

ANAESTHESIA MORTALITY

GLOSSARY OF TERMS - CASE CLASSIFICATION

A. Deaths Attributable to Anaesthesia

Category 1	Where it is reasonably certain that death was caused by the anaesthesia or other factors under control of the anaesthetist.
Category 2	Where there is some doubt whether death was entirely attributable to the anaesthesia or other factors under the control of the anaesthetist.
Category 3	Where death was caused by both surgical and anaesthesia factors.

Explanatory Notes:

- *The intention of the classification is not to apportion blame in individual cases but to establish the contribution of the anaesthesia factors to the death.*
- *The above classification is applied regardless of the patient's condition before the procedure. However if it is considered that the medical condition makes a substantial contribution to the anaesthesia-related death subcategory **H** should also be applied.*
- *If no factor under the control of the anaesthetist is identified which could or should have been done better subcategory **G** should also be applied.*

B. Death In Which Anaesthesia Played No Part

Category 4	Surgical death where the administration of the anaesthesia is not contributory and surgical or other factors are implicated.
Category 5	Inevitable death, which would have occurred irrespective of anaesthesia or surgical procedures.
Category 6	Incidental death which could not reasonably be expected to have been foreseen by those looking after the patient, was not related to the indication for surgery and was not due to factors under the control of anaesthetist or surgeon.

C. Unassessable Death

Category 7	Those that cannot be assessed despite considerable data but where the information is conflicting or key data is missing.
Category 8	Cases, which cannot be assessed because of inadequate data.

CAUSAL OR CONTRIBUTORY FACTORS IN CATEGORY A DEATH

Note that it is usual for more than one factor to be identified in the case of anaesthesia attributable death.

SUBCATEGORIES

A. Preoperative

(i) Assessment	This may involve failure to take an adequate history or perform an adequate examination or to undertake appropriate investigation or consultation or make adequate assessment of the volume status of the patient in an emergency. Where this is also a surgical responsibility the case may be classified in Category 3 above.
(ii) Management	This may involve failure to administer appropriate therapy or resuscitation. Urgency and the responsibility of the surgeon may also modify this classification.

B. Anaesthesia Technique

(i) Choice or application	There is inappropriate choice of technique in circumstances where it is contraindicated or by the incorrect application of a technique, which was correctly chosen.
(ii) Airway Maintenance Including Pulmonary Aspiration	There is inappropriate choice of artificial airway or failure to maintain or provide adequate protection of the airway or to recognise misplacement or occlusion of an artificial airway.
(iii) Ventilation	Death is caused by failure of ventilation of the lungs for any reason. This would include inadequate ventilator settings and failure to reinstitute proper respiratory support after deliberate hypoventilation (e.g. bypass).
(iv) Circulatory Support	Failure to provide adequate support where there is haemodynamic instability, in particular in relation to techniques involving sympathetic blockade.

C. Anaesthesia Drugs	
(i) Selection	Administration of a wrong drug or one, which is contraindicated or inappropriate. This would include “syringe swap” errors.
(ii) Dosage	This may be due to incorrect dosage, absolute or relative to the patient’s size, age and condition and in practice is usually an overdose.
(iii) Adverse Drug Reaction	This includes all fatal drug reactions both acute such as anaphylaxis and the delayed effects of anaesthesia agents such as the volatile agents.
(iv) Inadequate Reversal	This would include relaxant, narcotic and tranquillising agents where reversal was indicated.
(v) Incomplete Recovery	e.g. prolonged coma
D. Anaesthesia Management	
(i) Crisis Management	Inadequate management of unexpected occurrences during anaesthesia or in other situations, which, if uncorrected could lead to death or severe injury.
(ii) Inadequate Monitoring	Failure to observe minimum standards as enunciated in the ANZCA policy document or to undertake additional monitoring when indicated e.g. use of a pulmonary artery catheter in left ventricular failure.
(iii) Equipment Failure	Death as a result of failure to check equipment or due to failure of an item of anaesthesia equipment.
(iv) Inadequate Resuscitation	Failure to provide adequate resuscitation in an emergency situation.
(v) Hypothermia	Failure to maintain adequate body temperature within recognised limits.
E. Postoperative	
(i) Management	Death as a result of inappropriate intervention or omission of active intervention by the anaesthetist or a person under their direction (e.g. Recovery or pain management nurse) in some matter related to the patient’s anaesthesia, pain management or resuscitation.
(ii) Supervision	Death due to inadequate supervision or monitoring. The anaesthetist has ongoing responsibility but the surgical role must also be assessed.
(iii) Inadequate Resuscitation	Death due to inadequate management of hypovolaemia or hypoxaemia or where there has been a failure to perform proper cardiopulmonary resuscitation.
F. Organisational	
(i) Inadequate supervision, inexperience or assistance	These factors apply whether the anaesthetist is a trainee, a non-specialist or a specialist undertaking an unfamiliar procedure. The criterion of adequacy of supervision of a trainee is based on the ANZCA policy document on supervision of trainees.
(ii) Poor Organisation of the Service	Inappropriate delegation, poor rostering and fatigue contributing to a fatality.
(iii) Failure of interdisciplinary Planning	Poor communication in peri-operative management and failure to anticipate need for high dependency care.
G. No Correctable Factor Identified	
Where the death was due to anaesthesia factors but no better technique could be suggested	
H. Medical Condition of the Patient	
Where it is considered that the medical condition was a significant factor in the anaesthesia related death.	