



IN THE CORONERS COURT
OF VICTORIA
AT MELBOURNE

COR 2023 003601

FINDING INTO DEATH WITHOUT INQUEST

Form 38 Rule 63(2)

Section 67 of the Coroners Act 2008

Findings of:	Coroner Simon McGregor
Deceased:	Brian Robert Dean
Date of birth:	15 December 1978
Date of death:	3 July 2023
Cause of death:	1a : SEPSIS 1b : STREPTOCOCCUS PYOGENES (GROUP A STREPTOCOCCUS) SEPTICAEMIA COMPLICATING INFLUENZA A
Place of death:	University Hospital, Bellerine Street, Geelong, Victoria, 3220
Keywords:	Sepsis; Medical Death

INTRODUCTION

1. On 3 July 2023, Brian Robert Dean was 44 years old when he died at University Hospital in Geelong. At the time of his death, Brian lived at 6 Doolin Close, Grovedale, Victoria, 3216, with his wife Sandra Dean and their young children.
2. Brian's medical history included obesity¹, but there were no other known relevant conditions. He was a non-drinker and a non-smoker.

THE CORONIAL INVESTIGATION

3. Brian'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.
4. 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.
5. 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.
6. Victoria Police assigned an officer to be the Coronial Investigator for the investigation of Brian's death. The Coronial Investigator conducted inquiries on my behalf, including taking statements from witnesses – such as the forensic pathologist, treating clinicians and the relevant medical records.
7. This finding draws on the totality of the coronial investigation into the death of Brian Robert Dean. Whilst I have reviewed all the material, I will only refer to that which is directly relevant

¹ His Body Mass Index (BMI) = $138\text{kg}/(1.89\text{m})^2 = 38.6\text{kg}/\text{m}^2$ which is classified as WHO class II obesity.

to my findings or necessary for narrative clarity. In the coronial jurisdiction, facts must be established on the balance of probabilities.²

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

Circumstances in which the death occurred

8. After 4 days of nausea and vomiting, runny nose, cough, intermittent subjective fevers and tiredness, Brian presented at Geelong's University Hospital (**the Hospital**) at approximately 10:00 pm on 1 July 2023. He was admitted and subsequently diagnosed with Influenza A. Overnight, he was administered 5 litres of fluid, and was presenting as tachycardic and hypotensive,³ so he was placed in the Short Stay ward for continued observation. On the morning of the 2 July, Brian presented well and reported feeling better and was discharged home.⁴
9. Just after midnight on 3 July 2023, Brian called an ambulance from home because he was experiencing shortness of breath, and was transported back to the Hospital, arriving at 12:48 am. On his second admission, he had a low oxygen saturation, presented as cold, sweating and blue in colour, appearing to be in peri-arrest, with a heart rate of 150 beats per minute.⁵ Brian was administered intravenous medication but continued to decline where he went into cardiac arrest at 1:35am. Resuscitation was commenced and Brian was transferred to the ICU ward. Once in ICU, he also received antibiotics. An electrocardiogram was performed, revealing severe biventricular failure and thrombus in the right atrium. Further medication was administered but sadly the deterioration could not be reversed, and Brian passed at 11:37am that day.⁶

Identity of the deceased

10. On 5 July 2023, Brian Robert Dean, born 15 December 1978, was visually identified by his wife, Sandra Dean. Identity is not in dispute and requires no further investigation.

² 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.

³ Elevated heart rate and low blood pressure.

⁴ Statement of Dr Elleonor Lee.

⁵ The phase before or immediately after a full cardiac arrest. At this stage, his blood's Lactate level was 9.3 (reference range <2.0mol/l).

⁶ Medical deposition made by Dr Liam Christopher.

Medical cause of death

11. Senior Forensic Pathologist Dr Michael Burke from the Victorian Institute of Forensic Medicine (VIFM) conducted an autopsy on 10 July 2023 and provided me with a final written report of his findings on 28 March 2024.
12. The post-mortem examination showed no evidence of any injury which have contributed to or led to death by natural causes, but did reveal swollen and heavy oedematous lungs weighing about 1250 grams.⁷ There were bilateral large pleural effusions in keeping with recent heart failure, albeit without significant underlying primary heart disease.
13. Microscopic examination of the lungs showed internal bleeding, but without significant consolidation. Numerous large mononuclear cells and squamous metaplasia was seen within the mucosa of larger airways in keeping with the medical history of recent Influenza A infection.
14. The blood culture results showed streptococcus pyogenes⁸ rather than enterococcus.
15. Toxicological analysis of post-mortem samples identified the presence of the prescription medication known as Ondansetron, but did not identify the presence of any alcohol or other common drugs or poisons.
16. Dr Burke provided an opinion that the medical cause of death was 1(a) SEPSIS, 1(b) STREPTOCOCCUS PYOGENES (GROUP A STREPTOCOCCUS) SEPTICAEMIA COMPLICATING INFLUENZA A, and I accept his opinion.

FAMILY CONCERNS

17. Sandra communicated concerns she held about the care Brian had received during his first admission to the Hospital to the Court, first by telephone on 22 August 2023, then by on online form on 1 September 2023.
18. Her solicitors then followed these concerns up with a letter to me dated 11 December 2024, this correspondence contained submissions in support of an Application that I hold an inquest

⁷ The normal weight is approximately 400 grams.

⁸ Also known as 'Group A strep'.

in this matter. Those submissions were further supplemented in follow up correspondence dated 20 February 2025 and 7 March 2025.⁹

19. In summary the concerns raised included the following:

- a) Firstly, that Brian should have been differentially diagnosed with septic shock and then administered broad spectrum antibiotics in accordance with the Safer Care Victoria sepsis pathway;
- b) Secondly, that at the same time as administering broad spectrum antibiotics, a septic screen should have been arranged; and
- c) Thirdly, that Brian should not have been discharged home on the 2 July 2023 as his symptoms were not stable and that he would not have died if he was given the above treatment.

20. The submissions above were supported by two reports prepared by Associate Professor Luke Lawton¹⁰ and Professor Damon Eisen,¹¹ who provided the following opinions:

Associate Professor Lawton

- a) Given Brian's symptoms and medical history when he presented to Barwon Health, hospital staff should have treated Brian for presumed sepsis complicated by shock. This is because Brian was noted to have symptoms which met two criteria for suspected sepsis, being an elevated heart rate and temperature.
- b) Barwon Health should have assumed Brian was in septic shock and administered broad spectrum antibiotics in accordance with the safer Care Victoria sepsis pathway.
- c) Broad-spectrum antibiotics should have been administered shortly after 21:00 hours, at which time Brian had an elevated temperature (38.1°C) and heart rate (143 beats per minute), was hypotensive (systolic blood pressure of 84mmHg) and had both gastrointestinal and respiratory symptoms. Additionally, Brian's blood gas analysis was reported to show elevated lactate (2.3mmol/L).

⁹ I made a Form 28 Decision, refusing the Application on 11 August 2025.

¹⁰ Expert report prepared by Associate Professor Luke Lawton dated 24 November 2024.

¹¹ Expert report prepared by Professor Damon Eisen dated 6 February 2025.

- d) At the same time as administering broad-spectrum antibiotics, Barwon Health should have arranged a septic screen, including blood and urine cultures and a chest x-ray.
- e) There is a significant rate of bacterial co-infection in influenza cases and there was a clear imperative to treat Brian for presumed sepsis before the results of the respiratory viral and bacterial PCR test results were available.
- f) In consideration of Brian's condition overnight, in particular, his rising c-reactive protein, upward trending heartrate and temperature, Barwon Health should not have assessed Brian as being stable in the morning of 2 July 2023 and discharged him home

Professor Eisen

- a) The results of Brian's blood tests performed on 1 and 2 July 2023 show a picture of infection due to Influenza A with hyperlactatemia. Additionally, the results are indicative of bacterial infection developing up until to 2 July 2023 at 07:30 hours.
- b) On the balance of probabilities, Brian would not have died if intravenous flucloxacillin and gentamicin, with vancomycin added in the event of shock, had been administered shortly after 21:00 hours on 1 July 2023.
- c) Brian had evolving Streptococcus pyogenes superinfection of his influenza at 21:00 hours on 1 July 2023, however, it was not severe enough to cause blood stream infection or sepsis.
- d) At around 10:33 hours on 2 July 2023, Brian still had evolving Streptococcus pyogenes superinfection of his influenza and had not developed sepsis. It is likely that he would not have died if intravenous flucloxacillin and gentamicin had been administered prior to discharge.

FURTHER INVESTIGATIONS

- 21. As a result of receiving Sandra's concerns, I directed the independent practitioners in the Health and Medical Investigation Team of the Coroners Prevention Unit (CPU) to review the medical care Brian received in the days leading up to his passing.¹² The CPU is a team made

¹² The Coroners Prevention Unit (CPU) was established in 2008 to strengthen the prevention role of the coroner.

up of health professionals and personnel with experience in a range of areas including medicine, nursing, mental health, public health, family violence and other generalist non-clinical matters. The unit reviews the medical care and treatment in cases referred by the coroner, as well as assist with research related to public health and safety.

22. The CPU reviewed the available evidence in Brian's case, including:
- a) the medical deposition made by Dr Liam Christopher (ICU Resident at the Hospital);
 - b) medical records provided by Barwon Health and Torquay Medical Hub;
 - c) statements from Barwon Health;
 - d) the forensic pathologist's report and toxicology report;
 - e) the submissions and expert reports prepared by Associate Professor Lawton and Professor Eisen; and
 - f) considered Sandra's concerns, specifically that:
 - i. Brian was prematurely discharged from the Hospital on the morning of 2 July 2023, when he was still very unwell and only able to walk by leaning on the wall; and that
 - ii. if antibiotic coverage had been given during Brian's initial attendance at the Hospital on 1 July 2023, there may have been a different outcome.
23. The CPU explained, by way of background, that Invasive Group A Streptococcal (iGAS) infection is increasing in Victoria,¹³ and indeed around the world, although the reason for this is not known. The presence of iGAS is difficult to diagnosis as it both mimics viral infections and occasionally, can co-infect with viruses. Around the world, iGAS infection accounts for 500,000 deaths annually.¹⁴
24. In terms of Brian's discharge, the CPU observed that the medical records and statement of Brian's treating clinician do not indicate that he was experiencing low blood pressure after the initial presenting episode on the night of 1 July, and that nothing was recorded in the clinical notes to indicate that Brian's inability to walk unaided was known to medical staff. I wish to

¹³ <https://www.abc.net.au/news/2023-01-17/group-a-streptococcal-explainer-cases-in-australia/101854070>

¹⁴ <https://www.asavi.org.au/>

make it clear that this does not mean that either party is incorrect or in any way misrepresenting events here, but I consider it possible that the differences can be explained by understanding that Brian was keen to go home to convalesce, and so he may have ‘put on a brave face’ for doctors when describing his own condition to them. However, even if I am wrong about that hypothesis, with Brian’s subsequent passing, there is no longer any way to more fully explore that issue, and I will not do so, save to be explicit here that I make no adverse finding regarding the inconsistent histories.

25. In examining the factors that contributed to Brian’s passing, I note that one of the complexities in his case was that his treaters had identified a reasonable single cause (the Influenza A) for his multiple symptoms.
26. Before one jumps to a critical conclusion about this partial diagnosis, which was actually correct as far as it went, it must be borne in mind that unfortunately, at this stage there are no validated clinical decision-making tools to help doctors distinguish between a viral infection, such as Influenza A, from a viral infection with a co-existing serious bacterial infection such as iGAS. While existing sepsis protocols are designed to ensure doctors consider sepsis due to bacterial causes (and give antibiotics), they also capture sepsis due to viral causes (which do not require antibiotics and just requires supportive treatment).
27. The CPU noted Brian’s recorded rising CRP levels over time, but added that while the higher a C-reactive protein (CRP) level is within the blood of a patient with an infection, the more likely it is to be a bacterial infection, there is no cut-off that accurately predicts one kind of infection over the other. This is why CRP levels are not used in any early sepsis detection pathways. A rising CRP level is therefore just one part of the information that a clinician must consider. In her statement, Dr Lee lists a number of other data points that she considered in determining whether Brian was suitable for discharge without further investigations, including:
 - a) he was sitting up in bed, eating his breakfast, had mobilized to the bathroom, and told Dr Lee that overall he felt much better;
 - b) his heart rate was in the 80s (normal), his blood pressure was normal, and oxygen saturations were in the high 90s (normal);
 - c) he had had no further vomiting or diarrhoea, no abdominal pain, and had tolerated his breakfast;

- d) Brian’s blood cultures taken as part of a septic work-up on 1 July 2023 showed a negative microscopy and did not show the presence of a bacterial infection;
 - e) the improvement in his liver function, normal neutrophil count, improvement in his renal function; and
 - f) his overall appearance, reported improvement in symptoms, young age without comorbidities, and
 - g) his nearby residential location, containing with family support available therein.¹⁵
28. With regard to opportunities for prevention, the CPU explained to me that the most effective prevention strategy is vaccination, but that the Australian Strep A Vaccine Initiative started trials in 2022 and these trials will take some years to complete.¹⁶ Nonetheless, in light of Brian’s passing, I have added Victoria’s Department of Health to the distribution list of this Finding, to ensure they are kept up to date of developments relevant to the vaccine trials.
29. The CPU ultimately concluded that in the circumstances of Brian’s presentation, the treatment provided by Barwon Health was reasonable and appropriate with the information they had available to them at the time. I find that without the benefit of hindsight; it is not possible to determine that a serious bacterial co-infection could be reasonably diagnosed in the circumstances lead up to Brian’s discharge on 2 July 2023.
30. The Hospital’s own internal review processes, including its Clinical Incident Review, reached the same conclusion.¹⁷ I will however take this opportunity to endorse both of the recommendations arising from that review, namely that in future, reporting on cases such as this will be escalated to Safer Care Victoria, and that the Hospital attempt to develop its own risk based decision support tool until a statewide approach is developed. It is also pleasing to note that the first recommendation has already been implemented.

¹⁵ Statement of Dr Elleonor Lee.

¹⁶ For more information about the development of a Strep A vaccine is available online at: <https://www.asavi.org.au/our-work/vaccine-development/>

¹⁷ Statement of Dr Ajai Verma.

FINDINGS AND CONCLUSION

31. 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.¹⁸ 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.
32. Pursuant to section 67(1) of the *Coroners Act 2008* I make the following findings:
- a) the identity of the deceased was Brian Robert Dean, born 15 December 1978;
 - b) the death occurred on 3 July 2023 at University Hospital, Bellerine Street, Geelong, Victoria, 3220, from 1(a) SEPSIS, 1(b) STREPTOCOCCUS PYOGENES (GROUP A STREPTOCOCCUS) SEPTICAEMIA COMPLICATING INFLUENZA A; and
 - c) the death occurred in the circumstances described above.
33. Having considered all of the evidence, I am satisfied that Brian's medical care at the University Hospital in Geelong was appropriate and reasonable in these circumstances.

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

¹⁸ *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...'

Pursuant to section 73(1B) 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:

Sandra Dean, Senior Next of Kin (C/- Rachel Seager, Shine Lawyers)

Secretary to the Department of Health

Barwon Health (C/- Barbara de Brouwer, Minter Ellison)

Constable Candice Goulet, Coronial Investigator

Signature:



Coroner Simon McGregor

Date: 20 February 2026

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.
