



IN THE CORONERS COURT
OF VICTORIA
AT MELBOURNE

COR 2019 004927

FINDING INTO DEATH WITHOUT INQUEST

Form 38 Rule 63(2)

Section 67 of the Coroners Act 2008

Findings of:	Coroner Leveasque Peterson
Deceased:	Fangzhou Shi
Date of birth:	20 May 1995
Date of death:	9 September 2019
Cause of death:	1(a) Complications of head injuries (operated), sustained in a tram impact (pedestrian)
Place of death:	The Alfred Hospital, 55 Commercial Road, Melbourne, Victoria, 3004

INTRODUCTION

1. Fangzhou Shi was 24 years old at the time of his death and lived in Burwood in a share house with three other roommates. Fangzhou had emigrated to Australia from China in January 2019 on a student visa to study Foundation English at Deakin University, Burwood.
2. Fangzhou had poor eyesight and required prescription glasses to see. He did not otherwise suffer from any other medical issues.
3. On 9 September 2019, Fangzhou died at The Alfred Hospital after being struck by a tram six days prior on Burwood Highway, Burwood East.

THE CORONIAL INVESTIGATION

4. Fangzhou'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.
5. 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.
6. 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.
7. Victoria Police assigned an officer to be the Coroner's Investigator for the investigation of Fangzhou's death. The Coroner's 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.
8. This finding draws on the totality of the coronial investigation into the death of Fangzhou Shi 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.

9. In the coronial jurisdiction, facts must be established on the balance of probabilities.¹ The standard of proof for coronial findings of fact is the civil standard of proof on the balance of probabilities, with the *Briginshaw* gloss or explications.² Adverse findings or comments against individuals in their professional capacity, or against institutions, are not to be made with the benefit of hindsight but only on the basis of what was known or should reasonably have been known or done at the time, and only where the evidence supports a finding that they departed materially from the standards of their profession and, in so doing, caused or contributed to the death under investigation.

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

Circumstances in which the death occurred

10. On 2 September 2019, at about 8.37pm, Fangzhou spoke to his parents Yongming and Min Guo via video chat. He was very happy and in a good mood.
11. On 3 September 2019, at about 8.03pm, the Route 70 tram from Vermont was travelling west along Burwood Highway, Burwood East at approximately 55 km/hr, approaching Milford Street. In this area, Burwood Highway runs in an easterly to westerly direction, with three lanes running each way, with a wide central median strip dedicated to tram tracks which is bordered by bushes and grass on the southern side and grass on the northern side of the tracks. The north side of Burwood Highway has a number of restaurants and shops
12. As the tram approached Milford Avenue, the tram driver saw a male, later identified as Fangzhou, standing on the edge of the grass bordering the southern side of the tracks looking down at his mobile phone. He was facing the tracks (north) and his feet were on the grass very close to the concrete. The evidence before me indicates that Fangzhou was not wearing his prescription glasses at the time, as his only pair of glasses were later found on his bed.
13. The tram driver had been braking slightly prior to seeing Fangzhou, and when she saw him, she pressed the “gong” button constantly to try and get Fangzhou’s attention. Fangzhou did not look up or react to the bell. The tram driver also engaged the emergency brake, pressing

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 *Briginshaw v Briginshaw* (1938) 60 CLR 336 at 362-363: ‘The seriousness of an allegation made, the inherent unlikelihood of an occurrence of a given description, or the gravity of the consequences flowing from a particular finding, are considerations which must affect the answer to the question whether the issues had been proved to the reasonable satisfaction of the tribunal. In such matters “reasonable satisfaction” should not be produced by inexact proofs, indefinite testimony, or indirect inferences...’.

down hard on the brake. The tram was unable to stop in time, and struck Fangzhou to the right side of his body at approximately 50 km/hr and threw him 3.2 metres west from the point of impact.

14. The tram driver and passengers from the tram immediately went to Fangzhou to render aid and contacted emergency services. The tram driver did not observe anything in Fangzhou's ears like headphones to suggest he could not hear the bell of the tram. Ambulance paramedics attended shortly afterwards and found he had a life-threatening closed head injury. Fangzhou suffered a tonic clonic seizure and was subsequently intubated and taken by ambulance to The Alfred Hospital.
15. Fangzhou was diagnosed with catastrophic intracranial trauma with multiple intra and extra-axial haematomas, extensive skull and facial bone fractures and a blunt cerebrovascular injury. He underwent a decompressive craniectomy procedure shortly after admission, following which he was admitted to the Intensive Care Unit for ongoing treatment.
16. Over the following days, Fangzhou's condition did not improve, and he was pronounced brain dead on 9 September 2019. Fangzhou's family kindly consented to organ donation.

Identity of the deceased

17. On 11 September 2019, Fangzhou Shi, born 20 May 1995, was visually identified by his father, Yongming Shi.
18. Identity is not in dispute and requires no further investigation.

Medical cause of death

19. On 16 September 2019, Forensic Pathologist Dr Gregory Young from the Victorian Institute of Forensic Medicine (**VIFM**), conducted an external examination of the body of Fangzhou Shi. Dr Young reviewed the e-Medical Deposition from, post mortem computed tomography (**CT**) scan, scene photographs and Victoria Police Report of Death for the Coroner (Form 83). Dr Young provided a written report of his findings dated 18 September 2019.
20. The post-mortem examination showed evidence of neurosurgical intervention, a right periorbital haematoma and a bruise on the left cheek. Bruises and abrasions were also seen on the upper limbs.

21. The post-mortem CT scan showed residual subdural, subarachnoid, intraventricular and intraparenchymal haemorrhage in the head. The brain showed midline shift from left to right.
22. Toxicological analysis of ante-mortem samples identified the presence of midazolam,³ levetiracetam⁴ and laudanosine⁵ consistent with medical treatment following the accident.
23. Dr Young commented that the head injuries resulted in haemorrhage (bleeding) in and around the brain. The pressure effects exerted by the haemorrhage may lead to headache, confusion and eventual loss of consciousness and death when there is compression of essential centres in the brain. Decreased consciousness and mobility also predisposes to development of chest infections, deep vein thrombosis and pulmonary thromboembolism, which may also eventually lead to death.
24. Dr Young provided an opinion that the medical cause of death was 1 (a) Complications of head injuries (operated), sustained in a tram impact (pedestrian).
25. I accept and adopt Dr Young's opinion as to the medical cause of death.

POLICE INVESTIGATION

26. Victoria Police attended the scene of the incident and immediately commenced an investigation. The tram driver underwent a preliminary breath test which was negative for the presence of alcohol.
27. The tram was a "B2" class tram, weighing 34 tonnes and had a stopping distance of 39 metres when empty and on a dry, clean and level straight track travelling at 50 km/hr with an average deceleration of 2.47m². Investigators found that the tram had come to a complete stop 30.8 metres from the front of the tram to where Fangzhou's body came to a rest, and 9.9 metres from the rear of the tram to the point of impact. This section of track was a downhill slope, with a further dip where Fangzhou was standing which would have made it difficult for the tram driver to see.
28. Investigators observed that a street light illuminated the area 7.4 metres north-east from the point of impact. At the time of the collision it was dark. Fangzhou was wearing dark clothes and his position when struck had no back lighting which may have concealed his location.

³ Midazolam is a benzodiazepine clinically used as a preoperative medication, antiepileptic, sedative-hypnotic and anaesthetic induction agent.

⁴ Levetiracetam is an antiepileptic used for the control of partial onset seizures.

⁵ Laudanosine is a metabolite of atracurium, a non-depolarising neuromuscular blocker used as general anaesthesia to aid tracheal intubation, muscle relaxation for surgery and aid mechanical ventilation.

There were also 40.3 metres of bushes along the southern side of the tracks which had become overgrown and resulted in obscuring visibility in the area where Fangzhou stood, for both Fangzhou and the tram driver. The tram driver explained that the bushes to the left of the tracks made it difficult to see past them until very close.

29. Investigators noted that there had been five separate tram v pedestrian collisions in the area between October 2014 and September 2019. There were no barriers in the area stopping pedestrians from crossing the tram tracks where Fangzhou was struck and the closest pedestrian crossings were approximately 200 metres in either direction. Signage indicating pedestrians are prohibited from being on the tram tracks were also approximately 200 metres away.
30. Investigators concluded that Fangzhou's death was accidental and a significant factor for the incident was his poor eyesight, coupled with the overgrown bushes limiting visibility for both the tram driver and Fangzhou. Investigators also considered that Fangzhou was distracted at the time of the collision whilst using his mobile phone.
31. Enquiries were undertaken to ascertain the entity responsible for the maintenance of the bushes overhanging the tram tracks. Yarra Trams informed investigators that VicRoads were the responsible authority. However, the relevant maintenance sub-contractor in charge did not respond to police enquiries about the maintenance schedule for the bushes (reference 501649164).
32. Investigators noted there were no barriers to discourage pedestrians from crossing the tram tracks between designated areas and felt that erecting barriers along the tram tracks and additionally trimming the bushes along the tram tracks would significantly assist visibility for pedestrians and tram drivers.

FINDINGS AND CONCLUSION

33. Pursuant to section 67(1) of the *Coroners Act 2008* I make the following findings:
 - a) the identity of the deceased was Fangzhou Shi, born 20 May 1995;
 - b) the death occurred on 9 September 2019 at The Alfred Hospital, 55 Commercial Road, Melbourne, Victoria, 3004, from complications of head injuries (operated), sustained in a tram impact (pedestrian); and
 - c) the death occurred in the circumstances described above.

34. Having considered all of the evidence, I am satisfied that Fangzhou's death was the consequence of a tragic accident in circumstances where he had misjudged the width of the tram and his closeness to the tram tracks, had impaired vision without his prescription glasses and was distracted by using his mobile phone. I also consider that the overgrown bushes running along the side of the track, in conjunction with the limited lighting at night time and Fangzhou's dark clothing, impeded the vision of the tram driver and contributed to the tram driver being unable to see Fangzhou in sufficient time to take evasive action.
35. I convey my sincere condolences to Fangzhou's family. I acknowledge the grief and devastation that you have endured due to your loss.

COMMENTS

Pursuant to section 67(3) of the Act, I make the following comments connected with the death.

36. My investigation has identified a number of safety issues relating to the tram tracks where Fangzhou was struck, namely the reduced visibility due to the bushes running along the side of the track on a downhill slope, and a lack of barriers or warnings in the immediate vicinity to discourage pedestrians from crossing the tram tracks between designated areas. I agree with the assessment of investigating officers that the erection of barriers and trimming of the bushes along the tram tracks would significantly assist visibility for pedestrians and tram drivers and reduce the risk of such incidents occurring again.
37. In light of this, and having regard to my prevention role, I have made a recommendation to the Department of Transport with a view to improving pedestrian safety by conducting a safety review and audit of the Burwood Highway tram tracks in the vicinity of Milford Avenue as detailed below.

RECOMMENDATIONS

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

1. That the Department of Transport conduct a safety review and audit of the Burwood Highway tram tracks in the vicinity of Milford Avenue. The review should:
 - a. consider the feasibility of erecting safety barriers and/or warnings along the sides of the tram tracks to discourage pedestrians from crossing the highway between designated areas; and

- b. consider the risks posed by planting along the sides of the tram tracks for tram driver visibility, and develop and implement strategies to ensure visibility for tram drivers is not impeded by the growth of bushes planted alongside the tram tracks. Such strategies might include:
- i. implementing a schedule for regular maintenance checks to ensure the planting is trimmed back as necessary; or
 - ii. replacing tall bushes with planting that is unlikely to grow to heights that may impede visibility..

ORDERS AND DIRECTIONS

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:

Min Guo & Yongming Shi, Senior Next of Kin

Mr Paul Younis, Secretary, Department of Transport

Ms Keren Day, Director, Clinical & Enterprise Risk Management, Alfred Health

First Constable Sinclair Rozario, Coroner's Investigator

Signature:



Coroner Leveasque Peterson

Date : 16 December 2021

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.
