IN THE CORONERS COURT
OF VICTORIA
AT MELBOURNE

COR 2022 005249

FINDING INTO DEATH WITHOUT INQUEST

Form 38 Rule 63(2)

*Section 67 of the **Coroners Act 2008***

Findings of:	Coroner Catherine Fitzgerald
Deceased:	Child K
Date of birth:	26 January 2010
Date of death:	10 September 2022
Cause of death:	1(a) Injuries sustained in a quad bike incident (driver)
Place of death:	Goulburn Valley Health 2/2-48 Graham Street, Shepparton, Victoria, 3630

INTRODUCTION

1. On 10 September 2022, Child K was 12 years old when he passed away from injuries sustained in a quad bike incident. At the time of his death, Child K lived on a rural property at Kialla, Victoria, with his family.

2. The family owned a red 1999 Yamaha quad bike (**'the quad bike'**) which they used on their rural property to spray weeds and tend to the farm. Child K started riding a quad bike from the age of nine. At that age, Child K sat on the back of the quad bike, whilst his father, Mr A, steered and controlled the bike. Child K later started sitting in front of Mr A, assisting his father to steer the bike as they rode around the farm.

3. Mr A later showed Child K how to ride the quad bike on his own. Mr A would walk alongside Child K, as he operated it on his own. Child K was not permitted to use the quad bike without supervision or without first asking for permission from his parents.

THE CORONIAL INVESTIGATION

4. Child K'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 the circumstances in which the death occurred. The 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 Child K's death. The Coroner's Investigator conducted inquiries on my behalf and submitted a coronial brief of evidence.

8. This finding draws on the totality of the coronial investigation into the death of Child K 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

9. On 10 September 2022, Mr A and his wife Mrs H, were at home with their children. Mr A was visited by a friend that day. At about 2.30pm, Mr A offered to drive his friend home, as he lived about three kilometres away. Mr A also had a plumber in attendance at the house, completing some tasks around the house. He told the plumber, David Greenwood, that he would be leaving to take his friend home and that he would be back shortly. Mr A also informed Mr Greenwood that Child K would be remaining at home and would "*be hanging around with [him]*".

10. After about ten minutes, Mr Greenwood noticed that Child K "*disappeared*", and he was unsure where he went. According to Child K's brother, Child K then started riding the family's quad bike and completed laps up and down the driveway, which was about 700m in length. It does not appear that Child K was wearing a helmet.

11. Lisa Irwin, who was driving on the road near the family home, observed Child K riding at speed down the driveway. Ms Irwin witnessed the quad bike collide with the bank of a drain beside the driveway. She observed the quad bike flip, which resulted in Child K being ejected from the bike. Ms Irwin parked her car and rushed over to assist. During the incident, Child K's lower abdomen was impaled by the quad bike handlebar.

12. When Ms Irwin reached Child K, she observed that he was conscious and breathing. He said, "*I've been stabbed*" and Ms Irwin observed an injury to his groin area. Ms Irwin lifted the quad bike up in order pull Child K out of the ditch. Ms Irwin's daughter called 000, whilst another motorist, who was a nurse, stopped to assist. Ms Irwin and the nurse followed the 000 call-taker's instructions and placed pressure on Child K's lower abdomen to stem the bleeding.

[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.

13. Shortly after the incident, Mr A returned from dropping off his friend and saw the commotion on the side of the road. He quickly pulled over and attended the scene. Ms H and two of Child K's siblings were also notified and rushed over from the house.

14. Paramedics arrived on scene to find Child K critically unwell, unconscious, pale, diaphoretic and hypoventilating. Paramedics performed cardiopulmonary resuscitation (**CPR**) and provided a blood transfusion with an adrenaline infusion. A plan was formulated to airlift Child K to a major trauma hospital, however whilst transferring him to the aircraft, he deteriorated and went into cardiac arrest. Paramedics were able to achieve a return of spontaneous circulation after two minutes of CPR and decided to transfer him via road ambulance to Goulburn Valley Health (**GVH**) which was the closest hospital.

15. Child K arrived at the GVH Emergency Department at about 4.54pm. On arrival, he was assessed by clinicians and was noted to have suffered a significant penetrating injury to the right iliac fossa/inguinal area, with significant haemorrhage. GVH made a hospital-wide paediatric trauma call upon Child K's arrival in the Emergency Department, and five minutes later, called a hospital-wide code blue.

16. Child K was transferred to an operating theatre at about 5.11pm for an urgent laparotomy. The laparotomy identified a large volume intraperitoneal bleed, which was packed. Clinicians suspected a large retroperitoneal bleed; however, this was not confirmed.

17. CPR and advanced life support measures were continued; however, Child K did not demonstrate any cardiac activity. During resuscitative measures, GVH's entire supply of O-negative packed red blood cells was exhausted. All reversible causes for Child K's condition were considered and addressed, however, clinicians formed the view that his injury was not survivable.

18. Clinicians met with Child K's parents and a joint decision was made to cease active resuscitation. He passed away in the operating theatre at 6.32pm.

Identity of the deceased

19. On 10 September 2022, Child K, born 26 January 2010, was visually identified by his father, Mr A.

20. Identity is not in dispute and requires no further investigation.

Medical cause of death

21. Forensic Pathologist Dr Victoria Francis, from the Victorian Institute of Forensic Medicine (**VIFM**), conducted an examination on 12 September 2022 and provided a written report of her findings dated 23 November 2022.

22. The post-mortem examination revealed evidence of extensive resuscitation attempts, with a laparotomy incision on the abdomen and an open wound over the groin region.

23. The post-mortem CT scan showed no acute intracranial findings. There was a large groin wound with extensive packing material noted throughout the peritoneal cavity and bilateral pneumothoraces with 'white out' of the lung.

24. Toxicological analysis of ante-mortem samples identified the presence of fentanyl,[2] ketamine,[3] and midazolam.[4] Toxicological analysis of post-mortem samples identified the presence of ketamine. Neither sample identified the presence of alcohol or any other commonly encountered drugs or poisons. The fentanyl, ketamine and midazolam were all administered by Ambulance Victoria paramedics during resuscitation attempts.

25. Dr Francis provided an opinion that the medical cause of death was "*1(a) Injuries sustained in a quad bike incident (driver).*"

26. I accept Dr Francis' opinion.

FURTHER INVESTIGATIONS

27. Following the incident, a Victoria Police officer (acting as the CI) investigated the death on the coroner's behalf and provided a coronial brief. WorkSafe Victoria (**WSV**) briefly investigated but determined that the location of the incident was not a workplace and therefore, their involvement was not required.

28. Victoria Police examined the quad bike and noted that it was still operational following the incident. The bike had a clear warning label that stated "*Operating this ATV if you are under the age of 16 increases your chance of severe injury or death*. *NEVER operate this ATV if you*

[2] Fentanyl is a synthetic opioid with 50-100 times the analgesic potency of morphine, rapid onset (2-3 min) and short duration of action (0.5-1 hour). It is used in

[3] Ketamie is an anaesthetic normally used for short and medium duration operations as an induction agent.

[4] Midazolam is an imidazobenzodiazepine derivative used as a preoperative medication, antiepileptic, sedative-hypnotic, and anaesthetic induction agent.

are under age 16". Another warning label was affixed to the bike which reminded users to always wear a helmet, amongst other warnings.

29. Police observed that the left-hand brake lever was broken, although it appeared that this occurred during the collision, rather than at an earlier point in time. The rear brakes were still functional.

30. Despite some minor cosmetic damage to the bike that was likely sustained during the collision, police did not identify any faults or failures that could have caused or contributed to the incident.

FINDINGS AND CONCLUSION

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

    a) the identity of the deceased was Child K, born 26 January 2010;

    b) the death occurred on 10 September 2022 at Goulburn Valley Health 2/2-48 Graham Street, Shepparton, Victoria, 3630, from injuries sustained in a quad bike incident (driver); and

    c) the death occurred in the circumstances described above.

32. Having considered all the circumstances, I am satisfied that the collision was accidental, and that Child K was using the quad bike without his parents' knowledge or permission.

COMMENTS

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

33. The dangers associated with quad bikes have been thoroughly canvassed by coroners in this jurisdiction.[5] Quad bikes can be easily overturned, even at low speeds, which causes the rider to be ejected from the bike, and often trapped underneath it.

34. According to data published by Safe Work Australia (a national policy body), 187 quad bike fatalities occurred from 2011 to 14 September 2023. Of those fatalities, 17 were in children

[5] See, e.g., Finding into death without inquest: (COR 2020 3507); Finding into death without inquest: GW (COR 2017 4821); Finding into death without inquest: (COR 2011 0958); Finding into death without inquest: GS (COR 2018 5660).

aged under 10, and 20 of those fatalities were in children 10 to 19 years of age.[6] Data supplied by the National Coronial Information System (**NCIS**) identifies that between 2000 and 2023 there have been 469 quad bike and all-terrain vehicle related deaths in Australia and New Zealand. Deaths occurred every year within that time, and 15.4 per cent of those deaths were children under the age of 15 years.

35. Safe Work Australia, WSV and other government bodies have published numerous articles and reports about the dangers of quad bikes, particularly when operated by children. Coroners from other Australian jurisdictions have also published several findings about the dangers associated with quad bikes and have previously made recommendations aimed at reducing quad bike-related fatalities. It is not a new issue, and risk mitigation strategies such as operator protective devices (**OPDs**) have been available for some time.

36. The dangers associated with quad bikes are therefore well known and have been thoroughly investigated over several years. I have not identified any additional, or unexplored, prevention opportunities arising from the circumstances of this tragic case. However, it is yet another reminder about the dangers posed by quad bikes, particularly when operated by children. As such, pursuant to s 73(1A) of the *Coroners Act 2008*, I direct that a de-identified version of this finding be published on the Coroners Court of Victoria website. There may be some utility in again publicising the risk posed to children by quad bikes, and as a reminder of the need for constant vigilance in relation to their use by children.

I convey my sincere condolences to Child K's family for their loss.

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

Mr A and Mrs H, Senior Next of Kin

Goulburn Valley Health

WorkSafe Victoria

Senior Constable Grant McDonald (VP 40664), Victoria Police, Coroner's Investigator

[6] Safe Work Australia: Quad bike statistics, https://data.safeworkaustralia.gov.au/interactive-data/topic/quad-bikes, accessed 27 September 2023.

Signature:

Date : 13 February 2024

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.