacted the Vehicle Safety Standards Branch of the DIRDC, to find out whether there have been any changes since 2011. The CPU informed me the current policy is that, as power-assisted pedal cycles are deemed not to be road vehicles for the purpose of the *Motor Vehicle Standards Act 1989* (Cth), an importer does not need to obtain a Vehicle Import Approval to import them, although the other requirements listed above remain.
31. DIRDC stated that while a Vehicle Import Approval may not be required, as a matter of course the Department of Home Affairs may require an importer of a non-road vehicle (such as a power-assisted pedal cycle) to obtain advice from DIRDC that it is not categorised as a road vehicle under the legislation. This is a form of documentation like an import approval and issued by DIRDC which allows for Home Affairs to release the non-road vehicle.
32. To obtain a non-road vehicle assessment, DIRDC direct that the importer should pay a \$50 non-refundable fee and provide the following information to them:

- a) a purchase document for the vehicle in the name of the importer;
- b) evidence that the vehicle meets the specific requirements for the relevant non-road vehicle type, in the form of a manufacturer's brochure; and
- c) photographs of the vehicle in its current state.

Detection of electric motorcycles on import

33. To better understand the practical application of the importation process, on 3 April 2018 the CPU had a telephone discussion with the Vehicle Safety Standards Branch of DIRDC. The CPU contacted them directly because they are responsible for administering regulation and monitoring compliance in accordance with the *Motor Vehicle Standards Act 1989* (Cth). The DIRDC published their Compliance and Enforcement Strategy to meet this responsibility in December 2017. The strategy relies on voluntary compliance as well as informed risk-based compliance activities being carried out by DIRDC. However, I note that this strategy contains no reference to non-road vehicles, even though the Act itself, as well as the associated legislative instrument, define what constitute non-road vehicles.
34. The Vehicle Safety Standards Branch confirmed that DIRDC have limited enforcement powers, which are mainly restricted to either granting or refusing to issue a Vehicle Import Approval. They further confirmed that whilst non-road vehicles do not require a Vehicle Import Approval, they recommend that importers obtain an assessment from DIRDC to confirm that what is being imported is a non-road vehicle. The assessment comprises a review of information provided by the importer but does not include physical testing (for example dynamometer testing of the actual electric motor power).
35. The Vehicle Safety Standards Branch advised that they may ask for further information from an importer if they suspect the vehicle being imported is not as described and refuse to provide a Vehicle Import Approval or assessment of a non-road vehicle if unsatisfied with the information provided. Beyond this, DIRDC rely on the Department for Home Affairs (and specifically, the Customs section of the Australian Border Force) to prevent improper imports. DIRDC advised that they do have cases referred to them by Customs on occasion, such as when the vehicles imported do not match the documentation supplied; if the documentation is found to be inaccurate, DIRDC will

revoke the permission to import, and Customs will refuse to release the vehicle(s) in question to the importer.

36. The Vehicle Safety Standards Branch advised that they produce and disseminate educational materials to assist importers, such as their Road Motor Vehicles – Mopeds Factsheet, which explains that “fat tyred” mopeds and electric mopeds with pedals are road motor vehicles.
37. The Vehicle Safety Standards Branch acknowledged several problems about the importation of electric bicycles:
 - a) Some overseas suppliers and manufacturers amend the information provided with vehicles (such as user manuals or the EN15194:2009 compliance labels affixed to Pedalecs) to make electric motorcycles appear to be power-assisted pedal cycles, sometimes of their own volition, and sometimes at the behest of the importer;
 - b) Electric motorcycles can be legally imported into Australia provided they are for off-road use only. DIRDC can check to see if the vehicles being imported have elements that are consistent with off-road use, such as mudguards, or large and deeply treaded tyres, and refuse approval for those that do not have appropriate features. However, this control is easy to circumvent and there is no way to prevent a rider using an electric motorcycle in an on-road environment if they choose to do so after it has cleared import, and
 - c) DIRDC only have powers pertaining to the importation of entire vehicles. However, any pedal cycles can be retrofitted with either battery or petrol-powered motors to create an electric motorcycle or a power-assisted pedal cycle. These after-market cycle conversion kits are widely available in Australia, and their import is not prohibited as they are classified as mechanical parts, not vehicles.

Detection once in Australia

38. I understand that, once imported into Australia, there are very few ways in which an electric bicycle can be easily established to be an electric motorcycle or a power-assisted pedal cycle.

39. As noted, the vehicle that struck Albert May had supporting documentation, as well as labelling on the vehicle itself, which indicated that it was a compliant power-assisted pedal cycle; only mechanical testing revealed otherwise. The CPU opined that, if inaccurate labelling and documentation of this type is widespread, any action other than conducting dynamometer or similar mechanical tests on electric bicycles is unlikely to establish whether it is an electric motorcycle or a power-assisted pedal cycle.
40. 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 death of Albert May, or when the rider is witnessed by law enforcement officials engaging in prohibited behaviour such as speeding.
41. The CPU informed me that they could not find information from publicly available sources to suggest that Victoria Police members are able to easily distinguish power-assisted pedal cycles from electric motorcycles. On the contrary, the Coronial Brief indicated that LSC Philistin and other police members had difficulty in establishing that the vehicle which collided with Albert May was anything other than a power-assisted pedal cycle. For example, LSC Philistin stated that he and LSC Smith believed the vehicle “was a motorised bicycle” when attending the scene of the incident involving Albert May.
42. The CPU also speculated that a “random stop” of Peter Katonin’s vehicle in circumstances other than the incident in question, may have satisfied any law enforcement official who conducted a check that it was a power-assisted pedal cycle, given that its markings showed it as such.
43. Furthermore, as explained, the same vehicle was bought and sold within Australia in the belief that it was a power-assisted pedal cycle on several occasions. This might indicate that, like Victoria Police members, the public’s ability to distinguish between power-assisted pedal cycles and electric motorcycles is similarly limited. Moreover, the vehicle that collided with Albert May was bought and sold second-hand on at least two occasions, so prospective buyers could not benefit from dealing with a retailer that may have been more aware as to what the vehicle was.

44. Based on the information provided by the Vehicle Safety Standards Branch of DIRDC, the CPU also examined whether electric motorcycles were readily available to buy in Victoria, a practice which is completely legal if they are sold for off-road use only. To give just one example, Melbourne Electric Bicycles (one of the major retailers in Victoria) sell the Stealth F-37, which can reach speeds of 60km per hour under power. The CPU notes that the retailer describes this electric bicycle as “not street legal”, but obviously can do nothing to prevent the buyer from riding it on roads or bicycle paths after sale.
45. Finally, the CPU reported not only the wide availability of after-market bicycle conversion kits in Australia, but also the availability of devices designed solely to derestrict the 25km per hour speed limit found on many electric bicycles. Again, to give just one example, the Hanover, Germany-based online retailer E-Bike Tuning.com offer an English language site and a large range of products for this specific purpose, which they ship to all countries in the world except the USA and Canada.

Power-assisted pedal cycles in international jurisdictions

46. To establish whether any other jurisdictions have faced similar issues with regulation of electric bicycles, the CPU conducted general Google searches for terms including “electric bicycle” and “enforcement”. Through these searches the CPU came to focus on the United States of America (**the US**), which has a mature market for electric bicycles and was therefore presumed to be most likely to have encountered the regulatory and enforcement issues under consideration here.
47. In the US, the Consumer Product Safety Act (**CPSA**) exists at a federal level, which gives the following definition of a “low speed electric bicycle”:

[...] a two- or three wheeled vehicle with fully operable pedals and an electric motor of less than 750 watts (1 h.p.), whose maximum speed on a paved level surface, when powered solely by such a motor while ridden by an operator who weighs 170 pounds, is less than 20 mph.

48. The Consumer Product Safety Commission (**CPSC**) has the regulatory authority tasked to develop guidelines and standards to protect the public from unreasonable risks of injury or death associated with the use of electric bicycles. In conformance with

legislation adopted by the US Congress defining this category of electric-power bicycle (15 U.S.C. 2085(b)), CPSC rules stipulate that low speed electric bicycles are exempt from classification as motor vehicles providing they meet the definition given above. An electric bicycle meeting that definition is subject to the CPSC consumer product regulations for a bicycle.

49. Low speed electric bicycles in the US can therefore be considered as being analogous to power-assisted pedal cycles in Australia, as defined in Section 3.3 above.
50. However, the rules for the use of low speed electric bicycles on public roads, sidewalks, and pathways in the US are under state rather than federal jurisdiction, and these vary greatly across the country.
51. Of relevance, in 2015 in California a law was passed (AB 1096) that:
 - a) defined electric bicycles into three distinct types, explaining where and how they could be legally used in California
 - b) introduced a system of permanent labelling that manufacturers and distributors are required to apply to the electric bicycles they make or sell, and
 - c) specified how law enforcement agencies can use this labelling system to help to determine which type of electric bicycle they may be examining during their duties.
52. People for Bikes (a major national cycling advocacy group in the US), and the Bicycle Product Suppliers Association (BPSA, the US bicycle industry's trade association), believe that California's approach to electric bicycle regulation should be the model legislation.
53. By contrast, in New York, all electric bicycles are classified as "motor driven bicycles" and are subject to the registration, licensing and insurance requirements that apply to motor vehicles. However, New York's Department of Motor Vehicles does not recognise electric bicycles as vehicles with these requirements and has no system for supplying registration and licensing. Therefore, riding an electric bicycle in New York State is effectively illegal.

54. I was unable to determine how the US or any other international jurisdiction enforces laws governing power-assisted pedal cycle importation and operation. Nor could the CPU find specific information regarding any difficulties or issues with the enforcement frameworks of these international jurisdictions.

FINDINGS

The Coronial Investigation has identified that Albert Dean May was struck by an electric bicycle, sustaining injuries which contributed to his death. The electric bicycle was imported, sold and operated as though it was a power-assisted pedal cycle; a type of low-powered electric bicycle that does not require registration or a licence to operate. However, its motor power output greatly exceeded power-assisted pedal cycle specifications and it was in fact an electric motorcycle that should have been registered and only operated by a licenced rider.

The Investigation confirmed broader regulatory and enforcement issues that contribute to electric motorcycles being wrongly operated as power-assisted pedal cycles in Australia. I am grateful for the extensive and thorough research the CPU has conducted on my behalf.

I accept and adopt the cause of death formulated by Dr Jacqueline Lee and I find that Albert Dean May died from respiratory complications in the setting of chronic lung disease and rib and pelvic fractures from recent motorised vehicle collision, in circumstances where I find that misuse of an electric bicycle contributed his death.

RECOMMENDATIONS

Pursuant to section 72(2) of the **Coroners Act 2008**, I make the following recommendations:

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

Pursuant to section 73(1A) of the *Coroners Act 2008*, I order that this Finding be published on the internet.

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

Judith Maloney

Vehicle Safety Standards Bureau

Victoria Police

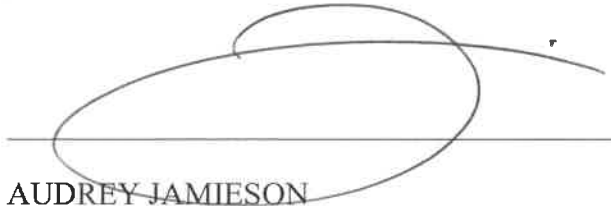
Bicycle Industries Australia

VicRoads

Transport Accident Commission

LSC Philistin

Signature:

A handwritten signature in black ink, appearing to read 'AUDREY JAMIESON', written over a horizontal line.

AUDREY JAMIESON

CORONER

Date: **29 November 2018**

