

## Utah State Dental Board Meeting

December 4, 2014

Creed Haymond DDS

Anesthesia Chairman - Utah Association of Oral & Maxillofacial Surgeons

Fellow

- American Dental Society of Anesthesiology

- American Association of Oral & Maxillofacial Surgeons

Diplomate

- American Board of Dental Anesthesiology

- American Board of Oral & Maxillofacial Surgeons

Concern for public safety and the State's responsibility to protect the public by ensuring appropriate training, certification, competence and ongoing continuing education of practitioners administering general anesthesia and conscious sedation in dental offices. Utah lags behind national and regional standards and requirements for dentists administering conscious sedation and general anesthesia. Utah should be a leader in protecting the public and ensuring the highest quality of services by practitioners.

### **Recommendations:**

1. Anesthesia specific CE requirement for Class III and Class IV anesthesia permit holders. 12 hours every license period (2 years) **in addition** to the 30 hours currently required to renew dental license. Proof of anesthesia CE credits must be submitted each license cycle to renew anesthesia permit. This is equivalent to one course every year. No grandfathering of current permit holders.
2. Anesthesia permits should be valid for 2 years and be renewed upon submission of proof of sufficient anesthesia specific CE credits, a history of safe practice within

standards of care, proof of current ACLS or PALS certification and certifying the administration of a minimum number of anesthetics each year.

3. Office anesthesia certification for Class III and Class IV anesthesia permit holders **and** any office where general anesthesia or conscious sedation are administered by a medical anesthesiologist, dental anesthesiologist, nurse anesthetist or Class III or Class IV anesthesia permit holder other than the operating dentist.
4. Office anesthesia evaluation every 5 years to renew office certification.
5. Review of mandatory monitoring and safety equipment required for offices where general anesthesia or conscious sedation are administered to include End Tidal Carbon Dioxide (ETCO<sub>2</sub>) monitors.
6. Review requirements for obtaining Class III and Class IV anesthesia permits.  
Grandfathering allowed.

These recommendations are not meant to restrict, nor do they restrict any practitioner from administering general anesthesia or conscious sedation in Utah. Neither are they onerous. They are less stringent than some states' regulations. These recommendations are meant to protect the public by ensuring that all practitioners are adequately and fully trained, qualified and equipped to administer anesthesia safely in dental offices in Utah. We feel that Utah has fallen behind in ensuring this. Any dentist can obtain a permit to administer anesthesia if they become qualified to safely and legally administer anesthesia in this State and obtain appropriate, ongoing continuing education. These recommendations should also not be construed to be self serving, as they apply equally to all Oral & Maxillofacial surgeons and Dentist Anesthesiologists.

We as a profession have the obligation to regulate ourselves and protect our patients. If we do not do so, others will regulate us. We should be proactive in this duty and not wait until tragedy compels us to do so.

We greatly appreciate the Board's commitment to this goal, and each individual Board member's significant personal sacrifice to this end by serving on the board and striving to elevate our profession and protect the public. These recommendations and statements are in no way meant to admonish the Board nor anyone else. Rather, they are meant to inform the Board, from specialists in anesthesia, of the current status of the State's anesthesia regulations and the national and regional standards of care today, and make recommendations to improve the standards of care in Utah. We feel that these recommendations are absolutely necessary, reasonable and appropriate to ensure public safety and allow access to anesthesia privileges by qualified practitioners.

Thank you for your attention to these matters and for allowing me to present these recommendations. I look forward to ongoing dialogue on these issues and am willing to help in any way I can to improve our State standards.

Respectfully your colleague,  
Creed Haymond

# Anesthesia On-Site Inspection and Evaluation Form

\*\*To be used in conjunction with Chapter 2 of *Office Anesthesia Evaluation Manual 7<sup>th</sup> edition*: Guidelines for Office Anesthesia Evaluation

## Utah Society of Oral & Maxillofacial Surgeons

Name of Practitioner Evaluated:	Date of Evaluation:  Time:
Location Inspected:  Telephone Number:	Dental License/Anesthesia Permit Number  Expiration Date of current ACLS Certification:
Office Anesthesia Evaluation Fee Paid:  Amount: _____ Check # _____	
Names of Evaluators:  1. _____  2. _____	**Evaluation Completion recorded at USOMS  By: _____  Date: _____

On-Site Inspection and Evaluation Form		Yes	No
All office equipment and records related to patient care should be available for inspection by the visiting doctors			
Office Facility and Equipment:			
Noninvasive Blood Pressure Monitor?			
Electrocardiograph?			
Defibrillator/Automated External Defibrillator?			
Pulse Oximeter?			
Operating Theater:			
Is the operating theater large enough to accommodate the patient on a table or in an operating chair adequately?			
Does the operating theater permit an operating team consisting of at least three individuals to move freely about the patient?			
Operating Chair or Table:			
Does the operating chair or table permit the patient to be positioned so the operating team can maintain the airway?			
Does the operating chair or table permit the team to alter the patient's position quickly in an emergency?			
Does the operating chair or table provide a FIRM platform for the management of cardiopulmonary resuscitation?			
Lighting system:			
Does the lighting system permit evaluation of the patient's skin and mucosal color?			
Is there a battery-powered backup lighting system?			
Is the backup lighting system of sufficient intensity to permit completion of any operation underway at the time of general power failure?			
Suction Equipment:			
Does the suction equipment permit aspiration of the oral and pharyngeal cavities?			
Is there a backup suction device available?			
Oxygen Delivery System:			
Does the oxygen delivery system have adequate full-face masks and appropriate connectors:			
Does the oxygen delivery system capable of delivering oxygen to the patient under positive pressure?			
Is there an adequate backup oxygen delivery system?			
Recovery Area (Recovery area can be the operating theater):			
Does the recovery area have available oxygen?			
Does the recovery area have available adequate suction?			
Does the recovery area have adequate lighting?			
Does the recovery area have adequate electrical outlets?			
Can the patient be observed by a member of the staff at all times during the recovery period?			

<b>Ancillary Equipment:</b>		
Is there a working laryngoscope complete with an adequate selection of blades, spare batteries and bulbs?		
Are there endotracheal tubes and appropriate connectors?		
Are there oral airways?		
Are there any laryngeal mask airways?		
Is there a tonsillar or pharyngeal type suction tip adaptable to all office outlets?		
Are there endotracheal tube forceps?		
Is there a sphygmomanometer and stethoscope?		
Is there adequate equipment for the establishment of an intravenous infusion?		
<b>Emergency Drugs:</b>		
Vasopressor drug available?		
Corticosteroid drug available?		
Bronchodilator drug available?		
Muscle relaxant drug available?		
Intravenous medications for the treatment of cardiopulmonary arrest available?		
Narcotic antagonist drug available?		
Benzodiazepine antagonist drug available?		
Antihistamine drug available?		
Antiarrhythmic drug available?		
Anticholinergic drug available?		
Coronary artery vasodilator drug available?		
Antihypertensive drug available:		
Anticonvulsant drug available		
Is Dextrose 50% or other antihypoglycemic drugs available?		

\*See Appendix B of *Office Anesthesia Evaluation Manual 7<sup>th</sup> edition* for suggested emergency equipment and drugs.

<b>Patient Records: (Have available THREE CHARTS of patients who have been treated in your office with intravenous sedation or general anesthesia.)</b>	<b>Yes</b>	<b>No</b>
<b>*Are the Following Maintained:</b>		
An adequate medical history of the patient?		
An adequate physical evaluation of the patient?		
Anesthesia records showing: continuous monitoring of heart rate, blood pressure, respirations, and oxygen saturation levels using electrocardiographic monitoring and pulse oximetry?		
Recording of monitoring every 5 minutes?		
Evidence of continuous recovery monitoring, with notation of patient's condition upon discharge and person to whom the patient was discharge?		
Accurate recording of medications administered, including amounts and time administered?		
Records illustrating length of procedure?		
Records indicating any complications of anesthesia (if any)?		
Written informed consent for level of anesthesia administered and procedure?		

Emergency Evacuation Plan:		
Does the office have a fire/disaster plan for the evacuation of a sedated patient?		
Is adequate equipment available (wheelchair/stretchers) to evacuate a sedated patient?		

**SIMULATED EMERGENCIES** (See Appendix C of *Office Anesthesia Evaluation Manual 7<sup>th</sup> edition* and/or "Emergency Scenarios-Doctor/Surgical Team" provided by the Oregon Society of Oral and Maxillofacial Surgeons).

"The evaluators and the OMS team should not just talk about emergency situations and how they should be managed. The oral and maxillofacial surgeon and his team should demonstrate their methods for managing the following situations":

Simulated Emergencies – Doctor & Surgical Team:	Yes	No
Laryngospasm/Bronchospasm		
Emesis and possible aspiration under anesthesia		
Airway Obstruction		
Angina Pectoris – Myocardial Infarction – Ventricular Tachycardia and Fibrillation		
Pulseless Electrical Activity		
Asystole		
Hypotension/Hypertension		
Allergic Reaction		
Malignant Hyperthermia		
Simulated Emergencies – Staff/Surgical Assistants		
Syncopal Reaction		
Nausea and Vomiting during recovery phase		
Airway Obstruction/Respiratory Arrest in recovery		

\*\*Amount of simulated emergencies to be demonstrated determined by committee members.

# Evaluator Summary

\*Copies of this form are to be sent to the Secretary of the State Society AND to the State Anesthesia Committee Chairperson.

Dr. \_\_\_\_\_

has successfully completed the Utah Society of Oral and Maxillofacial Surgeons Office Anesthesia Evaluation.

YES	NO

Recommendations for improvement discussed (if none, so state):

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Signature of evaluated doctor: \_\_\_\_\_

Printed Name

\_\_\_\_\_

Signature

Signatures of evaluators: \_\_\_\_\_

Printed Name

\_\_\_\_\_

Signature

\_\_\_\_\_

Printed Name

\_\_\_\_\_

Signature

Date: \_\_\_\_\_

Due date for next Office Anesthesia Evaluation: \_\_\_\_\_

## Emergency Scenarios – Doctor/Surgical Team

### Scenario 1- Laryngospasm/bronchospasm

Patient is a 27-year-old male whose PMH is significant only for mild asthma for which he occasionally uses his Ventolin inhaler. His asthma, which is precipitated by allergies, has been stable recently with no significant attacks. He is undergoing removal of four impacted wisdom teeth under general anesthesia. Prior to administering any medication, auscultation of his lungs revealed no wheezing and normal respiratory efforts.

Following induction of intravenous general anesthesia with your usual regimen, local anesthetic is administered in four quadrants and a throat pack is placed. Prior to initiating surgery, the patient begins to cough and buck, and the patient's SaO<sub>2</sub> begins to fall. You notice that the patient is having some trouble exchanging air. Sometimes a high-pitched crowing sound can be heard. What is your diagnosis and treatment?

**Diagnosis:** Laryngospasm

**Treatment:**

1. 100 % oxygen
2. Suction pharyngeal region and pack surgical sites
3. Push on chest, listen for air movement
4. Positive pressure ventilation with BVM
5. Succinylcholine 20-40 mg IV with positive pressure ventilation

Assuming the examinee appropriately treats the Laryngospasm above, proceed:

Following the administration of Succinylcholine, the patient is extremely difficult to ventilate with impaired respiratory exchange. You auscultate the chest and hear inspiratory and expiratory wheezing and attempts at positive pressure ventilation under anesthesia is met with increased resistance, the patient is cyanotic and the SaO<sub>2</sub> is 64 %. What is your diagnosis and how would you manage this patient at this point?

**Diagnosis:** Bronchospasm

**Treatment:**

1. Continue positive pressure ventilation 100% oxygen
2. Albuterol inhaler. (use in circuit if needed)
3. Intubate patient and continue positive pressure ventilation if bronchospasm continues with impaired respiratory exchange.
4. Administer medications if bronchospasm continues
  - Epinephrine 5cc of 1:10,000 (.5 mg) IV
  - Aminophylline 5 – 6mg/kg
  - Benadryl 50 mg IV
  - Decadron 20 mg IV

## Scenario 2 – Emesis / Possible Aspiration Under Anesthesia

A 17-year-old anxious white female who was reportedly NPO for eight hours prior to surgery is undergoing extraction of four third molars under general anesthesia. She has undergone induction of intravenous general anesthesia with your normal regimen of medications. Following induction of anesthesia, the patient begins to cough and buck and you visualize foreign material / vomitus in the posterior pharyngeal region. You quickly attempt to suction the area, but you suspect the patient may have aspirated as the patient continues to cough, becomes tachycardic, cyanotic, and the SaO<sub>2</sub> is 82%. How would you manage this patient?

**Diagnosis:** Emesis/Aspiration:

**Treatment:**

1. 100% oxygen
2. Allow patient to cough
3. Position head down to the right
4. Suction foreign material

The patient does not improve, is noted to have severe dyspnea, is cyanotic, is tachycardic with a HR of 144, and has a BP of 88/46. How would you manage this patient?

**Treatment:**

1. Place the patient in Trendelenburg 15% positioned on the right side
2. Attempt to remove foreign body material with suction or McGill forceps
3. Intubate, may require Succinylcholine
4. Manage bronchospasm as noted above
4. Continue 100% oxygen
5. Transfer to hospital

## Scenario 3 – Airway Foreign Body Obstruction

The patient is a 24-year-old healthy white male undergoing extraction of tooth #17 under local anesthesia. Following local anesthesia, the tooth is luxated with a 301 elevator and a 222 forcep is placed on the tooth. The tooth pops out of the socket and slips behind your throat pack. The patient coughs and gasps and quickly sits up. He grabs his throat and cannot speak. How would you manage this patient?

**Diagnosis:** Foreign body obstruction of airway

**Treatment:**

1. Heimlich maneuver / abdominal thrusts as per BLS protocol
2. Surgical airway if fails to resolve with BLS protocols and/or patient becomes unconscious and cyanotic.

**Scenario 4 – Angina / MI / Ventricular Tachycardia - stable/unstable/  
Ventricular Fibrillation**

Patient is a 67-year-old white male who is scheduled to undergo extraction of teeth # 3, 8, 9, 11, and 14 with local anesthesia and delivery of an immediate full upper denture. Past medical history is significant for Hypertension, Non-Insulin Dependent Diabetes Mellitus, and Chronic Angina and has smoked two packs of cigarettes per day for 40 years. Current medications: Atenolol, HCTZ, Prinivil, Glucophage, Glyburide, and he uses Nitroglycerin tablets intermittently. Preoperative vitals: BP 158/92, pulse 62 & regular.

Following injection of 4 carpules of 2% Lidocaine with 1:100,000, the patient complains of tightness and pain in his chest. EKG reveals sinus tachycardia at 108/min. (BP 160/86) What is your diagnosis and how do you manage this patient?

**Diagnosis:** Angina Pectoris

**Treatment:**

1. Terminate the procedure
2. Nitroglycerin sublingual tab or spray 0.4mg
3. 100% oxygen
4. Monitor BP and pulse – Consider double product control with Beta Blocker
5. Repeat Nitroglycerin after in 3 - 5 minutes
6. Repeat Nitroglycerin after additional 5 minutes, after third dose if no relief, assume MI

After three doses of Nitroglycerin, the patient continues to have chest pain and when you evaluate the EKG, the patient appears to have ST elevation. How would you manage this patient?

**Diagnosis:** Assume Myocardial Infarction

**Treatment:**

1. Continue 100% oxygen
2. Call EMS/911
3. Monitor EKG, BP, Pulse Oximetry
4. Start IV
5. MONA (morphine, oxygen, nitroglycerin, ASA)

As you wait for an ambulance to transport the patient, the patient states that his chest pain has resolved but he feels he now has palpitations. The patient denies SOB, chest pain, or dizziness. The patient BP is 156/88, HR 122, and the patient is noted to have a wide QRS Ventricular Tachycardia (show rhythm strip) on EKG. What is your diagnosis and how would you manage this patient?

**Diagnosis:** Stable Ventricular Tachycardia – Wide QRS

**Treatment:** 1. Amioderone 150 mg given IV over 10 minutes. Repeat as needed to maximum dose 2.2 g/24h hrs

As you continue to monitor the patient, he begins to complain of severe chest pain, SOB, dizziness, appears diaphoretic, and when questioned, he seems confused. The patient's vital signs are BP 84/42, HR 162/min with pulses. EKG continues to show Ventricular Tachycardia (show rhythm strip). What is your diagnosis and how would you manage this patient?

**Diagnosis:** Unstable Ventricular Tachycardia

**Treatment:** 1. Consideration sedation with Fentanyl, Versed  
2. Synchronized Cardioversion start at 100 J

Following your initial attempt at cardioversion, the monitor shows the patient has gone into this rhythm: (Show rhythm strip of Ventricular Fibrillation). What is your diagnosis and how would you manage this patient?

**Diagnosis:** Ventricular Fibrillation

**Treatment:** *First Round:*

1. Defibrillate at 360J or recommended biphasic J setting (120-200J)
2. Resume CPR immediately for 2 minutes (5 cycles)  
May intubate, and secure IV during CPR  
Rhythm Check at end of 2 minutes CPR  
Shockable?

*Second Round:*

3. Defibrillate (1 shock)
4. Resume CPR immediately
5. Vasopressin 40units once or Epinephrine 1 mg IV every 3-5 minutes  
(give meds during CPR)  
Rhythm Check at end of 2 minutes CPR  
Shockable?

*Third Round:*

6. Defibrillate (1 shock)
7. Resume CPR immediately
8. Amioderone 300 mg IV  
Rhythm Check at end of 2 minutes CPR  
Shockable?

*Fourth Round:*

9. Defibrillate (1 shock)
10. Resume CPR immediately
11. Amioderone 150mg IV or Lidocaine 1.5 mg/kg IV

The patient converts to sinus rhythm with a BP of 90/42, HR 53, and starts to spontaneously ventilate (show sinus rhythm)

- Treatment:**
1. Support ventilation as needed.
  2. Start drip of last dosed anti-arrhythmic
  3. Fluid challenge 250-500 cc
  4. Transport patient to hospital

### Scenario 5 - Pulseless Electrical Activity (PEA)

The patient is a 55-year-old white male who is referred to you to extract nonrestorable teeth #18 and 19. The patient is a known alcoholic who has been taking aspirin the last two weeks for tooth pain. As the patient is seated in the surgical chair, he states he has had abdominal pain for the last few days. Monitors are attached, and while his blood pressure is being evaluated, he falls back unconscious in the dental chair. You assess the patient, he has no palpable pulse, and is not breathing. The monitor reveals the following rhythm: (Show rhythm strip of narrow complex tachycardia).

**Diagnosis:** Pulseless Electrical Activity (possibly secondary to hypovolemia from GI bleed)

- Treatment:**
1. Activate EMS/Call 911
  2. Initiate CPR for 5 cycles
    - Search for and treat possible causes (H's and T's)
    - Start large bore IVs and administer fluid
    - Epinephrine 1 mg every 3-5 minutes
    - Consider Atropine 1 mg every 3-5 minutes if an absolute bradycardia up to a max of 0.04 mg/kg
  3. Transport to hospital

### Scenario 6 - Asystole

The patient is a 67-year-old patient who is scheduled to undergo extraction of his remaining maxillary dentition and insertion of an immediate upper denture. The patient is anxious and requests sedation. His medical history is unremarkable other than he smokes one to two packs of cigarettes per day.

Monitors are attached, the patient is NPO and the patient is sedated with a combination of Fentanyl and Versed that are titrated to affect, and an appropriate amount of local anesthetic is injected into the maxillary arch. Following completion of the maxillary left quadrant, the patient develops first bradycardia of 35/minute and shortly thereafter goes into asystole as evidenced on your monitor. How would you manage this patient?

**Diagnosis:** Asystole

- Treatment:**
1. Activate EMS/Call 911
  2. Initiate CPR for 5 cycles
    - Search for and treat possible causes (H's and T's)
    - Epinephrine 1 mg every 3-5 minutes
    - Consider Atropine 1 mg every 3-5 minutes if an absolute bradycardia up to a max of 0.04 mg/kg
    - Intubate and ventilate with 100% oxygen
  3. Transport to hospital

### Scenario 7 - Hypotension

The patient is a 57-year-old white female with unremarkable medical history who has underwent extraction of teeth 4 through 12 and insertion of an immediate denture using intravenous sedation and local anesthesia. The patient is recovering in the surgical chair and your assistant calls for your help. You examine the patient and she appears pale with a BP of 86/48, HR of 112, the monitor shows sinus tachycardia, no evidence of ischemic changes. How do manage this patient's hypotension?

**Diagnosis:** Hypotension:

- Treatment:**
1. Position patient in Trendelenburg and Identify possible etiology
  2. 100% oxygen
  3. Administer 500-1000 cc fluid challenge
  4. Medications: Ephedrine 5-10 mg IV may repeat (or optional meds)

### Scenario 8 - Hypertension

The patient is a 68-year-old white female who is scheduled to undergo extraction of teeth 20 through 27 and to insert a lower denture with local anesthesia and nitrous oxide. Past medical history is significant for hypertension. Current medications include: Atenolol, HCTZ, Prinivil. Following the administration of local anesthesia, the patient's BP elevates from 162/92 to 214/108. The patient appears relaxed and you wait 15-20 minutes and the patient's BP is now 208/106 and the patient complains of a headache and dizziness. How would you manage this patient?

**Diagnosis:** Hypertension

- Treatment:**
1. Identify possible etiology – pain, hypoxia, hypercarbia
  2. 100% oxygen
  3. Medications: Nitroglycerin  
Labetolol  
Other medications may be substituted

### Scenario 9 – Allergic reaction

The patient is a 17-year-old black male scheduled to undergo surgical extraction of tooth #19 under general anesthesia. Past medical history is significant for congenital cyanotic heart disease repaired at birth for which he is to take prophylactic antibiotics prior to treatment.

Monitors are placed and an IV is started and the patient is administered Ampicillin 2 grams IV over 10 – 15 minutes for SBE prophylaxis. With a few minutes Ampicillin is in, the patient starts itching, develops urticaria, and has complaints of tightness in chest and throat. What is your diagnosis and how would you manage this patient?

**Diagnosis:** Allergic reaction to Ampicillin with airway involvement

- Treatment:**
1. Maintain airway and administer 100% oxygen
  2. Place in supine or Trendelenburg
  3. Monitor vital signs
  4. IV fluids for any hypotension
  5. Medications:
    - Epinephrine IV 0.3 - 0.5 mg, repeat until stable
    - Diphenhydramine: 25-50 mg IV
    - Decadron 20 mg IV
  6. Appropriate discharge. (Home with PO cimetidine or benadryl for 3-5 days)

### Scenario 10 - Malignant Hyperthermia

The patient is a 26-year-old white male who is scheduled to undergo extraction of third molars with general anesthesia. Following induction of general anesthesia, the patient goes into laryngospasm. The AAOMS protocol is followed and you give 40 mg of Succinylcholine is given IV and with positive pressure ventilation, the spasm breaks and the patient is ventilated until spontaneous ventilations returns. The patient becomes tachycardic, is noted to have masseter muscle spasm, and hypertension. You suspect Malignant Hyperthermia. How do you manage this patient?

**Diagnosis:** Malignant Hyperthermia

- Treatment:**
1. Discontinue all anesthetics – Call the MH hotline and activate EMS
  2. Hyperventilate with 100% oxygen
  3. Dantrolene 1 - 3 mg/kg up to 10 mg/kg possible
  4. Body cooling as able
  5. Treat ventricular dysrhythmias
  6. Transfer patient ASAP to hospital

Scenarios for Surgical Assistant Team  
(Doctor not in room)

**Scenario 1 – Syncope**

Patient is a 23-year-old white male scheduled for extraction of teeth #29 and 30 under local anesthesia. Dr. \_\_\_\_\_ evaluates the patient and reviews his medical history. He administers three cartridges of local anesthetic to get the patient numb and quickly leaves the room to see a postop patient in another room. As soon as he leaves, the patient complains of feeling warm and lightheaded. You begin to question him further and his eyes rolls back and he becomes nonresponsive in the chair. What has happened and what actions would you take?

**Diagnosis:** Syncope

**Actions to be taken:**

1. Establish unconsciousness
2. Notify team members/doctors of emergency
3. Place patient in supine position with legs elevated
4. Establish airway with head tilt-chin lift or jaw thrust
5. Assess adequacy of breathing – look, listen, feel
  - a. Rescue breathing as necessary
6. Assess carotid pulse
  - a. Chest compressions/CPR as needed
7. Activate EMS/911 if fails to respond quickly (15 – 20 seconds)
8. Definitive treatment as necessary:
  - a. Oxygen
  - b. Monitor vital signs

**Scenario 2 – Nausea & Vomiting in During Recovery**

Patient is an otherwise healthy 33-year-old female who just underwent extraction of four malposed/impacted wisdom teeth under general anesthesia. The procedure was completely a short time ago, but the patient is waking up somewhat slowly and is still lying in a somewhat supine position. Dr. \_\_\_\_\_ is in another room involved in the next surgical procedure. As you monitor the patient, you suddenly notice she is bucking a little in the chair and then see vomitus in her mouth. What actions should you take?

**Diagnosis:** Post-anesthesia nausea/vomiting

**Actions to be taken:**

1. Turn the patient onto her side in the supine position to establish oral toilet
2. Use Yankeur suction to clear mouth and pharynx
3. Advise team members/doctor of problem
4. Continue to monitor patient until doctor is available

**Scenario 3 – Airway obstruction/Respiratory Arrest in Recovery Period**

Patient is a somewhat overweight 24-year-old male who just had four wisdom teeth removed under general anesthesia. He has been quite slow to wake up after the anesthesia, but Dr. (Doctor for OAE) had to move on to the next surgery to stay on schedule. All monitors other than the pulse oximeter have been removed. The pulse oximeter slowly begins to go down to the low 90's, then into the 80's. You assess the patient and it appears that he is not breathing (no air exchange). What is your diagnosis and what should you do?

**Diagnosis:** Most likely cause of problem is airway obstruction secondary to tongue blocking airway. They might know that other possibilities could include: laryngospasm, bronchospasm.

**Actions to be taken:**

1. Place patient in supine position
2. Most likely cause of airway obstruction is tongue blocking airway
3. Stimulate patient, encourage respiration, BUT no improvement
4. Establish airway with head tilt/chin lift or pull tongue forward manually

If airway established but still not breathing and pulse oximetry continues to fall, what should you do next?

1. Ventilate patient with Bag-Valve-Mask device

	<b>Requirements for Class III or IV Anesthesia Permit</b>	<b>Renewal Requirements for Class III or IV Anesthesia Permit</b>
<b>Utah</b>	ACLS certification; advanced training in GA/sedation for at least a year with a letter of recommendation from course director regarding competency in GA. (CI III: Training in conscious sedation; 60 hrs didactic education; successful completion of 20 cases)	None
<b>Nevada</b>	ACLS certification: completion of advanced anesthesiology program beyond dental school; completion of accredited grad program in OMS. (CI III: Training specific to conscious sedation including treatment of at least 20 pts)	3 hours of CE related to anesthesia/sedation every 2 years; each permit reviewed annually; inspection of facility at least once every 5 years.
<b>Arizona</b>	ACLS or PALS certification OR completion of a CE course in advanced airway management; At least one calendar year of training in anesthesiology OR be a Diplomate/Fellow with an anesthesiology board; onsite evaluation. (CI III: same requirements)	ACLS or PALS certification OR completion of a CE course in advanced airway management; 30 CE hours every 5 years; perform at least 10 GA/sedation cases per calendar year; onsite evaluation.
<b>California</b>	Complete at least one year residency in GA OR complete accredited OMS program OR have a fellowship on anesthesia. (CI III: Complete approved course in conscious sedation w/ 60 hrs instruction and manage at least 20 cases)	ACLS certification; 24 CE credits every 2 years; onsite inspection/evaluation every 2-5 years.
<b>Idaho</b>	ACLS certification; Complete accredited anesthesia education program within 5 years of application; established with a hospital; facility inspection. (CI III: Complete training in moderate parenteral sedation by an accredited school w/ 60 hrs instruction and manage at least 20 cases; maintain ACLS)	ACLS certification; 25 CE credits every 5 years.
<b>Colorado</b>	ACLS and BLS certifications; Complete an approved residency program OR complete a post-doctoral training program in GA; facility inspection. (CI III: Education/experience route: Complete training to administer and manage conscious sedation including at least 20 cases w/60 hrs instruction. Education ONLY route: Specialty or GA residency w/ training to administer moderate sedation.)	Reapply after 5 years.