IN THE CORONERS COURT

OF VICTORIA

AT MELBOURNE

Court Reference: COR 2017 5977

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 STEPHEN JOHN CARUANA

without holding an inquest:

find that the identity of the deceased was STEPHEN JOHN CARUANA

born 8 June 1969

and the death occurred on 28 November 2017

at Royal Melbourne Hospital, 300 Grattan Street, Parkville, Victoria 3050

from:

1 (a) HYPOXIC ISCHAEMIC ENCEPHALOPATHY COMPLICATING UPPER CERVICAL SPINE AND CORD INJURY

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

1. Stephen John Caruana was 48 years of age and resided in St Albans, Victoria at the time of his death. He had four children with his former partner Fiona Falkiner who lived in

Lal Lal. Mr Caruana was an experienced construction worker and was competent in using a chainsaw and cutting down trees, although he was not a qualified arborist.

2. On the evening of 20 November 2017, Mr Caruana went to Brian Scantlebury's property in Lal Lal to cut down a gum tree. Mr Caruana was in a cherry picker using a chainsaw to cut the head off the tree. As the head of the tree fell, the branches struck Mr Caruana and knocked him down into the cage. Mr Scantlebury heard the chainsaw start and then a loud thump and rustle a couple of seconds afterwards. He went outside to investigate and found Mr Caruana half hanging out of the basket of the cherry picker. Mr Caruana was unconscious.

3. Mr Scantlebury's wife Janet Scantlebury contacted emergency services. Mr Scantlebury obtained assistance from his neighbour Stephen Bragg to get the cherry picker down to the ground. Mobile Intensive Care Ambulance paramedics attended and commenced cardiopulmonary resuscitation. Mr Caruana was intubated and was airlifted to the Royal Melbourne Hospital Emergency Department (**ED**). He arrived at the ED at 10.16pm and was diagnosed with C2 and C3 vertebral fractures with C1-3 spinal cord injury with secondary asystolic cardiac arrest causing hypoxic brain injury. The consensus of clinicians from the ICU, neurosurgery and treating teams was that Mr Caruana's hypoxic brain injury could not be survived. After consultation with Mr Caruana's family, a decision was made to transition him to palliative care. Mr Caruana was a tissue donor and he was declared deceased on 28 November 2017.

INVESTIGATIONS

Forensic pathology investigation

4. Dr Matthew Lynch, Forensic Pathologist at the Victorian Institute of Forensic Medicine (**VIFM**), performed an external examination upon the body of Stephen John Caruana, reviewed a post mortem computed tomography (**CT**) scan and clinical records from Royal Melbourne Hospital and referred to the Victoria Police Report of Death, Form 83. Anatomical findings were consistent with the known mechanism of injury.

5. Toxicological analysis of Mr Caruana's ante mortem[1] blood detected midazolam[2], levetiracetam[3] and metoclopramide[4]. It was observed that some of these drugs may have been administered by hospital or emergency staff. Dr Lynch ascribed the cause of Mr Caruana's death to hypoxic ischaemic encephalopathy complicating upper cervical spine and cord injury.

Police investigation

6. Leading Senior Constable (**LSC**) David Young was the nominated Coroner's investigator.[5] At my direction, LSC Young investigated the circumstances surrounding Mr Caruana's death, including the preparation of the coronial brief. The coronial brief contained, *inter alia*, statements made by Brian Scantlebury, Murray Palmer, Daniel Caruana and Fiona Falkiner.

7. In the course of the investigation, police learned that Mr Caruana met Mr Scantlebury approximately four years prior to his death when he was delivering wood to Mr Scantlebury's property. In early 2017 Mr Scantlebury mentioned to Mr Caruana that he needed some branches trimmed on his property and asked Mr Scantlebury if he knew anyone who could do this work. Mr Caruana told Mr Scantlebury he could do this work and subsequently trimmed some branches at the rear of Mr Scantlebury's property using his own equipment.

8. About a week prior to the incident, Mr Caruana told Mrs Scantlebury that he would be coming back to cut down the gum tree. Mr Scantlebury spoke to Mr Caruana during the week and arranged to give Mr Scantlebury money to pay for the hire of equipment on 19 November 2017.

9. On 20 November 2017, at approximately 1.00pm Mr Caruana went to Palmer Hire and hired a cherry picker for two days. Mr Caruana told Murray Palmer that he was pruning

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[1] Mr Caruana's ante mortem blood was collected at 1.05am on 25 November 2017.

[2] Midazolam is a short acting benzodiazepine used intravenously in intensive care patients.

[3] Levetiracetam is an antiepileptic used for the control of partial onset seizures.

[4] Metoclopramide is an anti-emetic drug used for the treatment of nausea and vomiting.

[5] 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 receives directions from a Coroner and carries out the role subject to those directions.

grapes. Mr Palmer reported that he gave Mr Caruana instructions on operating and safety.

10. Mr Scantlebury reported that he observed Mr Caruana attaching the safety harness before he operated the cherry picker.

11. Mr Palmer reported that the cherry picker was inspected after the incident. He reported there was no damage or issue found with the cherry picker.

Coroners Prevention Unit review

12. The Coroners Prevention Unit (**CPU**)[6] has recently conducted research to identify the incidence of any other deaths occurring during the course of 'arborist activities' including tree trimming, removal, care and maintenance and the number of these deaths that took place in the course of work.

13. The review identified that between 1 January 2012 and 30 September 2018, 41 people died in Victoria as a result of coming into contact with a tree. Thirty-one of these deaths occurred when the deceased was tree felling[7] or completing a related activity. Of the 31 deaths due to tree felling or related activities, 13 occurred whilst at work[8]. Eight of these occurred whilst on a farm.

COMMENTS

Pursuant to section 67(3) of the **Coroners Act 2008**, I make the following comments connected with the death:

1. Tree trimming and removal is hazardous work and has resulted in the deaths of 31 people between 1 January 2012 and 30 September 2018. This investigation highlights the importance of implementing appropriate risk control measures when engaged in this

[6] 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, 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.

[7] The activity of felling, lopping, logging or trimming a tree.

[8] Work activity as part of paid employment or in kind, including for a family business or farm.

type of work, and the need to ensure workers have an adequate level of training to enable them to perform their work safely and competently.

2. WorkSafe Victoria informed me that their current guidance in relation to working with trees is a Working Safely with Trees guidance note published in February 2012. Their guidance note highlights the control measures to be used when working with chippers, chainsaws and at height, as well as the need to have emergency procedures in place. However, the guidance note does not provide any information or advice on the risk of falling trees and limbs when undertaking tree work.

3. Other local state workplace health and safety bodies have implemented initiatives to assist and guide workers and employers on managing the risks of tree trimming and removal work.

4. In 2014, WorkSafe in Western Australia conducted an inspection campaign focused on tree loppers and gardening services aimed at improving safety and health within the industry. As part of the campaign it published a checklist for tree loppers and gardening services to assist workers and employers in assessing and controlling the risks of tree trimming and removal.

5. In 2017, SafeWork NSW launched the Tree Work Action Plan in conjunction with NSW Fair Trading and the State Insurance Regulatory Authority (SIRA), focusing on improving safety within the tree work industry. The Plan involved consultation and collaboration with tree industry bodies and promotion of industry specific resources with video safety alerts, webinars, social media and self-assessment checklist resources.

6. Safe Work Australia has also published a 'Guide to Managing Risks of Tree Trimming and Removal Work'. The guide was published in 2016 and includes comprehensive advice on conducting risk assessments, taking action to control risks and provides information on units of competency and training that should be undertaken prior to undertaking tree trimming or removal work. It highlighted the need to establish a drop zone where parts of the tree or sections of the limbs and trunk may be felled or dropped. It also included advice on ensuring that trees are cut in sections short enough to avoid contact with climbers or elevated work platforms.

RECOMMENDATIONS

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

1. In the interests of public health and safety and with the aim of preventing like deaths, **I recommend** that WorkSafe Victoria review its guidance note on Working Safely with Trees to make specific note of the risks of injury from falling objects such as branches and provide recommendations on suggested control measures to reduce the risk of injury or death.

2. In the interests of public health and safety and with the aim of preventing like deaths, **I recommend** that WorkSafe Victoria consider developing safety checklists for persons engaged in tree lopping and gardening services to assist workers and employers with identifying risks and hazards of tree trimming and removal work and implementing appropriate risk control measures.

3. In the interests of public health and safety and with the aim of preventing like deaths, **I recommend** that WorkSafe Victoria consider implementing a safety action plan for tree work such as that initiated in New South Wales to promote safe work practices.

FINDINGS

Mr Caruana's death has illustrated the dangers of undertaking tree felling activities, alone, without appropriate safety precautions.

I accept and adopt the medical cause of death as identified by Dr Matthew Lynch and find that Stephen John Caruana died from hypoxic ischaemic encephalopathy complicating upper cervical spine and cord injury.

To enable compliance with rule 64(3) of the *Coroners Rules 2009* (Vic), I direct that the Findings will be published on the internet.

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

Mr Daniel Caruana

Ms Kellie Gumm, Royal Melbourne Hospital

WorkSafe Victoria

Leading Senior Constable David Young

Signature:

AUDREY JAMIESON

CORONER

Date: **11 February 2019**