

IN THE CORONERS COURT  
OF VICTORIA  
AT MELBOURNE

Court Reference: COR 2014 2990

**FINDING INTO DEATH WITHOUT INQUEST**

*Form 38 Rule 60(2)*

*Section 67 of the Coroners Act 2008 (Vic)*

I, JOHN OLLE, Coroner having investigated the death of JACK THOMAS IRVING  
without holding an inquest:

find that the identity of the deceased was JACK THOMAS IRVING

born on 9 March 1997

and the death occurred on 13 June 2014

at Railway line between Malvern and Caulfield Train Stations, VIC

from:

1(a) HEAD INJURY IN A TRAIN INCIDENT

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

1. Jack Irving was born on 9 March 1997 and was 17 years old at the time of his death. He was a school student who resided with his family at Beaumaris. He is survived by his father Timothy Irving, mother Cristina Maglio and brother Nicholas Irving.
2. A coronial brief was provided by Victoria Police to this Court, comprising statements obtained from family, witnesses, treating clinicians and investigating officers. The coronial brief also contains an incident report prepared Inspector Paul Downes on behalf of Metro Trains Melbourne Office of Safety Environment & Risk. I have drawn on all of this material as to the factual matters in this finding.

## BACKGROUND AND CIRCUMSTANCES

3. At approximately 7.00pm on 13 June 2014 Jack and his younger brother Nick travelled into the city and met up with three youth acquaintances at Melbourne Central. They wandered the city for approximately one hour, took photographs and walked to Flinders Street Station. Nick suggested to the group that they perform a 'guardian', which involves going into the drivers cab in a train.<sup>1</sup> He suggested that they attempt the 'guardian' at a different train station,<sup>2</sup> due to the presence of PSO's.<sup>3</sup>
  
4. At approximately 8.00pm the group boarded a train on the Frankston line and alighted at Armadale Station on platform 3.<sup>4</sup> They attempted to access the back driver's cab of the train they alighted, however could not open the door.<sup>5</sup> They waited approximately 15 minutes and successfully slid open the back drivers cab of a Flinders Street to Frankston Train TD 4507.<sup>6</sup> The youths were not authorised to enter the Driver's cab. The group sat on the floor of the cab and after the train passed Malvern station Jack opened the sliding door of the driver cab on the right hand side, facing the rear of the train. Jack was observed to then hold onto two bars either side of the door and lean out the open door backwards.<sup>7</sup> Jack pulled himself back into the cab and asked for someone to 'take a photo' before leaning out again. Within a few seconds of leaning back out of the driver cab Jack struck a ladder, associated with Signal F295, and fell onto the tracks.<sup>8</sup> Witnesses described that Jack's whole body was leaning out, except for his feet, when he was struck.<sup>9</sup> Approximately 10 seconds later the train stopped at Caulfield. The remaining group alighted the train and ran back to Jack, who was located on the tracks between Malvern and Caulfield railway stations next to signal post D296, which he had collided with after falling from the train.<sup>10</sup> Nick contacted emergency services, and the

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<sup>1</sup> Statement of Nicholas Irving, dated 4 July 2014, Coronial brief 3.

<sup>2</sup> Statement of Jose Riquelme-O'Rielly, dated 13 June 2014, Coronial brief 41.

<sup>3</sup> Statement of Hayley Badcock, dated 13 August 2014, Coronial brief 14.

<sup>4</sup> Ibid.

<sup>5</sup> Statement of Hayley Badcock, above n 3, 16.

<sup>6</sup> Statement of Train Driver Francesco Milazzo, dated 31 July 2014, Coronial brief 57.

<sup>7</sup> Statement of Jose Riquelme-O'Rielly, above n 2, 42.

<sup>8</sup> Statement of Nicholas Irving, above n 1, 4.

<sup>9</sup> Statement of Hayley Badcock, above n 3, 18.

<sup>10</sup> Metro Train Melbourne Office of Safety Environment & Risk report, Coronial brief 83.

group attended to Jack, wrapped a jacket around his head and moved him off the tracks slightly.<sup>11</sup> At approximately 9.10pm members of the Melbourne Fire Brigade attended the scene. Aganol breathing was detected and manual resuscitation was performed with a bag valve mask. Ambulance Victoria paramedics arrived shortly after 9.10pm. They secured Jack's neck with a cervical collar, IV access was gained to provide saline intravenously and he was intubated before being transported to the Alfred Hospital after a difficult extrication.<sup>12</sup>

5. Jack arrived at the Alfred Hospital at 10.33pm and was immediately seen by a pre-assembled trauma team. He lost cardiac output on arrival to hospital. A standard approach to resuscitation and critical care of a trauma patient was undertaken with primary issues addressed in priority. Jack's airway and breathing were assessed and a chest x-ray and cardiac ultrasound did not reveal chest trauma as the cause of his arrest. Cardiopulmonary resuscitation was commenced. Jack's head injury was assessed and it was determined that the injury was non-survivable and the cause for the arrest. A consensual decision was made to discontinue resuscitation and Jack passed away at 10.43pm.<sup>13</sup>

## **COLLISION INVESTIGATION**

6. Police attended the scene and seized a damaged camera. The camera had no memory card inside and a search of the immediate area did not locate the memory card.<sup>14</sup>
7. Train driver Francesco Milazzo was unaware of the incident at the time it occurred. Metro Trains Investigator Paul Downes reported that Driver Milazzo undertook a routine breath test which returned a negative result.<sup>15</sup> The prevailing maximum speed limit for trains travelling through the section where Jack was struck is 80km/h. Data indicates that the front passenger train was travelling at approximately 63km/h as it passed through the incident site, and that the rear carriage, adding the 140 metres of travel, passed the site at approximately 73km/h. CCTV footage shows that at 8.44pm on 13 June 2015 five youths entered the driver cab at

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<sup>11</sup> Statement of Nicholas Irving, dated 4 July 2014, 5.

<sup>12</sup> Statement of Stephen Mackenzie, dated 6 August 2014, Coronial brief 53.

<sup>13</sup> Statement of Dr Louis Mason, Emergency medicine registrar at Alfred Health, dated 9 November 2014, Coronial brief 55-6.

<sup>14</sup> Statement of Constable Nicholas Licari, dated 13 November 2014, Coronial brief 79-81.

<sup>15</sup> Metro Train Melbourne Office of Safety Environment & Risk report, above n 10, 136.

Armadale. The train departs Armadale at approximately 8.45 and the drivers cab door is closed. CCTV footage from Caulfield station indicates that the drivers cab door is closed as the train departs at 8.50pm.<sup>16</sup>

## **Drivers Cab Door**

8. There is an access door on either side of the driver's cab. The cab is separated from the carriage saloon by a bulkhead and there is an access door located in the centre of that bulkhead. All three doors are fitted with locks that open with a single key. The Comeng train entered service in the early 1980's. The Public Transport Corporation commenced Comeng train cab door lock modifications in 1997. The modifications were to increase cab security as well as allow the door to be unlocked from ground level, as when standing beside the train in a siding. Engineering Change documents indicate that an additional measure in the form of a pad bolt was fitted across the Comeng fleet of both Connex and National Express operated trains to make cab doors more secure in the event that the key locking mechanism failed whilst the train was running. This measure was intended to allow the train to remain in service prior to more permanent repair. The cab's sliding windows were also modified to improve cab security.
9. The function of the locks and spring loaded pad bolt is to restrict unauthorised entry into the cab whilst not preventing those inside from exiting the cab without the use of a key. Investigator Scott reported that it is possible that a locked external cab door can be opened without the appropriate key by applying pressure to the door handle and striking the door skin in a particular way that results in the latch rising above the catch point, thereby releasing the door. Whilst it is not a common occurrence, it has been observed by Train Drivers that the external cab door, despite being locked, may open during running due to vibration and carriage movement.<sup>17</sup>
10. Metro Trains Melbourne procedure L3-TSD-WOI-001 Version: 1 Effective from 17 December 2010 titled 'OPERATIONS Changing Ends' documents the process a Train Driver must perform when 'changing ends' or moving from one driving carriage to another. The

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<sup>16</sup> Metro Train Melbourne Office of Safety Environment & Risk report, above n 10, 137-139.

<sup>17</sup> Ibid 140-1.

stated purpose is to 'ensure non-driving cabs must be correctly isolated and secured to ensure safe operation of the train and safety of customers and staff'. Section 4.1 of that procedure instructs specifically in regard to the Comeng train type. Section 4.1.1 of the procedure applies to activity 'On arrival at the Terminal Station'. Subsection 4.1.1.15 states 'Visually inspect the rear of the train to ensure both marker lights are displaying RED and headlights have extinguished then lock and close both cab doors'. The train driver last inside the cab of 481M did not specifically recall his actions when changing ends on the train at Werribee. He was able to describe in some detail the requirements of the 'Changing Ends' procedure and added that it was his usual practice to comply with that procedure. The Train Driver added that he was aware that Comeng train doors do sometimes wiggle open during normal train running due to vibration and he was therefore very careful of ensuring that the Comeng cab doors are properly locked when exiting the cab.<sup>18</sup>

11. The drivers cab door is not connected to the saloon carriage door mechanism. There are controls and lights on the driver's console that indicate the status of the saloon carriage doors. There is no control or light on the drivers console that indicate whether any of the three driver cab doors are or have been opened or closed.<sup>19</sup>

## **POST-MORTEM INSPECTION AND REPORT**

12. A post-mortem inspection and report was undertaken by Dr Michael Burke, Senior Forensic Pathologist at the Victorian Institute of Forensic Medicine. Dr Burke reported that the post-mortem CT scan showed a large left occipital/parietal fracture with basal subarachnoid haemorrhage. There was a fractured pelvis and open fracture of the left tibia and fibula. The external examination showed findings in keeping with the clinical history.
13. Dr Burke determined that the cause of death is head injury in a train incident.

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<sup>18</sup> Metro Train Melbourne Office of Safety Environment & Risk report, above n 10, 142.

<sup>19</sup> Ibid 143.

## **FINDING**

14. I am satisfied, having considered all of the evidence before me, that no further investigation is required. I am satisfied that there were no suspicious circumstances.
15. I find that Driver Milazzo was unaware that the youths were in the rear driver cab and, accordingly, there was nothing that he could have done to prevent the incident. The speed of the train was within the prevailing track speed. There were no other environmental factors which may have caused or contributed to the incident.
16. The evidence satisfies me that the medical management and care provided by the Alfred Hospital was reasonable and appropriate in the circumstances, having regard to the complexities involved.
17. I find that Jack Thomas Irving died on 13 June 2014 and that the cause of his death is head injury in a train incident, in circumstances where he and four youths entered a rear driver cab of a train, while unauthorised to do so, and Jack exercised poor judgment by leaning out of the side driver cab door while the train was in motion, colliding with a ladder.

## **COMMENTS**

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

18. This tragic case highlights the dangers of youths participating in impulsive risk-taking behaviour, in circumstances where they are impressionable and do not adequately think about the consequences of their actions. I attach to this finding a report from Dr Bridie Scott-Parker, Research Fellow at the University of the Sunshine Coast, which provides a summary of factors involved with youth risk-taking behaviours.

## **RECOMMENDATIONS**

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

19. That the Metro Trains Melbourne General Manager Fleet implement a system to manage authorised access through 'smart' keys and locks yet to be fitted to railway infrastructure and rolling stock. I am informed that the 'smart' key is equipped with a microchip that requires

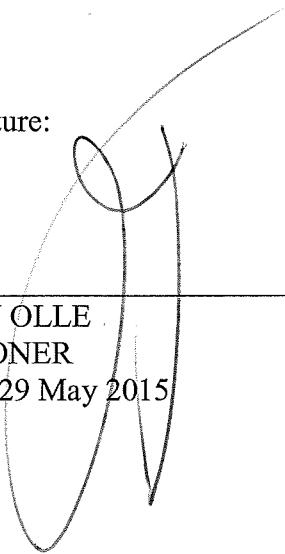
regular re-validation to ensure access security is maintained for authorised personnel only. I recommend that this proposal be entered as an action item in the MTM safety incident management system so that its progress may be followed to completion.

20. That the MTM General Manager Fleet consider the feasibility of installing a system that detects the status of Comeng train cab doors and transmits that status to a Train Driver at the driving end. This should include detection of internal and external doors of all non-driving motor carriages as well as the semi-permanent recording of that status in VICERS while the train is active.

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

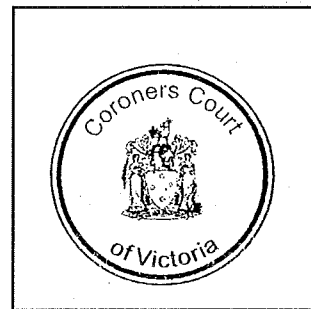
The family of Jack Irving;  
Interested Parties; and  
Investigating Member, Victoria Police.

Signature:



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JOHN OLLE  
CORONER  
Date: 29 May 2015



## Adolescent risk taking – who, what and why?

Adolescence and risk-taking behaviour often go hand-to-hand. Risk-taking behaviour can include smoking, drinking alcohol and using illicit drugs; unprotected sex; risky driving and passenger behaviour; tattoos and piercings; truancy, delinquency and vandalism; and train-surfing. Risk-taking behaviours are of concern because of the considerable potential for the adolescent to incur injury – both in the short- and the long-term, temporarily and permanently, and of minor or major severity including death.

There are a number of reasons why adolescents engage in risk-taking behaviour.

Firstly, while adolescents may *look* like an adult, and indeed they may *think* they are adults, they *do not* have an 'adult brain'. Two brain networks are important to consider in adolescent risk-taking. The socio-emotional network is highly attuned to stimuli that are social (eg., friends) and emotional (eg., rewards that feel good), and this network develops in early adolescence in response to pubertal hormone changes. The cognitive-control network looks after planning, self-regulation and self-control, and develops gradually into young adulthood. These two networks have important implications for adolescent risk-taking, particularly as the areas of the brain that process and respond to sensation seeking and rewards are fully developed before the areas of the brain that regulate behaviour<sup>1-4</sup>.

Secondly, the adolescent is carving out their *identity* – who they are, and by extension, who they are not, away from parents. Adolescents report tattoos express their self-identity, whilst adults view these tattoos as deviant<sup>5</sup>. Moreover, 'fitting in' to the friendship group is very important for the adolescent, and *peers* can be models of, and inspirations for a variety of risk-taking behaviours and attitudes<sup>6</sup> such as permanent body ink. Risk-taking behaviour may not be seen as risky; rather it may be seen as just a normal element of the peer group who provide a social meaning to the risk taking<sup>8</sup>. Simply having peers around increases the salience of the rewards associated with risk-taking behaviours<sup>1-4</sup>, and having a strong attachment to peers has been found to encourage risk-taking<sup>7</sup>.

Thirdly, parents are important. The *family structure* has been found to influence adolescent risk-taking, such that two-parent families, well-educated parents, and, relatedly, higher socioeconomic status, can be protective<sup>6-7</sup>. In contrast, single-parent families have been found to be associated with more spending money for the adolescent, which increases the risks of earlier sexual experiences for adolescents of both genders, and more sexual partners for boys in particular<sup>9</sup>. The *family processes*, that is, parenting behaviour, can also be protective. Parents model acceptable behaviours<sup>10</sup>, and adolescents who report that (a) their parents monitor their behaviours<sup>6,11</sup>, (b) they have a good parent-adolescent relationship<sup>7</sup>, and (c) they have good parent-adolescent communication<sup>6</sup>, report less risk-taking<sup>11</sup>.

Fourthly, the *school* environment is also important. Positive attitudes towards school are associated with less risk-taking. Interestingly, in cases of low parental attachment, school attachment can actually reduce risk-taking. Perhaps unsurprisingly, low parent attachment and low school attachment has been found to be associated with increased risk-taking<sup>7</sup>.



Fifthly the *individual themselves* is important. Some adolescents simply have a personality that is geared towards risk-taking, whilst other adolescents are attuned to avoiding risks; for example, adolescents with Conduct Disorder have been found to engage in a variety of risk-taking behaviours<sup>12</sup>. Adolescents with higher levels of religiosity are less likely to engage in risk-taking behaviour, whilst adolescents with higher levels of psychological distress (such as depression, anxiety, and suicidal ideation) and lower levels of self-esteem are more likely to engage in risk-taking behaviour<sup>6</sup>. Importantly, engaging in one risk-taking behaviour can lead to engagement in other risk-taking behaviours. For example, risky sexual behaviours has been found to be associated with delinquency<sup>6</sup> and drinking alcohol or using illicit drugs<sup>6,10</sup>. In addition, adolescents with tattoos and/or body piercings also have been found to engage in other risk-taking behaviours like illicit drug use and risky sexual behaviour<sup>13</sup>.

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