

MAGISTRATES COURT of TASMANIA

CORONIAL DIVISION

Record of Investigation into Death (Without Inquest)

Coroners Act 1995 Coroners Rules 2006 Rule 11

I, Robert Webster, Coroner, having investigated the death of Alyson Margaret Mellor

Find, pursuant to Section 28(1) of the Coroners Act 1995, that

- a) The identity of the deceased is Alyson Margaret Mellor (Mrs Mellor);
- b) Mrs Mellor died as a result of an injury sustained in a motor vehicle accident involving a single vehicle;
- c) Mrs Mellor's cause of death was a head injury; and
- d) Mrs Mellor died on 30 April 2022 at Penna, Tasmania.

Introduction

This investigation concerns a single motor vehicle accident which occurred at approximately 4:30pm on 30 April 2022. At that time Mrs Mellor was driving her Hyundai motor vehicle, registered number E09XL (the vehicle), on Brinktop Road at Penna towards Sorell. Around property number 317 Brinktop Road the vehicle left the roadway and struck an embankment. As the vehicle travelled up the embankment it became airborne and the roof and passenger side of the vehicle struck a power pole. The vehicle came to rest on the eastern side of the pole on the edge of the Sorell bound lane. Mrs Mellor was located deceased in the driver's seat of the vehicle.

The roadway at the crash location was made of bitumen and it was in good condition. There was a single lane for vehicles to travel east towards Sorell and a single lane for traffic to travel west towards Richmond. Both lanes were 3.1 m wide. They were divided by a single white broken line. The eastbound lane, in which Mrs Mellor was travelling, was bordered by a sealed shoulder and white fog line. A grass embankment was situated to the north of the road shoulder and a power pole was located approximately 1.5 m from the road edge.

The road was straight on approach to the point of impact with the pole with no obstructions. The weather was fine and dry. There was no evidence at the scene that any other vehicle was involved in this accident.

In making the above findings I have had regard to the evidence gained in the comprehensive investigation into Mrs Mellor's death. The evidence includes:

- The Police Report of Death for the Coroner;
- Affidavits as to identity;
- Affidavit of the forensic pathologist Dr Christopher Lawrence;
- Affidavit of the forensic scientist Mr Neil McLachlan Troup;
- Affidavit of Ms Sara Wall;
- Affidavit of Mr Shannon Frawley;
- Affidavit of Ms Terri-Lee Hoskinson;
- Affidavit of Mr Gerard Webb;
- Affidavit of Constable Melissa Hocken;
- Medical records obtained from Dr Roland McCallum consultant endocrinologist;
- Medical records obtained from Mrs Mellor's general practitioner;
- Medical records obtained from the Royal Hobart Hospital (RHH);
- Affidavit of Senior Constable Kelly Cordwell together with her report and plan;
- Affidavit of Mr Jason Armstrong;
- Affidavit of First-Class Constable Scott Wilson;
- Affidavit of Ms Melissa Bartulovic, Tasmania police (rank not stated); and
- Forensic evidence, photographs and body worn camera footage.

Background

Mrs Mellor was 64 years of age, married and she resided with her husband at Sorell at the date of her death. She was born to Lena and Louis Thorne in Lancashire, England on 21 November 1957. She has a younger brother. Mrs Mellor attended Samlesbury Church of England Primary School and Penwortham Girls High School.

In 1977 Mrs Mellor married Kenneth Cook and they had one child together namely the senior next of kin Ms Wall. They divorced in 1994 and in 1998 Mrs Mellor travelled to Australia on holiday with her daughter. She then emigrated to Queensland in 1999. In 2000 Mrs Mellor married Gary Pollard, however they divorced in 2005 and Mrs Mellor returned to live in England.

On 8 May 2009 Mrs Mellor married David Mellor after which they moved to Florida for a few years. In 2012 they moved to Tasmania and in 2015 they bought the home in which Mr and Mrs Mellor were living at the date of her death. While in Tasmania Mrs Mellor worked on a farm and she worked at an art gallery in Richmond during which time she sold some of

her husband's artwork. She became an ambassador for Diabetes Tasmania and in 2015 she received a medal for surviving 50 years with diabetes.

Mrs Mellor would return to England each year to spend time with her daughter and her grandchildren. During the COVID 19 pandemic she realised she was missing out on not being around her grandchildren and therefore Mrs Mellor decided to return to England to be close to them. She was due to move into her new home on 24 May 2022.

Health

Mrs Mellor was diagnosed with type I diabetes mellitus (TIDM) just prior to her 7th birthday. In 1979 she was involved in a traffic accident in England in which she broke her tibia and fibula and she sustained significant vascular damage. She spent a prolonged period in hospital, then in callipers and then she mobilised using a wheelchair. The TIDM and the injuries sustained in this traffic accident caused her lifelong health difficulties. In 1985 she suffered some left hip difficulties and avascular necrosis. She subsequently suffered from significant lower back pain and underwent some spinal blocks which were unsuccessful. Her health records disclose that in 2003 she suffered from a heart murmur and had a right toe amputated due to a foot infection. In 2013 she was diagnosed with peripheral vascular disease and she had declining bone density. In addition she had difficulties with anxiety and depression and difficulties in her relationship with Mr Mellor. He was battling his own cancer diagnosis from 1986 which metastasised and moved to other parts of his body. The records disclose that he consumed alcohol to excess, as did Mrs Mellor, and this led to arguments with Mrs Mellor and particular difficulties during 2015 when an order was made under the *Family Violence Act* 2004 which forced Mrs Mellor to live elsewhere for a few months.

She first attended a general practitioner in Tasmania in January 2013. Her last appointment prior to her death took place on 27 April 2022. Because of her various conditions and the complications they caused, she frequently attended her general practitioner each year. Apart from 2019 and 2022 she attended her general practitioner in excess of 12 occasions.

There were also a number of admissions to the Royal Hobart Hospital for diabetic related issues such as a collapse, hypoglycaemia and diabetic management on 29 January 2015, 13 January 2017, 13 December 2018 and 10 May 2021. In June 2015 there was a four-day admission due to a fractured hip arising from a fall whereas in 2018 Mrs Mellor underwent some toe surgery. Finally on 27 January 2020 she suffered a whiplash injury in a motor vehicle accident when she rear-ended another car at approximately 70 km/h. She was wearing a seatbelt. In addition to the admissions there were a number of visits to the emergency department which did not result in an admission. For example, there was an attendance in October 2014 as a result of a fractured third toe as a result of a slip, another

fall in June 2015, an ophthalmology visit in April 2020 and a trip and fall in her garden in February 2022. Because of her diabetes and chronic pain Mrs Mellor attended the podiatry clinic regularly between October 2014 and March 2022, the diabetic clinic between February 2015 and April 2022, the ophthalmology clinic (she had been diagnosed with proliferative diabetic retinopathy¹) between May 2015 and December 2020, the occupational therapy clinic between December 2014 and March 2022, the orthotics clinic in 2021 and 2022 and she attended the rheumatology clinic and the orthopaedic clinic in 2016, 2017 and 2018.

Circumstances Leading to Death

On 30 April 2022 Mrs Mellor was working at the *Artists of Richmond* shop (the shop). Mr Mellor, who spoke to police officers that advised him of her death later that day, said she had made comments to him throughout the day that her "levels" were dropping like a rock and presumably she was referring to her insulin levels.²

Mr Webb, who owns the shop, worked with Mrs Mellor up until about midday and she would have closed the shop between 4pm and 4:30pm. He says he did not notice anything unusual about her during the time he worked with her on that day, he did not hear any alarm (from her insulin pump) and she said nothing to him about being or feeling unwell.

Given this evidence and what police later found it is believed Mrs Mellor closed the shop and was travelling home via Brinktop Road when the accident occurred. At about 4:30pm Mr Frawley was travelling along that road with his young son when he observed the vehicle on the left-hand side of the road. The vehicle had clearly been involved in a crash. Travelling behind Mr Frawley was Ms Hoskinson. They both stopped and called 000. Mr Frawley checked on Mrs Mellor and then turned the ignition off and because the engine appeared to be overheating and boiling he disconnected the battery after opening the bonnet. Both Mr Frawley and Ms Hoskinson could however still hear a beeping sound coming from inside the vehicle after he had disconnected the battery which was later determined to be Mrs Mellor's insulin pump. Neither Mr Frawley or Ms Hoskinson observed the vehicle travelling on the roadway prior to the accident but they were both first on the scene. No witnesses could be found by police to attest to Mrs Mellor's demeanour and/or physical health for approximately 4.5 hours prior to her death.

¹ This is an advanced stage of diabetic eye disease. It occurs when the retina starts growing new blood vessels. These new vessels are fragile and often bleed into the vitreous.

² Police attempted on a number of occasions to obtain an affidavit from Mr Mellor however were unable to do so because he was not cooperative. He was observed to be in very poor health. A few weeks after their last attempt on 26 July 2022 police were advised he had passed away.

Investigation

At 4:30pm on 30 April 2022 uniform police were tasked to attend this accident. On arrival Mrs Mellor was checked and it was determined she was deceased. Mr Frawley and Ms Hoskinson were spoken to and the scene was secured. Senior Constable Cordwell, from crash investigation services, arrived at approximately 6pm. Just prior to her attendance First Class Constable Wilson from forensics arrived. Senior Constable Cordwell inspected the scene and identified, measured and marked all the relevant road markings and prepared a survey of the scene. She also inspected and recorded the damage to the vehicle. First Class Constable Wilson took photographs of the accident scene. Senior Constable Cordwell says she observed Mrs Mellor's insulin pump and heard it beeping. Mrs Mellor was wearing her seatbelt.

Senior Constable Cordwell located a 4.1 m long diagonal scrape mark across the bitumen which she says is consistent with having been made by the driver's side of the vehicle as it rotated anticlockwise. Towards the end of the mark was a significant gouge in the road surface caused by the front driver wheel as the vehicle rotated. Damage to the wheel was consistent with this hypothesis. A second scrape mark of 8.6 m was observed in the dirt and grass road edge along the embankment. This mark, she says, was made by the front passenger side of the vehicle. She says at this point the vehicle was beginning to rotate in an anticlockwise direction as the vehicle approached the power poll. Senior Constable Cordwell goes on to say the upward sloping embankment caused the vehicle to trip and begin to roll while rotating and there has been an initial impact between the power pole and the roof of the vehicle. There was significant crush damage caused to the roof and passenger door of the vehicle and she says it is evident the vehicle continued to roll slightly to where maximum engagement between the pole and the vehicle occurred in the area of the roof and passenger door between the A and B pillars. After hitting the power pole the vehicle continued to rotate anticlockwise around the pole and it came to rest on the surface of the road on its wheels 2.2 m east of the power pole and facing a general southerly direction. There were no tyre marks prior to the gouge marks to indicate the vehicle was under braking prior to the collision. There was no obvious roadway defect or other evidence at the scene to determine why the vehicle left the roadway.

Senior Constable Cordwell concludes the vehicle left a straight and unobstructed section of the roadway to the left impacting with a roadside embankment. That has caused the vehicle to rotate anticlockwise while commencing to roll driver-side first prior to impacting a power pole. Significant crush damage was caused to the vehicle after which it continued to rotate anticlockwise before coming to rest on its wheels east of the poll. In addition to there being no evidence of emergency braking there was no evidence to suggest any other vehicle was involved. Senior Constable Cordwell concluded Mrs Mellor has left the roadway as a result of either inattention/distraction or some form of medical episode. I accept her opinion.

Mr Armstrong inspected the vehicle on 5 May 2022. He is a qualified automotive mechanic with in excess of 30 years' experience in the automotive industry. He is employed as a transport safety and investigation officer with the Department of State Growth. As a result of his inspection of the vehicle he found one defect being the right rear tyre was devoid of any tread on its inner edge. He says however this defect did not contribute to the accident. I accept his opinion.

Dr Lawrence performed a post-mortem examination on 3 May 2022. He noted on admission to the mortuary Mrs Mellor's insulin monitor displayed a "low insulin" alert at 4:29pm. As a result of his examination and consideration of the medical evidence and the histology, toxicology and microbiology results Dr Lawrence determined Mrs Mellor died as a consequence of a head injury sustained in the accident. From his examination of the medical records Dr Lawrence says her glucose control appeared to be reasonably good. He noted there was no significant heart disease to account for a medical event. Dr Lawrence says Mrs Mellor may have had low glucose. The testing of urine showed low glucose and no ketones³. He says if the pump was low on insulin you would expect high urine glucose and ketones. Urine glucose tests are not very accurate and can be falsely decreased if the urine is refrigerated which what would have occurred in this case prior to testing. The test also reflects the blood glucose level a few hours earlier so it might not be particularly accurate. The detection of diabetic coma post mortem requires accurate biochemical analysis. Due to the continuous consumption of glucose by surviving cells post mortem, blood glucose levels decrease rapidly. Therefore the glucose level in vitreous fluid⁴ has been used to determine hyperglycaemia⁵ in forensic practice, since it has a very low cell count. In this case the vitreous was too thick to process so the vitreous glucose level could not be tested. It is therefore not possible to diagnose whether Mrs Mellor was suffering from hyperglycaemia or hypoglycaemia⁶ at the time of the collision. I suspect this is why Dr Lawrence has said

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³ Ketones are a type of chemical that the liver produces when it breaks down fats. High ketone levels make a person's blood too acidic. This is a serious condition called ketoacidosis. The most common type of ketoacidosis is a complication of diabetes called diabetic ketoacidosis. ⁴ The vitreous is the gel-like fluid that fills a person's eye.

⁵ Hyperglycaemia occurs when there is too much sugar (glucose) in a person's blood. It occurs when the body has too little insulin or if the body cannot use insulin properly. Early symptoms of the condition include increased thirst and/or hunger, frequent urination, headache, blurred vision and fatigue.

⁶ Hypoglycaemia, also called low blood sugar, is a fall in blood sugar to levels below normal, typically below 70 mg/dL (3.9 mmol/L). Hypoglycaemia may result in headache, tiredness, clumsiness, trouble talking, confusion, fast heart rate, sweating, shakiness, nervousness, hunger, loss of consciousness, seizures, or death. Symptoms typically come on quickly.

Mrs Mellor **may** have had a low glucose level in her body. Toxicology revealed therapeutic levels of the antidepressant citalopram.

The medical records reveal that on 11 February 2022 Mrs Mellor was assessed by her general practitioner to determine whether or not she was medically fit to drive a motor vehicle. She passed that assessment. In early July 2021 her insulin pump was upgraded and she was provided with training in its use by nursing staff at the diabetic clinic and also by a representative of the manufacturer of the pump. Notes in the general practitioner's records in October 2021 and January 2022 indicate the pump was working well. The discharge letter from the diabetic clinic of 14 April 2022, given Mrs Mellor's impending move to the United Kingdom, indicates she was doing very well with the pump. The letter also indicates she was given information that she could take to a diabetes clinic at one of the hospitals after she had moved.

An insulin pump is a small electronic device which mimics the functions of a healthy pancreas and replaces the need for frequent injections of insulin. The pump is designed to deliver precise doses of insulin during the day in order to match a person's needs. According to Diabetes Australia, insulin pump therapy can reduce the frequency of severe hypoglycaemic episodes and it can result in better blood glucose management which reduces the risk of complications.

Information from Ms Wall indicates her mother received a recall email for the insulin pump manufacturer in September 2022. Research undertaken in relation to this issue suggests that in certain circumstances the pump could be accessed via unauthorised means and the insulin dosage delivery changed. It is a potential issue only and in this case there was no evidence that it had in fact occurred. For unauthorised access to take place both the unit and the person seeking to access the unit needed to be on the same Wi-Fi system, they would need access to the serial number of the pump and the remote bolus setting needed to be "on" in the program. The pump cannot be accessed and changed over the Internet by remote access. No other issues have been reported with respect to this device.

Most insulin pumps can hold around 200 to 300 units of insulin, which depending on the extent of the condition, can last anywhere between 3 and 5 days. When the pump reservoir starts to run low it sounds a warning which alerts the user to refill the pump with insulin at the next opportunity. This may in fact have been the sound heard by Mr Frawley, Ms Hoskinson and Senior Constable Cordwell at the scene.

Police seized Mrs Mellor's phone but without the pass code could not unlock it. Subscriber checks were therefore made and it was determined she made a 4 second phone call at 4:27:3pm to a health fund and a 22 second phone call was made to her home phone number

at 4:27:48pm. Police believe these phone calls were made prior to Mrs Mellor leaving Richmond given the time of the 000 call is 4:33pm. I agree because the distance between Mrs Mellor's place of employment and the accident scene is 2.8 km. The speed limit on Brinktop Road⁷ at the time was 100 km/h. Assuming an average speed of 80 km/h over that distance, given Mrs Mellor had to drive approximately 400 m at 50 km/h before she reached the outskirts of Richmond, then 2.8 km would have been travelled in 2 minutes and 6 seconds. There was therefore sufficient time between the final phone call ending and the time of the call to 000 for Mrs Mellor to drive from her workplace to the site of the accident. I therefore conclude Mrs Mellor was not using her mobile telephone while she was driving along Brinktop Road.

Comments and Recommendations

I am satisfied from my consideration of the evidence this accident was not caused by the driver of another motor vehicle and nor did anything on the road surface, excessive speed, mobile phone use or the weather conditions cause or contribute to the accident. There was no significant heart disease to account for any medical event. The evidence also establishes Mrs Mellor was well versed in the operation of her insulin pump and there is no evidence that it was not working properly. She was assessed by her general practitioner as medically fit to drive. I agree with Senior Constable Cordwell's opinion Mrs Mellor's vehicle left the roadway due to either inattention/distraction or some form of medical episode. The evidence of Mr Mellor of what I infer to be comments by Mrs Mellor about her falling insulin levels on the day of this accident, the alarm heard by Mr Frawley, Ms Hoskinson and Senior Constable Cordwell at the scene and the findings by Dr Lawrence of the low insulin alert on the insulin pump suggest there would have been high glucose and ketones in the body suggestive of a hyperglycaemic attack. This however could not be confirmed due to the unreliability of the urine test which suggested the opposite result and the inability to test the vitreous. Mrs Mellor's post mortem status in this regard could therefore not be confirmed. That is I am not in a position to find this accident was caused by a medical event related to her diabetes rather than as a result of inattention or distraction. Accordingly I can make no finding other than this accident occurred when Mrs Mellor's vehicle left the roadway due to either inattention and/or distraction or a medical episode related to her diabetic condition.

I extend my appreciation to investigating officer Constable Melissa Hocken for her investigation and report.

⁷ The speed limit on this road has since been reduced to 80 km/h because of the number of accidents on this section of roadway; however in this case speed was not a causative factor.

The circumstances of Mrs Mellor's death are not such as to require me to make any comments or recommendations pursuant to Section 28 of the *Coroners Act* 1995.

I convey my sincere condolences to the family and loved ones of Mrs Mellor.

Dated: 2 November 2023 at Hobart in the State of Tasmania.

Robert Webster Coroner