# IN THE CORONERS COURT OF VICTORIA AT MELBOURNE

Court Reference: COR 2012 4117

# FINDING INTO DEATH WITH INQUEST<sup>1</sup>

Form 37 Rule 60(1)
Section 67 of the Coroners Act 2008

# Inquest into the Death of: JACK GLEN IRVINE

Hearing Dates:

17, 18, 19, 20 & 21 February 2014, 28 & 29 April 2014.

Appearances:

Mr Richard Stanley of Counsel on behalf of the Irvine

family.

Ms Fiona Ellis of Counsel on behalf of the Victorian

Karting Association.

Ms Jocelyn Saint-Fryar of Counsel on behalf of Subway

Systems Australia.

Mr John Snowden, Corporate Counsel on behalf of

Monash Health.<sup>2</sup>

Counsel Assisting the Coroner:

Leading Senior Constable Tania Cristiano, Police Coronial

Support Unit

Findings of:

AUDREY JAMIESON, CORONER

Delivered on:

29 April 2016

Delivered At:

Coroners Court of Victoria

65 Kavanagh Street

Southbank 3006

<sup>&</sup>lt;sup>1</sup> The Finding does not purport to refer to all aspects of the evidence obtained in the course of the Investigation. The material relied upon included statements and documents tendered in evidence together with the Transcript of proceedings and submissions of legal representatives/Counsel. The absence of reference to any particular aspect of the evidence, either obtained through a witness or tendered in evidence does not infer that it has not been considered.

<sup>&</sup>lt;sup>2</sup> Mr Snowden sought and was granted leave to appear limited to when Dr Cheek was called to give evidence.

I, AUDREY JAMIESON, Coroner having investigated the death of JACK GLEN IRVINE

AND having held an inquest in relation to this death on 17 February 2014 at Melbourne find that the identity of the deceased was JACK GLEN IRVINE born on 28 July 1997 and the death occurred on 30 September 2012 at Monash Medical Centre, Clayton

- 1 (a) GLOBAL ISCHAEMIC BRAIN INJURY POST CARDIAC ARREST
- 1 (b) ANAPHYLAXİS

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

#### **SUMMARY**

1. On 30 September 2012, Jack Glen Irvine died from consequences of consuming a cookie containing nuts to which he was allergic. The cookie was provided to him at a sporting training camp despite prior forewarning to the camp organisers of his allergy and hence dietary requirements.

# BACKGROUND CIRCUMSTANCES

- 2. Jack Irvine<sup>3</sup> was 15 years old at the time of his death. He lived with his parents, Robert (Glen) and Julie Irvine and two siblings in Nicholson, Victoria.
- 3. Jack had a medical history of chronic asthma<sup>4</sup>, chronic eczema<sup>5</sup> and multiple allergies with confirmed highly positive reactions to peanut, walnut, hazel, cashew, macadamia, pistachio and positive reactions to almond and pecan. Between the ages of eight and ten years, he was provided with an EpiPen® in the event of severe allergic reaction/anaphylaxis but in his early years Jack's response to certain foods would manifest as bad skin irritations/eczema<sup>6</sup> and it was

<sup>&</sup>lt;sup>3</sup> The Irvine family requested that Jack Irvine be referred to only as Jack during the course of the Inquest. For consistency, I have, in most part, avoided formality and also referred to him only as Jack throughout the Finding.

<sup>&</sup>lt;sup>4</sup> Jack had an Asthma Management Plan dated 11 July 2001 — attached to Exhibit 39 — Statement of Julie Irvine dated 29 April 2014. Julie stated that she believed there were subsequent Asthma Action Plans developed for Jack but this was the only one she could locate — T @ p 756.

<sup>&</sup>lt;sup>5</sup> Julie Irvine stated that at some stage Jack was participating in an eczema clinic at the RCH where "we'd come in every month or every three months just to monitor how his condition was going." – T @ p 753.

<sup>&</sup>lt;sup>6</sup> Transcript (T) @ p 757.

his eczema that was giving him the most grief at the time.<sup>7</sup> In 2011 Jack commenced at Gippsland Grammar School. The school was provided with a copy of Jack's Action Plan for Anaphylaxis (Action Plan) and he always carried with him a 'bag' containing his Action Plan and an EpiPen®.<sup>8</sup> He also had an EpiPen® in his pencil case however, Jack had only ever experienced local allergic reactions around the face or mouth which responded to Phenergan and later Zyrtec<sup>9</sup> and he had never needed to use his auto injector himself or be administered it by another person.<sup>10</sup>

- 4. Since approximately 2009, Dr Sema Yilmaz had been Jack's regular general medical practitioner. In relation to the management of Jack's asthma, Dr Yilmaz stated that Jack had "frequent episodes when he was unstable." In December 2011, Jack required hospitalisation for treatment for an exacerbation of his asthma.
- 5. On 1 June 2012, Jack and Julie Irvine attended the rooms of Dr David Bannister, Paediatrician for reassessment of Jack's food allergies. Skin prick testing was carried out which "confirmed that he was an atopic boy with significant sensitization to peanut and a number of tree nuts as well as aeroallergens". <sup>12</sup> Jack was given an updated Action Plan and provided with reeducation by Dr Bannister's nurse on the indications for using his EpiPen®. <sup>13</sup>
- 6. Jack and his family were keen Go Karters and members of the Victorian Karting Association. In 2012 Mr Irvine took on the role of vice president and Julie the role of treasurer of the Bairnsdale Karting Club.<sup>14</sup>

# SURROUNDING CIRCUMSTANCES

7. On 24 September 2012, Jack and his father attended a Victorian Karting Association (VKA) Junior Development Camp at the Oakleigh Go Karting Club's track in Deals Road Clayton. Mr Irvine drove Mrs Irvine's car to the venue. In the glove box of her car was a copy of Jack's Action Plan and an EpiPen®. Jack also had his 'bag' with him. Mr Irvine had some business

<sup>&</sup>lt;sup>7</sup> T @ p 758.

<sup>8</sup> Exhibit 39 – Statement of Julie Irvine dated 29 April 2014, T @ p 752 – Julie Irvine stated that Jack's 'bag' also contained his asthma pumps, preventative medication, eczema creams and eczema tablets.

<sup>&</sup>lt;sup>9</sup> T @ p 106. T @ p 769.

<sup>&</sup>lt;sup>10</sup> T @ p 772.

<sup>11</sup> T @ p 81.

<sup>&</sup>lt;sup>12</sup> Exhibit 2 - Statement of Dr David Bannister dated 21 May 2013.

<sup>13</sup> ibid.

<sup>&</sup>lt;sup>14</sup> T @ p 761.

<sup>&</sup>lt;sup>15</sup> Exhibit 39 – Statement of Julie Irvine dated 29 April 2014.

- to attend to while in Melbourne and so it was his intention not to remain at the track for the full time but to come and go.<sup>16</sup>
- 8. On the morning of the camp Darryl Crowley<sup>17</sup> noticed that Jack was coughing quite considerably and asked Jack if he had the flu. Jack responded that he had just got it that day.<sup>18</sup>
- 9. The Junior Development Camp was to run over two days and was intended to benefit junior, rookie and cadet karters. There were thirty-nine participants.
- 10. Prior to attending the camp, Jack's mother completed the Participant Registration Form (the Registration Form) which specifically requested that registrants identify if they have any food allergies. Mrs Irvine circled "Yes" to the question and identified that Jack was allergic to nuts. 19 No Action Plan was sought by the VKA for children with identified allergies and none was provided by the Irvine family. Mrs Irvine faxed the Registration form to the VKA. 20
- 11. A letter from the VKA dated 18 September 2012, was subsequently received by the Irvines in response to the Registration Form and contained instructions for attending the camp including advice to the participants that they should not bring food of any kind as all food would be supplied by the camp organisers.<sup>21</sup>
- 12. Ms Pam Arnett (Ms Arnett), State Secretary of the VKA received and collated all the Registration Forms. She completed a spreadsheet which showed that of the 39 participants, seven, including Jack, had food issues, allergies or preferences. Jack was identified as being allergic to nuts.
- 13. On the first morning of the camp Mr David Murray, VKA president held a welcome meeting/morning briefing<sup>22</sup> for all the participants and parents wherein he informed them of the schedule for the 2 day camp. At the end of the meeting Mr Murray asked anyone with medications, allergies or concerns to approach Linda White, volunteer or Ms Arnett.<sup>23</sup>

<sup>&</sup>lt;sup>16</sup> T @ p 110.

Leading Senior Constable Crowley's son Leigh had attended primary school with Jack and hence Darryl Crowley had known the Irvine family for approximately 10 years – Exhibit 7 - Statement of Darryl Crowley dated 18 March 2013.

<sup>&</sup>lt;sup>18</sup> Exhibit 7 - Statement of Darryl Crowley dated 18 March 2013.

<sup>19</sup> Inquest Brief pp67-70.

<sup>&</sup>lt;sup>20</sup> T @ p 109.

<sup>&</sup>lt;sup>21</sup> T @ pp 109-110, Inquest Brief @ p 71.

<sup>&</sup>lt;sup>22</sup> Exhibit 8 - Statement of David Murray dated 29 January 2013.

<sup>&</sup>lt;sup>23</sup> Mr Irvine does not recall such an announcement being made at this meeting – T @ p 112. It was however acknowledged by Ms Arnett that no one came forward- Exhibit 32 – Statement of Pamela Arnett dated 9 January 2013. See also Exhibit 8 – Statement of David Murray dated 29 January 2013.

- 14. Also on the first day of the camp Ms Arnett was feeling unwell so she decided to get catering for the first day lunch.<sup>24</sup> A decision was made to order Subway.<sup>25</sup> Mr Adam Burke, President of the Oakleigh Karting Club accessed the Subway website to inform them about what to order. Mr Burke then telephoned through their order to the Subway at Centre Road, Clayton. Ms Arnett was listening in and contributing to the telephone ordering process, responding in the affirmative when the call taker at Subway asked through Mr Burke if they wanted cookies with the order.<sup>26</sup> The order included a platter of mixed cookies including one that was a "White Chip Macadamia Nut" cookie (macadamia cookie).<sup>27</sup> Mr Burke and Ms Arnett picked up the order from Subway at approximately 1.07pm. When they returned to the track lunch was laid out on tables in the Oakleigh club rooms.
- 15. At lunch, Jack selected a macadamia cookie from the platter of cookies on the table where the lunch had been set out for the participants, parents and volunteers. Mr Irvine asked Jack if the cookie contained nuts, to which Jack "snapped it open and virtually shoved it under Mr Irvine's (sic) nose and said, 'Dad it's got white chocolate'". <sup>28</sup> Jack ate a macadamia cookie while Mr Irvine watched on, both believing it to only contain white chocolate chips. <sup>29</sup> There was no information about the contents of the cookies on the table where they had been placed. There was no food set aside for the seven participants who had identified food issues, allergies or preferences on their Registration Forms, except for Subway sandwiches that had been identified as having vegetarian fillings. There was no one supervising the selection/collection of food and there was no marketing items identifying that the food was from Subway. <sup>30</sup>
- 16. After lunch, Jack and some of the other boys at the camp went for a walk around the track, a distance estimated to be 980 metres. On their return from the walk, Jack returned to his Go Kart and completed approximately ten laps. Mr Irvine informed Jack that he was now going to leave the track to go into the city to do some business. Jack and Mr Irvine then walked back up a hill

<sup>&</sup>lt;sup>24</sup> Exhibit 32 – Statement of Pamela Arnett dated 9 January 2013.

<sup>25</sup> Subway Systems Australia is a franchisor. Each franchisees within the system is an independent small business owner responsible for the day-to-day workings in their store but must adhere to the Systems specifications as communicated by Subway Systems Australia.

<sup>&</sup>lt;sup>26</sup> Exhibit 32 - Statement of Pamela Arnett dated 9 January 2013.

<sup>&</sup>lt;sup>27</sup> See Exhibit 31.

<sup>&</sup>lt;sup>28</sup> T @ p 139.

<sup>&</sup>lt;sup>29</sup> T@p 116.

<sup>30</sup> T@p114.

- to their trailer to retrieve Jack's asthma inhaler before Mr Irvine was to leave. At this stage there was still no apparent indication of an adverse reaction.<sup>31</sup>
- 17. Approximately 30 40 minutes after eating the macadamia cookie, Jack started to display symptoms similar to an asthma attack. He complained of shortness of breath and was wheezing. Jack shouted at Mr Irvine to get an ambulance. Mr Irvine administered Jack his Ventolin, however this was of no effect. Mr Crowley was attempting to assist. Jack's EpiPen® was not administered and remained in his father's car. 32 After approximately 10 minutes, Jack collapsed and became unresponsive. Cardio-pulmonary resuscitation (CPR) was commenced and an ambulance was requested. Attending paramedics continued with resuscitation attempts. A Mobile Intensive Care Ambulance (MICA) also attended. Jack was found to be in electromechanical dissociation. He was administered multiple doses of Adrenaline and intubated. After approximately 15-20 minutes a cardiac output was restored.
- 18. Jack was transferred by ambulance to the Monash Medical Centre (MMC), Clayton campus. He was subsequently admitted to the Intensive Care Unit (ICU). He was treated for severe anaphylactic shock along with exacerbation of asthma and aspiration pneumonia. Diagnostic imaging results were consistent with severe hypoxic brain injury from which it was determined that Jack could not recover. Jack's family indicated a desire for Jack to become an organ donor. Jack's liver, kidneys and heart for valves were successfully retrieved.
- 19. On 30 September 2012 at 4.30pm, Jack was declared deceased. The e-Medical Deposition Form was completed by Dr Gregg Miller, ICU Registrar who identified the possible cause of death as "Anaphylaxis causing cardiopulmonary arrest → Hypoxic brain injury".

#### **JURISDICTION**

20. Jack's death was *reportable* under section 4 of the *Coroners Act 2008*, because his body was located in Victoria, the death occurred in Victoria and his death was unexpected.

### PURPOSE OF A CORONIAL INVESTIGATION

21. The purpose of a coronial investigation is to independently investigate a reportable death to ascertain, if possible, the identity of the deceased person, the cause of death and the circumstances in which death occurred. The cause of death refers to the medical cause of death, incorporating where possible the mode or mechanism of death. For coronial purposes, the

<sup>31</sup> T @ pp 116-120.

<sup>32</sup> It is not apparent where Jack's 'bag' was at this time.

circumstances in which death occurred refers to the context or background and surrounding circumstances, but is confined to those circumstances sufficiently proximate and causally relevant to the death and not merely all circumstances which might form part of a narrative culminating in death.<sup>33</sup>

- 22. The broader purpose of coronial investigations is to contribute to the reduction of the number of preventable deaths through the findings of the investigation and the making of recommendations by coroners, generally referred to as the 'prevention' role.<sup>34</sup> Coroners are also empowered to report to the Attorney-General on a death; to comment on any matter connected with the death they have investigated, including matters of public health or safety and the administration of justice; and to make recommendations to any Minister or public statutory authority on any matter connected with the death, including public health or safety or the administration of justice. These are effectively the vehicles by which the prevention role may be advanced.
- 23. It is not the coroner's role to determine criminal or civil liability arising from the death under investigation. Nor is it the coroner's role to determine disciplinary matters.
- 24. Section 52(2) of the Act provides that it is mandatory for a coroner to hold an inquest into a death if the death or cause of death occurred in Victoria and a coroner suspects the death was as a result of homicide, or the deceased was, immediately before death, a person placed in custody or care, or the identity of the deceased is unknown.
- 25. Jack's identity was not in dispute, he was not a person placed in "custody or care" as defined by section 3 of the Act, and his death was not the result of a homicide. Therefore, it was not mandatory to conduct an inquest into the circumstances of his death. However, I exercised my discretion, pursuant to section 52(1) of the Act, to hold an inquest because I had identified matters of public health and safety relating to the management of children with food allergies.
- 26. This finding draws on the totality of the material, the product of the coronial investigation of Jack's death. That is, the Court records maintained during the coronial investigation, the inquest brief and the evidence obtained at the inquest.
- 27. In writing this finding, I do not purport to summarise all of the evidence, but refer to it only in such detail as appears warranted by its forensic significance and the interests of narrative clarity.

The "prevention" role is explicitly articulated in the Preamble and purposes of the Act.

<sup>&</sup>lt;sup>33</sup> This is the effect of the authorities- see for example Harmsworth v The State Coroner [1989] VR 989; Clancy v West (Unreported 17/08/1994, Supreme Court of Victoria, Harper J).

#### STANDARD OF PROOF

- 28. All coronial findings must be made based on proof of relevant facts on the balance of probabilities and, in determining this; I am guided by the principles enunciated in *Briginshaw* v *Briginshaw*.<sup>35</sup> These principles state that in deciding whether a matter is proven on the balance of probabilities, in considering the weight of the evidence, I should bear in mind:
  - a. the nature and consequence of the facts to be proved;
  - b. the seriousness of an allegation made;
  - c. the inherent unlikelihood of the occurrence alleged;
  - d. the gravity of the consequences flowing from an adverse finding; and
  - e. if the allegation involves conduct of a criminal nature, weight must be given to the presumption of innocence, and the Court should not be satisfied by inexact proofs, indefinite testimony or indirect inferences.
- 29. The effect of the authorities is that coroners should not make adverse findings against, or comments about, individuals unless the evidence provides a comfortable level of satisfaction that they caused or contributed to the death.

# CORONIAL INVESTIGATIONS

#### **Identity of the Deceased**

30. Jack's mother, Julie Anne Irvine completed a Statement of Identification on 30 September 2012. His identity was not in dispute and required no further investigation.

## Medical cause of Death

31. On 1 October 2012, Dr Melissa Baker, Forensic Pathologist at the Victorian Institute of Forensic Medicine performed an external examination of Jack and reviewed a post mortem CT scan. In preparation of her written report, Dr Baker also had available to her the Victorian Police Report of Death (Form 83), Jack's medical records and a Medical Deposition from Monash Health and his medical records from the Bairnsdale Medical Group. Dr Baker reported that on the basis of the material available to her and in the circumstances, a reasonable cause of death could be ascribed to global ischaemic brain injury post cardiac arrest secondary to or arising from anaphylaxis. Dr Baker also commented that as death occurred six days after the cardiac arrest, it would be difficult

<sup>35 (1938) 60</sup> CLR 336.

- if not impossible to confirm the underlying cause of the cardiac arrest. However from the history, Dr Baker opined that anaphylaxis was almost certainly the underlying cause.<sup>36</sup>
- 32. In relation to the post mortem testing for tryptase, a mediator released from mast cells and a marker for anaphylaxis, Dr Baker stated in her report that it appeared that a tryptase level had not been requested during Jack's admission to MMC. A tryptase level was requested post mortem on an ante mortem specimen that had been collected in the hospital at 5.30pm on 24 September 2012. That is, more than three hours after the onset of Jack's symptoms. The result identified a tryptase level of 4.3 micrograms per litre which Dr Baker stated was not significantly elevated. She also stated that in addition, haemodilution was likely to be a factor in artificially lowering the tryptase level and opined that the result did not therefore exclude a diagnosis of anaphylaxis.<sup>37</sup>

# Coroner's Investigation

33. Senior Constable Adrian Gordon was assigned as my Coroner's Investigator and prepared the Inquest brief on my behalf.<sup>38</sup>

## **INQUEST**

- 34. Directions Hearings were held on 19 August 2013 and 9 October 2013.
- 35. An Inquest was conducted on 17 21 February 2014, 28 and 29 April 2014.
- 36. Leading Senior Constable Tania Cristiano of the Police Coronial Support Unit acted as counsel assist. The issues identified as requiring further exploration through the hearing of evidence included:
  - a. The registration process, including the collating of information adopted by the Victorian Karting Association;
  - b. First aid and anaphylaxis training of parent volunteers and coordinators of the camp;
  - c. General issues around the signs and symptoms of anaphylaxis and education about same.

<sup>&</sup>lt;sup>36</sup> Exhibit 1 -- Report of Dr Melissa Baker, Forensic Pathologist dated 12 December 2012, as conveyed and read to the Court by Dr Noel Woodford, Forensic Pathologist.

<sup>&</sup>lt;sup>37</sup> Exhibit 1.

<sup>&</sup>lt;sup>38</sup> A coroner's investigator is a member of the police force 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 takes instruction directly from a coroner and carries out the role subject to the direction of a coroner.

# Apology<sup>39</sup>

37. At the outset of the Inquest, Ms Ellis, on behalf of the VKA conveyed its condolences to Jack's family and friends. The VKA apologised to Jack's family, conceding that there were no written policies or procedures in place to guide the VKA, the executive or the volunteers about how to safely conduct the camp where there were registered participants with a known allergy. Ms Ellis further stated:

...there was no shared understanding among the VKA volunteers present at the camp of what risk management processes were to be put in place in this circumstance. The process that was in place in 2012 for the purchase of food items and the provision of food to registrants with a food allergy was clearly inadequate. The VKA is currently engaged with Australian Camps Association for the purpose of risk management evaluation.<sup>40</sup>

# **Evidence at Inquest**

- 38. Viva voce evidence was obtained from the following witnesses at Inquest:
  - a. Dr Noel Woodford, Forensic Pathologist, Victorian Institute of Forensic Medicine (VIFM);
  - b. Dr David Bannister, Paediatrician
  - c. Dr Sema Yilmaz
  - d. Robert (Glen) Irvine
  - e. Darryl Crowley
  - f. David Murray<sup>41</sup>
  - g. Russell White<sup>42</sup>
  - h. Martin Dix
  - i. Andrew Gent

<sup>&</sup>lt;sup>39</sup> See section 70 Coroners Act 2008.

<sup>40</sup> Transcript (T) @ p 5.

<sup>&</sup>lt;sup>41</sup> A successful application was made pursuant to section 57 of the Coroners Act 2008 for David Frank Murray to be granted a certificate pursuant to section 57(1)(b) of the Act. The certificate enables the witness to give evidence at the Inquest without the evidence being used in any proceeding against him.

<sup>&</sup>lt;sup>42</sup> A successful application was made pursuant to section 57 of the *Coroners Act 2008* for Russell Peter White to be granted a certificate pursuant to section 57(1)(b) of the Act. The certificate enables the witness to give evidence at the Inquest without the evidence being used in any proceeding against him.

- j. Ieng Taing
- k. Darryl Mossop
- 1. Professor Jo Douglass, Independent Expert
- m. Maria Said, Allergy and Anaphylaxis Australia
- n. Pamela Arnett, State Secretary of the VKA and National Secretary of the Australian Karting Association Inc.<sup>43</sup>
- o. Fiona Jones, Department of Health
- p. Julie Irvine

## The cause of death

39. Dr Noel Woodford, Forensic Pathologist from VIFM appeared in place of Dr Baker who was unable to attend. Dr Baker's report was tendered into evidence through Dr Woodford and he indicated that he was happy to speak to the report. There were no issues arising from the content of Dr Baker's report or from Dr Woodford's evidence who, for all intents and purposes accepted the comments, remarks and opinions of Dr Baker.<sup>44</sup>

## Anaphylaxis training – Jack and his family

- 40. The absence of any previous anaphylactic response<sup>45</sup> supports the evidence of Mr and Mrs Irvine that Jack was vigilant about avoiding exposure to nuts and that his family had educated, monitored and enforced his avoidance of nuts from his diet and contact. Dr Yilmaz agreed.<sup>46</sup> As early as the age of six years, an Action Plan was formulated by the Royal Children's Hospital after skin tests demonstrated a high degree of allergy to tree nuts and Jack and his family received instruction on the use of the EpiPen®.
- 41. There were, however, a number of elements to the Irvine family's knowledge about anaphylaxis that were lacking according to Mrs Irvine. In her evidence she said that in all the years of taking Jack to doctors about his eczema, asthma and allergies, she had never received any education from these doctors about three fundamental issues that she was now only aware of as a result of

<sup>&</sup>lt;sup>43</sup> A successful application was made pursuant to section 57 of the *Coroners Act 2008* for Pamela Joy Arnett to be granted a certificate pursuant to section 57(1)(b) of the Act. The certificate enables the witness to give evidence at the Inquest without the evidence being used in any proceeding against her.

<sup>&</sup>lt;sup>44</sup> T @ pp 15-23.

<sup>&</sup>lt;sup>45</sup> T@p85.

<sup>&</sup>lt;sup>46</sup> T@p85.

Jack's death. Mrs Irvine said that she had never been informed about the difficulty of distinguishing between asthma and anaphylaxis or the relationship between the two conditions. In addition, she had never received any education or information that there could be a delay of onset of symptoms after exposure to an allergen or that a severe anaphylactic reaction could occur without any localised symptomatology. Mr Irvine reiterated his concerns about the lack of education/information the family had in this regard.<sup>47</sup>

#### Identification of children at risk

- 42. There was no dispute that VKA had received Jack's Registration Form and that it had appropriately informed them of his allergy to nuts. There was no dispute that Jack's allergy information and hence dietary requirements had been collated and entered onto a spreadsheet by Ms Arnett.
- 43. There was, however, inconsistent evidence about what other measures had been taken for the purposes of identifying children at risk and/or with special needs. In particular, there was a lack of clear and cogent evidence about what, if any request was made by Ms Arnett or Mr Murray at the Welcome Meeting/briefing on the first day of the camp. At approximately 9.00am, a meeting was held to welcome the participants. Ms Arnett addressed the audience of registrants and their parents/guardians and believes that she announced at the conclusion of the meeting at approximately 9.30am, that any participant with any medication requirements should come and see Ms Linda White or herself. Mr Murray believed that Ms Arnett may have asked him to ask the children to bring forward any medications they required. Mr Crowley's recollection was that it was Mr Murray that addressed the participants and parents and it was the VKA vice president Russell White who asked for participants with illnesses or allergies to come forward after the meeting/debriefing. What does appear to be consistent in the evidence is that no child or parent came forward with any such information including Mr Irvine.

# Jack's signs and symptoms of anaphylaxis

44. Relying on the evidence of Dr Bannister in particular, Mr Stanley in his final submission to the Court said that the circumstances surrounding Jack's anaphylactic response were the "perfect

<sup>&</sup>lt;sup>47</sup> See below on page 22 of this Finding.

<sup>&</sup>lt;sup>48</sup> T@p176.

storm"<sup>49</sup> that is, all the elements were present to create a severe reaction. These elements included:

- Jack's reaction to macadamia nuts being in the 95 percentile;
- Jack's consumption of macadamia nut with a comorbidity of asthma;
- Exercise proximate to consumption of the allergen which acts as an accelerant to the ingestion of the allergen<sup>50</sup>; and
- The effect that heat has on the protein in the nut during the cooking of the cookie making it "more allergenic"<sup>51</sup>.
- 45. Dr Bannister stated that he would have thought that the probability was "extremely high" that it was the consumption of the macadamia cookie that led to Jack's anaphylactic reaction.<sup>52</sup>
- 46. Up to 40 minutes may have elapsed from the time Jack selected and likely consumed the macadamia nut cookie before he experienced the onset of symptoms. He complained of shortness of breath and was wheezy. These were recognisable to Mr Irvine as symptoms of Jack's asthma. They were not recognisable to Mr Irvine as symptoms of anaphylaxis, as Jack had never had an anaphylactic reaction before and the symptoms of allergic reaction that Mr Irvine had previously witnessed included swelling and tingling lips, which were not present at the time of the onset of Jack's symptoms. Mr Irvine did not, at the time, have any recall of Jack's Anaphylaxis Action Plan which clearly references respiratory/asthma like symptoms which warrants the administration of the EpiPen®. Furthermore, there was nothing obvious for Mr Irvine to make any association between something Jack may have consumed or had consumed sometime earlier and so he tried unsuccessfully to treat Jack for asthma by attempting to administer Ventolin through his inhaler. Mr Irvine did not possess the necessary information to formulate the decision to retrieve from his car and/or administer the EpiPen® to Jack. At all times during this critical period, Mr Irvine believed that Jack was having a severe asthma attack. Anaphylaxis was not in the forefront of his thinking until the paramedic specifically asked the question.

<sup>&</sup>lt;sup>49</sup> T @ p 793

<sup>50</sup> T@p47.

<sup>51</sup> T@p45.

<sup>&</sup>lt;sup>52</sup> T @ p 48.

# Anaphylaxis and Asthma

47. In his viva voce evidence, Dr Bannister explained that there are two major components to having anaphylaxis. The first component is related to the effects on the respiratory system and the second to the effects on the cardiovascular system. In respect of the respiratory system, it too has two components. The effects can be either to the large airways, demonstrable by for example, swelling around the voice box resulting in a hoarse voice or difficulty with breathing and/or stridor; or effect the lower airways. If the person already has asthma, according to Dr Bannister:

...you're much more likely for your lower airways which are already unstable, to be triggered off so that you will then become short of breath, you'll be coughing and you'll wheeze.<sup>53</sup>

- 48. Dr Bannister said that the symptoms exhibited by someone whose lower airways have been triggered by an anaphylactic reaction are identical to the symptoms of asthma<sup>54</sup> and that the coexistence of asthma and anaphylaxis makes the anaphylaxis worse. He said *that is one of the high risk factors for people with food allergy is if they have got unstable asthma*.<sup>55</sup>
- 49. Professor Douglass agreed that breathing difficulties are accepted as a symptom of anaphylaxis<sup>56</sup> and that asthma is a major risk factor for severe anaphylaxis and anaphylaxis death.<sup>57</sup> She said that two-thirds of people who died from anaphylaxis also had asthma.<sup>58</sup> Both Professor Douglass and Dr Bannister agreed that if an EpiPen® was available for the person with coexistent conditions, it should be administered if breathing difficulties occurred. Professor Douglass said that if it is found to be a severe asthmatic attack and not anaphylaxis, the adrenalin in the EpiPen® will do the person no harm.<sup>59</sup>

## The delay in onset of allergic response

50. According to Ms Maria Said from Allergy and Anaphylaxis Australia, it is widely known that there can be a delay of between twenty minutes and two hours before the onset of symptoms

<sup>&</sup>lt;sup>53</sup> T @ pp 34-35.

<sup>&</sup>lt;sup>54</sup> T @ p 49.

<sup>&</sup>lt;sup>55</sup> T @ p 67.

<sup>&</sup>lt;sup>56</sup> T @ p 480.

<sup>&</sup>lt;sup>57</sup> T@p 492-493.

<sup>&</sup>lt;sup>58</sup> ·T @ p 532.

<sup>&</sup>lt;sup>59</sup> T@p 480.

- after exposure to an allergen. Ms Said indicated that this information is clearly provided on the organisation's website.<sup>60</sup>
- 51. Professor Douglass said that it was surprising but not unusual for there to be a delay in the onset of symptomatology and surprising but not unusual for there to be a lack of a localised response from contact/ingestion of the allergen.

## Jack's state of wellness

52. Professor Douglass stated that reports about anaphylaxis death often point to issues of generalised "unwellness", or a cold or a respiratory tract infection, as being risk factors for severe anaphylaxis. 61 Dr Bannister also stated that factors that can add to the severity of a reaction can include the state of the person's body at the time of ingestion.

#### Avoidance and education

- 53. A nut free environment is not recommended as a risk management strategy by either Professor Douglass<sup>62</sup> or Dr Bannister.<sup>63</sup> According to Professor Douglass a nut free environment is difficult to enforce and "they may engender a sense of unwarranted security with regard to food content."
- 54. The treatment of Jack's food allergy was avoidance strategies and education because according to Dr Bannister, there were no desensitisation programs available for foods. <sup>65</sup> Dr Bannister says avoidance of allergens is linked to education. <sup>66</sup> Education comes in different forms and includes the provision of patient information material on 'what to avoid' such as the Australasian Society of Clinical Immunology and Allergy (ASCIA) material on peanut and tree nut allergy a document that was familiar to Mrs Irvine. <sup>67</sup> But perhaps the most significant informative and educative document is the individualised Action Plan for Anaphylaxis (the Action Plan), <sup>68</sup> the

<sup>&</sup>lt;sup>60</sup> T @ p 553.

<sup>61</sup> T @ p 492.

<sup>&</sup>lt;sup>62</sup> Exhibit 23 – Statement of Professor Jo Anne Douglass dated 1 December 2013.

<sup>63</sup> T@n 63.

<sup>&</sup>lt;sup>64</sup> Exhibit 23 - Statement of Professor Jo Anne Douglass dated 1 December 2013.

<sup>65</sup> Exhibit 2 - Statement of Dr David Bannister dated 21 May 2013.

<sup>66</sup> T@p51.

<sup>&</sup>lt;sup>67</sup> T @ p 754.

<sup>68</sup> Jack's Action Plan dated 1 June 2012 is attached to Exhibit 2 – Statement of Dr David Bannister dated 21 May 2013 and is in the Inquest Brief @ 1948

proforma of which is also produced by ASCIA.<sup>69</sup> Dr Bannister stated that the purpose of the Action Plan is:

...an education document documenting the confirmed allergens and also what to do in case of accidental exposure and treatment and it's divided into mild to moderate allergic reactions and severe allergic reaction which is anaphylaxis.<sup>70</sup>

- 55. The provision of the Action Plan assists anyone involved in the care or supervision of the child to have an understanding of what has to be avoided and at the same time what should be done in the event of accidental exposure what they should look out for and how they should treat the symptoms.<sup>71</sup>
- 56. In addition to the educative value of written material, educating the individual on how to practically avoid allergens is critical to their safety. In this regard, Dr Bannister advises that a person with a food allergy should be constantly questioning the content of food items and that the item should not be eaten if the person is unsure about its contents. The Bannister also advocates for smelling and tasting a food item before ingesting it when provenance is not clear. Smelling may provide clues to the ingredients and/or tasting the food by contact with the tongue then waiting to ascertain if there is a local reaction such as to the tongue, lips, roof of mouth or throat is a practical risk minimisation strategy. Professor Douglass agreed with the smelling and tasting or "touch test" approach for risk minimisation, but advocated the use of the lips over the tongue. The Yilmaz said she would be wary to recommend this strategy and suggested it should only be done if the patient had antihistamines to hand.
- 57. Avoidance and education of the adolescent with a food allergy presents different challenges to parents, carers and medical practitioners in the overall task of successfully communicating and feeling confident about the adolescent's capacity to implement risk reduction strategies. Professor Douglass stated that deaths from anaphylaxis are most likely to occur in the 12-25 year-old (adolescent) age-group. She said:

<sup>69</sup> Exhibit 25.

<sup>&</sup>lt;sup>70</sup> T @ p31-32.

<sup>&</sup>lt;sup>71</sup> T @ p32.

<sup>&</sup>lt;sup>72</sup> T @ p70.

<sup>&</sup>lt;sup>73</sup> T @ p 528.

<sup>&</sup>lt;sup>74</sup> T @ p528.

<sup>75</sup> T @ p92.

This adolescent transition from dependence to independence, presents heightened risks and consequently requires specific medical management, education and supportive environment.<sup>76</sup>

58. Avoidance and education is minimised if too many presumptions are made. According to Ms Said there is no room for a parent to make presumptions. She stated:

I think, as a parent of a child with food allergy, you know, a presumption isn't good enough. I think it's important to make sure. Even if you get labelled as being, you know, overbearing or the painful parent, or whatever, I think, yes, surety is better than presumption.<sup>77</sup>

59. The exact circumstances surrounding Jack's selection of the cookie and the extent of his questioning about its contents is equivocal. There was no other evidence than his father's that Jack had asked or spoken to any other child or adult about the contents of the cookies. I do, however, accept that there was no labelling on or next to the platter of cookies that would identify the presence of nuts. I also accept that Jack did break the cookie in half to demonstrate to his father that it only contained white chocolate chips and although it is also equivocal whether he specifically implemented the risk reduction strategy of smell and taste, it is unequivocal that he did not immediately experience any reaction either of a local or a systemic nature.

## The role of Subway

- 60. To enable each franchisee to run a Subway restaurant, Subway Systems Australia provide a number of guidelines, tools and recommendations to the franchisees as well as setting some mandatory requirements. Each restaurant must comply with food safety and hygiene codes and legislation relevant to their particular state such as the *Victorian Food Act*.<sup>78</sup>
- 61. The Subway Nutritional Guide and Allergen Guide are available on line and on request in the retail outlet. It is also titled "Australia Ingredient Information for People with Food Allergies and Sensitivities" (the Allergen Guide). It identifies that the "White Chip Macadamia Nut" cookie indeed contains tree nut.

<sup>&</sup>lt;sup>76</sup> Exhibit 23 - Statement of Professor Jo Anne Douglass dated 1 December 2013.

<sup>&</sup>lt;sup>77</sup> T @ p 570.

<sup>&</sup>lt;sup>78</sup> Submissions made by Ms Saint-Fryar – T @ pp 809-818.

- 62. When Mr Burke accessed the Subway website he did not cross reference his selected items with the Allergen Guide. There is no evidence however that Mr Burke was aware that there were participants at the camp with dietary requirements/limitations/allergies. Ms Arnett, fully cognisant about the dietary requirements/limitations/allergies of the children participants did not prompt Mr Burke to make any such enquiries with Subway. When Mr Burke telephoned the Subway Clayton restaurant he told the call taker, Ms Taing that he had looked at their website to choose his order. Ms Taing specifically asked if there were any vegetarians being catered for which led to an order for vegetarian "subs". Ms Taing also offered information that the "subs" were not gluten free. A chicken strip salad bowl with no-onions and no salt and pepper also formed part of the order. Mr Burke was not specifically asked by Ms Taing if there were any dietary requirements.
- 63. I was told and accept that the cookies containing nuts are displayed on a separate shelf within the Subway stores. I was also told that the Allergen Guide is also available/displayed within the store.

# Food Standards and Labelling requirements

- 64. The Australia New Zealand Food Standards Code ("the Code")<sup>80</sup> comprises of a series of individual food standards, which are developed and administered by Food Standards Australia New Zealand (FSANZ). The Commonwealth and state governments jointly agree upon these national food standards. The standards are legislative instruments under the *Legislative Instruments Act 2003*. Enforcement of the Code is the responsibility of state and territory departments and food agencies. In Victoria, the Department of Health<sup>81</sup> has general oversight of the administration of the *Food Act 1984* (Vic). Local councils and the Department of Health administer the Act.<sup>82</sup>
- 65. Under the *Food Act 1984*, all food business owners (and community groups who sell food) are legally responsible to ensure that food sold or prepared for sale is safe to eat. The Act also requires food premises to comply with the Code.

<sup>&</sup>lt;sup>79</sup> Exhibit 14 – Statement of Ieng Taing dated 17 March 2013; T @ pp 364,382,398; Exhibit 15 (p 76 Inquest Brief).

<sup>80</sup> http://www.foodstandards.gov.au/code/Pages/default.aspx

<sup>81</sup> Since the Inquest the Department of Health has been renamed to the Department of Health and Human Services.

<sup>82</sup> http://www.health.vic.gov.au/foodsafety/regulatory\_info/legislation.htm

- 66. Under section 4B of the Food Act 1984, "food business" means a business, enterprise or activity (other than a business, enterprise or activity that is primary food production) that involves:
  - (a) the handling of food intended for sale; or
  - (b) the sale of food, regardless of whether the business, enterprise or activity concerned is of a commercial, charitable or community nature or whether it involves the handling or sale of food on one occasion only.
- 67. Under Standard 1.2.1 Application of Labelling and Other Information Requirements, "food for catering purposes" includes food supplied to catering establishments, restaurants, canteens, schools, hospitals, and institutions where food is prepared or offered for immediate consumption.
- 68. The Food Industry Guide to Allergen Management and Labelling (last revised 2007) is published by the Australian Food and Grocery Council and provides guidance on the Code. With respect to food labelling, page 9 states:

Allergen labelling is required on all foods subject to the general labelling requirements of the Code under Chapter 1. The Code is available on the FSANZ website and is subject to change over time. Manufacturers should regularly check the Code for the latest allergen labelling requirements, especially when developing or reprinting labels.

Standard 1.2.1 of the Code provides exemptions to labelling in particular circumstances, taking into account the consumer's access to information from the person who makes the food and their ability to specify ingredients, as well as limitations imposed by the size of packaging. Exemptions are also provided where there are lower expectations for labelling, such as fund raising events.

Where the food is for retail or catering purposes and is exempt from labelling, the required allergen information must either be displayed on, or in connection with the display of the food, or provided to the purchaser upon request.

- 69. In March 2008, a consultation paper was released by FSANZ. Issue three related to "food exempt from bearing a label" which recognised that many allergic reactions occurred outside the home where unlabelled food is consumed.
- 70. A final report was released in December 2010. FSANZ reviewed the adequacy of both regulatory arrangements and non-regulatory measures. Their review included a consultative process with key stakeholders. Seven of the 10 stakeholders were satisfied with the current

arrangements. It was FSANZ's view that the current regulatory measures were adequate to manage food allergy risks for foods exempt from carrying a label. However, FSANZ recognised the need for a more effective means of communicating regulatory obligations and implementing initiatives to enhance the allergen management knowledge of workers in the food service industry.

# Victorian Department of Health initiatives

71. Allergen Working Party: In 2006, the former Minister for Health the Hon Bronwyn Pike requested that the Department of Human Services establish a Working Party to examine the issues and provide recommendations for action in response to community concern about the incidence of allergy and anaphylaxis and the associated adverse outcomes. The Working Party met for the first time in September 2006 with Terms of Reference being:

To examine and report to the Minister for Health on issues related to the diagnosis, prevention and management of allergic disorders (including anaphylactic reactions) in children and adults in the Victorian community.

- 72. Page 14 of the report states, "Approximately 2 percent of teenagers have food allergies, yet they account for more than half the deaths from food related anaphylaxis. Risk taking is common in this group (Sampson et al 2006)."
- 73. Page 16 of the report states, "... most of the severe and fatal anaphylactic cases would not have been averted by the sophisticated labelling messages on packaged food. They mostly occurred in a social setting and where questions about the labelling of a packaged food were not a factor."
- 74. The Department of Health produced the Food Allergen and Intolerance Information Kit for Food Businesses in March 2009. Page eight of the publication states that "where food is consumed on the premises (such as in a restaurant), the information must be provided to the customer upon request, either verbally or in writing."
- 75. The Department of Health also regularly prepares and disseminates food bulletins to Council Environmental Health Officers on matters pertaining to food safety and food law.<sup>83</sup>
- 76. The Department of Human Services funded a pilot study to educate hospitality staff on food allergens, forming a working party and releasing a final report in April 2009.<sup>84</sup> Surveys were

<sup>83</sup> T @ p 725.

administered pre and post the intervention (DHS food allergy information kit / DHS-provided training) and knowledge worsened in some categories.

77. In her *viva voce* evidence, Ms Fiona Jones from the Department of Health stated that the Department plays a guidance role in relation to the application of the *Food Act*, and it is the local or municipal councils that are primarily responsible for administering and enforcing the *Food Act*. The councils are regarded as a registration authority and thus register the food premises within their municipality. They employ environmental health officers to enforce the Food Act through means such as routine inspection and checking for compliance with all aspects of the Food Standards Code. The City Of Kingston was the relevant council for the Oakleigh Go Karting Racing Club Inc. and the club was registered under the *Food Act* as a Class 2 food premises at Simpson Road, Clayton South. The registration of the premises did not however extend to other community groups that may use the premises for their events; they required their own separate registration as a temporary food premises. From what Ms Jones was able to ascertain from the City of Kingston, the Oakleigh Club's registration did not extend to the VKA's use of the facility and the VKA did not have its own registration for the Junior Development Camp. Ms Jones said that "the onus is on somebody who is starting a new endeavour to find out what laws apply to them."

78. In relation to the labelling of foods, Ms Jones referred to having heard in the course of the Inquest a description of the platter of cookies as being a plastic container with a lid over the top. She opined that they would probably have met the definition of packaged food which under the Code requires some declaration of content on a label, unless it is exempt from a label, such as when the food is for catering. If it is not required to bear a label then the "seller should either declare it on or in connection with the display of the food or declare it to the purchaser upon request." According to Ms Jones, the Subway store was doing what it was required to under the Food Standards Code and the Food Act. 89

<sup>84</sup> http://www.health.vic.gov.au/foodsafety/bus/allergen.htm

<sup>85</sup> T @ p 728.

<sup>&</sup>lt;sup>86</sup> T@p 733.

<sup>87</sup> T@p745.

<sup>88</sup> T@pp 738-739.

<sup>89</sup> T@p 740.

## Anaphylaxis and first aid training - camp volunteers

- 79. The Australian Karting Association's (AKA) 2012 Karting Manual<sup>90</sup> states at paragraph 3.25 that "qualified first aid personnel must be in attendance at all official AKA race meetings". The VKA camp was reliant on two Level 2 first aiders, being Ms Arnett and Mr Adam Burke. Mr Crowley held a Level 1 first aid certificate. There was a period of time on 24 September 2012 that only Mr Crowley was at the track, but at the time of Jack's collapse, all qualified first aiders were present at the track.
- 80. The Australian Karting Association's 2012 Karting Manual states at paragraph 3.26 that "the insurer and the AKA recommend that an ambulance is in attendance at all official AKA race meetings (ie. St. John Ambulance or equivalent, according to local law.)"

## Review by the VKA

81. Approximately 12 months after the death of Jack, the VKA approached the Australian Camps Association (ACA) with the request for assistance with the development of risk management policies and procedures in respect of the junior overnight development camps. On the recommendation of the ACA Mr Tony Carden, independent risk management advisor was subsequently appointed by the VKA. 91 Mr Carden subsequently provided a risk management proposal to the VKA but as of April 2014 the VKA Executive had not met to discuss the same. In the interim Ms Arnett advised that:

..the VKA has made the decision to no longer hold junior overnight karting camps. What this means to the process underway with Mr Carden is uncertain and to some extent may involve AKA Limited.<sup>92</sup>

# Mr Irvine's discussion with me following the close of the evidence

82. Mr Irvine's distress about the circumstances of Jack's death was palpable. He articulated how he felt that he had failed Jack when he promised Jack he would not let him die. He said he should have known to retrieve the EpiPen® from his car and give it to Jack, but he did not. He did not recognise Jack's symptoms as anaphylaxis because when previously exposed to nuts Jack's "lips would go, his tongue would go". Furthermore, Mr Irvine said that he did not know

<sup>90</sup> Exhibit 40

<sup>91</sup> Exhibit 34 - Statement of Pamela Arnett dated 24 April 2014.

<sup>92</sup> Exhibit 34 - Statement of Pamela Arnett dated 24 April 2014, T @ p 127.

that an anaphylactic reaction could happen "hours later" and had he known about these things Jack "would probably be still with us". <sup>93</sup> In explaining how it came to be that he had watched Jack eat the macadamia cookie, Mr Irvine said that he was trying to give his 15 year old son "enough rope because he is growing up and because we're in a camp and the camp was notified of the allergies."

- 83. Mr Irvine also expressed his disbelief about how all the Subway cookies came to be on one platter when the cookies with nuts are placed on a separate shelf within the Subway retail stores. He was equally dismayed about the lack of First Aid trained personnel at the racetrack for the camp. He suggested that there should be dedicated people at the track that were readily identifiable as being First Aiders. Predominately this was because of the high risk nature of the activity being undertaken by the children, but in the circumstances surrounding Jack's collapse, he also felt an absence of assistance from trained people. Mr Irvine was also critical of the VKA including, but not limited to, that they had not provided any support to Mrs Irvine or himself after Jack's death. He said that "not even once have the VKA contacted Julie or I over the death of our son." <sup>94</sup>
- 84. Compounding the grief of Mr and Mrs Irvine was the absence of any acknowledgement from the recipients of Jack's organs. Mrs Irvine said that it was disappointing not to receive individual thanks from the recipients when they had given up so much.<sup>95</sup>

#### COMMENTS

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

1. The protection of children with life threatening food allergies, extends well beyond the child's immediate family. The younger the child the more reliant they are on others to ensure their safety from unnecessary, preventable exposure to high risk foodstuffs. I do not purport to proclaim that it is possible to eliminate risk, it is not, but it is clear from the circumstances of Jack's death and those of other children<sup>96</sup> that more can be done in the handling, preparation, labelling and presentation of food that would go towards reducing the risk to these vulnerable individuals. We all have a responsibility towards them. We all have a responsibility to enquire

<sup>&</sup>lt;sup>93</sup> T @ p777.

<sup>&</sup>lt;sup>94</sup> T @ p 779.

<sup>&</sup>lt;sup>95</sup> T@p 782. I indicated that it was outside my jurisdictional scope to make any comments about the processes of Donate Life but that I could have some enquiries made on their behalf.

<sup>&</sup>lt;sup>96</sup> See Finding into the death of Nathan Francis – COR 2007 1212

with the parents of children that we find ourselves providing food to; 'does your child have any dietary requirements?' Should that question be a part of the day to day, customer to customer, nomenclature of the food retail industry? If it goes towards minimising risk, yes it should. However, whether the question should have been asked of Mr Burke by Subway Clayton Manager, Ms Taing when he placed his telephone order, is more difficult to be definitive about. Ms Taing took Mr Burke's call and was aware that he had accessed the Subway website where the Allergen Guide could be easily viewed and downloaded. Had Ms Taing asked Mr Burke if any of the likely consumers of his Subway food order had any dietary requirements/allergies poses the question, would that have made any difference to Mr Burke's order because he was not privy to Ms Arnett's collated information about dietary requirements/allergies? If the question had been put directly to him it may have prompted him to ask Ms Arnett the question, which may in turn have prompted her to recall this vital information when it was most needed. However, such speculation is neither helpful nor does it equate to a balanced approach to the evidence.

2. The fact remains that Mrs Arnett had the relevant knowledge and was present when the lunch order to Subway was made. I acknowledge that Ms Taing did not specifically go through the catering checklist that is recommended by the overseeing franchisor and thus did not ask the question of Mr Burke "have you confirmed if there are any special dietary requirements". However, to be prophesying that the chain of events could have been altered or indeed broken, "if only" Ms Taing had asked the question of Mr Burke, unfairly implies that she was complicit in some failure to look out for the welfare of children<sup>97</sup> and/or the Junior Development Camp participants, the details of which she had no knowledge. In addition, although the specific question was not asked by Ms Taing, I do accept that she did have a conversation with Mr Burke and effectively, Ms Arnett who was either listening into the conversation or on a conference call, which equated to a prompt to the VKA representatives about dietary requirements/allergies. Ms Taing recalls specifically asking if there were any vegetarians within the group to be catered for and it was this part of the conversation which led to a change from the original order of turkey and ham to vegetarian sandwiches or "subs". In addition, the ordering of the chicken strip salad bowl with no onions and no salt and pepper was in response to Ms Taing advising the VKA representatives that the "sub" was not gluten free. 98 The VKA's responsibility towards the children at their development camp cannot be divested by saying

<sup>97</sup> Ms Taing in her viva voce evidence stated that she had no knowledge that the consumers of the catering order were children – T @ p 387.

<sup>&</sup>lt;sup>98</sup> T @ pp 382-383, 814-815

Subway did not ask the one right question. I accept Ms Taing's evidence in this regard. The substance of Ms Taing's conversation with the VKA representatives was about dietary requirements and that in itself should have been enough to prompt the VKA representatives to properly reference the information that the parents had already provided them. In making these comments, I acknowledge Ms Ellis' submissions that the VKA is a "community organisation" made up of enthusiastic "ordinary members of the community" volunteering their time to enable children to gain the experience of karting and as such they should be distinguished from schools and teachers who have been specifically educated in allergies, anaphylaxis and the use of the EpiPen®, whereas the VKA members have not.99 Good intent and voluntary work is to be applauded and deserves acknowledgement that many children's outside school activities would not occur without them. However, I cannot ignore that it is the fact that the VKA activities are involving children and they have sought information from parents that implies a level of understanding about the significance of allergies that warrants the analysis of the appropriateness of their actions/inactions. It is thus very disappointing that even by the conclusion of this Inquest the VKA, other than cancelling the junior overnight development camps, had not implemented any other restorative or preventative measures in response to Jack's death.

- 3. Ms Saint-Fryar on behalf of Subway Systems Australia submitted that the franchisees are heavily reliant on customers placing orders to communicate information about allergens so that the franchisee can assess how this important information may impact on the food suitability, preparation and supply. I concur.
- 4. The VKA Participant Registration Form specifically sought information about whether the participant had ambulance membership, had any food allergies and/or was a vegetarian. It did not specifically request a copy of any existing Action Plan related to the identified food allergy but did ask for "Any medication or allergies please send in information with registration form". Having been asked about food allergies/dietary requirements on the Participant Registration Form, and having supplied this information to the VKA, Julie and Glen Irvine were entitled to expect the food compulsorily supplied to Jack at the VKA Junior Development Camp would be free of the identified allergen, nuts. In the knowledge that food was being supplied at the Junior Development Camp and that his mother had completed the Participant Registration Form identifying his food allergy, Jack, a 15 year old adolescent boy was entitled to assume that the

<sup>&</sup>lt;sup>99</sup> T @ p 845.

food presented to him for the taking at lunch on 24 September 2012 was free from nuts. Consequently, he was entitled to assume without further interrogation, that what he was looking at on the surface of and within the cookie he selected from the platter, was a white chocolate chip cookie. Nevertheless, I must also acknowledge that all these "entitlements" contained a number of presumptions that had not been interrogated to raise them to a level of surety.

- 5. Julie Irvine did not provide the VKA with Jack's Action Plan or details of his medication at the time she faxed through Jack's Participant Registration Form. Mr Irvine did not think to provide the Action Plan or Jack's medication, specifically the EpiPen® on the first day of the camp, 24 September 2012. The provision of both to the VKA had the potential to inform the organisers that the identification of a food allergy on their own Participant Registration Form is not merely a dietary preference but a potentially life threatening condition.
- 6. I do not consider that there are grounds to make recommendations for a review and/or changes to The Australia New Zealand Food Standards Code ("the Code") or the *Food Act 1984*. The lack of risk minimisation steps at identifying the content of the lunch food rests with the VKA and Subway.
- 7. Subway Systems Australia have a number of safe guards in place to alert their customers to the ingredients of their foodstuffs. In particular, their website does include a link to the Allergen Guide that is specifically designed to assist people with dietary requirements to avoid food items they have sensitivities or allergies to. The Allergen Guide identifies that all of the Subway cookies may contain nuts or traces of nuts. Where there is reference to cookies or cookie platters there is in some instances, also a prompt (asterisk) alerting the customer to a footnote that advises that the cookies may contain nuts.
- 8. Ms Saint-Fryar advised that nutritional, allergen and ingredient labelling is not currently provided with catering platters which are made to order and prepared at the restaurant premises, but she indicated that labelling of this nature can be provided at the customer's request. However, labelling of the catering platters appeared to lack consistency. Vegetarian rolls were prepared with a means of identification but no other labelling was provided. In particular, no label accompanied the platter of cookies so as to reinforce to the unknown and distant consumer, who is the recipient of the catering, that the product may contain nuts or traces of

<sup>&</sup>lt;sup>100</sup> T @ pp 811-812.

<sup>101</sup> Ms Taing wrapped deli paper around the vegetarian rolls as a means of identifying to her customer (Mr Burke and Ms Arnett) that these were the

nuts. Whilst I acknowledge the concerns of Subway Systems Australia about the loss of control<sup>102</sup> of their catering foodstuff once it is collected by the customer and the range of potential scenarios from mislabelling to contamination, I consider the potential benefits outweigh Subway's concerns related to this loss of control. Providing labelling with the catering platters would be a relatively simple task for the franchisee. Providing labelling with the catering platters would provide information about the food to the consumer who was not present when the food was ordered or picked up. Information about food content through labelling of catering platters may help to prevent like instances.

- 9. The lack of provision of clearly identifiable first aiders at the Junior Development Camp was an issue raised by the family and the subject of final submissions on their behalf. Mr Stanley submitted that it was common sense that there should have been "a first aider on board who is identifiable" such as a St John's Ambulance first aider 103, in "circumstances where there were 39 children, 15 of them young, hurtling around a Go Kart track". 104 I agree but this is not a situation where a child has been fatally injured whilst hurtling around the track and it is not a situation where there has been any evidence led that causally connects Jack's death with the lack of identifiable first aiders or that his death may have been prevented but for the presence of a readily identifiable first aider such as a St John's Ambulance member. In the circumstances, I do not intend to make any recommendations in this regard. The Karting Manual makes reference to the requirement for a "St John's Ambulance or equivalent".
- 10. Communication and education about the signs, symptoms and risks associated with any medical condition is not solely within the domain of the medical profession. However, the general public does heavily rely only on the information provided to them by their health professionals, with many never seeking out and/or informing themselves through other sources. The medical profession of course has a duty of care to its patients to provide them with information about their condition(s), proposed treatment options and risks of the same. Similarly, parents have a duty of care to their children along similar lines when it comes to being the "watchdog" while endeavouring to ensure that their child avoids exposure to unnecessary risk. I have no doubt that Jack and his family did receive information/education about Jack's medical conditions and how to manage them. On 1 June 2012, Mrs Irvine and Jack were provided with an Action Plan for

<sup>&</sup>lt;sup>102</sup> T @ p 812.

<sup>103</sup> A St John's Ambulance First Aider is a Level 2 certificate holder – Submission of Ms Ellis – T @ p 841.

<sup>104</sup> T@pp 806-807.

Anaphylaxis<sup>105</sup> prepared by Dr Bannister and received instruction on the use of the EpiPen® and the Action Plan by Dr Bannister's nurses. They had previously received education on the same at the RCH. The additional information that the family states was missing from their knowledge base would have without a doubt heightened their awareness of the potentially fatal risks associated with Jack's condition, but I am not convinced holding that additional information in the particular circumstances surrounding Jack's collapse would have made any difference to the response. The Action Plan contained sufficient information and warnings so as to prompt the emergency response to administer the EpiPen®. Mr Irvine did not recall the warning on the Action Plan about respiratory symptoms – "difficulty/noisy breathing". Or, the alternative possibility is that he did not associate what he believed to be his son's asthma as being the same as "difficult/noisy breathing" as it is depicted in the signs and symptoms of the severe allergic reaction section, possibly because at the time of extreme anxiety for his son's welfare, he did not possess the necessary recall about the details on the Action Plan to put the plan into practice. Mr Irvine had never witnessed his son having an anaphylactic reaction but he had witnessed an asthma attack. Mr Irvine's response was intuitive, not one that was fully informed. But the lack of information about the dangers of the coexistence of asthma and anaphylaxis; the possibility for the delay of onset of symptoms; and creating a comfortable level of confidence to administer an EpiPen® when the onset of symptoms appears asthmatic; are all identified shortfalls in the education provided. Mr and Mrs Irvine lacked knowledge of these matters. That is not a criticism of them but an acknowledgement that they feel let down by the education provided to them and I have no evidence on which to conclude that Mr and Mrs Irvine are less informed than other parents and carers of children with anaphylaxis and asthma.

- 11. I accept that there are a growing number of children with allergic disease including those at risk of anaphylaxis and I accept the submission of Allergy and Anaphylaxis Australia that it should be considered a National Health Priority. A national approach could potentially improve the resources that appear necessary to effectively heighten awareness in the community and maximise risk minimisation strategies. The dialogue on this serious social health problem needs to be improved upon. Although I do not intend to make a specific recommendation in this regard I hope that the dissemination of this Finding may go towards advancing the discussion.
- 12. Similarly, I decline to make a broad recommendation that sporting clubs holding camps for children should ensure that the organisers/volunteer parents all have training in food

<sup>105</sup> Inquest Brief @ p 48.

allergies/anaphylaxis management in part because no interested party identified the appropriate body/entity that such recommendation(s) should be directed to. Had Jack been at a school camp the Department of Education and Early Childhood Development is readily identifiable as the recipient of recommendations as occurred following the investigation into the death of Nathan Francis. <sup>106</sup> But the responsibility for the policies and procedures and staff of sporting clubs is not so easily identifiable. Many likely do not hold children's camps and if and when they do, as seen with the VKA Junior Development Camp, those responsible for the welfare of children are volunteer parents. Local Councils play some role in registrations and compliance under the *Food Act* but the policies and procedures of individual clubs must also play a role. I will however endeavour to enter into the myriad of responsible statutory bodies/entities through a recommendation to the Minister for Sport.

13. The Working with Children Certification may be an avenue that could be explored further as submitted by Counsel Assisting however there was not the opportunity to do so in Jack's Inquest. A future line of enquiry could be regarding the feasibility of requiring the completion on a free on-line training course on allergy and anaphylaxis possibly through ASCIA<sup>107</sup> as a condition to obtaining the Certificate.

#### **FINDINGS**

- 1. I find the identity of the deceased is Jack Glen Irvine born 28 July 1997 and that his death occurred on 30 September 2012 at Monash Medical Centre, Clayton.
- 2. I accept and adopt the medical cause of death as ascribed by Dr Melissa Baker and confirmed in evidence by Dr Noel Woodford and I find that Jack Glen Irvine died from global ischaemic brain injury post cardiac arrest secondary to, or arising from anaphylaxis.
- 3. AND I further find on the balance of probabilities that the source of Jack's anaphylactic reaction was the Subway macadamia nut cookie that Jack consumed at lunch at the VKA Junior Development Camp on 24 September 2012.

<sup>106</sup> COR 2007 1212

<sup>107</sup> See www.allergy.org.au

- 4. I find that there were a number of opportunities lost in educating the VKA about Jack's food allergy and hence avoidance of exposure to the nut allergen by the Action Plan not being sought or provided to the VKA.
- 5. I find that there were a number of opportunities lost in educating the VKA about the significance of identifying Jack's food allergy on the Participant Registration Form, by not providing the VKA with details of his prescription medication including the EpiPen® and his asthma medication. There was also an opportunity lost in not providing the VKA with Jack's medication at the start of the camp, with the aim of reinforcing with the VKA that the identified food allergy was a serious medical condition.
- 6. It is not necessary for me to make any findings on whether or not there was a call for participants with medical conditions and/or medication at the meeting on the morning of 24 September 2012 to identify themselves to the officials, because I accept that Mr Irvine did not hear such a request or alternatively, he did not register how such a request related to Jack.
- 7. In acknowledging the concessions made by the VKA, I find that the VKA had no policies and procedures in place at the time of the Junior Development Camp in September 2012, on how to guide the VKA members/volunteers on how to safely conduct the camp where the registered participants included children with food allergies.
- 8. I find that the VKA failed to take any meaningful steps to inform itself of what was meant by the positive identification to food allergies on the Participant Registration Forms. In acknowledging the concessions made by the VKA, I find that through a failure to disseminate the collated information about children with food allergies, there was no shared understanding among the VKA members/volunteers at the Junior Development Camp of what risk management processes were to be put in place in the circumstances where the registered participants included children with food allergies.
- 9. I find that there was no meaningful attempt by the VKA to shop and cater for the registered participants who had given a positive identification to food allergies on their Participant Registration Form. In acknowledging the concessions made by the VKA, I find that the process that was in place at the September 2012 Junior Development Camp for the ordering, purchase, provision and presentation of food for the registered participants, some of whom included children with food allergies, was inadequate because each step in the process failed to have

regard for the dietary requirements and in particular the known sensitivities of the children with identified food allergies.

- 10. It is regrettable that Mr Irvine nor other lay first aid responders considered the possibility of an allergic reaction because the prompt delivery of adrenalin through the EpiPen® provides the best opportunity for survival. However, prompt administration of the EpiPen® by no means provides certainty and as such I cannot make a finding that the outcome would have been different if Jack had been administered his EpiPen® whilst awaiting the arrival of the paramedics. I do however find that the lack of administration of adrenalin in the form of the readily available EpiPen® was a loss of opportunity to provide Jack with potentially lifesaving medication.
- 11. I make no criticism of how Mr Irvine responded to his son's rapidly deteriorating state. I find that Mr Irvine's response to Jack's parlous state was both intuitive and altruistic. Similarly, I make no criticism of any of the lay first aid responders who also endeavoured to provide assistance. It is a credit to them all that they put themselves forward. It would have been an incredibly stressful situation to be a participant in resuscitation attempts of a child and I acknowledge that such participation will remain with individuals, particularly as Jack did not survive despite their individual and collective endeavours.
- 12. I find that Ambulance paramedics responded and provided emergency care which was reasonable and appropriate to the circumstances. Mr Irvine's perceptions of what the first aiders and paramedics were doing or specifically not doing, were formulated at a time of extreme anxiety and I consider that this interfered with his cognitive ability to discern the facts from his perceptions. This is not a criticism of Mr Irvine but an acknowledgement that the inability of individuals to recount accurately the circumstances of an emergency situation in which they have been involved is not uncommon. In his *viva voce* evidence Mr Irvine did however acknowledge that since making his statements<sup>108</sup> for the Court that he now appreciated that more took place, and that more advice and assistance was given to him that he recounted in those statements.<sup>109</sup> I welcome his personal reflection of the events.

<sup>&</sup>lt;sup>108</sup> Exhibits 4, 5 and 6.

<sup>&</sup>lt;sup>109</sup> T @ pp 102-103.

13. Ultimately I am obliged to turn my mind to whether, on the balance of probabilities, the death of Jack Irvine was preventable. On the weight of the evidence I am satisfied that there is clear and cogent evidence to support such a finding that the death of Jack Glen Irvine was preventable.

#### RECOMMENDATIONS

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

- 1. With a view to providing additional education and support to families with children who suffer from asthma and are also known to be at risk of anaphylaxis, I recommend that the Royal College of General Practitioners and Royal College of Physicians work collaboratively and in consultation with the Australian Society of Clinical Immunology and Allergy (ASCIA) for the purposes of producing an information specific brochure which also provides guidance on how parents should respond. Such a brochure should be in addition to and not as a substitute for education/information sessions provided to such patients in the medical rooms/premises and similarly, should be in addition to and not as a substitute for specifically constructed Action Plans.
- 2. With a view to providing additional education and support to families with children who are known to be at risk of anaphylaxis, I recommend that the Royal College of General Practitioners and Royal College of Physicians work collaboratively and in consultation with the Australian Society of Clinical Immunology and Allergy (ASCIA) for the purposes of producing an information specific brochure and/or education module and/or electronic device application directed at the identified high risk group of adolescents aimed at but not limited to, assisting them to minimise risk through understanding and managing their own food allergy(ies) during the transition from childhood dependence on others through to adulthood and independence. Such a brochure/module/application should be in addition to and not as a substitute for education/information sessions provided to such patients in the medical rooms/premises and similarly, should be in addition to and not as a substitute for specifically constructed Action Plans.
- 3. With a view to providing greater clarity and reinforcement to families with children who suffer from asthma and are also known to be at risk of anaphylaxis, I recommend that the Australian Society of Clinical Immunology and Allergy (ASCIA) if they have not already done so, review the content of the Action Plan for Anaphylaxis to include guidance on the management in the

case of suspected allergic reaction or suspected asthma attack wording along the lines of but not restricted or limited to:

"In the event of sudden breathing difficulties in someone that has both food allergy and asthma, administer EpiPen®/auto-injector, and then give Ventolin."

- 4. With a view to enhancing its' policies and procedures for notifying members of the public about the ingredients in their products and with a view to minimising risk of adverse allergic reaction from inadvertent exposure to allergens, **I recommend** that Subway Systems Australia provide a copy of the Allergen Guide with each catering order/pack such that the customer has readily available a reference guide for the consumers.
- 5. With a view to enhancing its policies and procedures for notifying members of the public about the ingredients in their products and with a view to minimising risk of adverse allergic reaction from inadvertent exposure to allergens, **I recommend** that Subway Systems Australia implement a mandatory labelling policy for its catering orders/packs such that a label identifying potential allergens such as nuts, can be placed with the platter by the customer when it is laid out for the consumers.
- 6. With a view to enhancing its policies and procedures for notifying members of the public about the ingredients in their products and with a view to minimising risk of adverse allergic reaction from inadvertent exposure to allergens, **I recommend** that Subway Systems Australia mandate the display in the public area of the Allergen Guide in each Subway restaurant outlet.
- 7. With a view to enhancing the allergy and anaphylaxis training at sporting clubs and hence to the general community, **I recommend** that the Victorian Minister for Sport, in consultation with the Minister for Health, consider whether the provision of grants under the 'Community Sports Infrastructure Fund' to sporting clubs, be conditional upon them having policies and practices in place that require all staff, volunteers and employees to complete allergy and anaphylaxis training, through, but not limited to, first aid training or online training provided by the Australian Society of Clinical Immunology and Allergy (ASCIA).
- 8. And although I was advised that Victorian Karting Association were no longer holding overnight Junior Development Camps, I recommend the Victorian Karting Association do not hold any further Junior Development Camps until such time as it has completed a legitimate and meaningful independent review of its policies and procedures on how to safely conduct camps for children, including, but not limited to, assessing the training required of its volunteers on

allergy and anaphylaxis management and the safe provision of food to the children with identified allergies.

To enable compliance with sections 72(5) and 73(1) of the *Coroners Act 2008* (Vic), I direct that these Findings will be published on the internet.

I direct that a copy of these Findings be provided to the following:

- Julie and Glen Irvine
- Victorian Karting Association
- Subway Systems Australia
- Maria Said, Allergy and Anaphylaxis Australia
- Australian Society of Clinical Immunology and Allergy
- The Honourable John Eren, MP, the Victorian Minister for Sport
- The Honourable Jill Hennessy, MP, the Victorian Minister for Health and Ambulance Services
- Royal College of General Practitioners
- Royal College of Physicians
- Professor Jo Douglass
- Fiona Jones, Manager Regulations and Incident Management Team, Department of Health and Human Services

Signature:

AUDREY JAMIESON CORONER

Date: 29 April 2016

OF Victoria