Appendix 14
Standards for anaphylaxis education sessions

Context

The ANZCA CPD standard requires participants to complete two of the four activities from the Emergency Responses category during each CPD triennium.

The purpose of this document is to assist hospital departments, private practice groups, and medical education providers to use the information in this document to develop and/or conduct education sessions that satisfy local needs, incorporating local staff, work environment and equipment.

This document defines the minimum standard required for education sessions to achieve recognition as a valid activity for satisfying the CPD requirement of management of Anaphylaxis.

This activity requires participants to complete a recognised education session, of which acceptable formats include practical simulation sessions, workshops or online learning resources.

Background to the Anaphylaxis Activity

Anaphylaxis occurs infrequently. However, there is reasonable evidence that suboptimal care has contributed to preventable morbidity.

Numerous factors have been recognised that pose challenges to anaesthetists in crisis situations, including diagnostic uncertainty and insufficient familiarity with management steps.

Lack of knowledge about appropriate follow up and referral (for definitive testing and diagnosis) places patients at risk for recurrence of anaphylaxis.

Anaesthetists should be able to:

- Recognise the onset of suspected anaphylaxis and declare it as an ‘Anaphylaxis Emergency’.
- Commit to interventions to maintain or restore cardiovascular stability and oxygenation implemented according to the ANZAAG Anaphylaxis Management Guidelines.
- Understand that omitting referral of a suspected episode of anaphylaxis could place the patient at risk of death or morbidity with future anaesthesia. Referral should not be delegated to the surgical team or general practitioner but is the responsibility of the treating anaesthetist.

Knowledge of management guidelines, recognition of anaphylaxis, and rehearsal of emergency procedures are essential components of training. Ideally, training will occur within a team and in the participants’ regular working environment.

Participants should be aware of electronic resources to assist them to develop an Anaphylaxis Box, which can be made available to assist with this training, and to be utilized in the event of anaphylaxis in all operating theatres where they work.
Anaesthetists should have knowledge of methods to locate and refer to their nearest anaesthetic testing centre.

Recognised emergency algorithms and guidelines

ANZCA recognises that several published algorithms exist for the treatment of anaphylaxis. Many of these involve the treatment of anaphylaxis in settings other than a highly monitored critical care environment and are intended for use by noncritical care specialists.

ANZCA has endorsed the Australian and New Zealand Anaesthetic Allergy Group (ANZAAG) *Anaphylaxis Management Guidelines* for the management of perioperative anaphylaxis in settings where medical professionals with experience titrating intravenous adrenaline provide continuous monitoring of physiological parameters.

For the treatment of other anaphylaxis outside of these settings, Australian Society of Clinical Immunology and Allergy (ASCIA) *Acute Management of Anaphylaxis Guidelines* should be followed.

The algorithms can be accessed via the links below:

- ANZAAG
- ASCIA

Learning objectives

To achieve recognition for the ANZCA CPD program, the education session must address, as a minimum, the objectives below.

By the end of the session, participants will be able to:

Knowledge

1. Explain why intravenous administration of medications or mucosal exposure to substances, coupled with the physiological derangements associated with anaesthesia, may exaggerate the speed of onset and severity of the features of anaphylaxis.
2. Describe some risk factors for perioperative anaphylaxis including common patterns of cross reactivity such as those within classes of neuromuscular blockers, antibiotics, colloids and blue dyes.
3. Identify the common clinical features of anaphylaxis, including recognition that anaphylaxis associated with anaesthesia may not present with all of these features, and that the onset will vary in severity and may be temporally delayed.
4. Explain the pivotal role that adrenaline plays in the treatment of perioperative anaphylaxis and the need for appropriate titration of intravenous adrenaline or the use of intramuscular adrenaline in order to mitigate the risks associated with adrenaline administration.
5. Recognise the need to switch to adrenaline infusion if repeated boluses of adrenaline are required.
6. Describe the relevance of tryptase measurements and the reasons for serial measurements at appropriate times (1, 4 and 24 hours from the beginning of the reaction).
7. Explain why it is the anaesthetist’s responsibility to ensure that a patient is appropriately investigated by a specialist testing centre.

8. Recognise the interpersonal and cognitive factors that contribute to poor outcomes when anaesthetic anaphylaxis arises and employ strategies to overcome these.

9. Recall the overall structure of the ANZAAG Anaphylaxis Management resources crisis cards and when and how to use them.

Skills

10. Apply the ANZAAG Anaphylaxis during Anaesthesia: Immediate Management card for urgent measures.

11. Use the ANZAAG Anaphylaxis during Anaesthesia: Diagnostic Card to consider other differential diagnoses and to grade the reaction as mild, moderate or severe and apply this to management recommendations.

12. Apply the ANZAAG Anaphylaxis during Anaesthesia: Refractory Management card in situations where the Immediate Management steps would not have resulted in stabilisation of the patient’s vital signs.

13. Apply the ANZAAG Anaphylaxis during Anaesthesia: Post-Crisis Management card

14. Discuss with a patient/family what has occurred and the planned follow up

15. Provide a list of drugs and/or other substances that were given to the patient prior to the suspected episode of anaphylaxis, in order to alert health professionals in case of an emergency before Anaesthetic Allergy testing has taken place.

16. Communicate with other health professionals that a critical situation exists when anaphylaxis is suspected.

17. Adopt the role of team leader in the treatment of anaphylaxis, co-ordinating the team response.

Structure of education session

The education session must:

1. Provide pre-course reading (could be web-based) that refers to the ANZAAG management guidelines and provides relevant foundation knowledge of the session content.

2. Have a minimum total duration of 90 minutes, which should be discussion of cases and application of the guidelines.

3. Provide case-based discussion or scenario-based simulation activities to practice implementation of the ANZAAG management guidelines.

4. Utilise anaphylaxis cases that include a variety of clinical features and degrees of severity at presentation.

5. Be facilitated by a post-Fellowship specialist who is appropriately skilled and experienced to deliver the content of the session. If possible the facilitator will have medical education experience and/or credentials.

6. Aim for a facilitator: participant ratio of 1:25. Facilitators must be engaged with each participant while they are working through scenarios to ensure they are achieving the objectives of the session.

Session Materials

Session materials must include the following (in hard copy or electronic form):

- Session objectives
• Session outline
• Facilitators’ guide (including scenario outlines)
• ANZAAG Anaphylaxis management resources as handouts
• Session evaluation forms for feedback from participants
• Participant list template to record date, venue, names and appointment type of participants