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Expectations for clinical and ethical practice

GENERAL ANESTHETIC SERVICES IN DENTISTRY

(NON-HOSPITAL FACILITIES)

Applies to Dentists

There are three main ways that the BC College of Oral Health Professionals protects the public:

The British Columbia College of Oral Health Professionals (BCCOHP) was created on September 1, 2022 through the amalgamation of four health regulatory colleges: the College of Dental Hygienists of BC, the College of Dental Surgeons of BC, the College of Dental Technicians of BC, and the College of Denturists of BC. All current requirements for standards of clinical and ethical practice issued by the four colleges remain in place upon amalgamation. This document was created by the College of Dental Surgeons of BC and will be updated to reflect the amalgamation.

The College is updating its documents to reflect the transition to regulation under the Health Professions Act and College Bylaws. The principles and requirements outlined in all documents continue to apply to dentists and CDAs.

GENERAL ANAESTHETIC SERVICES IN DENTISTRY

(NON-HOSPITAL FACILITIES)

This document contains standards of practice in relation to inducing general anaesthesia while providing dental services in British Columbia. Since contravention of these practice standards may be considered unprofessional conduct, dentists employing any modality of general anaesthesia must be familiar with the content of this document, be appropriately trained, and govern their professional practices accordingly.

These practice standards are minimum requirements and the CDSBC does not represent that they are sufficient or adequate in any particular situation. Dentists must exercise their own professional judgment in determining what practices and procedures they will employ in order to ensure patient safety and to minimize the risk of patient complaints or claims.

Please note: As of September 2019 a new essential drugs list has been placed in these standards and guidelines. **Please see page 2-11 for the updated information.** The rest of this document will be updated in the coming months.

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Updated May 2022 (essential drugs list added September 2019)

TABLE OF CONTENTS

CHAPTER 1

CHAPTER 2

CHAPTER 3

AUTHORIZATION FOR NON-HOSPITAL GENERAL ANAESTHETIC FACILITIES

CHAPTER 4

APPENDICES

CHAPTER 1

INTRODUCTION

I. OVERVIEW

General anaesthesia is a controlled state of unconsciousness accompanied by partial or complete loss of protective reflexes including inability to maintain an airway independently and respond purposefully to physical stimulation or verbal command. This state may be produced by a pharmacologic or non-pharmacologic method or a combination thereof, and applies to any technique which has depressed the patient beyond conscious or deep sedation.

General anaesthesia may be indicated to treat patient anxiety associated with dental treatment, to enable treatment for patients who have cognitive impairment or motor dysfunction which prevents adequate dental treatment, to treat patients below the age of reason, or for traumatic or extensive dental procedures. This modality should only be used when indicated, as an adjunct to appropriate non-pharmacologic means of patient management.

The standard of anaesthetic care, whether it is provided in a hospital or in a non-hospital anaesthetic facility, must be uniform. After consultation with the Canadian Anaesthetists' Society and the College of Physicians and Surgeons of British Columbia, and based on the *Guidelines to the Practice of Anaesthesia* as recommended by the Canadian Anaesthetists' Society, the College of Dental Surgeons of British Columbia (hereinafter referred to as CDSBC) has developed standards for dental offices, clinics and facilities providing out-patient general anaesthetic services independent of a hospital, including a process for authorization which involves the verification of these standards by a survey team. This document represents a revision and replacement of the previous publications, *Guidelines for the Use of General Anaesthesia in Dental Offices* (approved by Council 1987) and *The Accreditation Procedures and Inspection of Dental Offices and Facilities Providing General Anaesthetic Services Independent of a Hospital*.

The standards are designed to apply to all practitioners providing general anaesthetic services for dentistry in non-hospital facilities in the province of British Columbia. They are intended to provide the framework for a reasonable and acceptable standard of patient care and should be interpreted as such, allowing for some degree of flexibility to occur in different circumstances. The information is subject to review and revision as warranted by the development of technological and practice advancements.

General anaesthetic facilities must be accredited by the College of Dental Surgeons of British Columbia or the College of Physicians and Surgeons of British Columbia. While these standards are concerned primarily with general anaesthetic services in dental offices, dentists should satisfy themselves that equipment and procedures used in any location in which they operate conform to these standards and that the facility is accredited.

II. DEFINITIONS

For the purposes of this document, the following definitions have been used:

Anaesthetist: A dentist or physician with qualifications to administer general anaesthesia (see page 3)

ASA: The American Society of Anesthesiology

BLS: Basic Life Support (CPR Level C)

CAS: The Canadian Anaesthetists' Society

CDSBC: The College of Dental Surgeons of British Columbia

Certificate: A certificate issued upon full authorization of a non-hospital general anaesthetic facility

Committee: Sedation and General Anaesthetic Services Committee

Council: The governing body of the College of Dental Surgeons of British Columbia

CSA: The Canadian Standards Association

General anaesthesia: A controlled state of unconsciousness accompanied by loss of protective reflexes, including inability to maintain an airway independently and respond purposefully to physical stimulation or verbal command. This state therefore applies to any technique which has depressed the patient beyond conscious or deep sedation.

General anaesthetic facility: Any dental office, clinic or facility providing out-patient general anaesthetic services independent of a hospital

OMAAP: Oral and Maxillofacial Surgeons Anesthesia Assistant Program

Operating dentist: A licensed member of the College of Dental Surgeons of British Columbia who provides dental services in a non-hospital general anaesthetic facility

Owner: A licensed member of the College of Dental Surgeons of British Columbia or the College of Physicians and Surgeons of British Columbia who owns a general anaesthetic facility

Registrar: The Registrar of the College of Dental Surgeons of British Columbia

Sedation/General Anaesthesia Register: A College of Dental Surgeons Register of dentists providing sedation and/or general anaesthesia services.

Category I:	Moderate sedation
Category II:	Deep sedation
Category III:	General Anaesthesia

Standards: The practice standards described in this document

III. QUALIFYING WORDS

Must/shall:	Indicates imperative need and/or duty; an indispensable item; mandatory
Should:	Indicates the recommended manner to obtain the standard; highly desirable
May/could:	Indicates a suggested alternative is discretionary
Appropriate/ pertinent/ satisfactory	Indicates professional judgment is expected

CHAPTER 2

STANDARDS FOR GENERAL ANAESTHESIA

I. ANAESTHETIC TEAM

Physicians, dentists and other personnel in a non-hospital general anaesthetic facility should be instructed in and familiar with proper anaesthetic protocol, and their responsibilities should be outlined in current job descriptions. All clinical staff must be trained in BLS (CPR Level C), and duties in anaesthetic emergencies must be well defined. During the assessment and treatment of patients, the presence of a female staff member is recommended at all times.

A. ANAESTHETIST

1. Qualifications

General anaesthesia must only be administered in a non-hospital facility by dentists or physicians who are currently licensed with their respective College and who are qualified as follows:

- Dentists who have successfully completed a postgraduate program in general anaesthesia in a university and/or teaching hospital over a minimum of 12 consecutive months. The program must have specifically evaluated and attested to the competency of the individual.

- Dentists who have successfully completed a formal postgraduate program in oral and maxillofacial surgery suitable for certification in British Columbia, incorporating adequate training in general anaesthesia, such that individual competence has been specifically evaluated and attested to.

- Physicians who have successfully completed instruction in general anaesthesia recognized by the College of Physicians and Surgeons of British Columbia.

For dentists, a certificate or other evidence of satisfactory completion of the course and a description of the program signed by the course director must be submitted to the CDSBC for consideration. Completion of such a program will be entered onto the dentist's record.

2. Responsibilities

Physicians and dentists administering general anaesthesia must possess the knowledge and technical skills necessary to perform such services to the required standards of care. These include the ability to:

- Provide pre-anaesthetic evaluation of the patient and determine the appropriate anaesthetic management
- Administer the anaesthesia
- Monitor and support the vital organ systems during the anaesthetic period
- Provide immediate post-anaesthetic management of the patient
- Provide resuscitation or emergency care, if necessary

In addition to clinical responsibilities, the anaesthetist in a non-hospital facility should be responsible for:

- Providing on-going advice to owner(s) of the facility with respect to equipment and agents necessary for the proper administration of general anaesthetic and related services
- Ensuring that policies and procedures concerning the safe administration of general anaesthesia, including education, training and supervision of personnel, are in place
- Ensuring that procedures for maintenance of necessary records for the evaluation of all anaesthetic care are in place
- Adhering to the current Canadian Anaesthetists' Society *Guidelines to the Practice of Anaesthesia* as they apply to non-hospital anaesthetic facilities

B. OPERATING DENTIST

The dentist providing services under general anaesthesia must be familiar with the use of this modality of anaesthesia including indications, contraindications, patient evaluation, patient selection, pharmacology of relevant drugs, and management of potential adverse reactions. The dentist must hold a current BLS (CPR Level C) certificate.

C. OPERATIVE ASSISTANT

The operative assistant's primary function is determined by the type of dental services being provided under general anaesthesia. The operative assistant must be appropriately trained and licensed and must hold a current BLS (CPR Level C) certificate.

D. RECOVERY SUPERVISOR

The recovery supervisor's primary duties and responsibilities are supervising and monitoring patients in the recovery area. The

recovery supervisor must be a nurse registered with the British Columbia College of Nursing Professionals, a dentist currently licensed to practise by CDSBC, a physician currently licensed to practise by the CPSBC, a person who has successfully completed DAANCE/OMAAP, or a person who has completed a comparable program approved by the Board. Responsibilities include assessing and maintaining a patent airway, monitoring vital signs, recording appropriate findings, and assisting in emergency procedures. Registered nurses, physicians, and qualified dentists' duties may also include venipuncture and administering medications as required. The recovery supervisor must have adequate training in post-sedation recovery and must hold a current BLS or CPR-HCP equivalent certificate.

E. OFFICE ASSISTANT (RECEPTIONIST)

The office assistant's function is to attend to office duties so that the anaesthetic team is not disturbed.

II. PHYSICAL FACILITIES

The facility must comply with all applicable federal, provincial and municipal laws, including building and fire codes. Emergency ambulance and treatment service must also be available in the community. The facility must be authorized by the CDSBC (see Chapter 3), or by the CPSBC.

A. LAYOUT AND DESIGN

The general physical design for a non-hospital facility depends on the number and types of dental and surgical procedures to be performed. The layout of the facility should ensure efficient and effective patient care as well as privacy. Traffic flow for patients and staff should be convenient and must permit ready transfer of emergency cases to an acute care facility. Doorways must be wide enough to allow wheelchair and stretcher or chaircot access.

1. Space Requirements

Functions needing adequate space are:

- Reception and waiting
- Administrative activities for patient interview, patient admission, business functions, record storage
- Pre-operative evaluation and preparation for anaesthesia
- Operative/surgical treatment
- Post-anaesthetic recovery
- Preparation and sterilization of instruments
- Storage for equipment, gases, drugs and supplies
- Staff activities

2. Operating Room and Recovery Area

The operating room and post-anaesthetic recovery area must provide a safe, comfortable environment. The operatory can act as a recovery room. Specialized requirements include the following:

- Areas must be large enough to accommodate all required equipment and staff.
- Dental chairs or tables used for general anaesthesia and recovery must be adequately padded and adjustable (capable of being placed in supine and head down positions).
- Electrically operated equipment must meet appropriate CSA standards (see section IV.A).

B. UTILITIES / BACKUP SYSTEMS

1. Electrical Supply / Lighting

- Electrical outlets must be accessible and adequate to accommodate all necessary equipment.
- Room lighting must be adequate to permit evaluation of the patient's skin and mucosal color.

2. Suction

- Bedside suction must be available for every patient in both the operatory and recovery areas.

Because of the possibility of a power failure, central medical gas system failure, or equipment malfunction, appropriate backup must be available to provide light, suction, and oxygen.

III. FACILITY OPERATING REQUIREMENTS

A. INFECTION CONTROL

Sterilization facilities must conform to currently accepted standards of practise in the area of infection control, and, at a minimum, all anaesthetic equipment which comes into direct contact with patients must be cleaned, disinfected, and sterilized before use. Procedures for safe disposal of clinical materials must also be in place.

B. DRUG CONTROL

- Appropriate storage must be available for clinical materials and drugs (e.g., refrigeration where required).
- All drugs and agents must be correctly identified and not out-dated.
- All supplies of narcotics must be appropriately recorded and contained in a separate, locked cabinet.

C. SAFETY REQUIREMENTS

All applicable laws and regulations pertaining to the safe operation of a general anaesthetic facility must be complied with, including all applicable laws and regulations pertaining to:

- the preparation, storage, identification and use of medical gases, drugs and related materials;
- hazards from fires, explosions, electrical facilities, electrocution, earthquake, and other natural hazards; and
- the safe and effective operation of all equipment used in the facility.

D. MEDICAL EMERGENCY PROCEDURES

The general anaesthetic facility must be prepared to recognize and treat adverse responses utilizing appropriate equipment and drugs when necessary. All clinical staff must have the training and ability to perform basic cardiac life support techniques, and must be capable of initiating definitive treatment for medical emergencies such as cardiopulmonary arrest or malignant hyperthermia.

Protocols for emergency procedures including arrangements for hospital transfer must be established and reviewed on a regular basis. Emergency numbers must be posted by the telephones in the facility and the duties of all staff (anaesthetist, operating dentist, operative assistant, recovery supervisor, receptionist, etc.) should be outlined.

IV. GENERAL ANAESTHETIC ARMAMENTARIUM

All necessary equipment, drugs and supplies comprising the general anaesthetic armamentarium must be readily available and in proper working order, including emergency equipment for resuscitation and life support.

The practitioner administering the general anaesthesia must be familiar with these Practice Standards, and the facility's current list of general anaesthetic equipment, corresponding log books indicating maintenance and servicing, and list of drugs available with their expiry dates noted.

A. GENERAL CONSIDERATIONS

1. Equipment

Medical gas piping systems, physiological monitoring equipment, and related medical devices must meet current CSA standards unless the Committee is satisfied that compliance with those standards is not necessary. (Refer to Appendix I: *Published Standards for Equipment.*) In addition, specific requirements of provincial legislation must be adhered to.

2. Servicing, Maintenance and Inspections

Medical gas piping systems, monitoring equipment and related medical devices must receive the care and maintenance recommended by the manufacturer. Equipment must be serviced by qualified personnel in accordance with the manufacturer's specifications, or annually, whichever is more frequent. Details of such servicing and maintenance must be recorded in an appropriate logbook, which must be available on the premises for the review of the practitioner(s) using the equipment.

All medical devices (including anaesthetic machines and accessories, monitors, pulse oximeters, oxygen analyzers, temperature probes, defibrillators, etc.) must only be serviced by a registered biomedical engineer or a biomedical technologist having expertise in general anaesthetic medical device technology and related standards. All medical devices must be inspected by a registered biomedical engineer or a biomedical technologist, as described above, at the greater of the following frequencies:

- As recommended by the manufacturer.
- Every six months for anaesthetic machines.
- Every twelve months for all other medical devices.

In addition, defibrillators must be inspected and discharged bi-monthly by appropriately trained personnel, and details of these inspections must be recorded in a logbook maintained by the owner of the facility. (Refer to Appendix II: *Inspection of Medical Devices.*)

Note: If a visiting dentist or physician brings his/her own monitoring equipment to an authorized general anaesthetic facility, it must also be serviced, maintained and inspected as required by these Practice Standards, and appropriate records must also be maintained.

B. ANAESTHETIC DELIVERY SYSTEM

Components of the anaesthetic delivery system include sources of compressed oxygen and anaesthetic gases, reducing valves, flowmeters, vaporizers, carbon dioxide absorption system, inspiratory and expiratory valves, escape valve, reservoir bag, and breathing tubes and face masks.

1. Machines used for the delivery of anaesthetic gases are numerous in type, style and manufacturer. Regardless of which specific machine is used, it must function reliably and accurately with respect to gas pressure and concentrations, and must comply with all standards described in section IV.A above.

2. The installation of gas piping or conducting systems must be performed by competent and experienced personnel, and must comply with all standards and qualities dictated by the manufacturer and governmental regulatory bodies.

3. Appropriate safety indexing systems for all medical gas connections must be in place to eliminate the possibility of connecting the wrong medical gas in the system.

4. Prior to each case, adequacy of the volumes of gases on hand should be confirmed along with the availability of a backup supply of oxygen to ensure that the supply of oxygen cannot fail during treatment. The reserve supply of oxygen should be a portable cylinder, (minimum “E” size), ready for immediate use with appropriate regulator, flowmeter and connectors attached.

5. Gases must be stored and properly locked so that they cannot be tampered with or turned off by an unknown third party. The location of the key must be defined along with who is responsible for turning gases on and off.

6. A satisfactory scavenging system for removing waste anaesthetic gases from the office environment must be installed according to the manufacturer’s specifications and must be tested periodically as required in hospitals. (Refer to WCB Industrial Health and Safety Regulations.)

C. PHYSIOLOGICAL MONITORING EQUIPMENT

The non-hospital general anaesthetic facility is responsible for the provision and maintenance of physiological monitoring equipment that meets original performance specifications and standards as described in section IV.A above. These devices should function as assistants and not as substitutes for constant personal contact with the patient, and should not replace sound clinical judgment and observation.

The following must be available for each anaesthetized patient:

1. Stethoscope (either precordial, esophageal or paratracheal)
2. System for monitoring blood pressure with appropriately sized cuffs
3. ECG monitor with continuous audible signal recognition
4. System for monitoring temperature
5. Pulse oximeter
6. Oxygen gas analyzer with alarm
7. Capnometer (for an intubated patient)

In addition, at least one functional battery-powered physiological monitor must be available (e.g., ECG, pulse oximeter).
The following equipment must be immediately available:

1. Peripheral nerve stimulator *
2. Respirometer (tidal volume) *
3. Ventilator with low-pressure alarm *

* These items are applicable in situations of elective, prolonged controlled ventilation with muscle paralysis.

D. ESSENTIAL AIRWAY EQUIPMENT

The facility must be equipped to enable comprehensive management of the airway, electively or in response to an emergency.

1. Bag and Mask Management

- Oral and nasopharyngeal airways appropriate for patient's size
- Ventilation apparatus with adapter to fit tracheal tube
- Facemasks appropriate for patient's size that can be used with ventilation apparatus
- Oxygen source that can be used with ventilation apparatus

2. Suction Apparatus

The following equipment must be present, adapted to the vacuum system and compatible with a functional back-up vacuum system:

- Tonsil suction
- Catheters for cleaning the pharynx, larynx, trachea, and bronchi
- Nasogastric tubes

3. Intubation

The following intubation equipment must be present:

- Laryngoscope with preferred blades
- Extra laryngoscope
- Blades of different sizes and types (curved and straight)
- Spare batteries and bulbs
- Endotracheal tubes of appropriate sizes, cuffed and non-cuffed
- Syringe for inflating cuff
- Lubricants
- Stylettes that will fit tracheal tube
- Forceps (Magill)
- Emergency airway adjuncts (difficult intubation kit) which must include tracheotomy or cricothyrotomy sets.

(Note: At the discretion of the practitioner administering general anaesthesia, the intubation equipment may include laryngeal mask and lighted stylette)

E. GENERAL ANAESTHETIC DRUGS AND SUPPLIES

1. Anaesthetic Drugs

The choice of anaesthetic drugs is determined by the anaesthetist who must ensure that all drugs are current and have been stored appropriately. There must be a drug inventory record and a periodic inspection by staff to ensure that used drugs have been restocked and out-dated drugs have been replaced.

2. Venipuncture

Intravenous access must be established in all cases. Intravenous equipment and supplies must include the following:

- Cannulas (needles)
- Catheters
- Administration sets (adult/pediatric)
- For smaller children, mini-drip sets (60 drops/cc) with burettes
- Intravenous stand
- Intravenous solutions (choice to be determined by anaesthetist)

3. Other Supplies

Accessory equipment and supplies such as the following must be available and stored appropriately:

- Needles (various types/sizes)
- Syringes (various sizes)
- ECG leads and electrodes
- Defibrillation paste or pads
- Sponges, tape, etc.
- Throat packs
- Lubricants
- Disposal container for sharps
- Padding (e.g., pillow) to help in head positioning

F. EMERGENCY ARMAMENTARIUM

Emergency equipment and drugs must be consolidated and stored in a well-organized, self-contained, mobile unit (cart or kit) at a centralized location that is readily available at all times. Drugs must be current and readily identifiable. The emergency cart or kit will contain all drugs and equipment necessary to perform emergency procedures. An emergency cart or kit must be present in each facility before any procedure is commenced. Emergency carts or kits must not be shared with other facilities when sedations are performed. The emergency cart or kit must be present until the patient is discharged from the facility.

Emergency Equipment

a. Airway Adjuncts (see section D, Essential Airway Equipment)
b. Intravenous Equipment (see section E2, Venipuncture)
c. Defibrillator

Each facility must have a defibrillator that conforms to CSA standards. It must be tested bi-monthly by appropriately trained personnel and as previously noted, records of testing and maintenance must be kept in an appropriate log book.

The complex equipment required for long-term cardiac life support is not justifiable in the out-patient general anaesthetic facility because of the unlikelihood of it being used and also because attempts to initiate its use would likely delay hospital transfer.

1. Emergency Drugs

The following is a list of *essential* emergency drugs, of which there must be a minimum of two ampoules, except as noted:

New Essential Emergency Drug List for Deep Sedation & GA

Essential Emergency Drug List		
Drug	**Dosage and Quantity**	**Drug Options**
Adenosine	1 dose of 6mg 1 dose of 12 mg	
Antiarrhythmic	Choice of: 3 vials of 150 mg or 2 x 100mg	Amiodarone or Lidocaine
ASA non enteric-coated		
Atropine	4 ampoules	
Corticosteroid		
*Dantrolene + Sterile water for reconstitution	12 ampoules, enough for a 2.5kg/dose +Sterile water for reconstitution	
Dextrose 50%	1 amp	
Diphenhydramine (Benadryl)	2 vials	
Ephedrine	2 vials	
Epinephrine	4 vials of 1mg/mL 2 preloaded syringes of 0.1 mg/mL	
Flumazenil	1 vial	
Labetalol + 1 other betablocker + 1 antihypertensive (or appropriate equivalent)	1 from each drug class (betablocker and antihypertensive), Labetalol – one multidose vial, 2 each of others	**Betablockers** Esmolol Metoprolol Propranolol **Antihypertensives** Hydralazine Nifedipine

Midazolam or equivalent		
Morphine	2 doses of 10 mg	
Naloxone	2 vials	
Nitroglycerine	1 bottle or spray	
Oxygen e-cylinder with regulator for emergency use only	1 tank	
Salbutamol		
Phenylephrine	2 vials	
Succinylcholine	1 vial	

** Not required if triggering agents are used only for emergencies*

V. GENERAL ANAESTHETIC PROCEDURE

A. PATIENT SELECTION

This modality of anaesthetic is used only when indicated and as an adjunct to appropriate non-pharmacological means of patient management. Children under 3 years of age and less than 15 kilograms are normally not candidates for non-hospital general anaesthetic procedures involving intubation. *Note:* In a nonhospital general anaesthetic facility, treatment of patients requiring emergency dental services must be carried out to the same standard of care as required in a hospital.

B. PRE-ANAESTHETIC EVALUATION

1. Since general anaesthetic procedures are potentially more life threatening, patients about to undergo general anaesthesia in a non-hospital facility should normally conform to American Society of Anaesthesiology (ASA) physical status Class I (normal healthy patient) or Class II (patient with mild systemic disease). However, Class III patients (patients with severe systemic disease that limits activity but is not incapacitating) may be accepted for treatment if the patient's disease is not expected to be affected by the anaesthesia. Patients not conforming to these classifications should be referred to a hospital for general anaesthesia or consideration should be given to a more appropriate anaesthetic technique. In any surgical procedure where post-operative care and observation are expected to be lengthy, the patient should be hospitalized.

American Society Of Anaesthesiology Physical Status Classification System

ASA I:	A normal healthy patient.
ASA II:	A patient with mild systemic disease.
ASA III:	A patient with severe systemic disease that limits activity but is not incapacitating.
ASA IV:	A patient with incapacitating systemic disease that is a constant threat to life.
ASA V:	A moribund patient not expected to survive 24 hours with or without operation.
ASA E:	Emergency operation of any variety; E precedes the number indicating the patient's physical status.

2. The pre-anaesthetic evaluation should be conducted by the anaesthetist who will be providing the anaesthetic services for the patient, or by the patient's physician or oral and maxillofacial surgeon

in consultation with the anaesthetist. At the time of the pre-anaesthetic visit, a medical history should be taken and a physical examination performed to facilitate plans for the administration of general anaesthesia.

The history should include inquiries regarding previous drug therapy, unusual reactions or responses to drugs, and prior anaesthetic experiences including problems and complications. Information about general anaesthesia which the patient would consider relevant, including the risks and nature of complications which may occur, should be discussed. Details of the pre-anaesthetic assessment must be documented on the patient's chart.

3. Where indicated, pertinent medical consultations and laboratory tests must be obtained and the results reviewed pre-operatively. The requirement for tests is determined by the anaesthetist based on the patient's medical history.

4. The time interval between the pre-anaesthetic evaluation and the general anaesthetic procedure should not exceed 90 days. If this time period is exceeded, a further preanaesthetic evaluation should be considered. If new medical developments occur during the 90 day period, they must be communicated to the anaesthetist.

5. The operating dentist and the patient's physician have a responsibility to inform the anaesthetist of problems known to them which may affect the safe administration of general anaesthesia. The anaesthetist must be aware of the planned dental procedures, duration of the procedures, potential blood loss, number of appointments anticipated, and any drugs the operating dentist intends to use (including their routes of administration) pre-operatively, during the treatment, and post-operatively. It is the responsibility of the anaesthetist to determine whether or not the clinical information and laboratory test results are adequate, if further consultation is required, and finally, if the patient is fit for general anaesthesia.

6. Any difference of opinion between the operating dentist and the anaesthetist with regard to the care of the patient must be resolved prior to the time of the operation.

C. INFORMED CONSENT

Any intentional touching of a person without the person's consent may constitute a battery.

It is therefore very important that written informed consent be obtained during the pre-operative visit and before any sedative is administered. Consent to a particular dental treatment does not necessarily imply consent to the use of general anaesthesia. It is

highly recommended that a specific consent for each be obtained in writing.

Except in an emergency, the patient must be given an appropriate non-technical explanation of the planned treatment, associated hazards or complications, and chances of success or failure. The patient should also be advised on alternatives to the planned dental and anaesthetic procedures, including the alternative of not undergoing treatment, and the possible consequences of those alternatives. It is highly recommended that this not only be documented in the patient's records but also confirmed to the patient in writing. Whenever possible, the patient must be given a choice of treatment alternatives.

If the patient is either a minor who does not meet the consent criteria in Section 17 of the *Infants Act* (as it may be amended from time to time), or is an adult who is incapable of giving or refusing consent to the proposed treatment, the informed consent must be obtained from the minor's parent or from the minor's or incompetent adult's legally authorized representative.

Dentists should seek specific legal advice if they are unsure or have any difficulty in determining who, in a particular situation, qualifies as the minor's or incompetent adult's legally authorized representative, or whether the patient is competent to provide an informed consent.

Note: The pre-anaesthetic and post-anaesthetic responsibilities of the patient are an important aspect of treatment, and it is highly recommended that written acknowledgment of these be obtained at the same time as the informed consent.

D. PRE-ANAESTHETIC INSTRUCTIONS

The patient must be adequately informed and instructed in preparation for general anaesthesia and should be provided with a pre-anaesthetic instruction sheet. A standard policy should be followed concerning the minimum time interval from last oral intake to the induction of anaesthesia (e.g., minimum of four hours after clear fluids and minimum of eight hours after solid food is recommended). Possible exceptions to this are usual medications or pre-operative medications which may be taken as deemed necessary by the dentist or anaesthetist. Pre-medication, if indicated, should be ordered by the anaesthetist, or dentist in consultation with anaesthetist. Dosage, time and route of administration must be specified.

E. ADMINISTRATION OF GENERAL ANAESTHESIA

No practitioner should administer general anaesthesia and perform dental procedures at the same time.

1. Immediately prior to the administration of general anaesthesia, the presence and serviceability of equipment should be confirmed using a standardized checklist to prevent any oversights or omissions.

2. The anaesthetist must ensure that a continuous intravenous access is established and maintained throughout the procedure. Given the clinical situation, the establishment of the IV must be at an appropriate time during the course of the general anaesthesia as determined by the anaesthetist. An intermittent or continuous fluid administration must be used to ensure patency.

3. It is recommended that the duration of a general anaesthetic procedure in a non-hospital facility be no longer than three and one half hours per session. General anaesthesias of longer duration have significantly higher incidence of complications and prolonged recovery times. The non-hospital general anaesthetic facility normally is not equipped or staffed for prolonged recovery periods.

4. In the non-hospital general anaesthetic facility, the anaesthetist is primarily responsible for the patient and must remain with the patient at all times throughout the course of the general anaesthesia including the recovery period, unless the recovery area is constantly staffed by a recovery supervisor with training in post-anaesthetic recovery. The presence of a female staff member is recommended at all times. The anaesthetist must decide the appropriate time to transfer the patient to the recovery area and must approve his/her dismissal from the office.

5. The dentist should recognize that the anaesthesia of children represents a unique clinical challenge. The child's age and weight must be considered and dosages adjusted accordingly to ensure that the intended level of general anaesthesia is not exceeded.

The practice of simultaneous administration of general anaesthesia by one anaesthetist for concurrent dental procedures on two patients is unacceptable.

F. MONITORING

The anaesthetist is responsible for monitoring the patient. This includes making sure that appropriate monitoring equipment is available and properly maintained, and that policies for monitoring requirements are established to help ensure patient safety.

Clinical observation must be supplemented by the following means of physiological monitoring performed at appropriate intervals, usually every five minutes throughout the general anaesthetic administration. Alarms on monitoring equipment should be utilized.

1. Continuous pulse oximetry
2. System to monitor blood pressure
3. System to monitor respiration
4. Continuous electrocardioscope monitoring, at the discretion of the anaesthetist
5. If intubated, monitoring of end tidal carbon dioxide by capnometry
6. If ventilation is controlled by an automatic mechanical ventilator, breathing system disconnect monitoring
7. If using an anaesthetic machine, oxygen gas analyzer with alarm

G. RECOVERY AND DISCHARGE

The patient should remain in the dental chair and not be moved to the recovery area until he/she has regained protective reflexes. Earlier transfer may only be considered if the recovery area is appropriately equipped and constantly staffed by a trained recovery supervisor who can supervise and monitor the patient. The anaesthetist should discuss the care of the patient with the recovery room staff, identifying any special problems related to the patient's safe emergence from the anaesthetic state. Pulse oximetry is required to be available.

Recovery status post-operatively and readiness for dismissal must be specifically assessed and recorded by the anaesthetist (i.e., the anaesthetist must remain on the premises until the patient receiving general anaesthesia meets predetermined recovery criteria). Criteria for discharge include conscious and oriented (e.g., to time, place and person relative to the pre-anaesthetic condition), stable vital signs (blood pressure, heart rate, oxygen saturations), ambulatory and showing signs of progressively increasing alertness. The patient must be discharged from the facility to the care of a responsible adult.

H. POST-ANAESTHETIC INSTRUCTIONS

It is highly recommended that written post-anaesthetic instructions be given to the patient as part of the treatment plan presentation and also be given to the person accompanying the patient upon discharge from the facility. The patient should be advised not to drive an automobile or operate hazardous machinery for at least 24 hours or longer if drowsiness or dizziness persists. He/she should also be advised to refrain from consuming alcoholic beverages and sedative drugs as they prolong the effects of drugs that have been administered. It is highly recommended that the post-anaesthetic responsibilities of the patient be acknowledged in writing as part of the informed consent.

VI. ANAESTHETIC RECORDS

A. PRE-ANAESTHETIC RECORD

At a minimum, a pre-anaesthetic patient evaluation record must be obtained, and must contain the following information:

1. Vital Statistics

- patient's full name, date of birth, gender
- name and phone number of person to be notified in the event of an emergency
- in case of a minor or a mentally incompetent adult, name of the parent or legally responsible representative

2. Medical History Questionnaire

The information on the medical history questionnaire must be adequate, current, clearly recorded and signed by the patient or legally authorized representative. It must elicit core information for determining the correct ASA physical status classification, in order to assess risk factors in relation to general anaesthesia, and it must provide written evidence of a logical process of patient evaluation.

Core information should include the evaluation and recording of significant positive findings related to the following:

- general questions
- previous anaesthetic experiences

- familial anaesthetic complications
- drug therapy
- sensitivities/allergies
- heart and blood vessels
- brain and nervous system
- blood
- lungs and respiratory system
- endocrine system
- gastrointestinal system
- genitourinary system
- neuromuscular/skeletal system
- ears/nose/throat/eyes
- mental condition
- infectious diseases
- cancer/radiation/chemotherapy
- organ transplants
- medical implants
- symptoms review

3. Physical Examination

The physical examination must include the evaluation and recording of significant positive findings related to:

- general appearance (note obvious abnormalities)
- head, neck and intra-oral examination (particularly pertaining to airway such as range of motion, loose teeth, crowns, dentures, potential obstruction from large tongue, tonsils, etc.)
- cardiovascular system including measuring and recording of vital signs (blood pressure, pulse rate, volume and rhythm, auscultation as indicated)
- pulmonary, auscultation and/or other assessments as required
- examination of other physiologic systems as indicated (endocrine, neurologic, musculoskeletal, gastrointestinal, genitourinary)
- other assessments including laboratory tests as indicated

B. ANAESTHETIC RECORD

When determining the format of the anaesthetic record to be used, practitioners should ensure that the information is clear and

readily understood. The following information must be appropriately recorded.

- patient name
- date of procedure
- verification of NPO (nothing by mouth) status
- verification of accompaniment for discharge
- pre-operative blood pressure, heart rate, and oxygen saturation
- ASA physical status classification
- names of all drugs administered
- doses of all drugs administered
- time of administration of all drugs
- intravenous type, location of venipuncture, type and amount of fluids administered
- list of monitors used
- record of systolic and diastolic blood pressure, heart rate and oxygen saturation at appropriate intervals (automated printout of monitors may be attached in lieu of handwritten recording of these signs)
- time of the start and completion of the administration of general anaesthesia
- time of the start and completion of the dental procedure(s)
- recovery period
- discharge criteria met: oriented, ambulatory, vital signs stable (record of blood pressure, heart rate, oxygen saturation)
- time of discharge/name of accompanying adult
- name of anaesthetist and dentist responsible for the case
- notation of any complication or adverse reaction

C. RESUSCITATION RECORD

In the event of a cardiac arrest, a resuscitation record must be completed. It is suggested that this form be kept with the defibrillator so that it is immediately available if an emergency arises. The resuscitation record should include the following:

- patient name
- date/time of arrest
- arrest condition
- time resuscitation stopped
- respiratory management
- cardiac management
- time cardiac shock applied and number of joules
- names of all drugs administered and by whom
- doses of all drugs administered
- time and route of administration of all drugs

- intravenous type, location of venipuncture, type and amount of fluids administered

D. INCIDENT REPORT

Anaesthetic cases resulting in the need for resuscitation, referral of a patient to a hospital, or death must be reported to the Registrar immediately. The initial contact should be made by telephone and must be followed promptly by the submission of a complete report to the Registrar. A sample incident report is on page 4-10.

CHAPTER 3

AUTHORIZATION FOR NON-HOSPITAL GENERAL ANAESTHETIC FACILITIES

I. INTRODUCTION

Dental offices, clinics and facilities providing general anaesthetic services independent of a hospital setting must have current authorization from the CDSBC (or the CPSBC). The authorization process is designed to ensure that the delivery of general anaesthetic services within the facility conforms to these Practice Standards. The issuance of an authorization is not, however, an endorsement of any particular facility, technique or practitioner.

Note: Non-hospital facilities that are authorized to provide general anaesthetic services in dentistry automatically meet the requirements for deep sedation and do not require a further authorization.

II. AUTHORIZATION CLASSIFICATIONS

Authorization status is determined by the Committee on the basis of a site visit by a survey team. The findings of the survey team and the recommended authorization status are contained in a report which is sent to the owner of the facility and the CDSBC.

A. FULL AUTHORIZATION

Full authorization is granted when the facility achieves or exceeds the minimum requirements outlined in this document. This status is valid for three years from the date of the site visit. When full approval is granted following provisional or unacceptable for authorization status, the term of authorization is for the balance of the three year term calculated from the date of the original site visit.

B. PROVISIONAL AUTHORIZATION

Provisional authorization is granted if it has been determined that the facility has deficiencies or weaknesses in one or more specific areas but is still considered adequate to maintain minimum standards of patient care. This authorization status requires follow-up and in some cases may require additional site visits.

C. UNACCEPTABLE FOR AUTHORIZATION

Unacceptable for authorization is indicated when identified deficiencies or weaknesses are such that patient care is at risk. This status results in immediate cessation of general anaesthetic

services in the facility. Once the deficiencies have been corrected, the owner may again apply for a site visit.

III. SURVEY TEAM

The survey team visits the site and is responsible for preparing a written report of the findings and determining the appropriate authorization status. A roster of qualified surveyors is maintained by the CDSBC from which the required numbers of individuals are selected for each survey team.

A. MEMBERSHIP

1. An anaesthetist registered with the College of Physicians and Surgeons of British Columbia who is knowledgeable in the practical application and provision of general anaesthesia for the practice of dentistry.

2. A dentist currently licensed to practise with the CDSBC, preferably a certified specialist in oral and maxillofacial surgery, who is familiar with dental general anaesthesia.

3. A biomedical engineer registered with the Association of Professional Engineers and Geoscientists of British Columbia, or a biomedical technologist directly supervised by a professional engineer, having expertise in general anaesthetic medical device technology and associated standards and regulations.

B. CONFLICT OF INTEREST - SELECTION OF SURVEY TEAM

Appointments to the survey team are made by the CDSBC and are presented to the registered owner of the facility who has an opportunity to request an alternate surveyor should there be a concern regarding bias or conflict of interest. The registered owner has an obligation to raise any concerns regarding the selection of the survey team within seven calendar days of being notified of the composition of the survey team.

C. CONFIDENTIALITY

All documentation and discussions related to the site visit are confidential and must not be divulged by the survey team or the CDSBC, except where required by law or as required to administer and enforce these Practice Standards.

IV. SURVEY FOR AUTHORIZATION OF FACILITY

A. APPLICATION

1. Initial Application

New facilities must be granted an authorization (whether full or provisional) before providing general anaesthetic services. An application for a survey for authorization must be submitted in writing to the CDSBC at least 45 days in advance of the anticipated opening.

2. Renewal Application

An owner of a facility seeking renewal of its authorization must submit an application for a survey for authorization in writing to the CDSBC at least 45 calendar days before the expiry of the existing authorization. A reminder of the impending expiry of authorization is sent by the CDSBC 60 days prior to expiry date.

3. Qualifications of Facility Staff

An initial application and a renewal application must identify the facility staff comprising the General Anaesthetic Team and describe their qualifications.

B. SURVEY SCHEDULING

Upon receipt of an initial application for authorization, an on-site survey by the appointed survey team will normally take place within 30 calendar days. In the case of a renewal application, the CDSBC will advise the owner of the facility of the date on which the survey team will attend, which will normally be at least 30 days before the expiry of the authorization. If visiting dentists or physicians provide their own monitoring equipment, this monitoring equipment also must be available for examination along with their service and maintenance logbooks. Re-surveys are scheduled as required.

C. FEES FOR SURVEY

Survey fees are intended to offset the cost of site visits and are the responsibility of the owner of the facility. If a further survey site visit is required, an additional fee will normally be charged. The fee schedule is determined from time to time by the CDSBC Council and payment must be received with the request for renewal and site visit.

D. SITE VISIT

Site visits are normally scheduled during business hours. All members of the survey team are expected to participate in the

site visit at the same time. During the site visit, the survey team examines the following to determine if they meet the Practice Standards:

- Physical facilities
- General Anaesethic delivery systems
- Physiological monitoring equipment
- Essential airway equipment
- Anaesthetic drugs and supplies
- Emergency armamentarium
- General Anaesthetic protocol, including emergency procedures
- Anaesthetic records
- Equipment records

E. SURVEY REPORT

Assessments made by the survey team are based on the requirements outlined in this document. Weaknesses and/or deficiencies are specifically identified in relation to requirements, and, where applicable, time limits for rectification and/or the need for an additional site visit are specified. The survey team may also offer suggestions which could lead to an improvement in the functioning of the facility. However, the registered owner is not obliged to implement these suggestions, and the results of the site visit are independent of them.

The survey team is responsible for preparing a joint written survey report with a recommendation. The joint written survey report is forwarded to the facility owner who then has an opportunity to review the report for verification of factual data and to provide general comments. The survey team may prepare a revised survey report based on those comments. The survey report, together with any outstanding points of contention or comments, is presented to the Committee for its consideration.

Upon review of the survey report by the Committee, an appropriate authorization status is issued, effective as of the date of the original site visit. Once full authorization has been obtained, the facility owner will be so advised in writing.

The Committee may accept or reject the recommendation of the survey team contained in the survey report. In circumstances where the survey team has recommended a full or provisional authorization and the Committee is having difficulty in accepting that recommendation, the Committee will advise the facility owner and will, where possible to do so without jeopardizing patient safety, allow the facility owner to make his or her views known to the Committee before the Committee makes a decision on the authorization status of the facility.

Where the Committee concludes that a facility is unacceptable for authorization, the facility owner will be so advised in writing, and the owner must immediately cease providing general anaesthetic

services in the facility until such time as provisional or full authorization is obtained.

F. FOLLOW-UP

A facility that receives a provisional authorization as a result of a site visit is required to submit a progress report within the time specified. That report should comprehensively document how the facility has rectified the deficiencies identified in the survey report. In some instances, a further site visit may be required.

If a facility owner who has received an unacceptable for authorization status presents documentation concerning the rectification of deficiencies which satisfies the Committee that patient safety is no longer jeopardized, the Committee will issue a provisional authorization for the facility. A further site visit may be required in order for the Committee to be satisfied that patient safety is no longer jeopardized. Additional fees may be charged for such further site visits.

G. ANNUAL FACILITY SELF-ASSESSMENT AND STATUS CONFIRMATION

Continued authorization status during the three-year cycle between site visits is dependent on the annual submission by the facility of a self-assessment and status confirmation form which has been completed to the satisfaction of the Committee. (Refer to Appendix IV: Annual Facility Self-Assessment and Status Confirmation Form.)

H. SALE OF A FACILITY

Where an authorized facility is sold, both the vendor and the purchaser have an obligation to advise the Committee that the sale is taking place. When a facility is sold, the authorization status for that facility will normally end within 60 calendar days of the sale, and the new owner must therefore apply for a site visit and authorization as soon as possible after purchasing a facility. In circumstances where the Committee is satisfied that the sale of the facility does not require a new authorization process to take place (e.g., where the sale of the facility is from a dentist to the dentist's holding company) the Committee may confirm that the existing authorization status for the facility will remain in effect despite the sale of the facility.

CHAPTER 4

SAMPLE FORMS

It is understood that a certain amount of flexibility is necessary when it comes to records, and that practitioners must be able to exercise their judgment with respect to particular practice situations. To this end, each practitioner may determine the format of his/her own records. The practitioner, however, should use forms that as a minimum contain the information recommended in the standards.

The following forms have been provided as examples only and their use is not mandatory.

CLINICAL RECORDS / FORMS

- PRE-ANAESTHETIC RECORD - MEDICAL HISTORY QUESTIONNAIRE
- PRE-ANAESTHETIC RECORD - PHYSICIAN'S ASSESSMENT
- PATIENT'S CONSENT FOR DENTAL TREATMENT AND GENERAL ANAESTHETIC
- PRE-ANAESTHETIC PATIENT INSTRUCTIONS
- POST-ANAESTHETIC PATIENT INSTRUCTIONS
- ANAESTHETIC RECORD
- RESUSCITATION RECORD
- INCIDENT REPORT

EQUIPMENT RECORDS

- PRE-ANAESTHETIC CHECKLIST
- EQUIPMENT SPECIFICATIONS

PRE-ANAESTHETIC RECORD

Date _____

Name _____

Date of Birth Y____/M_____/D_____ ☐ Male ☐ Female Phone: Res. _____

Work _____

Home address: _____

City/Province: _____ Postal Code: _____

Person to notify in case of emergency _____ Rel. _____ Phone_____

If applicable, name of parent or legally authorized representative _____

MEDICAL HISTORY QUESTIONNAIRE

Have you ever had a general anaesthetic? ☐ Yes ☐ No If yes, when?_____

Any complications? ☐ Yes ☐ No _____

Any history of familial anaesthetic complications? ☐ Yes ☐ No _____

Are you being treated for any medical condition at present or within the past two years? ☐ Yes ☐ No

If yes, please explain. _____

_____

When was your last visit to a physician? _____ Last complete medical examination? _____

Have you ever had a serious illness, accident, or required extensive medical care? ☐ Yes ☐ No

If yes, please explain. _____

_____

Have you been hospitalized in the last five years? ☐ Yes ☐ No If yes, please explain. _____

_____

Are you taking any prescription or non-prescription drugs? ☐ Yes ☐ No If yes, what is the drug(s), dose(s), and for how long?) _____

Have you ever had a reaction to any drug(s) or been advised against taking any kind of medication? ☐ Yes ☐ No

If yes, please explain. _____

Do you have any sensitivities or allergies ? ☐ Yes ☐ No If yes, please explain. _____

_____

Do you have any history of family disease? ☐ Yes ☐ No If yes, please explain. _____

_____

Indicate which of the following you presently have or ever had.

	Yes	*No*		*Yes*	*No*		*Yes*	*No*
AIDS	☐	☐	Bleed easily	☐	☐	Circulation problems	☐	☐
Alzheimers	☐	☐	Blood disorders	☐	☐	Congenital heart lesions	☐	☐
Anemia	☐	☐	Blood in sputum	☐	☐	Congestive heart failure	☐	☐
Angina pectoris	☐	☐	Bronchitis	☐	☐	Cortisone/steroid therapy	☐	☐
Arthritis/rheumatism	☐	☐	Cancer	☐	☐	Diabetes	☐	☐
Artificial heart valve	☐	☐	Cerebral palsy	☐	☐	Earaches (frequent)	☐	☐
Artificial joints	☐	☐	Changes in appetite	☐	☐	Emphysema	☐	☐
Balance problems	☐	☐	Chest pains	☐	☐	Epilepsy or seizures	☐	☐

	Yes	No		Yes	No		Yes	No
Fainting or dizzy spells	☐	☐	Hyper(hypo) glycemia	☐	☐	Psychiatric treatment	☐	☐
Glandular disorders	☐	☐	Hypertension	☐	☐	Radiation treatment/ chemotherapy	☐	☐
Glaucoma	☐	☐	Impaired vision	☐	☐			
Headaches (severe)	☐	☐	Infective endocarditis	☐	☐	Rheumatic/scarlet fever	☐	☐
Head/neck injuries	☐	☐	Jaundice	☐	☐	Shortness of breath	☐	☐
Hearing difficulties	☐	☐	Kidney disease	☐	☐	Sickle cell disease	☐	☐
Heart disease or attack	☐	☐	Leukemia	☐	☐	Sinus trouble	☐	☐
Heart murmur	☐	☐	Liver disease	☐	☐	Stomach/intestinal problems	☐	☐
Heart pacemaker	☐	☐	Lung disease	☐	☐	Stroke	☐	☐
Heart rhythm disorder	☐	☐	Malignant hyperthermia	☐	☐			
Heart surgery	☐	☐	Medical implant	☐	☐	Temperature intolerance	☐	☐
Hemophilia	☐	☐	Mental/nervous disorder	☐	☐	Thyroid disease	☐	☐
Hepatitis A	☐	☐	Mitral valve prolapse	☐	☐	Tuberculosis	☐	☐
Hepatitis B	☐	☐	Nosebleeds (frequent)	☐	☐	Ulcers	☐	☐
Hepatitis C	☐	☐	Organ transplant	☐	☐	Venereal disease	☐	☐
Herpes	☐	☐	Persistent cough	☐	☐	Weight gain/loss	☐	☐
High/low blood pressure	☐	☐	Pulmonary edema	☐	☐	Other	☐	☐
Hodgkin's disease	☐	☐	Positive testing for HIV	☐	☐	Other	☐	☐

Do you smoke or use other forms of tobacco? ☐ Yes ☐ No _____

Do you have a history of alcohol and/or drug use? ☐ Yes ☐ No _____

Have you received treatment for alcohol or drug use?` ☐ Yes ☐ No _____

Do you currently have, or have you had in the past, any disease, condition or problem not listed? ☐ Yes ☐ No

If yes, please explain. _____

Is there any problem or medical condition that you wish to discuss in private only? ☐ Yes ☐ No

WOMEN ONLY: Are you pregnant or suspect you might be? ☐ Yes ☐ No Anticipated delivery date? _____

Are you breast feeding? ☐ Yes ☐ No_____

Are you taking any birth control pills? ☐ Yes ☐ No_____

NOTE: IT IS IMPORTANT THAT ANY CHANGES IN YOUR HEALTH STATUS BE REPORTED TO OUR OFFICE.

I, the undersigned, certify that all of the medical and dental information provided is true to the best of my knowledge, and I have not knowingly omitted any information. I also consent to my physician being contacted if necessary to obtain information that is required for my dental care.

Signature _____ Date_____

☐ *Patient* ☐ *Parent* ☐ *Legally Authorized Representative*

Reviewed by dentist _____ Date _____

PRE-ANAESTHETIC RECORD
PHYSICIAN'S ASSESSMENT

Dear Doctor,

Your patient is scheduled for dental treatment under general anaesthesia. Please complete this history and physical examination form, and return it to our office by _____. If you have any questions, please call. Thank you for your assistance.

Patient's Name _____ Date of Birth _____ Phone _____

Address _____

City/Province _____ Postal Code_____

Planned Dental Treatment_____

_____

ALLERGIES	
MEDICATION	
FUNCTIONAL INQUIRY	Cardiac
	Respiratory
	Other
PAST ILLNESS	Anaesthesia Experience
	Other
FAMILY HISTORY	Anaesthesia Problems
	Other
PHYSICAL EXAMINATION	General Appearance
	B/P _____ P. _____ R. _____ Wt. _____ Ht. _____
	Head, Neck and Intraoral
	Heart
	Lungs
	Abdomen
	Skeletal
	CNS
	Laboratory Tests
ASA CLASSIFICATION	I II III IV V E

Date _____ Physician's Signature _____

PATIENT'S CONSENT FOR
DENTAL TREATMENT AND SEDATION / GENERAL ANAESTHESIA

PROCEDURE(S) _____

_____

_____

OPERATING DENTIST _____

ANAESTHETIST _____

I, the undersigned, hereby consent to the procedure(s) noted above. I acknowledge that the procedure(s), its implications and possible complications have been explained to me, along with the alternatives including not having any treatment. I understand that the procedure will require sedation/ general anaesthesia, and I hereby consent to the administration of this by the above-named anaesthetist. I further understand that during the course of any treatment, unforeseen circumstances may be revealed that could necessitate the performance of an additional or alternate procedure.

Signature _____

Date

☐ *Patient* ☐ *Parent* ☐ *Legally Authorized Representative*

Witness _____

Date

I, the undersigned, hereby acknowledge receiving a copy of the pre- and post-operative instructions which have been explained to me. I understand the advice given and agree to the restrictions placed on me. After my discharge, I will notify my doctor if I experience any acute pain, heavy bleeding from the surgical site, respiratory problems, or any other post-operative problems.

Signature _____ Date _____

☐ *Patient* ☐ *Parent* ☐ *Legally Authorized Representative*

Witness _____ Date _____

PRE-ANAESTHETIC PATIENT INSTRUCTIONS

For the safe treatment of the patient, the following pre-anaesthetic instructions must be followed very carefully.

FOOD AND BEVERAGES

- It is essential that the stomach be empty at the time of the anaesthetic appointment.
- Do not eat any solid foods after midnight the night before the anaesthetic appointment.
- Do not drink anything, even water, for at least 4 hours before the anaesthetic appointment.
- Do not drink any alcohol prior to treatment.

MEDICATIONS

- Regular medication should be taken pre-operatively and in this case, a sip of water is permitted.

CLOTHING / CONTACT LENSES

- Wear loose casual clothing for the appointment (e.g., short sleeve tee shirt). Female patients should wear slacks.
- Do not wear jewelry, hair pins or make-up.
- Remove contact lenses before surgery.

SMOKING

- Refrain from smoking prior to treatment.

TRANSPORTATION

- Under no conditions can you drive yourself home. A responsible adult (excluding a taxicab driver) must pick you up after the appointment and accompany you home.
- Public transportation is not recommended.

CHANGE IN HEALTH STATUS

- If your general health deteriorates (e.g., cold, cough, fever, etc.), contact the dental office prior to the day of the appointment. If in doubt, please phone the office to discuss the change in health status.

If you have any questions, please do not hesitate to ask them. It is important that you understand the circumstances surrounding this treatment.

POST-ANAESTHETIC INSTRUCTIONS

Following general anaesthetic, 24 to 36 hours are required for the full effects of the drugs to wear off. During this period, it is essential that you follow these instructions.

DISCHARGE FROM OFFICE

- The patient must be discharged into the care of a responsible adult who can accompany him/her home.
- Arrangements should be made to have a responsible adult remain with the patient for the balance of the day and during the night.

TRANSPORTATION FROM OFFICE

- Private automobile is preferred. Public transportation is not recommended.

FOOD AND BEVERAGES

- Clear liquids are advised for at least 6 hours and, after that, diet as tolerated.
- Do not drink alcohol in any form for 48 hours.

MEDICATIONS

- Resume normal medication as directed by physician after appointment.

ACTIVITY RESTRICTIONS

- Do not operate motor vehicles, boats, power tools or machinery for 18 hours, or longer if drowsiness or dizziness persists.
- Do not operate an aircraft for at least 48 hours following general anaesthetic.
- Do not sign or enter into any legal contract for at least 24 hours.

PROBLEMS

- If you experience any acute pain, heavy bleeding from the surgical site, respiratory problems, or any other post-operative problem, please notify office.

ANAESTHETIC RECORD

Patient' Name _____ Age _____ Date _____

Medical History Reviewed _____

_____

Allergies _____ Medications _____

NPO _____ Accompanied by Responsible Adult _____

Pre-op BP _____ Pre-op HR _____ Pre-op O_2 St'n _____ ASA Classification: I II III IV V E

Premedication _____ Time _____

IV: Angio or BF Gauge _____ Site: R L DOH ACF FA Other _____

Fluids: Type _____ Volume _____

Monitors: Pulse Oximeter _____ BP _____ Other _____

ECG _____ End tidal CO_2 _____ Other _____

DRUGS	Time 0	15	30	45	0	15	30	45	0	15	Total
O_2(1/min)											
N_2O(1/min)											
Local Anaesthetic: ml of											

TIME

Start anaesthetic _____

Start procedure _____

End procedure _____

End anaesthetic _____

To recovery room _____

DISCHARGE CRITERIA

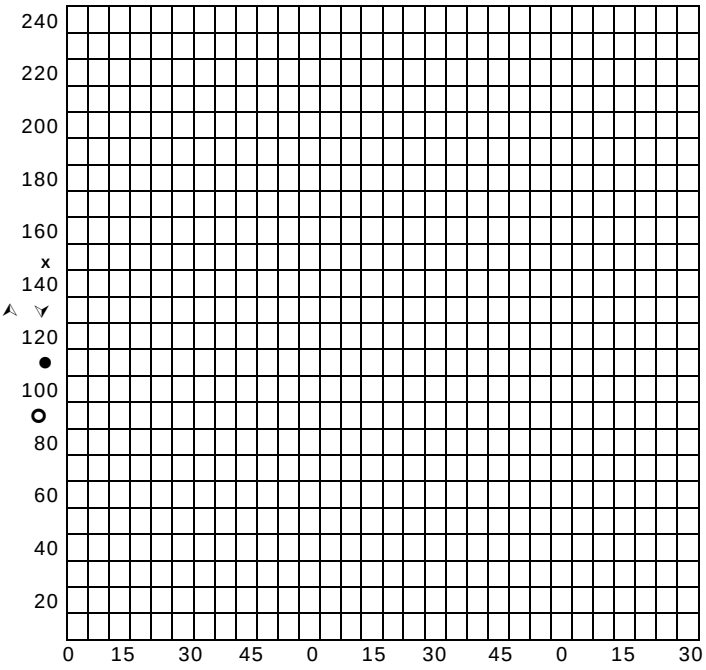
Oriented _____ .

Vital signs stable _____

BP _____ HR _____

Ambulatory _____

Discharge time _____



In the company of _____

NOTES

_____

_____

Operating Dentist _____ Anaesthetist _____

RESUSCITATION RECORD

Name _____Time of Arrest _____ Time Resuscitation Stopped _____

Arrest Condition_____

_____

RESPIRATORY MANAGEMENT	CARDIAC MANAGEMENT
Mouth to Mouth ☐ Yes ☐ No Bag and Mask ☐ Yes ☐ No Intubated ☐ Yes ☐ No Extubated by _____ at _____ hrs. Type of tube: _____ On ventilator: ☐ Yes ☐ No Type: _____ XXXX _____ T.V. _____O% _____	(a) External Massage ☐ Yes ☐ No Initiated at: _____ Duration: _____ Pupil Reaction: _____ Time / R / L (b) ECG Interpretation _____ _____ (c) Defibrillation: Time Watt/Sec Post Defibrillation ECG Interpretation _____

BLOOD GASES

PH	PO_2	PCO_2	HCO2	B.E.

IV SOLUTION / ADDITIVES	IV Amt. Started ml	Time Stop-ped	Amt. Remain-ing	Total I.V. In	Output				Site of IV
					Time	Urine	Blood	Other	
									Site of IV Cannula

Time	Medication	Route	Given By

Total during resuscitation _____ Total _____

Attending Physician _____

INCIDENT REPORT

Date of Incident: _____ Report Date: _____

Name of Facility: _____ Phone Number: _____
Address: _____
City/Province: _____ Postal Code:_____

Facility Owner(s): _____ Phone Number: _____
Address: _____
City/Province: _____ Postal Code:_____

Operating Dentist: _____ Phone Number: _____
Address: _____
City/Province: _____ Postal Code:_____

Anaesthetist: _____ Phone Number: _____
Address: _____
City/Province: _____ Postal Code:_____

Patient: _____ Age ____ Sex ___ Phone Number: _____
Address: _____
City/Province: _____ Postal Code:_____

Description of complication, patient status, and disposition at conclusion of event:

Present patient status:

Forward report to:
Registrar's Office
College of Dental Surgeons of British Columbia
500 - 1765 West 8th Avenue
Vancouver, BC V6J 5C6

PRE-ANAESTHETIC CHECKLIST

A. GAS PIPELINES

1 ___ Secure connections between terminal units (outlets) and anaesthesia

B. ANAESTHETIC MACHINE

1 ___ Line oxygen (40-60 psi) (275-415kPa)
2 ___ Nitrous oxide (40-60 psi) (275-415kpa)
3 ___ Adequate reserve cylinder oxygen pressure
4 ___ Adequate reserve cylinder nitrous oxide content
5 ___ Check for leaks and turn on cylinders
6 ___ Flow meter function of oxygen and nitrous oxide over the working range

C. VAPORIZER

1 ___ Vaporizer filled
2 ___ Filling ports pin-indexed and closed
3 ___ Ensure "on/off" function and turn off
4 ___ Functioning oxygen bypass (flush)
5 ___ Functioning oxygen fail safe
6 ___ Oxygen analyzer calibrated and turned on
7 ___ Functioning mixer (oxygen and nitrous oxide where available)
8 ___ Functioning common fresh gas outlet

D. BREATHING CIRCUIT

1 ___ Correct assembly of circuit to be used
2 ___ Patient circuit connected to common fresh gas outlet
3 ___ Oxygen flowmeter turned on
4 ___ Check for exit of fresh gas face mask
5 ___ Pressurize. Check for leaks and integrity of circuit (eg. Pethick test for co-axial)
6 ___ Functioning high pressure relief valve
7 ___ Unidirectional valves and soda lime
8 ___ Functioning adjustable pressure relief valve

E. VACUUM SYSTEM

1 ___ Suction adequate

F. SCAVENGING SYSTEM

1 ___ Correctly connected to patient circuit

EQUIPMENT SPECIFICATIONS

ITEM	
MANUFACTURER	
MODEL	SERIAL NUMBER
VENDOR	OWNER
NORMAL LOCATION	
DATE IN SERVICE	WARRANTY EXPIRES
TYPE OF APPROVAL LABEL	RISK CLASS (3,2,2G,1) or APPLIED PART TYPE (B, BF, CF)
OPERATING MANUALS (LOCATION)	SERVICE LOG BOOK (LOCATION)
INSPECTION REQUIREMENTS	
PERFORMANCE CHECKS	
PREVENTIVE MAINTENANCE REQUIREMENTS	

OTHER COMMENTS

PUBLISHED STANDARDS FOR EQUIPMENT

C22.1 Hospitals)	Canadian Electrical Code Part I, (Section 24, Patient Care Areas in
C22.2 No. 125-M1984 (R1992)	Electromedical Equipment
C22.2 No. 601.1-M90	Medical Electrical Equipment, Part I: General Requirements for Safety
C22.2 No. 601.1S1-94	Supplement /Amendment
C22.2 No. 601.1.1.94	Medical Electrical Equipment, Part 1: General Requirements for Safety
C22.2 No. 601.2 Series	The following standards provide particular safety requirements for medical electrical equipment. Each of these Part 2 standards is designed to be used with the Part 1 General Requirements.
C22.2 No. 601.2.2-92	Medical Electrical Equipment, Part II: Particular Requirements for the Safety of High Frequency Surgical Equipment
C22.2 No. 601.2.4-M90	Medical Electrical Equipment Part II: Particular Requirements for the Safety of Cardiac Defibrillators and Cardiac Defibrillator - Monitors.
C22.2 No. 601.2.10-92	Medical Electrical Equipment Part II: Particular Requirements for the Safety of Nerve and Muscle Stimulators
C22.2 No. 601.2.12-94	Medical Electrical Equipment Part II: Particular Requirements for the Safety of Lung Ventilators for Medical Use
C22.2 No. 601.2.13-94	Medical Electrical Equipment Part II: Particular Requirements for the Safety of Anaesthetic Machines
Z32.2-M89	Electrical Safety in Patient Care Areas
Z168.3-M84	Continuous-Flow Inhalation Anaesthetic Apparatus (Anaesthetic Machines) for Medical Use
Z168.3S1-M1991	Supplement to Z168.3-M84
Z168.5.1-M87	Anaesthesia Ventilators
Z168.5.6-96	Expired Air Pulmonary Resuscitators
Z168.6-M89	Oxygen Analyzers
Z168.8-M82 (R1994)	Anaesthetic Gas Scavenging Systems
Z168.9-92	Breathing Systems for Use in Anaesthesia
Z305.1-92	Non-flammable Medical Gas Piping Systems
Z305.2-M88	Low-Pressure Connecting Assemblies for Medical Gas Systems
Z305.3-M87	Pressure Regulators, Gauges and Flow Metering Devices for Medical Gases
Z305.5-M86	Medical Gas Terminal units (outlets)
Z305.6-92	Medical Oxygen Concentrator Central Supply System for Use with Nonflammable Medical Gas Piping Systems
Z317.2-M91	Special Requirements for Heating, Ventilation and Air Conditioning (HVAC) Systems in Health Care Facilities
Z317.5-M89 (R1994)	Illumination Systems in Health Care Facilities
Z317-10-88	Handling of Waste Materials Within Health Care Facilities

Z317.11-M82 (R1994)	Area Measurement for Health Care Facilities
Z327-M91	Standards for User-Applied Drug Labels in Anaesthesia and Critical Care
Z5360-94	Anaesthetic Vaporizers - Agent Specific Filling Systems
Z5361-94	Tracheal Tubes
Z8382-94	Resuscitators Intended for Use with Humans
Z8836-94	Suction Catheters for Use in the Respiratory Tract
Z9919-94	Pulse Oximeters for Medical Use - Requirements

Copies of these publications may be obtained by writing to:

CANADIAN STANDARDS ASSOCIATION
13799 Commerce Parkway
Richmond, BC V6V 2N9

APPENDIX II

INSPECTION OF MEDICAL DEVICES

The medical devices in a non-hospital general anaesthetic facility must be inspected and maintained at a standard equal to that of hospital facilities in the province. The following table shows a list of medical devices typically found in a dental general anaesthetic facility along with the required inspection procedures and frequencies. In addition to regular inspection procedures, all equipment must be maintained as indicated in the manufacturer's manual. The registered owner(s) of the facility must be notified by the anaesthetist of any problems in the facility in order that corrective action can be undertaken immediately.

DEVICE	PROCEDURE	FREQUENCY
Anaesthetic Gas Machine	Full inspection	Two times per year
Oxygen Analyzer	Check by anaesthetist	Prior to each use
ECG Monitor	Full inspection	Annually
Non-Invasive Blood Pressure Monitor	Full inspection	Annually
Pulse Oximeter	Full inspection	Annually
Defibrillator	Full inspection	Two times per year
	Performance check	Once per week
	Visual check	Once per day
Temperature Monitor	Generic testing	Annually
Capnometer	Full inspection	Annually

APPENDIX III

A SPECIAL POLICY STATEMENT
IN CASE OF
DEATH OF A PATIENT WHILE ANAESTHETIZED

This statement is intended as a guide to all dentists in the event of involvement in the death of a patient in a dental office.

Any reply to press or radio enquiries should be simple and straight forward, dealing only with the facts as the dentist personally knows them to be.

It is essential that the dentist avoids elaboration or opinion on medical matters for which he is not qualified to disseminate.

Apart from this, the dentist should immediately report the emergency to, and maintain close contact with, the College office. This is particularly important before making any statements other than basic factual statements to press and radio reporters.

In the event of a death, the matter must be immediately reported to the local coroner's office or a peace officer under the provisions of the *Coroner's Act*.

In general:

1. Render all possible service to the patient.
2. If possible, obtain immediate medical assistance.
3. In telephoning the inhalator squad or ambulance, *state only your office address and the fact that there is an emergency*. Do not voluntarily identify your office as a dental office.
4. Contact the College office immediately, if possible, before answering press and radio questions.
5. Whether before or after contacting the College office, refer to the above policy in statements to reporters. Do no appear to be withholding a straight forward statement of facts.

Approved by Council
College of Dental Surgeons of British Columbia
May 8, 1992