

Anaphylaxis: Meeting The Challenge For Western Australian Children



Report Of The Review By The Western Australian Anaphylaxis
Expert Working Committee

September 2007



Delivering a Healthy WA

Anaphylaxis: Meeting the Challenge for Western Australian Children

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The Western Australian Anaphylaxis Expert Working Committee

The Western Australian Anaphylaxis Expert Working Committee was established in 2006 following the release in September 2005 of the findings of the New South Wales coronial inquest into the death from anaphylaxis of a school student in September 2001 at a school excursion. In light of the findings of the New South Wales Coroner, a recommendation was made to the Director General, Department of Health, Western Australia that an Anaphylaxis Expert Working Committee, led by the Department of Health and in close partnership with the Department of Education and Training and the then Department for Community Development, be convened in Western Australia. The purpose of the committee was to review the issues relating to anaphylaxis in schools and licensed childcare services in Western Australia. Taking into account the New South Wales Coroner's recommendations, the committee was to deliver a report to the Minister for Health with recommendations for the development of a State strategy for the management of anaphylaxis in schools and licensed childcare services.

In all cases Western Australian Department of Health must be acknowledged as the source when reproducing or quoting any part of the report.

At the time of publication, the links to websites referred to in this document were correct. The committee acknowledges that, at times, organisations change Internet addresses, or remove information from the Internet.

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Australian Children**

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Hon Jim McGinty MLA
Minister for Health

Dear Mr McGinty

Strengthening anaphylaxis prevention in Western Australian schools and licensed childcare services

On behalf of the Western Australian Anaphylaxis Expert Working Committee, it is my pleasure to submit our report for the consideration of the Minister for Health, the Minister for Education and Training and the Minister for Child Protection; Communities; Women's Interests; Seniors and Volunteering.

The rising threat of life-threatening anaphylaxis to children poses a challenge for countries worldwide. Anaphylaxis can and does occur in schools and licensed childcare services, and parents of at-risk children are seeking reassurance that childcare workers and teachers have the ability to deal with this if a life-threatening emergency occurs. Most children at risk of anaphylaxis can lead normal, interactive lives in childcare services and schools as long as policies and practices are put in place to identify and manage their health needs.

Western Australian children grow, learn and are cared for in a State that provides the best prospect for current and future generations. There remains, however, opportunity to build on the strengths of our current environment to minimise the risk of anaphylaxis in schools and licensed childcare services.

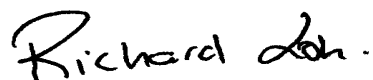
The Ministers for Health, Education and Training and Child Protection; Communities; Women's Interests; Seniors and Volunteering should be commended for their cooperative approach in developing a means of managing this problem in Western Australia. The fostering of partnerships by the agencies and extensive community consultation facilitates a systematic and collaborative approach to the development of policy and practice.

I would like to acknowledge the positive contributions of many people with an interest and perspective on anaphylaxis. The Committee met regularly since February 2006, established three working groups and conducted an extensive stakeholder forum.

I believe that the recommendations in this report provide a strategic and robust approach to leading coordinated action on risk minimisation for Western Australian children at risk of anaphylaxis.

I commend the report to the Ministers.

Yours sincerely

A handwritten signature in black ink that reads "Richard Loh." The signature is written in a cursive, slightly slanted style.

Assoc Prof Richard Loh
Chair, Anaphylaxis Expert Working Committee

September 2007

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Foreword

Allergies to peanuts alone, has become significantly more common worldwide and it is estimated that 2% of students are peanut allergic. Anaphylaxis can and does occur in schools and licensed child care services, and parents of at risk children are seeking reassurance that child care workers and teachers have the ability to deal with this if a life-threatening emergency occurs. It can be expected that the number of children at risk in Western Australia will increase. Currently there is no comprehensive management strategy for anaphylaxis in Western Australian schools and childcare centres.

While we are not aware of any anaphylactic deaths of Western Australian children, there have been two deaths interstate in recent years. It is imperative that we be proactive in providing the best possible care of our children and I believe that a coordinated interagency approach will be the most effective means of managing anaphylaxis in this State. The Ministers for Health, Education and Training and Child Protection; Communities; Women's Interests; Seniors and Volunteering should be congratulated for their cooperative approach in developing a means of seeking to manage this increasing problem.

I would like to commend the excellent work of the Anaphylaxis Expert Working Committee, which was convened in February 2006 and was chaired by Associate Professor Richard Loh to establish an anaphylaxis risk minimisation strategy for Western Australian schools and childcare services.

It has been a privilege and a unique opportunity to be involved in producing a report that has brought together experts from the various departments to meet the challenge to strengthen the health management of Western Australian children.

I gratefully acknowledge the contributions to making this report a success through the interagency partnerships that have been established with key stakeholders and the valuable input through community consultation. The depth and breadth of input received has been, and will continue to be, an extremely valuable resource to guide us collaboratively in progressing risk minimisation of anaphylaxis.



Dr Neale Fong
DIRECTOR GENERAL

September 2007

Executive Summary

Western Australian Anaphylaxis Expert Working Committee

The Western Australian Anaphylaxis Expert Working Committee was established in 2006 following the release in September 2005 of the findings of the New South Wales coronial inquest into the death from anaphylaxis of a school student, Hamidur Rahman, in September 2001 during a school excursion. It was recommended to the Director General, Department of Health, Western Australia, in light of the findings of the New South Wales Coroner, that an Anaphylaxis Expert Working Committee led by the Department of Health and comprising relevant stakeholders (such as the Department of Education and Training and the Department for Community Development) be convened in Western Australia. The purpose of the committee was to review the issues relating to the management of anaphylaxis in schools and licensed childcare services in Western Australia, taking into account the NSW Coroner's recommendations, and to deliver a report to the Minister for Health, outlining key recommendations, on completion of the review.

Background Of Anaphylaxis

The incidence of anaphylaxis due to allergies, previously deemed to be a rare medical emergency, is on the rise around the world and touches the lives of many individuals, particularly children of all ages. It is a sudden, severe and rapidly progressive allergic reaction to an allergen in a sensitised individual. It has an enormous psychosocial impact and rare but potentially life-threatening consequences. While researchers and scientists continue to seek a cure for anaphylaxis, prevention is the only avenue to protect children from the condition. This continues to present policymakers, administrators, educationalists and healthcare providers with opportunities to consider a range of interventions to minimise the risk of death from anaphylaxis within schools and licensed childcare services.

Peanuts are the most commonly implicated allergen that can cause anaphylaxis, but it can also be triggered from exposure to other allergens such as shellfish, egg, milk, insect stings, latex and medicines.

Peanut allergy affects approximately 1 in 70 children worldwide. There is little data on the overall incidence of anaphylaxis to date and no reported deaths from anaphylaxis in children in Western Australia for at least the past 10 years. However, there are real challenges to pursue when building on current risk management strategies for Western Australian children. In Western Australia, approximately 70,000 children attend 1,516 licensed childcare services every year. There are 371,957 children enrolled in 1,124 Government and non-Government schools as of February 2006. If the prevalence in the western world of peanut allergy is applied to the Western Australian context then most schools and licensed childcare services will be called on to manage at least one child with acute anaphylaxis and will be attended by approximately 20 children at risk of anaphylaxis.

A majority of children spend a large proportion of their childhood in schools and licensed childcare services. The unpredictable nature of anaphylaxis with rare but potentially life-threatening

consequences leads to an expectation amongst parents of at-risk children, that childcare workers and teachers have the ability to protect their children and provide first aid in life-threatening emergencies. On the other hand, childcare workers and teachers have an expectation that policies and practices will be put in place to enable them to recognise and manage the health needs of children at risk of anaphylaxis.

The key to the prevention of anaphylaxis revolves around the avoidance of allergens. This can be a complicated and challenging process for all involved as peanut, the most common allergen, is a widespread food and a frequent ingredient in processed and prepared foods. The potentially life-threatening nature of anaphylaxis often means that children with allergies face many food and social restrictions.

Therefore, the challenge of reducing the risk of anaphylaxis for Western Australian children in schools and licensed childcare services is shared by children, parents, carers, administrators, teachers, food providers, healthcare workers, policymakers and the broader community. This will require sustained leadership, collaboration across government and non-government agencies and partnerships with community stakeholders.

Summary Of Key Issues Identified During The Review

To rise to the challenge and keeping within identified principles, the Western Australian Anaphylaxis Expert Working Committee has carried out an extensive 10-month consultation process, using a systematic and collaborative approach and come up with the following key issues:

- There is a need to raise the awareness of anaphylaxis and allergies, and its effects on children and families amongst community members.
- The rising incidence of allergy-related conditions presents itself as a risk, therefore funding to boost anaphylaxis management in Western Australia is vital.
- It is recognised that schools and licensed childcare services operate in a dynamic and complex range of contexts.
- There is a need to improve and provide standardised training resources for anaphylaxis management.
- There is a requirement of timely specialist medical management of children at risk of anaphylaxis.
- There is a need to further develop and strengthen the communication link between health professionals, schools and licensed childcare services.
- There is need for a systematic reporting and recording register for risk management of anaphylaxis.
- Improvement is required in the area of non-compliance amongst some parents regarding provision of appropriate medical information and medications to the schools and licensed childcare services.
- There is a need for parents of children who do not have allergies leading to anaphylaxis, to improve their understanding so they can assist and engage in risk minimisation.
- There are legal constraints regarding emergency administration of EpiPens by non-medical professionals in schools and licensed child care services.

- There are significant costs associated with provision of EpiPens in first aid kits in schools and licensed childcare services.

Key Recommendations

Based on the above key issues, the committee has put forward eight recommendations to achieve the best outcome for anaphylaxis management in Western Australia. The eight recommendations are considered and presented under four key areas of a risk minimisation framework in schools and child care services. They are as follows:

- *Empowerment of Communities*
 - Raise the awareness of anaphylaxis and its health impact on parents and carers, the community, school and childcare services.
- *Better Planning and Better Future*
 - Establish an Anaphylaxis Management Implementation Group tasked with leading and coordinating timely implementation of accepted recommendations.
- *Legislation, Regulation and Policies*
 - Legislation be enacted in Western Australia to govern the safe and secure emergency management of anaphylaxis by teachers and carers in schools and childcare services.
 - Regularly review and audit first aid provision and anaphylaxis risk identification, minimisation and management policies in schools and childcare services.
 - Establish structures and processes to document and report on events of anaphylaxis, case fatality rate, near misses and their surrounding circumstances.
- *Investment in Sustainable Actions and Services*
 - Establish and implement an agreed standardised and certified education program for teachers, childcare workers and carers in the approach to allergy and anaphylaxis identification, risk minimisation and emergency management.
 - Improve the knowledge base of healthcare professionals, including complementary practitioners, and strengthen protocols in the detection, diagnosis and appropriate management of children at risk of anaphylaxis.
 - Establish a specialised paediatric anaphylaxis service for Western Australia.

While the recommendations are interlinked and closely dependent on each other the grouping within the risk minimisation framework for anaphylaxis in Western Australian schools and child care services is designed to further progress the current state and national momentum for anaphylaxis management. First and foremost a strategy is required to empower communities to embrace anaphylaxis as a potential consequence, that is capable of being a serious reaction to allergies, that can be either prevented or treated. Secondly, to meet the challenge of anaphylaxis for the future of Western Australian children a cross-sectoral Anaphylaxis Management Implementation Group that can focus on the educational needs of teachers, child care workers, parents, children, doctors and nurses must be established. Thirdly, it is imperative that we review legislation, regulation and policy requirements that will provide protection and support to childcare workers and school teachers in the emergency

management of anaphylaxis. A two tiered approach to implementing this area lies around reinforcing the application of policy and then strengthening policy through legislative and regulatory endorsement. Finally, to ensure the community can be protected in the future an investment in sustainable actions and services needs to be made available.

Most of all, the successful transformation of our school and childcare environments will depend on adequate and ongoing resourcing above existing departmental budget allocations, robust leadership, legislative changes, effective communication and collaboration across government and non-government agencies and partnerships with community stakeholders. It will also require an enduring commitment to place the security, physical, mental and social wellbeing of the child, carer and family at the centre of care.

Acknowledgements

Working Group

Reviewing the scale of “*Anaphylaxis: Meeting the Challenge for Western Australian Children*” is an accomplishment of many people from many disciplines and skills. From its inception to final production, the report passed through many phases each of which required the cooperation and help of distinctive individuals and organisations.

Thanks go to all the Western Australian Expert Working Committee Working Group Members for making this report possible. The Committee members include:

- Ms Carol Conley, A/Divisional Director, Legal and Legislative Services, Department of Health
- Dr Maree Creighton, General Practitioner
- Mr Steve Glew, Manager, Strategic Planning and Policy, Inclusive Education Standards Directorate, Department of Education and Training
- Ms Ana Gowrea, Dietitian, Child and Community Health, Child and Adolescent Health Service
- Dr Dorothy Jones (ex-Executive Sponsor), Director, Office of Safety and Quality, Department of Health
- Mr Andrew Lee, Manager, Special Projects, Department for Community Development
- Clinical Associate Professor Richard Loh (Chair), Head of Immunology, Princess Margaret Hospital
- Clinical Associate Professor Dominic Mallon, President, The Australasian Society of Clinical Immunology and Allergy
- Ms Sharon McBride, Senior Portfolio and Policy Officer, Child and Community Health, Child And Adolescent Health Service
- Dr Simon Towler (current Executive Sponsor), Chief Medical Officer, Office of Chief Medical Officer and Executive Director, Health Policy and Clinical Reform, Department of Health
- Ms Cora-Ann Wilson, Manager, Children’s Services, Department for Community Development
- Ms Sandra Vale, Anaphylaxis Australia.

Special thanks also go to the following people for their valuable contributions during the different life stages of the committee:

- Ms Mikala Atkinson, Policy Officer, Office of Chief Medical Officer, Department of Health
- Dr Mukti Biyani, Medical Administration Registrar, Office of Chief Medical Officer, Department of Health
- Ms Pat Cambridge, A/Senior Policy Officer, Office of Chief Medical Officer, Department of Health
- Ms Keva Crouch, Project Officer, Association of Independent Schools of WA
- Ms Katerina Hegney, A/Senior Policy Officer, Office of Chief Medical Officer, Department of Health

- Ms Kathryn James, Senior Policy and Programs Officer, Children’s Services, Department for Community Development
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- Dr Shiong Tan, Clinical Advisor, Office of Safety and Quality, Department of Health
- Ms Gail Thomas, A/Senior Policy Officer, Office of Chief Medical Officer, Department of Health
- Ms Karen Wroughton, Legal Officer, Employee and Communication Relations Team School Personnel Section, Catholic Education Office of WA.

Stakeholder’s Forum

The Committee has had an enormous amount of support and contributions from individuals and participants in the stakeholder forum. In particular, we would like to extend our gratitude to the following:

- Anaphylaxis Australia
- Association of Independent Schools of Western Australia, Project Officer
- Asthma Foundation
- Canning Division of General Practice
- Catholic Education Office
- Child Services Support Unit
- Community Health Services, Principle Nursing Officer
- Department for Community Development, Project Officer
- Princess Margaret Hospital, Department of Dietetics and Nutrition
- Department of Health, Food Safety & Nutrition
- Department of Health, Health Policy and Clinical Reform
- Department of Health, Office of the Chief Medical Officer
- Department of Health, Senior Legal Officer
- Family Day Care Schemes of Western Australia Inc (Communicare)
- Health Consumers' Council of Western Australia
- Inclusion Support Agencies of Western Australia
- Independent Schools Nursing Association
- In-Home Care Reference Group
- Inland Population Health Directorate, Acting Zone Director
- Law Society of Western Australia
- Princess Margaret Hospital, Executive Director, Medical Services
- Meerilinga Young Children’s Foundation
- Miscellaneous Worker’s Union
- Nutrition Australia (Western Australia Branch)

- Parents and Friends Association
- Perth and Hills Division of General Practice
- Pharmacy Guild of Western Australia
- Princess Margaret Hospital, Immunology Liaison Nurse
- Private Dietitian
- Professional Association for School Aged Childcare Services Inc.
- Resource Unit for Children with Special Needs
- Royal Australian College of General Practitioners
- St John Ambulance
- State School Teachers Union of Western Australia
- University Of Western Australia, School of Teaching
- WA Centre for Remote and Rural Medicine
- WA Council State Schools Organisation
- WA Country Health Service, Population Health Director
- WA District High School Administrators' Association
- WA Division of General Practice
- WA General Practice Education and Training
- WA Primary Principals' Association
- WA School Canteen Association
- WA Secondary School Executives Association
- YMCA.

Abbreviations

AAI	Anaphylaxis Australia Incorporated
ACT	Australian Capital Territory
AMIG	Anaphylaxis Management Implementation Group
ASCIA	Australasian Society of Clinical Immunology and Allergy
CHCCN3C	Unit Descriptor (Prepare nutritionally balanced food)
CHCCN4C	Unit Descriptor (Respond to illness, accidents and emergencies)
CPD	Clinical Professional Development
CSSU	Children’s Services Support Unit
DAA	Dietitians Association of Australia
DCD	Department for Community Development
DET	Department of Education and Training
DOH	Department of Health
ETWG	Education and Training Working Group
GPs	General Practitioners
HCA	Health Care Authorisation
ISA	Inclusion Support Agencies
MATE	Make Allergy Treatment Easier
NSW	New South Wales
RACGP	Royal Australian College of General Practitioners
RAST	Radioallergisorbent Tests
RTC270A	Unit Descriptor (Provide basic first aid)
RUCSN	Research Unit for Children with Special Needs
SIS	Schools Information System
UK	United Kingdom
WA AEWC	Western Australian Anaphylaxis Expert Working Committee
WA	Western Australia

Anaphylaxis - Setting The Scene

Background

The incidence of anaphylaxis due to allergies, previously deemed to be a rare medical emergency, is on the rise around the world and touches the lives of many individuals, particularly children of all ages.^{1,2,3} Anaphylaxis is a sudden, severe and rapidly progressive allergic reaction to an allergen in a sensitised individual. It can have enormous psychosocial impact and rare but potentially life-threatening consequences. While there is no available scientific cure for allergies, this is a preventable condition, which when managed well can improve the quality of life for those affected.

Anaphylaxis in children is most often caused by food such as peanuts, shellfish, egg, milk etc.⁴. The peanut, however, is the leading cause of anaphylaxis in school-aged children, affecting 1 in 70 children worldwide. In peanut-sensitised children, half are likely to have experienced allergic symptoms by the age of two years and almost all would have experienced symptoms by the age of seven years. Anaphylaxis can also be triggered from exposure to other allergens such as insect stings, latex and medicines.

Symptoms of anaphylaxis include anxiety, tingling or warm feelings, itching, the taste of metal in the mouth, swelling of lips and tongue, hives or other skin rash, difficulty breathing, wheezing, vomiting, diarrhoea, stomach cramps, dizziness, light-headedness and chest pain. Respiratory complaints are the most common amongst children.

Adrenaline is the only medication that has been shown to be effective for the immediate treatment of anaphylaxis. In a non-medical setting, an EpiPen, which is a pre-filled auto-injector containing adrenaline is used by the individual during an acute generalised allergic reaction or anaphylaxis. The EpiPen Junior is recommended for children weighing between 10 and 20 kg.

There is substantial evidence to suggest that early access to adrenaline or an EpiPen is associated with improved survival from anaphylaxis⁵; furthermore of all the patients who have died from food related anaphylaxis, 84-91% did not receive adrenaline within 15 minutes of the onset of symptoms.^{6,7,8} Unfortunately, the varied and unpredictable course of allergic reactions to peanuts and other foods makes it difficult to define when an EpiPen should be prescribed.

¹ Avery, N.J., King, R.M., Knight, S. & Hourihane, J. (2003). Assessment of quality of life in children with peanut allergy. *Pediatric Allergy and Immunology*, 14, 378-382.

² Ewan, P. W. (1996). Clinical study of peanut and nut allergy in 62 consecutive patients: new features and associations. *British Medical Journal*, 312, 1074-1078.

³ Neugebauer A.L., Ghatak A.T., & Miller R.L. (2001). Anaphylaxis in the United States: An Investigation into its Epidemiology. *Archives of Internal Medicine*, 161, 15-21.

⁴ Brown, G. A., Mullins, R. J. & Gold, M. S. (2006). Anaphylaxis: diagnosis and management. *Medical Journal of Australia*, 185(5), 283-289.

⁵ Sampson, H.A. & Metcalfe, D.D. (1992). Food allergies. *JAMA*, 268(20), 2840-2844.

⁶ Bock, S.A., Munoz-furlong, A. & Sampson, H. A. (2001). Fatalities due to anaphylactic reactions to foods. *Journal of Allergy and Clinical Immunology*, 107, 191-193.

⁷ Yunginger, J, Sweeney, K., Sturner, W., Giannandrea, L., Teigland, J., Bray, M. et al (1988). Fatal food-induced anaphylaxis. *Journal of the American Medical Association*, 206(10), 1450-1452.

⁸ Pumphrey, R. S. (2000). Lessons for management of anaphylaxis from a study of fatal reactions. *Clinical and Experimental Allergy*, 30(8), 1144-1150.

The Australasian Society of Clinical Immunology and Allergy (ASCIA) states that there are no contraindications to the use of the EpiPen for a potentially life-threatening allergic reaction. ASCIA goes on to state that the life-saving benefit of injecting adrenaline in an emergency scenario outweighs the risks of side effects.

While access to EpiPens in the emergency scenario is important, it is critical that parents, carers, childcare workers and school staff be afforded opportunities to train in the use of EpiPens. Early detection and recognition of the signs and symptoms of anaphylaxis, by parents, carers and school staff, can provide opportunities for the timely provision of first aid care and the transfer to medical facilities.

Incidence/Prevalence

Anaphylaxis is uncommon but not rare,^{1,2,3,6,7,8} however, deaths from anaphylaxis are very rare.³ There is little data on the overall incidence of anaphylaxis and no reported deaths from anaphylaxis in children in Western Australia (WA) to date. However, the admissions due to anaphylaxis have doubled in the past 4 years at Princess Margaret Hospital for children in WA. Around the country, particularly in South Australia, a parent-reported allergy and anaphylaxis survey found that 1 in 170 school children had suffered at least one episode of anaphylaxis.⁹ In New South Wales (NSW) and Australian Capital Territory (ACT), studies have found that 1 in 50 children under the age of 5 years had a history of past or existing food allergies.¹⁰

Globally, the incidence of allergic related medical conditions due to food allergies is on the rise.^{1,2} In the United States, there is an estimated 150 - 200 deaths from anaphylaxis annually.¹¹ Hospital admissions for anaphylaxis management have increased seven-fold in the last decade in the United Kingdom (UK).¹²

Challenges For Western Australian Children And Their Families

There is currently no cure for allergies, however, anaphylaxis can be prevented by successful avoidance of the allergens.¹³ This is a complicated and a challenging process for families as peanut, a common allergen, is a widespread food and a frequent ingredient in processed and prepared foods. Therefore, children with such allergies face many food and social restrictions due to the potentially life-threatening nature of anaphylaxis. Patients and families of children at risk of anaphylaxis often

⁹ Boros, C.A., Kay, D. & Gold, M.S. (2000). Parent reported allergy and anaphylaxis in 4173 South Australian children. *J Paediatr Child Health*, 36, 36-40.

¹⁰ Baumgart, K., Brown, S., Gold, M. et al. (2004). ASCIA guidelines for prevention of food anaphylactic reactions in schools, preschools and child-care centres. *J Paediatr Child Health*, 40, 669-671.

¹¹ Yocum, M.W., Butterfield, J.H., Klein, J.S. et al. (1999). Epidemiology of anaphylaxis in Olmsted County: a population-based study. *J Allergy Clin Immunol*, 104, 452-456.

¹² Royal College of Physicians. (2003). Allergy: The Unmet need, a blueprint for better patient care. Royal College of Physicians, UK.

¹³ Nowak-Wegryn, A., Conover-Walker, M.K., & Wook, R.A. (2001). Food allergic reactions in schools and preschools. *Archives of Paediatric and Adolescent Medicine*, 155, 790-795.

experience stress related illnesses,¹⁴ describe their thoughts of fear and live in constant vigilance. Sound management of this condition improves the quality of life for these families.

In relation to peanut allergy, doctors are presently unable to reliably differentiate between children at risk of fatal anaphylaxis from those children who will only experience a mild reaction. This uncertainty results in a high degree of anxiety amongst the families of these children.¹⁵ It has also been reported that the quality of life in children with peanut allergy is lower compared to children with insulin dependent diabetes and compared to the parents of children with rheumatological diseases. Parents of peanut-allergic children reported that their children had significantly^{2,16} more disruption in their daily activities.

Socioeconomic disparities also pose access and equity issues for the children living with allergies and at risk of anaphylaxis. Those who are particularly vulnerable include children from some culturally and linguistically diverse groups, children in out-of-home care, children who have a parent with a mental illness, maltreated children, homeless children, and children who are geographically isolated.

The West Australian Context

There are approximately 544,400 children currently residing in WA. The majority of these children (76%) live in metropolitan Perth, another 17% live in rural locations, and 7% live in remote places. Out of these, approximately 70,000 children attend 1,516 licensed childcare services every year. According to the school census in February 2006, there were 371,957 children enrolled in 1,124 Government and non-Government schools, including pre and post-compulsory enrolments. In addition, a small number of children receive home schooling, which is auspiced by the Department of Education and Training, and a few children of transient families may not be enrolled at all.

Western Australian Schools

The Education sector in this State includes three systems, Government, Catholic and Independent Schools. There are 771 Government schools governed by the Department of Education and Training, 157 Catholic Schools governed by the Catholic Education Commission and the remaining schools are Independent schools governed by individual Boards of Management. The majority of students are enrolled in Government schools (68.4%). All schools in WA must comply with the *School Education Act 1999*.

Schools are diverse in size and community, ranging from small rural and remote schools with fewer than 20 students, to large metropolitan secondary schools of over 1,800 students. Schools cater for children of diverse backgrounds, at various developmental stages with varied health and educational needs. Government schools are required to comply with a regulatory framework, which includes a

¹⁴ Gowland, M. H. (2001). Food allergen avoidance: the patient's viewpoint. *Allergy, 56 Suppl. 67*, 117-137.

¹⁵ Masia, C., Mullen, K., & Scotti, J. (1998). Peanut allergy in children: Psychological issues and clinical considerations. *Educ Treat Children, 2*, 514-531.

¹⁶ Primeau, M.N., Kagan, R., Joseph, L., Lim, H., Dufresne, C., Duffy, C., Prhcal, D., & Clarke, A. (2000). The psychological burden of peanut allergy as perceived by adults with peanut allergy and the parents of peanut-allergic children. *Clin Exp Allergy, 30*, 1135-1143.

number of policies relating to health care, notably the *Duty of Care Policy*, *Student Health Care Policy*, *Enrolment Policy*, *First Aid Policy for Sickness and Accidents in School*, *Excursions and Off-School Site Policy*. Non-Government schools may use these policies as a guide.

Western Australian Childcare Services

Childcare services include family day care (where a small number of children are cared for in a private home), long day care centres, and outside school hours care. A large proportion of children who receive services do so in long day care and range between 0 to 6 years. All of the licensed services are regulated under the *Children and Community Services Act 2004*, through the relevant regulations by the Childcare Licensing and Standards Unit.

As children progress to school age, the use of childcare required drops significantly. The Australian childcare study done in 2002¹⁷ suggested that 28% of 5 year olds and only 7% of 9-11 year olds used formal care. Collectively, the most common type of childcare service used by children aged 5-11 years was before and after school care, attended by 9% of the age group.

While most children in WA enjoy good health, approximately 2% of these children would be at a risk of anaphylaxis if the NSW and ACT data were used in a WA context. If the prevalence in the Western World (where it affects 1:70 children) of peanut allergy applies to WA context then most childcare and schools will be called on to manage at least one child with acute anaphylaxis and will be attended by approximately 20 children at risk of anaphylaxis.

Implications For Western Australian Health Care Services

Hospital admissions for anaphylaxis have increased seven-fold in the last decade in the UK and in Princess Margaret Hospital for children in WA, they have doubled in the past four years. The scale of the problem is such that in WA, paediatric allergy and immunology services cannot accommodate the rising number of referrals. This results in a prolonged waiting list for specialist assessment. The average waiting time for an initial consultation is 7 to 9 months, making it difficult to see patients with anaphylaxis in a timely manner. There is thus an increasing gap between the need for effective advice and treatment, and the availability of professional services in WA.

Children often present to schools and licensed childcare services with a history suggestive of a severe allergic reaction, but they have not been assessed by an allergist, do not have management plans and do not carry EpiPens. This scenario poses a significant risk to the service and is a cause of concern for children, parents, carers and teachers alike.

Primary care must ultimately provide the front line care for allergy treatment, yet considerable development is needed. A 2005 United Kingdom Parliament Select Committee on Health stated, "because of the lack of knowledge of allergy in primary care, accurate diagnosis including the identification of allergic triggers is rare". A survey of general practitioners (GPs) carried out by the

¹⁷ Australian Bureau of Statistics. (2002). Child Care, Australia, Abs Catalogue No. 4402.0.

British Society for Allergy and Clinical Immunology indicated that the majority of GPs had received no training in the management of allergic disorders. Only 23% of respondents reported that they were familiar with any guidelines for the management of an allergic condition.

In WA, the situation is consistent with global trends and there exists an imperative to improve the awareness of healthcare professionals in the best practice identification, assessment and management of children experiencing anaphylaxis and allergy related illnesses.

The Way Forward

Anaphylaxis not only produces physical symptoms in a child but it also has an enormous psychosocial impact on everyone around the affected child due to its unpredictable nature. Therefore managing anaphylaxis requires more than a medical response constructed within a 'rational' or 'evidence based' paradigm. Anaphylaxis management needs to remove the uncertainty that disturbs the lives of families with food allergic children. This requires a broad, multifocal approach to the prevention, treatment and management of anaphylaxis that encompasses both the emotional and the clinical nature of the condition.

The diverse and complex nature of schools and licensed childcare services require a corresponding diversity in approach to anaphylaxis. Therefore, the challenge of reducing the risk of anaphylaxis for WA children in these services, is shared by children and their parents, carers and administrators, teachers, food providers, healthcare workers, policymakers and the broader community. Most of all, successful transformation of our school and childcare environments will depend on adequate and ongoing resourcing above existing departmental budget allocations, robust leadership, effective communication and coordination across all sectors.

Western Australian Anaphylaxis Expert Working Committee - Setting The Scene

Background

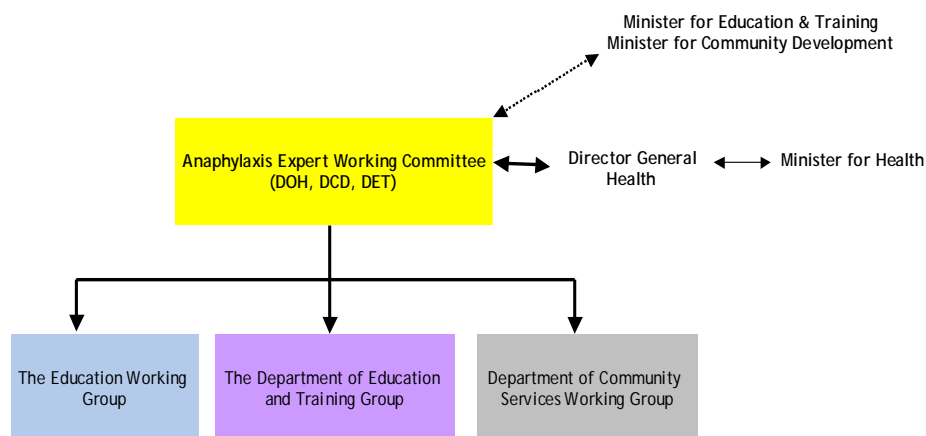
The WA AEWC was established in 2006 following the release in September 2005 of the findings of the NSW coronial inquest into the death from anaphylaxis of a 13-year-old school student, Hamidur Rahman in September 2001 during a school excursion. An analysis of the Coroner's findings by a group of local members of the ASCIA found that there were a number of issues of concern around the better management of anaphylaxis in WA schools and licensed childcare services.

It was recommended to the Director General, Health that in light of the findings of the NSW Coroner, an Anaphylaxis Expert Working Committee led by the Department of Health (DOH) in close partnership with the Department of Education and Training (DET) and the Department for Community Development (DCD) be convened in WA. The formation of the WA AEWC was supported by the Minister for Health.

The detailed roles and responsibilities of the committee, including the methodology used for the review have been discussed in a tabular format below:

FORMATION OF WA AEWC:	<ul style="list-style-type: none"> • WA AEWC was first convened in February 2006. • It is an interagency collaboration.
ROLE OF WA AEWC:	<ul style="list-style-type: none"> • To assess the recommendations of the NSW Coroner regarding anaphylaxis management in schools. • To assist the DOH, DET and DCD to strengthen appropriate policies and practices to manage anaphylaxis in schools and licensed childcare services in WA. • To consult with all relevant stakeholders, including consumers and professional bodies to ensure that the WA Anaphylaxis Strategy is aligned with current needs.
COMPOSITION OF WA AEWC:	<ul style="list-style-type: none"> • Chief Medical Officer (Executive Sponsor) • Representative of the Director General, DOH (Chair) • Director, Legal and Legislative Services, DOH • Representative community school nurses • Representative dietitian • Representative(s) of the Director General, DET • Representative(s) of the Director General, DCD • Representative General Practitioner • Member of Anaphylaxis Australia • Member of the ASCIA • Secretariat, DOH.

STRUCTURE OF WA AEWC:



- The WA AEWC is directly accountable to the Minister for Health, through the Director General, DOH. There is also indirect accountability to the Minister for Education and Training and the Minister for Community Development, Seniors and Youth.
- The Director General, DOH, appointed Associate Professor Richard Loh, a lead clinician in the area of anaphylaxis in childhood as the Chair of the committee.
- The WA AEWC also established three working groups
 - The Education Working Group
 - The Department of Education and Training Group
 - The Department of Community Services Working Group.

GUIDING PRINCIPLES OF WA AEWC:

- Place the security, physical, mental and social wellbeing of the child, carer and family at the centre of care.
- Value the pivotal stewardship role of teachers, carers, and healthcare professionals over children in their charge.
- Adopt an evidence-based approach to identifying, assessing and considering policies, procedure and behaviour change across health, childcare and educational settings.
- Advocate for a collaborative, interagency and multidisciplinary approach to achieving an equitable and sustainable service transformation across school and childcare settings.

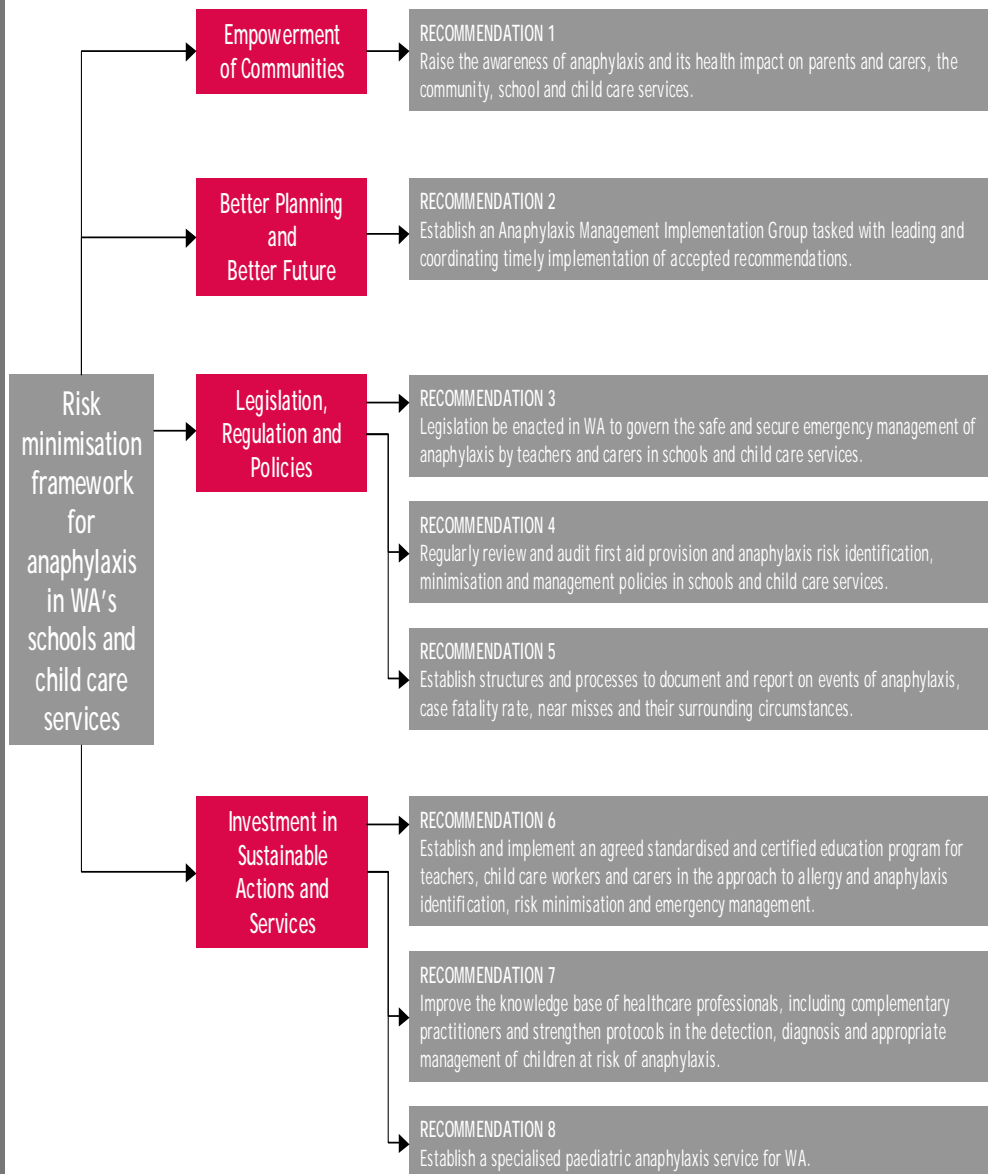
METHODOLOGY OF THE REVIEW:

- The WA AEWC has met monthly since February 2006 and during the initial meeting developed a systematic and collaborative approach for the review of issues relating to anaphylaxis in schools and licensed childcare services in WA. In April 2006, three working groups were formed as part of the activities of the WA AEWC.
- An Anaphylaxis Stakeholder Forum was conducted in August 2006. Attendance at the forum was in excess of 63 representatives from 46 various organisations. The strategic direction arising from WA AEWC and working group meetings were presented in the Anaphylaxis Forum conducted by an external facilitator. The major issues arising from the forum formed a focal point for formulation of the key recommendations, which are briefly highlighted on the next page and discussed in detail in the following pages.

- The final WA AEWC report has been developed as a combined product of extensive community consultation with support from key stakeholders and the hard work of a very dedicated and passionate committee. The WA AEWC report recognises the Reason Framework for conceptualising hazard and the Ottawa Charter principles for Health Promotion.

**RISK
MINIMISATION
FRAMEWORK
FOR
ANAPHYLAXIS
DEVELOPED AS A
RESULT OF THE
REVIEW:**

- The DOH, in close partnership with the DET and DCD completed an extensive consultative process with various stakeholders to examine the NSW recommendations and identify a risk management plan for WA that is outlined in the flowchart below.



Key Issues Identified In Western Australia

The NSW Coroner’s recommendations were reviewed in the WA context and as a result, a number of key areas have emerged that present opportunities to build on the strengths of our current environment and to minimise the risk of anaphylaxis in schools and licensed childcare services. They are briefly discussed in the table below.

ISSUES IDENTIFIED:	RESPONSE REQUIRED	PROPOSED RECOMMENDATION
<ul style="list-style-type: none"> •Need for community awareness relating to the increase in anaphylaxis and its rapidly progressive nature. •Need for awareness in the community of its impact on quality of life for children and their families. •Need for community awareness in recognising anaphylaxis symptoms, prevention, the first aid options and the possibility of severe reactions such as anaphylactic shock. •Misinformation about anaphylaxis and allergy in the community. •Uncertainty relating to role of parent, guardian or carer in the transfer of health related information, especially allergies to stewards of their child ’s welfare. •Need for support from other family members and the community. 	<p>Need for increased awareness of anaphylaxis in the community</p>	<div style="background-color: #808080; color: white; padding: 10px; border: 1px solid black;"> <p>Raise the awareness of anaphylaxis and its health impact on parents and carers, the community, school and child care services</p> </div>
<ul style="list-style-type: none"> •Evidence of complex, diverse and dynamic nature of schools and child care facilities, which in turn required a coordinated and corresponding diversity in approach. •Presence of multiple agents across public and private sectors, education and health domains. •Presence of multiple competing priorities across agencies, services and sectors. •Need for coordination in distributing human and knowledge capital. •Presence of variable leadership and commitment to anaphylaxis risk management across various sectors. 	<p>Need for a consistent and timely first aid and medical management</p>	<div style="background-color: #808080; color: white; padding: 10px; border: 1px solid black;"> <p>Establish an Anaphylaxis Management Implementation Group tasked with leading and coordinating timely implementation of accepted recommendations</p> </div>

ISSUES IDENTIFIED:	RESPONSE REQUIRED	PROPOSED RECOMMENDATION
<ul style="list-style-type: none"> •Need for parent compliance in providing health care documentation and medication to schools. •Presence of legal constraints regarding the administration of EpiPens by child care and school staff. •Potential legal liability is a common concern for teachers and child care staff. •Unclear role of facilities in the provision of food and risk of allergen exposure to sensitised child. •The autonomy of teaching professions in selecting professional development activities. •Balancing time taken for training against time for provision of educational needs of children becomes critical in small schools. 	<p style="text-align: center;">Need for changes to legislation, regulations and policies</p>	<div style="border: 1px solid black; background-color: #cccccc; padding: 10px; margin-bottom: 10px;"> <p style="text-align: center;">Legislation be enacted in WA to govern the safe and secure emergency management of anaphylaxis by teachers and carers in schools and child care services</p> </div> <div style="border: 1px solid black; background-color: #cccccc; padding: 10px;"> <p style="text-align: center;">Regularly review and audit first aid provision and anaphylaxis risk identification, minimisation and management policies in schools and child care services</p> </div>
<ul style="list-style-type: none"> •Need for local data to define the scope and magnitude of allergic disorders or anaphylaxis, which could aid in decision making at multiple levels of planning. •Need for incident reporting systems registering incidents and near misses. •Need for sharing of lessons learnt across the sectors. 	<p style="text-align: center;">Need for a systematic reporting and recording system</p>	<div style="border: 1px solid black; background-color: #cccccc; padding: 10px;"> <p style="text-align: center;">Establish structures and processes to document and report on events of anaphylaxis, case fatality rate, near misses and their surrounding circumstances</p> </div>

ISSUES IDENTIFIED:	RESPONSE REQUIRED	PROPOSED RECOMMENDATION
<ul style="list-style-type: none"> • Presence of variability in the reliability and accessibility of allergy and anaphylaxis related information and services. • Presence of variable levels of awareness in staff working in schools and childcare services, of the risks posed by allergens, the potential for severe reactions and approaches to risk minimisation. • Need for standardisation in training material and delivery resulting in an inconsistent delivery of messages. • Training is not uniform nor is it compulsory for staff across all the child care centres and schools. • High turn over of staff in children 's services and relief staff or newly appointed staff are often on duty. • Inclusion Support Agencies (ISA) only go into " approved services", those supported by the Commonwealth Government. There are the other services that do not have access to an ISA. • Family Day Care is a large children's service in the state and although access to an ISA is available via their scheme staff, some carers may not always inform their scheme of a child's anaphylaxis at enrolment. 	<p>Need for consistent training and education of all target groups</p>	<p>Establish and implement an agreed standardised and certified education program for school staff, child care workers and carers in the approach to allergy and anaphylaxis identification, risk minimisation and emergency management</p>
<ul style="list-style-type: none"> • Presence of variable levels of awareness in medical and complementary healthcare practitioners of the need for comprehensive allergy testing. • Presence of variability in the clinical management of sensitised children at risk of anaphylaxis. • Presence of inconsistency in the provision of clinical advice relating to specialist assessment. • Presence of inconsistency and variability in medical advice relating to anaphylaxis management. • Presence of variable utilisation of anaphylaxis management plans. • Need for availability and access to allergy assessment services in a timely manner. • Presence of variable penetration and use of EpiPen trainers in primary care setting. • Presence of variable clinical risk assessment and patient preparedness. • The inability to predict who is at risk of fatal reactions as patients who have previously had mild reactions can have severe reactions in the future. 	<p>Need for a consistent and timely first aid and medical management</p>	<p>Improve the knowledge base of healthcare professionals, including complementary practitioners and strengthen protocols in the detection, diagnosis and appropriate management of children at risk of anaphylaxis</p> <p>Establish a specialised medical outpatient anaphylaxis service in WA</p>

WA AEWC Recommendations

The interagency committee has developed a set of proposed recommendations that aim to protect our children and prevent a similar death from occurring in WA. They are as outlined:

Empowerment Of Communities

Almost all events of anaphylaxis occur in the community setting. As our knowledge base underpinning the pathophysiology of allergy and anaphylaxis has grown so has health technology innovation. Community knowledge continues to lag as a result of a commensurate rise in the volume of health related messages in the public sphere. However, successful achievement of improved risk minimisation in childcare, education and training services will depend on improved community awareness and linkages.

It is prudent that a public awareness campaign be devised and implemented to ensure the general community understands the problems associated with allergies and the possibility of severe reactions, especially anaphylactic shock.

The public awareness campaign should improve our communities' awareness of the preventability of anaphylaxis and emergency first aid measures, including the use of self-injecting adrenaline. Access to education and information about anaphylaxis achieves effective participation and the empowerment of people and communities.

'We can help prevent similar tragedies from happening by educating all in the community about the seriousness of this issue' Dr Ruhno, Immunologist, WA

WA Recommendation 1

Raise the awareness of anaphylaxis and its health impact in parents and carers, the community, school and child care facilities.

- Schools may consider the adaptation of the "Be a MATE Program" (refer to page 26 for details) for use in WA DET Schools.
- Allergy and Anaphylaxis Awareness Raising Campaign be devised and implemented (Refer to Appendix 6).

Better Planning And Better Future

WA is at a unique point of transformation in relation to anaphylaxis risk management. It is recognised that action has been limited across public and private sectors, health, community and education domains with regard to minimising anaphylaxis risk. It is evident that a systematic effort is required to strengthen our efforts to this day.

Achieving this transformation will require vision, leadership and a coordinated action to capitalise on the resident human, social and knowledge capital distributed across agencies, sectors and communities. The WA AEWC recognises and highlights the resource constraints facing agencies and

believes the Anaphylaxis Management Implementation Group (AMIG) resource requirements be independent of current existing agency commitments.

WA Recommendation 2

Establish an Anaphylaxis Management Implementation Group (AMIG) tasked with leading and coordinating timely implementation of accepted recommendations.

Governance

- AMIG is responsible for leading and coordinating implementation of accepted recommendations.
- AMIG is accountable to a nominated agency with tenure of three (3) years.
- AMIG is adequately funded beyond current existing departmental budgets and resourced to lead and coordinate implementation.

Membership includes the following:

- A Chair. This will be a leader with knowledge and experience in working with government and non-government agencies across community development, health, education and training sectors.
- Department of Community Development, Department of Education and Training and Department of Health Representatives.
- Individuals with knowledge of the Independent Schools and Catholic Education Sectors.
- An individual with knowledge of risk management policy development, implementation and evaluation.
- An individual with knowledge of health professional education and training across general practice.
- A parent or community member.

Legislation, Regulations And Policies

There is commitment in the community to do what is right and reasonable in the event of a rapidly progressing anaphylactic reaction. At this stage there remains substantial uncertainty on a range of issues for those engaged in anaphylaxis prevention, first aid provision and transfer of care.

It is recognised that legislation and regulation alone is not a sufficient lever to achieve change. Establishing clear principles to guide all who participate in the care and education of children will be a necessary tool in strengthening the coherence of our services. Notably, some of the objectives set out could be addressed through policy cycles at agency level.

'Am I legally liable if I use an Epi-Pen when it hasn't been prescribed, or use another child's Epi-Pen?' Teacher, Anaphylaxis Forum

WA Recommendation 3

Legislation be enacted in Western Australia to govern the safe and secure emergency management of anaphylaxis by teachers and carers in schools and childcare services.

The legislation should:

- set out the responsibilities of parents (or other persons with parental responsibility) to provide
 - information to child care services and schools about their child's allergies or other conditions which may require emergency medical treatment
 - medication to the child care service or school for use in relation to their child
- require child care service and schools to develop plans for the treatment of children in emergency situations
- require appropriate number of members of child care service and school staff to be trained to deal with life-threatening medical conditions
- give members of the child care service and school staff the authority to administer medication to children in an emergency in circumstances where the staff member reasonably believes that the child is suffering an allergic reaction or other life-threatening condition (notwithstanding anything in the Poisons Act and notwithstanding that the parent or guardian may have refused their consent to the provision of such treatment)
- give a member of the child care service or school staff who administers medication to a child in an emergency protection from civil liability in circumstances where the member of the school staff has acted in good faith
- establish a mechanism for collecting information about children with anaphylaxis (see recommendation 5).

As an interim measure pending the enactment of legislation, consideration should be given to making adrenaline exempt from the relevant provisions of the *Poisons Act 1964* when it is used for the purpose of providing emergency medical treatment to children in child care services and schools (as to which see section 21A of the *Poisons Act 1964*)."

The DET's Student Health Care Policy has been available since 2001 and requires a Health Care Authorisation to be developed for all students with identified health care needs such as anaphylaxis. In addition, the DET's *Excursions and Off School Site Activities* policies require teachers to undertake risk assessment for all off site activities. An appropriate emergency response plan must be developed prior to the event. The teacher in charge of the event is responsible for ensuring all relevant information about respective responsibilities is communicated to students and supervisors.

The Department's First Aid Policy for Sickness and Accident in School (2006) currently precludes the administration of any medication that has not been authorised by parents/carers and documented in the student's health care authorisation form. For the Department to revise this position, it would require legislative changes to ensure adequate legal protection for staff (Refer to Recommendation 3) and funding to cover the cost of providing multiple EpiPens in all school first aid kits.

WA Recommendation 4

Regularly review and audit first aid provision and anaphylaxis risk identification, minimisation and management policies in schools and child care services.

Identification

Review and audit policies relating to schools and child care services addressing:

- identification of children who are at increased risk of anaphylaxis at enrolment or diagnosis
 - enrolment procedures include
 - identification of children at risk of anaphylaxis
 - documentation of the known triggers of anaphylaxis
 - documentation of a current Anaphylaxis Management Plan endorsed by the treating medical practitioner
 - provision of an up-to-date EpiPen by parent/guardian for children at risk of anaphylaxis
 - documentation of consent for EpiPen use according to the Anaphylaxis Management Plan by parent/guardian
 - treatment and mitigation of the risk posed by allergens in the school and child care settings including policies addressing the physical environment (classrooms, food services and canteens)
 - children at risk of anaphylaxis having ready access to appropriately trained staff who know where Action Plans are kept, can recognise an anaphylactic reaction and administer appropriate treatment including EpiPen.

Care planning

- Audit process to ensure that documentation is current and complete and school and childcare facilities' policies are adhered to.
- Recommend the use of Anaphylaxis Action Plans developed by the ASCIA across WA schools and child care facilities by agreement with parents/carers.
- Accredited training in anaphylaxis identification and EpiPen administration be developed and implemented.

First Aid Provision

First aid policies in schools and child care services to address:

- appropriate number of staff trained to administer EpiPen and recognise anaphylaxis
- availability of the EpiPen in first aid kits (subject to legal constraints and funding)
- timely administration of the EpiPen for children with anaphylaxis, including those experiencing anaphylaxis for the first time
- access to Anaphylaxis Action Plans and EpiPens
- protocol to access emergency clinical advice
- arrangements for transfer of care to medical services
- children who need a second injection (requires legislative change).

Rich information exists within our institutions, and much learning occurs within our schools and childcare services. It is important that information relating to incidents, near misses and root causes is collated to inform improvement across our system.

Incident reporting plays a critical role in the development of evidence-based risk minimisation strategies. A centralised database holding epidemiological data allows policymakers, planners and administrators to accurately define the extent of the problem, demographic trends, and prioritise areas that require early intervention. Schools and childcare services can be surveyed to establish the scope and magnitude of allergy and anaphylaxis related incidents to allow for feedback into planning and decision making. Realising the human propensity for error and recognising the dynamic nature of our workplace environment suggests that successful risk minimisation and strategies to treat anaphylaxis risk will require information and knowledge derived from our local context.

WA Recommendation 5

Establish structures and processes to document, report and communicate on events of anaphylaxis, case fatality rate, near misses and their surrounding circumstances.

- Establish a mechanism for collecting information about children with anaphylaxis (for example, by way of mandatory notification), registering that information, and regulating the use and disclosure of that information (see recommendation 3).
- As an interim measure pending the enactment of legislation, consideration should be given to making anaphylaxis a prescribed condition of health for the purposes of Part XIA of the *Health Act 1911*.
- Establish a mechanism that enables health professionals to communicate relevant diagnosis and management plans to relevant stakeholders in a timely manner (e.g. child care centres, schools etc).
- Anaphylaxis events and deaths from anaphylaxis to be reported to a centralised database within 72 hours and an analysis and action report on root cause provided within 45 working days to the anaphylaxis register and the appropriate agency.
- Information about children with anaphylaxis to include access to EpiPens, anaphylaxis management plans and exposures to triggering agent.
- Establish a voluntary mechanism to allow for self-reporting of near miss events.

Investment In Sustainable Actions And Services

Childcare workers and teachers attending to the educational needs of children are well placed to play an active role in anaphylaxis detection and first aid provision. Establishing a comprehensive anaphylaxis prevention and first aid response at the childcare facility and school level is contingent on building and maintaining the knowledge base of its workers.

It would be beneficial for teachers and childcare workers to be afforded the opportunity to receive information and access training in detection and first aid provision.

'School and childcare communities do play an important role in helping keep children and young people with allergies safe' Maria Said, President, Anaphylaxis Australia

There is no formal system of accreditation in WA to recognise teachers and other staff who have undertaken the training programme. The DET schools have on site mechanisms for maintaining a

record of professional learning activities undertaken by staff on a whole of school or individual staff basis.

WA Recommendation 6

Establish and implement an agreed standardised and certified education program for teachers, childcare workers and carers in the approach to allergy and anaphylaxis identification, risk minimisation and emergency management.

It is proposed that relevant agencies support setting up of educational programs and staff attendance at those programs on anaphylaxis detection and first aid management (Refer to Appendix 6). Educational program to include:

- allergy risk identification, minimisation and management in their working environment
- detection of moderate and severe allergic reactions including anaphylaxis
- first aid responses in the event of anaphylaxis including the administration of adrenaline through the EpiPen
- provisions for certification to recognise competency of trainer and trainee.

Educational programs to target:

- Medical Practitioners such as GPs, Paediatricians, Sub-specialists, Undergraduates
- practitioners of complementary medicine, including pharmacist, homeopaths and naturopaths
- school nurses, dietitians, school staff, including relief staff
- child care service carers
- food service providers at schools and child care, i.e. canteen staff and cooks
- children with, and without, anaphylaxis including very young infants and children in child care services, pre-school age children, early and late primary school, and secondary school children
- parents of children with anaphylaxis
- general public.

The evidence and knowledge base that underpins healthcare grows at an exponential rate. This provides a challenge to the generalist clinician in the modern day primary care setting. Maintaining evidence-based practice is contingent on access to primary sourced literature, critical appraisal and translation of research findings into the individual patient context.

Improvement in case detection and management of anaphylaxis provides clarity for children, families and carers in appropriate preventative action and contingency planning in the event of exposure. Allergen identification and anaphylaxis management requires cross discipline collaboration to provide optimal plans for prevention.

Healthcare professionals, including complementary care providers in the community setting, are well placed to provide comprehensive information and care for children and families seeking clinical care. Whilst there is a recognised diversity in conceptual constructs across complimentary and orthodox medical practice, it is critical that a shared approach is established and promulgated across the community of practitioners.

WA Recommendation 7

Improve the knowledge base of healthcare professionals, including complementary practitioners, and strengthen protocols in the detection, diagnosis and appropriate management of children at risk of anaphylaxis.

Establish a dialogue with ASCIA, learned colleges of health care professionals and representative institutions of complementary health care providers, to work towards a unified approach to the assessment and treatment pathways for children who are at risk of anaphylaxis.

The DOH and appropriate professional bodies setting the standards of care in primary and complementary care promulgate best practice guidelines in the detection, diagnosis and management of anaphylaxis. These guidelines should:

- provide material for updating and maintaining knowledge base in the detection, diagnosis and appropriate management of anaphylaxis
- adopt action plans for anaphylaxis developed by the ASCIA
- provide EpiPens and action plans at point of primary care after initial episode of anaphylaxis (Emergency Departments, general practitioner surgeries, community health nurses etc)
- encourage parent education in the use of EpiPens at the point of primary care (training in the use of emergency medicine for physicians and general practitioners).

Hospital admissions for anaphylaxis have increased seven-fold in the last decade in the UK and in Princess Margaret Hospital for children in WA, they have doubled in the past four years. The scale of the problem is such that in WA, paediatric allergy and immunology services cannot accommodate the rising number of referrals. This results in a prolonged waiting list for specialist assessment. The average waiting time for an initial consultation is 7 to 9 months, making it difficult to see patients with life-threatening illnesses in a timely manner. There is thus an increasing gap between the need for effective advice and treatment, and the availability of professional services in WA.

WA Recommendation 8

Establish a specialised paediatric anaphylaxis service for WA.

Establish and fund a paediatric anaphylaxis service, which provides specialist assessment for identification of the triggers of the episode of anaphylaxis and ongoing management in a timely manner. This service must be led by specialists trained in allergy to enable appropriate standards of care to be achieved and maintained. This will involve the following:

- Establishment of anaphylaxis clinics in Princess Margaret Hospital, Joondalup, and Fremantle/Murdoch campuses (total of 4 medical clinics and 4 nurse clinics).
- Telephone availability of consultant immunologists to GP's to assist in the initial management when patient presents to GP.
- Increased community awareness of anaphylaxis (lectures, working with Community Nurses in schools).
- Improving the knowledge and training of GPs and Paediatricians so that they can provide an effective primary and secondary care led allergy service with expertise available from the hospital setting for more severe and complex problems.
- Funding for a Nurse Practitioner in Allergy.

Conclusion

The challenge of reducing the risk of anaphylaxis for WA children in schools and licensed childcare services is shared by children and parents, carers and administrators, teachers, food providers, healthcare workers, policymakers and the broader community. This will require adequate and ongoing resourcing above existing departmental budget allocations, sustained leadership, effective communication and collaboration across government and non-government agencies and partnerships with community stakeholders. It will also require an enduring commitment to place the security, physical, mental and social wellbeing of the child, carer and family at the centre of care.

The Ministers of Health, Education and Training and Community Development, Seniors and Youth should be commended for their cooperative approach in developing a means of managing anaphylaxis in Western Australia.

Appendix 1 - Glossary

Adrenaline

Adrenaline is one of the body's natural stress hormones. When given as a medication it is the most effective and the most rapidly acting treatment for anaphylaxis. Adrenaline increases the heart rate and blood pressure, opens up the airways and reverses swelling in the throat and tongue. Common side effects usually only last for a few minutes and can include: increased heart rate, increased blood pressure, thumping of the heart, the "shakes", nausea, and sometimes nervousness or a transient headache.

Allergens

Allergens are substances that can cause an allergic reaction. Common allergens include pollens, dust mites, animal hairs, and in some cases protein components of certain foods. Normally the immune system recognises that these substances are harmless, and ignores them.

Allergic reaction

A reaction to an allergen. Common signs and symptoms include one or more of the following: hives, tingling feeling around the mouth, abdominal pain, vomiting and/or diarrhoea, facial swelling, cough or wheeze, difficulty swallowing or breathing, loss of consciousness or collapse (child pale or floppy), or cessation of breathing.

Allergy

An immune system response to something that the body has identified as an allergen.

Anaphylaxis

Most allergic symptoms are usually mild and rarely serious. The most severe and sudden form of allergic symptoms is anaphylaxis. Anaphylaxis usually occurs either immediately or very soon after exposure to the trigger (allergen). These reactions can be serious and even life threatening. There are many symptoms such as itching and swelling, red watery eyes, vomiting and diarrhoea, change of voice, noisy breathing, difficulty in breathing, difficulty talking or swallowing, persistent coughing, wheezing, dizziness, fainting, loss of consciousness or change in skin colour. The most dangerous, potentially fatal symptoms are breathing difficulties and a drop in blood pressure (also known as anaphylactic shock).

EpiPen

The EpiPen is a device which automatically delivers a single dose of injectable adrenaline. It is designed for use by non-medical people in non-medical settings. The EpiPen is available in two forms: EpiPen Junior (for children weighing 10 - 20 kg), and EpiPen (for children weighing over 20 kg), although specialists adjust the dose depending on the severity of previous anaphylaxis.

Histamine

Histamine is the main chemical responsible for the early symptoms of an allergic reaction (including itch). Antihistamine drugs work by blocking its effects.

Intolerance

Food intolerance may occur in response to a wide range of food components (both natural and artificial). In these cases small amounts of the problem food may be tolerated, but larger quantities result in a reaction occurring. The reaction can occur after several hours, or even days, of eating a particular food. Food intolerance is more common than food allergy, but is more difficult to diagnose. It may develop at any age, and seems to be linked with eating larger than usual quantities, or a greater concentration of the particular food. In some individuals both food allergy and intolerance can be present together.

Schools

School refers to a government or non-government school according to the *School Education Act 1999*. In Western Australia, it is compulsory for children aged 6-15 years to attend school. This period is also known as the "compulsory education period". However, it is not uncommon to have a number of children starting as young as 4 years of age and some children finishing compulsory education at 19 years of age. Schools do not constitute post compulsory education, which is generally carried out in TAFE or Universities. Schools also do not constitute pre-compulsory education, which finishes the latest at the age of 5 and falls into the domain of childcare services and kindergartens.

Appendix 2 - NSW Coroner's Recommendations

Finding

I find that Hamidur Rahman died on 20 March 2002 at Leeton, New South Wales. The cause of death is 'Anaphylactic shock' suffered after eating peanut butter on a school excursion.

Hamidur's Recommendations

To the Minister for Education and Training:

1. That staff and student training in the area of 'allergy' awareness be implemented immediately in all public and private sector schools. Training programmes should include:
 - identifying students at risk
 - allergy prevention
 - risk management
 - recognising Anaphylaxis
 - emergency treatment (particularly the use of the EpiPen).
2. All staff in pre-school and childcare centres undertake 'allergy and Anaphylaxis awareness' training to ensure the safest environment for their children who may be 'at risk'.
3. That a system of accreditation be developed to recognise teachers and other staff who have undertaken the training programme.
4. That all schools and childcare services undertake 'risk assessment' for all educational or recreational activities.
5. That an audit of all schools and childcare services be undertaken to identify children who suffer allergies.
6. That all schools require parents/guardians to immediately alert them to any allergies or medical conditions that may affect their child.
7. That this information is to be recorded in a central register accessible by all staff. That the register be continually updated.
8. That the 'Be A MATE' Programme devised by Anaphylaxis Australia be adopted in all schools.
9. That the Anaphylaxis Guidelines be amended at page 7 point 3 to read 'If the form indicates the student has an allergy/s or has either been hospitalised or prescribed an EpiPen or both, a meeting should be organised with the parent'.

To the Minister for Health

10. That the current programme of 'Registered Nurse Educators' under the auspices of the Department of Health be continued and expanded to ensure all educators receive timely and expert guidance on the issues of allergies and anaphylaxis management.
11. That the Anaphylaxis Working Party develops a universal set of competencies for Anaphylaxis training.
12. That an awareness campaign for all medical practitioners in both general and specialist fields be devised to alert them to the significant dangers of food and other allergies and the possibility of an Anaphylactic reaction. It should be impressed on these practitioners the need to have children

tested for allergies. It should also be stressed that if a child is found to be 'allergic' a risk management plan should be devised immediately.

13. The awareness campaign should also target practitioners of homeopathy and naturopathy.
14. That all children at risk of Anaphylaxis be subject to a management plan. Management plans should be the same for all children and not different plans devised by different doctors.
15. That a Register of Deaths from Anaphylaxis be implemented to identify Anaphylaxis as a cause of death and the circumstances of death.
16. That a public awareness campaign should be devised and implemented to ensure the general community understands the problems associated with allergies and the possibility of severe reactions especially Anaphylactic shock.

To the Attorney General

17. That Legislation similar to the proposed Canadian 'Sabrina's Law' be enacted to govern both schools and childcare centres in the public and private sector. The intention of the Legislation would be to protect pupils at risk of Anaphylaxis and to safeguard teachers and staff from prosecution if an act done to manage or save a child was undertaken in 'good faith'.

Magistrate Jacqueline M. Milledge
Senior Deputy State Coroner
9 September 2005

Appendix 3 - Current Situation In WA

The NSW Coroner's recommendations were reviewed in the WA context and as a result, a number of key areas have emerged that present opportunities to build on the strengths of our current environment and to minimise the risk of anaphylaxis in schools and licensed childcare services. They are briefly discussed in the table below.

New South Wales Coroner's Recommendations	Gap analysis of current situation in WA (as at February 2006)
<p><u>NSW Recommendation 1</u> That staff and student training in the area of 'allergy' awareness be implemented immediately in all public and private sector schools. Training programmes should include:</p> <ul style="list-style-type: none"> • identifying students at risk • allergy prevention • risk management • recognising Anaphylaxis • emergency treatment (particularly the use of the EpiPen). 	<p><u>Current situation in WA:</u></p> <ul style="list-style-type: none"> • A practical guide to the management of food allergy and Anaphylaxis was produced by the ASCIA entitled "Dealing with Food Allergy". This was distributed to all WA public schools. • The DETs Student Care Policy, which only applies to public schools, requires a Health Care Authorisation to be developed for all students with identified health care needs such as Anaphylaxis. This identifies medical/health issues, describes appropriate management implications at school and off site, and identifies the responsibilities and actions of staff including the administration of medication and how to respond to emergency situations. • The Student Health Care Advice Paper, available on the DET website, contains information on anaphylaxis and its management. This can be accessed by staff as well as by members of the public. • Where necessary, schools can apply to access funding for an Education Assistant to provide support for children diagnosed with anaphylaxis. • Student Services Managers are kept up to date on current strategies for the management of anaphylaxis. The Manager of the Strategic Policy and Planning Unit within the Inclusive Education Standards Directorate carries out this service. • WA has over 150 community health nurses who work in and assist schools. This includes the provision of anaphylaxis training for schools. <p><u>Gaps and Challenges:</u></p> <ul style="list-style-type: none"> • There are no formal training programmes that address: identifying students at risk, allergy prevention, risk management, recognising anaphylaxis, and emergency treatment (particularly the use of EpiPen). • The DET's <i>First Aid</i> policy currently precludes the administration of any medication that has not been authorised by parents/carers and documented in the student's health care authorisation form. For the Department to revise this position, it would require legislative changes to ensure adequate legal protection for staff. • Staff in schools cannot be forced to undergo training and not all staff will be willing to be trained. This may be problematic in small schools with low staff numbers.
<p><u>NSW Recommendation 2</u> All staff in pre-school and childcare centres undertake</p>	<p><u>Current situation in WA:</u></p> <ul style="list-style-type: none"> • Some training being conducted by school nurses. • The current position of most of the above services in managing

<p>'allergy and Anaphylaxis awareness' training to ensure the safest environment for their children who may be 'at risk'.</p>	<p>a child with identified anaphylaxis is to either:</p> <ul style="list-style-type: none"> • Take instruction from a parent in case of an emergency. • Call their local ISA. The ISA would provide information from ASCIA about anaphylaxis and request the service access progression assistance (Silver Chain, Red Cross or St Johns Ambulance) in gaining training in the use of the EpiPen. • Use a policy that was developed by the Children's Services Support Unit as a resource. This policy includes information for staff about anaphylaxis and the ways to avoid triggers and formulate an action plan. <p>Gaps and Challenges:</p> <ul style="list-style-type: none"> • There are no 'allergy and anaphylaxis awareness' training programs for staff in preschool and childcare in WA. Childcare services include Long Day Care Centres, Occasional Care Centres, Out of School Care Programs and Family Day Care Services.
<p>NSW Recommendation 3 That a system of accreditation be developed to recognise teachers and other staff who have undertaken the training programme.</p>	<p>Current situation in WA:</p> <ul style="list-style-type: none"> • The DET Schools have on site mechanisms for maintaining a record of professional learning activities undertaken by staff on a whole of school or individual staff basis. <p>Gaps and Challenges:</p> <ul style="list-style-type: none"> • There is no formal system of accreditation in WA to recognise teachers and other staff who have undertaken any training programmes. • There are no accredited training resources.
<p>NSW Recommendation 4 That all schools and childcare services undertake 'risk assessment' for all educational or recreational activities.</p>	<p>Current situation in WA:</p> <ul style="list-style-type: none"> • The DET's <i>Excursions and Off School Site Activities</i> policies require teachers to undertake risk assessment for all off site activities. This includes: <ul style="list-style-type: none"> • An assessment of a student's capacity to safely undertake the excursion or other off site school activity. • An assessment of student health care maintenance and/or intensive health care needs. • The development of an appropriate emergency response plan prior to the event. • The provision of a Health Care Form for each student, completed by parents/carers prior to the event. This form is in addition to the Student Health Care Authorisation completed at enrolment. • The teacher in charge of the event is responsible for ensuring all relevant information about respective responsibilities is communicated to students and supervisors. • The DCD ensures that all licensed childcare services develop excursion plans that incorporate safety measures and strategies in order to minimise risk.
<p>NSW Recommendation 5 That an audit of all schools and childcare services be</p>	<p>Gaps and Challenges:</p> <ul style="list-style-type: none"> • No audit of WA schools and childcare services has been undertaken to identify children who suffer allergies.

<p>undertaken to identify children who suffer allergies.</p>	<ul style="list-style-type: none"> • Reports could be run using records compiled at enrolment and stored on DET database (Schools Information System (SIS)).
<p><u>NSW Recommendation 6</u> That all schools require parents/guardians to immediately alert them to any allergies or medical conditions that may affect their child.</p>	<p><u>Current situation in WA:</u></p> <ul style="list-style-type: none"> • The DET's Student Health Care Policy requests parents/guardians to immediately alert the school to any allergies or medical conditions that may affect their child. In addition, school principals need to review the Health Care Authorisation for an individual student on an annual basis, or when school staff becomes concerned about any changes in the health needs of the student. Part of this review process includes informing new staff of the Health Care Authorisation for students in their care. • The DET believes that the requirement for parent compliance in the provision of information about their child's health needs is adequately articulated by the DET <i>Enrolment Policy</i> in conjunction with the <i>School Education Act 1999</i>. However, some parents still do not provide the necessary information and/or medication. • The DCD currently requires parents/carers to provide relevant details of their child's medical history to the childcare service as part of the childcare regulations. This includes current immunisation status and any allergies suffered by the child. <p><u>Gaps and Challenges:</u></p> <ul style="list-style-type: none"> • Strengthening of this recommendation by defining minimum amount of information and timeliness may be required.
<p><u>NSW Recommendation 7</u> That this information is to be recorded in a central register accessible by all staff. That the register be continually updated.</p>	<p><u>Current situation in WA:</u></p> <ul style="list-style-type: none"> • The electronic information system used in the DET Schools does have the capacity to allow the schools to enter and flag important medical details for students. Multiple medical conditions and necessary emergency procedures can be entered. • The system has the central capacity to extract data on a statewide basis, however at this stage this is not done for students with identified health needs. Entry requirements and terminology used could be standardised across all schools. • It may be possible to investigate whether the childcare Licensing & Standards Unit database can record the medical information of enrolled children. <p><u>Gaps and Challenges:</u></p> <ul style="list-style-type: none"> • There is no central register that can be accessed by all staff and is continually updated. • <u>Note:</u> Setting up of this sort of database may require legislative change.
<p><u>NSW Recommendation 8</u> That the 'Be A MATE' Programme devised by Anaphylaxis Australia be adopted in all schools.</p>	<p><u>Current situation in WA:</u></p> <ul style="list-style-type: none"> • 'Be a MATE' Programme is not routinely used. MATE is an acronym for "Make Allergy Treatment Easier". • DET Policy is to provide schools with funding to purchase resources according to the needs of their students.

<p>NSW Recommendation 9 That the Anaphylaxis Guidelines be amended at page 7 point 3 to read 'If the form indicates the student has an allergy/s or has either been hospitalised or prescribed an EpiPen or both, a meeting should be organised with the parent'.</p>	<p>Current situation in WA:</p> <ul style="list-style-type: none"> • Meetings with parents are not routinely requested if a student or child has an allergy/s or has either been hospitalised or prescribed and EpiPen or both. • Current DET Policy requires parents of children with a health care need requiring support during school hours to complete and sign a Health Care Authorisation (HCA). Completion of the HCA requires parents to actively engage in health care planning for their child (refer to comments in recommendation 6).
<p>NSW Recommendation 10 That the current programme of 'Registered Nurse Educators' under the auspices of the Department of Health be continued and expanded to ensure all educators receive timely and expert guidance on the issues of allergies and Anaphylaxis management.</p>	<p>Current situation in WA:</p> <ul style="list-style-type: none"> • WA has Community Health Nurses in schools that provide anaphylaxis teaching as well as other duties. These nurses have a yearly lecture provided by staff of the Child and Adolescent Health Service on anaphylaxis and its management. They have been provided with EpiPen trainers and educational material and provide anaphylaxis education at the request of the school. • There are no 'Registered Nurses Educators' under the auspices of the DOH. <p>Gaps and Challenges:</p> <ul style="list-style-type: none"> • Not all Community Health Nurses in WA have attended the lectures. • Community Health Nurses do not have the expertise of the nurse educators in NSW whose only role is anaphylaxis education.
<p>NSW Recommendation 11 That the Anaphylaxis Working Party develops a universal set of competencies for Anaphylaxis training.</p>	<p>Current situation in WA:</p> <ul style="list-style-type: none"> • Associate Professors Mallon and Loh and Dr Simon Brown are the WA members of the Anaphylaxis Working Party that is developing a universal set of competencies for anaphylaxis training.
<p>NSW Recommendation 12 That an awareness campaign for all medical practitioners in both general and specialist fields be devised to alert them to the significant dangers of food and other allergies and the possibility of an Anaphylactic reaction. It should be impressed on these practitioners the need to have children tested for allergies. It should also be stressed that if a child is found to be 'allergic' a risk management plan should be devised immediately.</p>	<p>Gaps and Challenges:</p> <ul style="list-style-type: none"> • There is no awareness campaign for medical practitioners in both general and specialist fields to alert them to the significant dangers of food and other allergies and the possibility of an anaphylactic reaction in WA.
<p>NSW Recommendation 13 The awareness campaign should also target practitioners of homeopathy and</p>	<p>Gaps and Challenges:</p> <ul style="list-style-type: none"> • There are no awareness campaigns targeting practitioners of homeopathy and naturopathy.

naturopathy.	
<p><u>NSW Recommendation 14</u> That all children at risk of Anaphylaxis be subject to a management plan. Management plans should be the same for all children and not different plans devised by different doctors.</p>	<p><u>Current situation in WA:</u></p> <ul style="list-style-type: none"> • The 2005 DET's Student Health Care policy and procedures are being supported by advice papers for schools. • The advice to schools in terms of anaphylaxis management is to accept the ASCIA standard management plan for anaphylactic reactions when this is recommended by a health professional. • Advice is provided to childcare services with respect to adopting ASCIA's plans. <p><u>Gaps and Challenges:</u></p> <ul style="list-style-type: none"> • All children at risk of anaphylaxis are not subject to a standardised management plan.
<p><u>NSW Recommendation 15</u> That a Register of Deaths from Anaphylaxis be implemented to identify Anaphylaxis as a cause of death and the circumstances of death.</p>	<p><u>Gaps and Challenges:</u></p> <ul style="list-style-type: none"> • There is no register that reports deaths from anaphylaxis.
<p><u>NSW Recommendation 16</u> That a public awareness campaign should be devised and implemented to ensure the general community understands the problems associated with allergies and the possibility of severe reactions especially Anaphylactic shock.</p>	<p><u>Gaps and Challenges:</u></p> <ul style="list-style-type: none"> • There is no public awareness campaign to ensure the general community understands the problems associated with allergies and the possibility of severe reactions, especially anaphylactic shock, in WA.
<p><u>NSW Recommendation 17</u> That Legislation similar to the proposed Canadian 'Sabrina's Law' be enacted to govern both schools and childcare centres in the public and private sector. The intention of the Legislation would be to protect pupils at risk of Anaphylaxis and to safeguard teachers and staff from prosecution if an act done to manage or save a child was undertaken in 'good faith'.</p>	<p><u>Current situation in WA:</u></p> <ul style="list-style-type: none"> • No similar legislation exists in WA. • The provision of medical treatment to children in an emergency and issues of liability arising there from is governed by a complex array of statute and common law. In addition, the supply of adrenaline is subject to the restrictions contained in the Poisons Act. • In light of the fact that there are a number of legal barriers to, and legal uncertainties surrounding, the administration of medication to children by a member of the staff of a childcare service or school in an emergency situation, the Committee supports the introduction of legislation to provide greater clarity and certainty. The Committee considers that "<i>Sabrina's Law, 2005</i>"¹⁸ is a useful reference model".

¹⁸ Emond Harnden 2006, Emond Harnden, Ontario, viewed 12 January 2007, <<http://www.emond-harnden.com/publications/jun05/sabrinaslaws.html>>.

Appendix 4 - Organisations Represented At The Stakeholder's Forum

Organisations and People Represented At The Stakeholder's Forum:

- Anaphylaxis Australia
- Association of Independent Schools of Western Australia, Project Officer
- Asthma Foundation
- Canning Division of General Practice
- Catholic Education Office
- Child Services Support Unit
- Community Health Services, Principle Nursing Officer
- Department for Community Development, Project Officer
- Princess Margaret Hospital, Department of Dietetics and Nutrition
- Department of Health, Food Safety & Nutrition
- Department of Health, Health Policy and Clinical Reform
- Department of Health, Office of the Chief Medical Officer
- Department of Health, Senior Legal Officer
- Family Day Care Schemes of WA Inc (Communicare)
- Health Consumers' Council of WA
- Inclusion Support Agencies of WA
- Independent Schools Nursing Association
- In-Home Care Reference Group
- Inland Population Health Directorate, Acting Zone Director
- Law Society of Western Australia
- Princess Margaret Hospital, Executive Director, Medical Services
- Meerilinga Young Children's Foundation
- Miscellaneous Worker's Union
- Nutrition Australia (WA Branch)
- Parents and Friends Association
- Perth and Hills Division of General Practice
- Pharmacy Guild of Western Australia
- Princess Margaret Hospital, Immunology Liaison Nurse
- Private Dietitian
- Professional Association for School Aged Child Care Services Inc.
- Resource Unit for Children with Special Needs
- Royal Australian College of General Practitioners
- St John Ambulance
- State School Teachers Union of Western Australia
- University Of WA, School of Teaching
- WA Centre for Remote and Rural Medicine
- WA Council State Schools Organisation
- WA Country Health Service, Population Health Director
- WA District High School Administrators' Association
- WA Division of General Practice
- WA General Practice Education and Training
- WA Primary Principals' Association
- WA School Canteen Association
- WA Secondary School Executives Association
- YMCA.

Organisations and People Invited Yet Unable To Attend The Stakeholder's Forum:

- Australian College for Rural and Remote Medicine
- Australian Institute of Holistic Medicine
- Australian Medical Association
- Australian Natural Therapies Association
- Carewest
- Childcare Association of WA
- Children's Area Health Service, Area Health Services Director
- Coastal Division of General Practice
- Community Services Health & Education Industry Training Council
- Curtin University of Technology, School of Public Health
- Curtin University School of Teaching
- Department for Community Development, Child Care Advisory Committee
- Edith Cowan University School of Teaching, Executive Dean, Faculty of Education and Arts
- Ethnic Child Care Resource Unit
- Fremantle Division of General Practice
- Independent Teachers Union
- Kwinana Division of General Practice
- Mulbury Tree Child Care
- Murdoch University School of Education
- North Metropolitan Area Health Service, Area Health Services Director
- North Metropolitan Area Health Service, Population Health Director
- ODG Central Office, General Counsel, Legislation Project
- Osborne Division of General Practice
- Pharmacist Society
- Playgroup Association of WA
- Royal Australasian College of Physicians
- South Metropolitan Area Health Service, Area Health Services Director
- South Metropolitan Area Health Service, Population Health Director
- Swan Education District Department of Education and Training, Student Services Manager representative
- WA Country Health Service, Area Health Services Director
- WA Education Support Principals' Association
- Yorganop Childcare Aboriginal Corporation.

Appendix 5 - List Of Members Of The Three Working Groups

Members of the Education and Training Working Group:

- Ana Gowrea
- Dominic Mallon (Chair)
- Kathryn James
- Maree Creighton
- Sallee Pettit
- Sandra Vale
- Sharon McBride.

Members of the Department of Education and Training Working Group:

- Karen Wroughton
- Katerina Hegney
- Keva Crouch
- Richard Loh
- Sallee Pettit
- Sandra Vale
- Sharon McBride
- Steve Glew (Chair).

Members of the Department of Community Services Working Group:

- Bernadette Giambazzi
- Chantal Miller
- Christine Walker
- Cora-Ann Wilson (Chair)
- Doreen Blythe
- Jane Elton
- Kathryn James
- Leanne Kenworthy
- Magda Heijmans
- Richard Loh
- Ross Adams
- Sandra Vale
- Sandy Morton
- Shelly Prendergast
- Virginia McSporrان.

Appendix 6 - Report Of The Education And Training Working Group

- Executive Summary -

Process

The Education & Training Working Group (ETWG) was formed at the request of the Anaphylaxis Expert Working Committee. The aims were:

1. To determine the education and training requirements of various target groups involved in managing anaphylaxis in schools and childcare services.
2. To review available education and training materials for these groups.
3. To identify education and training materials required to enable the community to better manage children with anaphylaxis in the WA context, including new and existing resources that can be adapted.

Membership

Members of the ETWG were:

- Maree Creighton
- Ana Gowrea
- Kathryn James
- Sharon McBride
- Dominic Mallon (Chair)
- Sallee Pettit
- Sandra Vale.

Review Of Available Education And Training Materials For Anaphylaxis Management In Schools And Childcare Services In Australia

The ETWG first identified the target groups involved in anaphylaxis management in WA schools and childcare services. For each target group, the key information required to enable them to improve anaphylaxis management in their setting were identified (see Table 1). Existing education and training materials available in Australia and overseas were then analysed to identify those that can be used and/or adapted for the WA context as well as identify additional education tools that need to be developed (Tables 2 and 3). For each target group, ETWG members identified key messages, communication strategies that could be employed, existing education and training tools and resources, and new tools that need to be developed (see 'Education and Training Requirements').

Key Findings

The ETWG found that, despite the existence of a number of excellent Australian publications and WA-specific policies aimed primarily at teachers and childcare workers currently available either in print or on websites, insufficient attention has been paid to the diversity and differing requirements of target groups involved in anaphylaxis management. In particular, few materials are available to inform and support parents and children. Limited educational materials that focus on processes and guidelines to help translate key information into action in schools and childcare services were available, with the Department of Education and Training's Student Health Care Advice Paper being the only WA-specific document of this sort.

Specific Issues Requiring Consideration

The ETWG considered that the following issues would need to be addressed for the successful implementation of any education and training strategy:

- Development of recommended **Standards of Care** as an indicator of the level of performance we would like to achieve following the successful introduction of our education and training package.
- **Consistency and simplicity of key messages.**
- **Relevance to the local context** - Education and training resources need to be salient to the specified target group. Adaptations of existing and development of new, more-targeted resources will be required to translate the information into desired action in WA. Key messages, including roles and management/action pathways, need to be clear.
- **Accessibility of resources** - Links to other networks are important.
- **Sustainability of resources** - Need to incorporate new materials and strategies into existing processes and context to allow for revisions and updates. The suitability of the newly developed strategies and resources to existing processes for each target group in their local setting will need to be assessed.

Summary Of Recommendations

Education of all Target Groups

That a comprehensive education and training strategy be developed to specifically target the following groups involved in anaphylaxis management in schools and childcare services:

- Medical Professionals - General Practitioners, Paediatricians, Undergraduates, Subspecialists
- school Nurses and Dietitians
- school Teachers, including relief staff
- childcare Service Carers
- food service providers at schools and childcare, i.e. canteen staff and cooks
- children with, and without, anaphylaxis including very young infants and children in childcare services, pre-school age children, early and late primary school, and secondary school children
- parents of children with anaphylaxis
- practitioners of complementary medicine, including homeopaths and naturopaths; and
- general public.

Identified Priority Resources Requirements

1. Information package providing basic information on anaphylaxis to all target groups.
2. Training package with more detailed information relevant to people charged with caring for children at risk of anaphylaxis.
3. Standardised staff development materials for health care professionals.
4. Parent focussed information pack on relevant aspects of anaphylaxis and child-focussed information pack for the child with anaphylaxis.
5. Clinical pathway resources (fact sheet and checklist) for generalist Medical Practitioners managing anaphylaxis.
6. High quality large visual aids (e.g. Posters) for EpiPen administration.
7. Food Safety Information Pack for food providers.

Report - Education & Training Working Group Anaphylaxis Expert Working Committee

Introduction

The Education & Training Working Group (ETWG) was formed at the request of the Anaphylaxis Expert Working Committee. The aims were:

1. To determine the education and training requirements of various target groups involved in managing anaphylaxis in schools and childcare services.
2. To review available education and training materials for these groups.
3. To identify education and training materials required to enable the community to better manage children with anaphylaxis in the WA context, including new and existing resources that can be adapted.

Membership

Members of the ETWG were:

- Maree Creighton
- Ana Gowrea
- Kathryn James
- Sharon McBride
- Dominic Mallon (Chair)
- Sallee Pettit
- Sandra Vale.

Review Of Educational Material For Management Of Anaphylaxis In Schools And Childcare Centres Currently Available In Australia

The committee first identified the target groups involved in anaphylaxis management and the key messages required by each. Secondly, education material, which was already available, was analysed to identify the need for development of additional material (Tables 2 and 3).

The committee found that in general, insufficient attention had been paid to the diversity and different requirements of target groups involved in anaphylaxis management. There are a number of excellent publications and policies aimed primarily at teachers and childcare workers available either in print or on websites in the Australian public domain (Table 2). Less material was available for parents and children.

The target groups and key messages are represented in a grid developed by this committee (Table 1).

Table 1: Target Audiences And Key Messages Grid

KEY INFORMATION TOPIC	Emergency practitioners - ambulance officers, first aid	Pharmacists	Medical Professionals - GPs, Paediatricians,	School - nurses, dietitians, other service providers	School - principals, teachers	C/care - licensees, coordinators, carers, other service providers	School - canteen mgrs, volunteers (Food service)	C/care cooks (Food service)	School/childcare - All parents	School - All students (pre-school to high school)	Parents w/allergic child	Allergic child	General Public - homeopaths, naturapaths	
	Emergency treatment	Key Messages:										Key messages: Detailed information for daily living, including emergency actions, risk mgt plans AND prevention. Will need Age-appropriate education materials.		
	Emergency management plans	<ul style="list-style-type: none"> Detailed information on their lead roles within the school regarding procedures, actions during emergencies, ie. Use of EpiPen. 												
	Risk management plans - health care plans, individual roles	<ul style="list-style-type: none"> Information on HOW TO INFORM parents and the community MAY RECOMMEND: training for these target groups, develop Educator's Kit/website for principals, teachers, childcare workers and nurses; release Position Paper for GPs.												
	Risk reduction / Preventing anaphylactic reactions (environment)	Supportive expert role			Need to take lead role within the school and the childcare setting.		Need awareness of food safety procedures to reduce risks, and info on alternative foods ideas		Key Message: Understand the value of risk reduction strategies implemented. The challenge is engaging this group. Will need Age-appropriate education materials, eg. 'Ally the elephant' and 'Be a MATE'					
Anaphylaxis and Allergies - definition, causes, symptoms	<ul style="list-style-type: none"> Could be included as part of the Educator's Kit. 					Could be included as part of a Food Service Education strategy		MAY RECOMMEND: Syllabus/Curriculum materials					What is the key message for general public? Mass media vs local community strategies	
Allergy testing	Referral and testing procedures, services available.													

Note: Communicate to new enrolments that plans/procedures are in place to cater for their child with special needs.

Table 2:

Review Of Anaphylaxis In Schools Educational Material Currently Available In Australia

ORGANISATION	DOCUMENT DESCRIPTION	NURSE EDUCATORS/ TEACHERS/ CHILDCARE ASSISTANTS	PARENTS	CHILDREN	COMMENTS
ASCIA	Guidelines for prevention of food anaphylatic reactions in schools, preschools and childcare centres	+++	+	-	Succinct guide; restricted to foods
ASCIA	Anaphylaxis training manual	+++	+	-	More comprehensive document, including above + anaphylaxis from insect stings and medications
SA Government	"The Prevention, Recognition and Management of Anaphylaxis"	+++	++	-	Initial document available in Australia - comprehensive guide to anaphylaxis management. Formatting is aged, but content is excellent
NSW Government	Anaphylaxis guidelines for schools	+++	++	-	In some ways easier to read than the SA document. Good role delineation
ACT	Health and Safety Policy contained as an Appendix within the First Aid Policy	+	+	-	Bare bone policy, unlikely to be disseminated. Good pictures of EpiPen administration
Community Childcare Cooperative Ltd (NSW)	A guide to enrolling a child with severe food allergies in a childcare service	+++	+	-	Very readable guide for Childcare centre operators. Solid advice and information
Anaphylaxis Australia Inc Website	Parent and Patient support organisation	+	+++	++	Lots of sensible tips for parents and patients to assist them in negotiating the minefield. Good links
WA Education Department	Student Health Care Advice Paper	++	++	-	Solid, detailed information, formatting, good links
NT, TAS & VIC Governments	Not available				
ASCIA Website	Medical Practitioners' website	++	++	-	Directed mainly at medical practitioners, with many useful resources and links, including those mentioned above. Dated web design, static web page

- no resources
+ one resource
++ two resources
+++ three resources

Recommended Standards Of Care

The messages contained in the report of the coronial inquiry and in the educational materials available were clear. However, translation of those messages into action in the schools and childcare centres is a major challenge.

To inform policy discussion and the development of targeted educational materials, this working group drafted recommended standards of care. These standards attempted to define acceptable and achievable care provided by the health and educational and/or childcare service systems to a child who experiences anaphylaxis in the ideal world. In addition, these standards may provide measurable and auditable performance parameters for the system, once implemented.

The draft standards were presented at a meeting of the John Ilham Foundation and at the ASCIA Anaphylaxis Expert Working Party Meeting. It is acknowledged that these standards are novel and therefore cannot be based on evidence. However, they were refined as a result of feedback from these meetings to the following five standards:

1. Each child with a history of anaphylaxis will have a maximum of one unmanaged episode of anaphylaxis in its life.

Implications of this standard include:

- *Provision of EpiPens at point of primary care after initial episode of anaphylaxis (Emergency Departments and general practitioner surgeries).*
- *When the point of primary care is an alternative health practitioner, the alternative health practitioners must advise patients with anaphylaxis to attend qualified medical practitioners.*
- *Parent education on the use of EpiPen at the point of primary care (training in the use of emergency medicine for physicians and general practitioners).*
- *Provision of EpiPen trainers and action plans at points of primary care.*

2. Specialist assessment for identification of the triggers of the episode of anaphylaxis and for ongoing management will occur within 6 weeks of the episode.

Implications of this standard include:

- *Radioallergisorbent Tests (RAST) for all suspected triggers at time of diagnosis.*
- *Specialist referral, review of results of initial RAST testing and performance of skin testing/additional RAST testing if required.*
- *Provision of sufficient, public specialist anaphylaxis clinics to allow this standard to be met (recognising that a proportion of these children will be seen in Private Practice).*
- *Consider making anaphylaxis a notifiable disease allowing development of a centralised database from which this standard can be audited.*
- *All children with anaphylaxis to insect venom would be prescribed appropriate desensitisation to substantially reduce their risk of similar episodes occurring in the future.*

3. Schools and childcare centres who enrol children with a history of anaphylaxis will undertake measures to reduce the risk of that child being exposed to the triggering allergen.

Implications of this standard include:

- *Parents to inform schools and/or childcare services of their child's allergies.*
- *Teachers, carers and staff at school canteens to be advised of the presence of children with anaphylaxis and their triggering allergens.*
- *Be a MATE Program reviewed for suitability for use in WA.*
- *All children with anaphylaxis to insect venoms to wear socks and shoes at all times when playing outside at their schools and childcare services.*

- *Where possible, parents to prepare foods for children with food allergies to take to the school and childcare centre.*

4. Children who suffer an episode of anaphylaxis* at school, will be administered injectable adrenalin within 5-10 minutes of onset of severe symptoms*.

Implications of this standard include:

- *Parents of children with a history of anaphylaxis providing the school and/or Childcare Centre with an Action Plan completed by a suitably trained or experienced Medical Practitioner, and at least one EpiPen for their child attending that school.*
- *Schools advising teachers of the presence of children with anaphylaxis in their classes.*
- *Be a MATE Program reviewed for suitability for use in WA.*
- *Education of teachers to recognise symptoms of moderate to severe anaphylaxis.*
- *Availability of EpiPens and of staff competent to administer the EpiPens within 5-10 mins of children attending all activities on and off the school campus and childcare centres.*
- *Legislative protection for staff who act in a competent manner and in good faith while administering EpiPen to students/children they assess as having anaphylaxis.*
- *Availability of EpiPens in First Aid boxes to cover children developing anaphylaxis for the first time at schools or childcare services.*

5. All children suffering an episode of anaphylaxis at schools or childcare centres will be attended by an ambulance or other suitably trained health care professional within 30 minutes of notification of the emergency.

Implications of this standard include:

- *Schools and childcare centres being able to efficiently request attendance of an ambulance/other suitably trained healthcare professional in case of an emergency.*

*As defined in the ASCIA Anaphylaxis Action Plan.

Other Specific Issues Identified By The Committee

The ETWG considered that the following issues would need to be addressed for the successful implementation of any education and training strategy:

- **Key messages need to be consistent and simple.**
- **Relevance to the local context** - Education and training resources need to be salient to the specified target group. Adaptations of existing and development of new, more-targeted resources will be required to translate the information into desired action in WA. Key messages, including roles and management/action pathways, need to be clear.
- **Accessibility of resources** - Links to other networks are important.
- **Sustainability of resources** - Need to incorporate new materials and strategies into existing processes and context to allow for revisions and updates. The suitability of the newly developed strategies and resources to existing processes for each target group in their local setting will need to be assessed.

Determination of Educational Requirements for each Target Group

Members of the committee were then tasked with determining the educational requirements for each target group under the following headings:

- Key messages
- Strategies
- Tools available
- To be developed.

The proceedings of those deliberations are as follows:

Target group

Community Health Nurses in Schools

Key messages include:

- anaphylaxis is a medical emergency
- anaphylaxis is increasing in prevalence amongst school aged children
- schools have a duty of care to manage children with anaphylaxis
- school staff require training to enable them to manage anaphylaxis at schools (including risk assessment; prevention and recognition of anaphylaxis; administration of the appropriate emergency treatment, and gaining prompt access to clinical supervision).

Strategies include:

- provision of information upon induction for new community nurses staff working in schools (CD or on-line learning package)
- clinical updates required on a regular basis i.e. every two years (staff development lectures)
- updates with regard to Education sector policy, as per teachers and Principals (video package)
- practice guidelines in relation to emergency management, minimization of risk and training teachers.

Tools available include:

- regular clinical updates (staff development lectures)
- ASCIA materials
- Anaphylaxis Australia materials.

To be developed:

- CD or on-line learning package
- staff development lecture (new and improved version)
- video package (as per for teachers and Principals).

Target group

Parents of non-allergic children at Schools / Childcare services and extended family members of affected child

Key messages include:

- anaphylaxis is dangerous and potentially life-threatening
- the common triggers for anaphylaxis are foods (peanut, egg, cow's milk) and stinging insects (bees). They and their children can help protect children with anaphylaxis by
 - ✓ understanding and adopting risk management strategies
 - ✓ recognising and responding (according to ability) to children suffering an episode of anaphylaxis.

Strategies include:

- incorporation of information on anaphylaxis at education/orientation sessions offered by school/childcare service to all new parents
- 'Be a MATE' Program reviewed for suitability for use in WA
- Teacher/Principal led discussion on anaphylaxis risk management at information evenings
- inclusion of these strategies as part of criteria for accreditation as "Allergy Friendly Schools".

Tools available include:

- ASCIA DVD on anaphylaxis
- video resources described on back of AllergyFacts.
- web resources
 - ✓ www.allergyfacts.org.au
 - ✓ www.allergy.org.au
- notes provided to parents when signing in and out of centre (done in some centres), alerting the parents to the fact that there are a number of children at the centre with anaphylaxis.

To be developed include:

- training courses on anaphylaxis for Principals, school nurses, teachers, coordinators of childcare services
- fact sheets
 - ✓ Anaphylaxis and Triggers
 - ✓ Risk Management
- an accreditation process for Allergy Friendly Schools
- centre policies and procedures to require notes sent to all parents notifying them of children with severe allergies in attendance at the centre
- brochures provided by Peak Agencies, informing parents of the importance to be aware that other children in centres may have anaphylaxis and how parents can take a proactive role to help minimise the risks to such children.

Comments

Principals and childcare supervisors are the key opinion leaders in schools and childcare services. Respectively, they represent an important target group for education strategies.

Target group

Parents of children with anaphylaxis

Key messages include:

- anaphylaxis is dangerous and potentially life threatening
- the safety of my child is dependent upon them avoiding exposure to known triggers, and prompt access to emergency treatment
- this requires me to understand the triggers, recognise anaphylaxis and initiate emergency treatment, through
 - expert medical assessment
 - receipt of self-injectable adrenaline (EpiPen)
 - the completion of Action/Management plans by a qualified medical practitioner
 - in the case of food allergy, advice from a dietician on how to avoid the triggers while providing a balanced diet
- I need to tell all of these things to those who care for my child at the school/childcare service.

This is best done by providing them with a written action plan and the service's management plans that have been completed by a suitably qualified Medical Practitioner.

Strategies include:

- training in emergency treatment and issue of emergency action plan at time of presentation
- verbal, practical + written information at time of initial consultation with specialist
- written information pack to include standardised information/resources
 - ✓ Action Plans (if not already received from primary care)
 - ✓ Medi-Alert bracelet application
 - ✓ Community support resources available
 - ✓ Website links
 - ✓ Educational resources
 - ✓ Advice on Reading food labels
- regular information sessions in the community that are available soon after initial consultation (eg the asthma information sessions provided by the Asthma Foundation).

Tools available include:

- ASCIA DVD on anaphylaxis
- video resources described on back of AllergyFacts
- AAI Written material eg "Off to school with anaphylaxis"; "Preparing for Camp"
- web resources
 - ✓ www.allergyfacts.org.au
 - ✓ www.allergy.org.au.

To be developed:

- "Off to Childcare with Food Allergies/Anaphylaxis" - a guide for parents
- portable information (eg wallet cards on hidden allergens/reading food labels)
- fact sheets
 - ✓ Anaphylaxis + triggers
 - ✓ Risk Management
- childcare centre policies stating the requirement for parents to provide centres with Anaphylaxis Management Plans and EpiPens for all medically diagnosed children with anaphylaxis
- sample letters to parents re: allergy friendly schools
- parent information brochures.

Comments

Quality of information received during first few weeks following initial episode is important - process needs to be efficient and well managed from time of presentation to initial Specialist consultation.

Target group

Children with anaphylaxis

Key messages include:

- I am a normal kid
- I may get sick if I eat/get stung by the thing(s) that I'm allergic to
- if I'm careful to avoid these things, I can stop myself getting sick
- even if I do accidentally eat/get stung by the thing I'm allergic to and get sick, I can be treated quickly with the injection the Doctor has given me.

Strategies include:

- same as strategies for parents of children with Anaphylaxis (above), but delivered in an age appropriate way.

Tools available include:

- books available through Anaphylaxis Australia Incorporated (AAI). Directed at early Primary school age (Alexander the Elephant; Ali the Elephant), directed at older children (Be a MATE), directed at teenagers (Stories from the Heart; Letting Go - Teaching a Child Responsibility; Learning to live with Food Allergy)
- ASCIA DVD on anaphylaxis
- video resources described on back of Allergy Facts
- AAI written material eg "Off to school with anaphylaxis"; "Preparing for Camp"
- web resources
 - ✓ www.allergyfacts.org.au
 - ✓ www.allergy.org.au

To be developed:

- visual aids to help children recognise triggers eg photos of nuts (ie if not exposed at home)
- portable information (eg wallet cards on hidden allergens/reading food labels), as appropriate for age
- age-appropriate fact sheets
 - ✓ Anaphylaxis + triggers
 - ✓ Risk Management.

Comments

Parents + carers + teachers are the critical conduits of information.

Target group

Non-allergic children at schools / childcare services

Key messages include:

- anaphylaxis is dangerous and potentially life threatening
- the common triggers for anaphylaxis are foods (peanut, egg, cow's milk) and stinging insects (bees)
- I can help protect my friends with anaphylaxis by recognising and raising the alarm when I see a child at school is suffering an episode of anaphylaxis.

Strategies include:

- incorporation of information on anaphylaxis at education/orientation sessions offered by school/childcare service to all new parents with encouragement for them to discuss these with their children
- Teacher/Principal led discussion on anaphylaxis risk management and emergency response at school assemblies, as part of health education
- inclusion of these strategies as part of criteria for accreditation as "Allergy Friendly Schools".

Tools available include:

- ASCIA DVD on anaphylaxis
- video resources described on back of Allergy Facts
- web resources
 - ✓ www.allergyfacts.org.au
 - ✓ www.allergy.org.au
- notes provided to parents when signing in and out of centre (done in some centres), alerting the parents to the fact that there are a number of children at the centre with anaphylaxis.

To be developed:

- curriculum resources
- 'Be a MATE' Program reviewed for suitability for use in WA.

Target group

Generalist Medical Practitioners

Key messages include:

- anaphylaxis is a medical emergency, the acute management of anaphylaxis must be known
- beyond acute treatment, the management of anaphylaxis requires training of the parent/child in emergency administration of injectable adrenaline, accurate diagnosis of the triggers, and specialist advice on avoidance of triggers/specific immunotherapy to prevent recurrences
- this information must be clearly and concisely communicated to the child's school/childcare centre as it becomes known to allow those facilities to adequately care for the child with anaphylaxis
- Action and management plans must be reviewed regularly as the child grows up and his/her allergies/circumstances/capabilities change.

Strategies include:

- inclusion of comprehensive diagnosis and management of anaphylaxis in Medical School curriculum
- inclusion of comprehensive diagnosis and management of anaphylaxis in curricula of Colleges training Generalists (eg as part of Basic Paediatric training; RACGP, ACEM curricula)
- wide dissemination of Clinical Guidelines for management of anaphylaxis in the community for practitioners beyond their training years
- provision of training packages with the guidelines for use at CPD activities
- ASCIA training courses for Generalists.

Tools available include:

- EpiPen trainers
- web resources
 - ✓ www.aaaai.org
 - ✓ <http://www.eaaci.net/site/homepage.php>
 - ✓ www.allergyfacts.org.au
 - ✓ www.allergy.org.au
- ASCIA DVD on anaphylaxis.

To be developed:

- training packages for Colleges who train Generalists
- standardised training packages for CPD activities
- simple, single page clinical pathway stationery with checklists for Medical Practitioners managing patients with acute anaphylaxis.

Target group

Pharmacists

Key messages include:

- anaphylaxis is a medical emergency, the incidence of which is rising
- increasing numbers of patients will attend with prescriptions for adrenaline auto-injectors
- it is important that pharmacists ensure that patients receiving adrenaline auto-injectors are capable of understanding their action plans and of using them before they leave the pharmacy.

Strategies include:

- inclusion of training in medical management of anaphylaxis in Pharmacy curriculum
- provision of training packages (including EpiPen Trainers) to pharmacies for pharmacists to learn acute management of anaphylaxis
- provision of visible aids (eg posters) to pharmacies for display in prominent places within pharmacies to assist with training
- incorporation of this competency into accreditation criteria for Pharmacists.

Tools available include:

- web resources
 - ✓ www.aaaai.org
 - ✓ <http://www.eaaci.net/site/homepage.php>
 - ✓ www.allergyfacts.org.au
 - ✓ www.allergy.org.au
- ASCIA DVD on anaphylaxis.

To be developed:

- training packages for Pharmacists to learn emergency management of anaphylaxis (may be generic/shared with other clinical practitioners)
- posters/visual aids demonstrating use of EpiPens for pharmacies
- undergraduate curriculum/course.

Target group

Dietitians

Key messages include:

- practical, evidence-based dietary management of food allergies and anaphylaxis prevention
- knowledge of referral and testing procedures
- knowledge of and liaise with support services available for affected children and their families, including health service, school or childcare staff
- knowledge of risk minimisation strategies and policies for food selection and preparation.

Strategies include:

- incorporate key messages into existing dietetic training programs
- develop evidence-based Dietetic Practice Guidelines, Position Papers and education resources.

Tools available include:

- postgraduate courses in Dietetics
- Food Allergies and Intolerance National Interest Group, Dietitians Association of Australia (DAA)
- endorsement process for developing evidence-based clinical practice guidelines, Dietitians Association of Australia.

To be developed:

- training module/package on practical dietary management of Anaphylaxis and Food Allergies to be incorporated into existing training programs
- DAA and ASCIA-endorsed Evidence-based Dietetic Practice Guidelines on food allergy and anaphylaxis management.

Target group

Licensees of childcare services

Key messages include:

- anaphylaxis is a medical emergency whose prevalence is increasing in children
- childcare services need to develop appropriate policies and procedures to manage the condition. It is important to train staff to manage an anaphylactic child and how to administer the EpiPen
- policies that reflect the duty of care of childcare services may include requirements such as
 - ✓ need for medical diagnoses as part of the enrolment of the new child
 - ✓ need for staff at centres to be capable of timely administration of EpiPen to children suffering anaphylaxis as part of the first aid response
 - ✓ need for EpiPens to be appropriately stored and updated for each anaphylactic child
 - ✓ need for anaphylaxis management plans to be provided for all anaphylactic children and displayed in both the child's room and the kitchen.

Strategies include:

- regulation requirement for centres to develop and implement policies and procedures as outlined above
- educate licensees at the time of application for a new licence and upon renewal.

Tools available include:

- CSSU policy - (not currently mandated).

To be developed:

- Clause in Regulations - "Licensee must ensure that policies and procedures relating to the management of anaphylaxis are provided upon request"
- Clause in Regulations - "Parents of children diagnosed with anaphylaxis are to provide the centre with a medical diagnosis signed by their GP and/or Immunologist together with an Anaphylaxis Management Plan that the parent authorises to be displayed in their child's room
- further develop CSSU policy
- DCD Website to have a page for Anaphylaxis - with links to ASCIA.

Target group

Supervising officer /
person to act in place
of

Key messages include:

- anaphylaxis is a medical emergency whose prevalence is increasing in children
- policies and procedures will be developed to manage and ensure the safety of children with anaphylaxis who attend childcare services. It is important that these are implemented and adhered to by all staff, including relief staff
- it is important that "Anaphylaxis Management Plans" completed by suitably qualified Medical Practitioners are provided by the parent for all children who have suffered an episode of anaphylaxis upon the new enrolment and displayed in both the child's room and the kitchen
- it is important that children with anaphylactic reactions to foods be catered for with customised food menus and strategies to limit cross contamination of food with allergenic foods.

Strategies include:

- regulation requirement for all centres to have Anaphylaxis Management Plans for all children diagnosed with anaphylaxis children.

Tools available include:

- ASCIA - Anaphylaxis Management Plan
- CSSU Policy.

To be developed:

- policy and procedures to incorporate the need to handover critical information to relieving and/or new staff and the need for Anaphylaxis Management Plans upon enrolment
- standardised training package to impart key messages outlined above
- education/information resources on DCD Website.

Target group

Carers

Key messages include:

- anaphylaxis is a medical emergency whose prevalence is increasing in children
- timely administration of adrenaline (a safe medication when given as directed via an EpiPen autoinjector) is the best first aid treatment for a child suffering an anaphylactic reaction
- carers in childcare services can be trained to recognise anaphylaxis and to safely administer EpiPen to children through training and participation in regular emergency drills
- policies and procedures will be developed to manage and ensure the safety of children with anaphylaxis who attend any childcare service. It is important that these are followed by all staff, including relief staff.

Strategies include:

- incorporate messages into first aid training
- incorporate messages into unit of competency, CHCCN4C: Respond to illness, injuries and emergencies.

Tools available include:

- ASCIA - Anaphylaxis Management Plan
- CSSU Policy
- range of First Aid training - St John Ambulance RTC2704A
- in-service seminars
- RUCSN to support the anaphylactic child through training centre staff.

To be developed:

- further in-service sessions for all centre staff on basic understanding of anaphylaxis and the administering of the EpiPen.

Target group

Food handlers

Key messages include:

- anaphylaxis is a medical emergency whose prevalence is increasing in children
- anaphylaxis in young children is commonly triggered by foods, in particular peanut, milk and egg
- it is important to identify all children with anaphylaxis that is triggered by foods at the centre and to keep them safe
- obtaining information from the parents on which foods must be avoided, and on the foods that are safely tolerated by the child
- designing menus to cater for food anaphylactic children at the centre, including an ability to identify foods that the children may be allergic to from food labels; knowledge of food alternatives, eg egg replacement for egg-allergic children
- following procedures that eliminates cross-contamination of allergic children's food.

Strategies include:

- incorporate messages into current training package.

Tools available include:

- CHCCN3C Prepare nutritionally balanced food in a safe and hygienic manner
- CSSU Policy
- Anaphylaxis Australia - "Pre-school and playgroup checklist for managing food allergies" (A3 colour poster).

To be developed:

- customised training module/package for the food handler on cross-contamination, high risk foods, label reading and providing alternative foods for anaphylactic children
- booklet for all food handlers explaining food allergies, anaphylaxis, safe food handling to avoid cross contamination, food labelling and ways in which the food handler can develop interesting food menus for such children, eg. use of egg replacement for children allergic to eggs.

Target group

School canteen managers

Key messages include:

- anaphylaxis is a medical emergency whose prevalence is increasing in children
- anaphylaxis in young children is commonly triggered by foods, in particular peanut/nuts, milk and egg
- it is important to identify all children at the school with anaphylaxis that is triggered by foods
- it is important to minimise the risk of anaphylaxis occurring at school by selecting foods that are unlikely to trigger anaphylaxis, and by adopting practices that minimises the risk of cross-contamination of foods with highly allergenic foods (eg peanut/nuts)
- liaise with parents and teachers regarding Student Health Care plans and safe food products.

Strategies include:

- incorporate key messages into existing training programs and resources.

Tools available include:

- School Canteen Manager's Course, WA School Canteen Association
- A3-size posters for school canteens, Anaphylaxis Australia
- Looking after our Kids, a national School Canteen Food Safety Project (2002) - a video and handbook resource for school principals, parent bodies, canteen managers, canteen assistants and volunteers to help them understand and comply with the Food Safety Standards.

To be developed:

- customised training module/information pack on practical management of Food Allergies and Anaphylaxis Prevention to be incorporated into existing training programs and resources listed above
- information booklet for all food handlers explaining food allergies, anaphylaxis, reinforcing safe food handling to avoid cross contamination, food labelling and developing interesting food menus for allergic children, e.g. nut-free recipes and meal ideas.

Target group

Principals and teachers

Key messages include:

- anaphylaxis is a severe allergic reaction of rapid onset whose prevalence is increasing in children. In school children, it is commonly triggered by stinging insects (in particular bees) and foods (in particular peanuts, tree nuts, egg and cow's milk)
- The Department of Education and Training policies that provide for the safety of children with anaphylaxis include, but are not restricted to
 - ✓ Student Health Care Policy
 - ✓ Duty of Care Policy
 - ✓ School Excursions and Off School Site Activities Policy
 - ✓ First Aid Policy
 - ✓ Risk Management Policy
 - ✓ Bullying and Violence Prevention Policy
- ensuring the safety of a child with anaphylaxis requires the simultaneous implementation of a number of interdependent strategies
- it is important that "Anaphylaxis Management Plans" completed by suitably qualified Medical Practitioners are provided by the parent for all children who have suffered an episode of anaphylaxis at the point of enrolment or upon subsequent diagnosis and displayed in a way that allows efficient reference to them in the event of anaphylaxis occurring
- timely administration of adrenaline (a safe medication when given as directed via an EpiPen autoinjector) is the best first aid treatment for a child suffering an anaphylactic reaction.
- principals and teachers can be trained to recognise anaphylaxis and to safely administer EpiPen to children as part of an integrated emergency response (see below).

Tools available include:

- relevant policy documents
- DET Regulatory Framework
- SIS Schools Information Systems
- HCA Guidelines
- HCA Parent/Carer Information Brochure
- ASCIA Resources
- Anaphylaxis Advice Paper.

To be developed:

- training package for face-to-face delivery to school staff by a variety of service providers including the school nurse
- online learning modules for school staff
- DVD/Video and trainer EpiPen sessions with the nurse or other training provider.

What Materials Are Required For Implementation?

Based on this information, the subcommittee formulated the following prioritised list of resources that would need to be developed to assist our health, education systems and our childcare services to better manage our children with anaphylaxis (Table 3).

Table 3:

Prioritised List Of Anaphylaxis Training & Resource Requirements

	Community Health Nurse	Parents		Children		Drs	Pharmacists	Dietitians
		Children with Anaphylaxis	Non-allergic children	With anaphylaxis	Non-allergic			
1. Information Package*: - multiple formats & languages - high tier, generic information - multiple formats - DVD, online, hard copy.	✓	✓	✓	✓	✓		✓	✓
2. Training Package: - includes content from Information Package (refer to resource #1) - Generic background <ul style="list-style-type: none"> • Recognition of symptoms (action plan) • Emergency management (action plan) • Minimum standards for prevention/risk management • Frequently asked questions - formats - DVD, online, action plan, fact sheets, EpiPen trainer.	✓	✓					✓	✓
3. Standardised staff development lecture	✓						✓	✓
4. Parent focussed information pack*: - Guide (include school & childcare centre policies) - Information cards - Information Package (refer resource #1) - Training Package (refer resource #2) - formats - hard copy, online.		✓						
4a. Child focussed information packs for the child with anaphylaxis*: - visual aids - age appropriate information cards.				✓				
5. Clinical pathway stationery for generalist Medical Practitioners managing anaphylaxis - include standardised proformae for communication with schools/childcare centres.							✓	

6. High quality large visual aids (eg Posters) for EpiPen administration								✓
7. Information Pack - Food safety for food providers		✓						

* As determined by consensus within the committee. It should be noted that there was a strong opinion within the group that each of these materials were interdependent and so should be implemented together if at all possible.

Table 3:

Prioritised List Of Anaphylaxis Training & Resource Requirements (Contd....)

	Childcare Centre licenees	Childcare supervising officers	Childcare Carers	Childcare Food handlers	School canteen managers	Principals & teachers	Emergency Response workers
1. Information Package*: - multiple formats & languages - high tier, generic information - multiple formats - DVD, online, hard copy.	✓	✓	✓	✓	✓	✓	✓
2. Training Package: - includes content from Information Package (refer to resource #1) - Generic background <ul style="list-style-type: none"> • Recognition of symptoms (action plan) • Emergency management (action plan) • Minimum standards for prevention/risk management • Frequently asked questions - formats - DVD, online, action plan, fact sheets, EpiPen trainer.	✓	✓	✓	✓	✓	✓	✓
3. Standardised staff development lecture							✓
4. Parent focussed information pack*: - Guide (include school & childcare centre policies) - Information cards - Information Package (refer resource #1) - Training Package (refer resource #2) - formats - hard copy, online.							
4a. Child focussed information packs for the child with anaphylaxis*: - visual aids - age appropriate information cards.							
5. Clinical pathway stationery for generalist Medical Practitioners managing anaphylaxis - include standardised proformae for communication with schools/childcare centres.							
6. High quality large visual aids (eg Posters) for EpiPen administration	✓	✓	✓			✓	
7. Information Pack - Food safety for food providers*				✓	✓		

* As determined by consensus within the committee. It should be noted that there was a strong opinion within the group that each of these materials were interdependent and so should be implemented together if at all possible.



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