



OFFICE OF THE STATE CORONER

FINDINGS OF INVESTIGATION

CITATION: **Non-inquest findings into the death of A**

TITLE OF COURT: Coroners Court

JURISDICTION: CAIRNS

FILE NO(s): 2015/590

FINDINGS OF: Kevin Priestly, Coroner

CATCHWORDS: Non-inquest findings, motor vehicle collision, loss of control, aquaplaned, tyres incorrectly fitted to vehicle

Introduction

1. I order that the identity of the deceased not be released or published out of respect for the wishes of the family and to reduce the risk of exacerbating their grief. However, in light of the importance of this case in highlighting to road users the hazards associated with driving in wet conditions with defective tyres, I decided to publish the findings.
2. At about 10.50am on 12 February 2015, A was driving a 2005 Holden Commodore Sedan north on the Bruce Highway, North Queensland. At the same time and place, a Kenworth prime mover towing a trailer was travelling south in the opposite direction. A lost control of the vehicle, travelled sideways across the centre line, into the path of the oncoming Kenworth. They collided head on. A's vehicle was pushed back onto the correct side, coming to rest with the rear end partially blocking the lane. The Kenworth continued forward a short distance, left the road, travelled down the eastern (driver's left) embankment and overturned.
3. A suffered multiple injuries and died at the scene. The driver of the prime mover and trailer was treated for shock.
4. Forensic Crash Unit (FCU) investigators with Qld Police Service attended the scene and conducted a comprehensive scene investigation. My findings are based on the investigator's report.

The Scene

5. At the time of the incident it had been raining and the roadway was wet. There was water on the roadway but visibility was good.
6. This section of the highway was a sealed two lane bitumen road in generally good condition. The road was level before entering a slight sweeping right bend when travelling north. There were two continuous white centre lines. The speed limit was 100km/hr. The crash occurred just north of a rail crossing and near the intersection on a nearby road. The road surface appeared in a good state of repair and there were no potholes or signs of surface degradation.
7. FCU Investigators inspected the road and found a number of gouge marks on the southern lane and centre of the road caused by the impact and collision. There were no skid marks on the road surface, which indicates that A's vehicle probably aquaplaned across the road and collided with the prime mover.

The Vehicles

8. The damage to the Kenworth was consistent with a frontal impact. It was not mechanically inspected as the nature of its involvement did not make an inspection necessary. The service records show it was in good mechanical order prior to the incident and was serviced regularly. There were no signs of any mechanical defects involving the prime mover that may have contributed to the crash.
9. A's vehicle was mechanically inspected. There was major impact damage to the front of such force the engine block was torn out and found some distance away. There were no mechanical defects found during the inspection. However, defective tyres were found:

- The front left tyre was a directional designed tyre and had been fitted in the incorrect direction of rotation. The vehicle inspection officer reported this condition causes “*reduced wet weather performance of the tyre and potential aquaplaning at road speeds above 80 km/hr under wet road conditions*”. The tyre also showed damage consistent with being driven with low inflation. Finally, the inner tyre bead was torn on the seal consistent with non-professional tyre removal and fitting. It also had unsatisfactory tread condition being devoid of sufficient tread on the absolute inner shoulder.
 - The rear right tyre was in a potentially dangerous condition with the construction belts exposed on the inner tread section of the tyre.
 - The left rear tyre had an unsatisfactory tread condition being devoid of sufficient tread section of the tyre.
 - The front tyres and wheel rims were different sizes and unsatisfactory for fitting to a common axle.
10. The speedometer of A’s vehicle was locked at impact on about 102 km/hr, likely indicating the vehicle’s speed at the time of impact.
11. A was located with some small clip seal bags containing a small amount of green leafy material and a small amount of white powder residue believed to be dangerous drugs, although these have not been analysed.

Witnesses Accounts

12. A witness reported to police that she had been travelling in the area only minutes prior to the crash and her visibility was limited to a couple of metres due to torrential rain. She said she was getting pushed over every now and again due to the water on the road. Due to the heavy rain, she pulled off the road until it eased.
13. The driver of the Kenworth told police he was travelling at about 90 – 95 km/hr while headed south on the Bruce Highway near a turn off and it was raining. He saw a car (A’s car) lose control with the back end sliding out towards the driver’s side. He braked and attempted to move away however the trailer jack-knifed and he lost control. He then hit a bank and the trailer rolled on its side. He climbed out and went to check on A, but found A was deceased.
14. The driver of a vehicle following the Kenworth told police she was about 30 metres behind at about 90km/hr and there was light rain. The Kenworth did not veer out of the lane. She didn’t see the crash. However, she did see bits and pieces flying everywhere then saw the truck veer off the road and down the embankment. She then realised there’d been a collision and called triple zero. As an Emergency Nurse, this driver attended A and immediately realised A was deceased.
15. The Kenworth was fitted with a dash camera and the video recording was reviewed. The video clearly shows A lost control and travelled onto the wrong side of the roadway, colliding with the prime mover. The video was entirely consistent with the witness accounts.

Other Investigations

16. Department of Transport and Main Roads provided investigators with an Engineer's report that included a Road Safety Audit for the location of the collision which showed:
 - The pavement marking at the intersection and bridge approach was in poor condition and was unclear with faded markings/removed marking, insufficient Raised Pavement Markers and insufficient Road Edge Guide Posts.
 - The debris on the road shoulder and lack of road cross fall causes water to pond in several locations at the site.
 - The lay-bys on the left and right are unclear and are in unsafe locations.
 - There is insufficient width/provision for through traffic to pass vehicles turning at the intersection into a nearby road.
17. Since the incident, debris has been cleared from the site reducing the potential for water pondage. Other items such as signage and line marking are being progressively addressed.

Autopsy and other reports

18. Dr Max Stewart conducted an autopsy and confirmed that A died from multiple injuries due to a motor vehicle accident. Toxicology from blood taken at autopsy was positive for amphetamine, methylamphetamine and tetrahydrocannabinol.
19. The toxicology findings were provided to Dr Griffiths, Forensic Medical Officer, for comment on the extent to which A was likely impaired in A's capacity to drive. Dr Griffiths reported that the methylamphetamine level was very high and whatever the tolerance, it cannot be ignored as a potential major causative factor.
20. However, the potential impact of the drug level must be considered in the context of the dynamics of this particular incident.
21. The initial loss of control is clearly due to aquaplaning, not drug use. But it might reasonably be concluded that the level of methylamphetamine might have affected the capacity of A to regain control. On viewing the video from the dash cam, it appears that once the vehicle was aquaplaning, even a reasonable driver unaffected by drugs would have struggled to regain control in the limited opportunity given the speed, time and volume of water on the road.

Conclusions

22. The FCU investigator concluded that the following factors contributed to the incident:
 - The wet conditions;
 - The unsafe condition of the tyres;
 - The speed given the wet conditions.
23. In particular, a directional designed tyre was fitted in the incorrect direction of rotation. This and the poor tread on other tyres substantially reduced wet weather performance and increased the potential for aquaplaning at road speeds above 80 km/hr under wet road conditions.
24. I find that A died on 12 February 2015 due to multiple injuries due to a motor vehicle accident. A died when A's vehicle aquaplaned into the path of an oncoming prime mover and trailer shortly after heavy rain. A tyre was fitted incorrectly and others were

in a condition that contributed to a high risk of aquaplaning, a risk that tragically eventuated. A was affected by drugs that may have diminished the capacity to respond when the vehicle did aquaplane. I seriously doubt there was any opportunity to regain control in the short period before collision.

25. This case should serve as an important warning to owners of vehicles to ensure tyres are correctly fitted and in good serviceable condition, particularly leading up to the wet season. It is also important to drive to the conditions. If other factors such as water on the road and heavy rain increase the risk; adopt equivalent precautionary strategies such as slowing.
26. I do not propose to hold an inquest because the investigation has revealed sufficient information to enable me to make the findings required under the *Coroners Act 2003*. Further, the findings do not give rise to the need for recommendations which can only be made at an inquest.
27. I consider that the publication of these findings is in the public interest. There are important road safety messages arising from the findings. The family of the deceased was consulted, and I direct the findings be published in accordance with section 46A of the *Coroners Act 2003*.

Findings required by s45

Identity of the deceased –	A
How they died –	Loss of control of a motor vehicle from aquaplaning into the path of an oncoming prime mover truck.
Place of death –	Bruce Highway, North Queensland
Date of death–	12 February 2015
Cause of death –	Multiple injuries due to a motor vehicle accident

**Kevin Priestly
Coroner
CAIRNS**

12 February 2016