NEVADA STATE BOARD of DENTAL EXAMINERS

Anesthesia Committee & Subcommittee

Teleconference Meeting

Tuesday, January 12, 2021

6:00 p.m.

PUBLIC BOOK

Agenda Item (5)(a):

CURRENT
Anesthesia Algorithms for simulated emergencies

Nevada State Board of Dental Examiners

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Laryngospasm Algorithm (AO)

R - Recognition of Emergency

Assess mild vs. severe airway obstruction

Mild: good air exchange; responsive and can cough forcefully

Severe: poor or no air exchange; weak or ineffective cough or no cough; high-pitched noise while inhaling or no noise at all; increased respiratory difficulty; possible cyanosis; unable to speak; unable to move air

Typically caused by water, fluid, foreign body or tooth debris when a patient is too deeply sedated

Most often, patient will cough, then show signs of difficulty breathing

Remove all retrievable material from mouth

Call for assistance: retrieve O_2, AED, and emergency kit

P - Position

Supine

A - Airway

Suction airway with yankauer suction device

Perform head tilt-chin lift, jaw thrust

If partial obstruction and can cough, encourage vigorous coughing; call 911 if problem worsens or persists

If total obstruction or with significant partial obstruction and inability to cough, call 911; place in supine position; begin positive pressure ventilation using BVM at 10 L/min 100% O_2; begin CPR if no pulse

If patient becomes unresponsive, call 911; place in supine position; begin positive pressure ventilation using BVM at 10 L/min 100% O_2; begin CPR if no pulse

B - Breathing

Breathing check incorporated above

C - Circulation

If no pulse, move to **Cardiac Arrest Algorithm**

D - Diagnosis, Definitive Therapy

Moderate sedation providers: Administer reversal agents until the patient is able to breath on their own or until EMS arrives

Naloxone 0.4 mg IV (every 2-3 minutes) [Opioid reversal]

Flumazenil 0.5 mg IV only per package insert (repeat twice if needed every 1 minute)

General Anesthesia providers: Administer **Succinylcholine 20mg IV push**

E - Emergency Medical Services - *If EMS is activated*, facilitate access of emergency personnel by waiting for arrival and escort to office

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Bronchospasm (Asthma Attack) Algorithm (AO 2015)

R - Recognition of Emergency

Check for evidence of bronchospasm (expiratory wheezing; dyspnea; may be gradual to sudden in onset)
May have increased respiratory efforts
Call for assistance: retrieve O_2, AED, and emergency kit
Remove materials from mouth

P - Position

Comfortable for patient, usually sitting upright

A - Airway

Assess airway patency

B - Breathing

Assess breathing
If breathing, reassure patient; may consider oxygen as directed by pulse oximetry; otherwise 100% O_2 @ 10 L/min via facemask
If not breathing, call 911; positive pressure ventilation with BVM @ 10L/min 100% O_2*

C - Circulation

Assess pulse
If pulse, check heart rate and blood pressure; record vital signs at least every 5 minutes
If no pulse, call 911; move to **Cardiac Arrest Algorithm**

D - Diagnosis, Definitive Therapy

Auscultate lungs; examine airway for signs of airway edema
Administer *albuterol* inhaler 1-3 puffs (90 mcg each puff) repeat every 2-3 minutes up to 12 puffs
Consider calling 911 if symptoms not relieved
May use spacer (*AeroChamber*) for child or sedated/unconscious adult
For severe bronchospasm not responsive to *albuterol*
  Administer *1:1000 epinephrine* (1mg/mL), 0.3 mg (0.3 mL) IM (upper thigh), repeat every 5 minutes until stable
  May use *EpiPen* IM (upper thigh) in adults, *EpiPen Jr* IM (upper thigh) in children
  Call 911

E - Emergency Medical Services

If EMS activated, facilitate access of emergency personnel by waiting for arrival and escorting to office (if third office person)

*Adults: 1 breath every 5-6 seconds; infants to adolescents: 1 breath every 3-5 seconds. Watch for chest rise; avoid stomach insufflation

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Airway Obstruction–Foreign Body Algorithm (AO 2015)

R - Recognition of Emergency

Assess mild vs. severe airway obstruction

Mild: good air exchange; responsive and can cough forcefully

Severe: poor or no air exchange; weak or ineffective cough or no cough; high-pitched noise while inhaling or no noise at all; increased respiratory difficulty; possible cyanosis; unable to speak; clutching the neck with the thumb and fingers, making the universal choking sign; unable to move air

Sudden disappearance of tooth, instrument or foreign object/debris in mouth

Remove all retrievable material from mouth

Call for assistance: retrieve O_2, AED, and emergency kit

P - Position

If sudden loss of object without airway obstruction, let the patient attempt to expel the foreign object

If acute partial or total loss of airway, position yourself to perform the Heimlich maneuver

If patient is unconscious, place into supine position

A - Airway

If patient is cooperative and breathing, let the patient attempt to expel the foreign object

If partial obstruction and can cough, encourage vigorous coughing; examine airway for retrieval of lost object; repeat sequence; call 911 if problem worsens or persists

If total obstruction or with significant partial obstruction and inability to cough, perform *Heimlich* maneuver (ages ≥ 1 year; chest thrusts in pregnant women, obese patients; back blows and chest compressions in infants) until ventilation restored or patient becomes unresponsive

If patient becomes unresponsive, call 911; place in supine position; examine airway quickly and remove an object if you see it; begin CPR

B - Breathing

Breathing check incorporated above

C - Circulation

If awake, check pulse and blood pressure; record vital signs at least every 5 minutes

If pulse but unresponsive, call 911; open the airway, remove the object if you see it; begin CPR; each time you give breaths, open the victim's mouth wide and look for the object; if you see an object, remove it with your fingers; if you do not see an object, keep doing CPR

If no pulse, move to **Cardiac Arrest Algorithm**

D - Diagnosis, Definitive Therapy

Consider chest, head and neck, and/or abdominal radiographs to identify location of object

E - Emergency Medical Services

If EMS is activated, facilitate access of emergency personnel by waiting for arrival and escorting to office (if third office person)

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Respiratory Depression Algorithm (AO 2015)

R-Recognition of emergency
Absence of breathing or decrease in respiratory rate/volume
Generally associated with loss of consciousness or altered mental status
Call for assistance: retrieve O2, AED, and emergency kit
Remove materials from mouth

P-Position
Comfortable position if conscious
If unconscious, supine position with legs elevated

A-Airway
Assess airway patency
If obstructed, head tilt–chin lift (reposition if necessary with airway adjuncts like jaw thrust, oral/nasal airway)
If apneic, perform rescue breathing*

B-Breathing
Check breathing
If breathing, oxygen as directed by pulse oximetry; otherwise 100% O2, 10 L/min via facemask
If not breathing, call 911; positive pressure ventilation using BVM at 10L/min 100% O2*

C-Circulation
Check pulse (up to 10 seconds; carotid artery ages ≥ 1 year)
If pulse, check heart rate and blood pressure; record vital signs at least every 5 minutes
If no pulse, call 911; move to **Cardiac Arrest Algorithm**

D-Diagnosis, Definitive Therapy
Auscultate lungs
May consider the use of airway adjuncts
Search for cause of respiratory depression (e.g., syncope, medications, hypoglycemia, stroke, hypercarbia)
Call 911 if the respiratory depression is not easily managed (difficult airway), no likely cause is identified (e.g., syncope), or does not resolve within a few minutes

E-Emergency medical services
If EMS activated, facilitate access of emergency personnel by waiting for arrival and escorting to office (if third office person)

*Adults: 1 breath every 5-6 seconds; infants to adolescents: 1 breath every 3-5 seconds. Watch for chest rise; avoid stomach insufflation

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Allergic Reaction Algorithm (AO 2015)

R - Recognition of Emergency

Check for evidence of an acute allergy (flushing, urticaria, nausea, angioedema, wheezing, hypotension, itching)
Call for assistance: retrieve O_2, AED, and emergency kit
Remove all materials from mouth

P - Position

Position patient comfortably
With airway compromise, sit upright

A - Airway

Assess airway patency
If obstructed, head tilt-chin lift (reposition if necessary with airway adjuncts like jaw thrust, oral/nasal airway)
Monitor for upper airway obstruction (due to airway edema)

B - Breathing

Check breathing
If breathing, O_2 as directed by pulse oximetry; otherwise 100% O_2 @ 10 L/min via facemask
If not breathing, call 911; positive pressure ventilation with BVM @ 10L/min 100% O_2

C - Circulation

Assess pulse (carotid artery)
If pulse, check heart rate and blood pressure; record vital signs at least every 5 minutes
If no pulse, call 911; move to **Cardiac Arrest Algorithm**

D - Diagnosis, Definitive Therapy

Auscultate lungs; examine airway for signs of airway edema
For cutaneous reaction, consider ***diphenhydramine*** (***Benadryl***), 50 mg (0.5 mg/kg in children) IM (deltoid or upper thigh)
For anaphylaxis
(1.) Administer ***1:1,000 epinephrine*** (1mg/mL) 0.3mg IM (upper thigh), repeat every 5 minutes until stable
May use ***EpiPen*** IM (upper thigh) in adults, ***EpiPen Jr*** IM (upper thigh) in children
(2.) Call 911
(3.) Administer ***diphenhydramine***, 50 mg (0.5 mg/kg in children) IM (deltoid or upper thigh)
(4.) Consider ***albuterol***, 4-6 puffs inhalation for bronchospasm
If hypotensive, place in supine position with legs elevated

E - Emergency Medical Services

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Seizure Algorithm (6/2015)

R - Recognition of Emergency
Generalized tonic-clonic (*grand mal*) or clonic seizures
Call for assistance: retrieve O2, AED, and emergency kit

P - Position
Remove materials from mouth only if possible to do so safely
Supine position
Protect the patient against physical injury

A - Airway
Assess airway patency
If obstructed, perform head tilt–chin lift (reposition if necessary with airway adjuncts like jaw thrust, oral/nasal airway)

B - Breathing
Assess breathing
If breathing, O2 as directed by pulse oximetry; otherwise 100% O2 @ 10 L/min via facemask
If not breathing, call 911; positive pressure ventilation with BVM @ 10L/min 100% O2*
Patient may experience respiratory depression while in a postictal state; be prepared to assist breathing

C - Circulation
Assess pulse (carotid artery)
If pulse, check heart rate and blood pressure; record vital signs at least every 5 minutes if possible
If no pulse, call 911; move to **Cardiac Arrest Algorithm**

D - Diagnosis, Definitive Therapy
Call for family member to come assist you in evaluating the seizure (they will have a better idea of what is typical vs. atypical for this particular patient)
Look for specific cause of seizure (e.g., epilepsy history, syncope)
May administer ***midazolam,*** 0.1 – 0.2 mg/kg up to a total dose of 10mg IM (adults) or 0.1 mg/kg up to a total dose of 3 mg IM (children), usually for prolonged, repeated seizures
May administer ***midazolam*** IN (intra-nasally) 0.2mg/kg up to 10mg
Call 911 for new, continuous, or recurring seizures

E - Emergency Medical Services
If EMS activated, facilitate access of emergency personnel by waiting for arrival and escorting to office (if third office person)

*Adults: 1 breath every 5-6 seconds; infants to adolescents: 1 breath every 3-5 seconds. Watch for chest rise; avoid stomach insufflation

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Local Anesthesia Overdose Algorithm (AO 2015)

R - Recognition of Emergency

Patient begins to act differently after local anesthesia is given (agitated, confused, slurred speech, drowsy/unconscious, seizures)
Call for assistance: retrieve O_2, AED, and emergency kit

P - Position

Remove materials from mouth
Supine position
Protect the patient against physical injury

A - Airway

Assess airway patency
If obstructed, perform head tilt–chin lift (reposition if necessary with airway adjuncts like jaw thrust, oral/nasal airway)

B - Breathing

Check breathing
If breathing, O_2 as directed by pulse oximetry; otherwise 100% O_2 @ 10 L/min via facemask
If not breathing, call 911; positive pressure ventilation with BVM @ 10L/min 100% O_2*
If the patient has a seizure, they may experience respiratory depression while in a postictal state; be prepared to assist breathing

C - Circulation

Check pulse (carotid artery)
If pulse, check heart rate and blood pressure; record vital signs at least every 5 minutes
If no pulse, call 911; move to **Cardiac Arrest Algorithm**

D - Diagnosis, Definitive Therapy

Call 911, inform them that you think it might be a local anesthetic overdose
For the most part, this is a preventable condition

E - Emergency Medical Services

If EMS activated, facilitate access of emergency personnel by waiting for arrival and escorting to office (if third office person)

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Hyperglycemia Algorithm (AO 2015)

R - Recognition of emergency
Hyperventilation, tachycardia, confusion, possibly 'sweet' breath, hypotension
Medical history evidence of hyperglycemia risk (e.g., history of insulin-dependent diabetes)
Call for assistance: retrieve O_2, AED, and emergency kit
Remove materials from mouth

P - Position
Comfortable for patient, usually sitting upright
If unconscious, supine with legs elevated

A - Airway
Assess airway patency
If obstructed, head tilt–chin lift (reposition if necessary with airway adjuncts like jaw thrust, oral/nasal airway)

B - Breathing
Check breathing
If breathing, O_2 as directed by pulse oximetry; otherwise 100% O_2 @ 10 L/min via facemask
If not breathing, call 911; positive pressure ventilation with BVM @ 10L/min 100% O_2*

C - Circulation
Check pulse (up to 10 seconds; carotid artery ages ≥ 1 year)
If pulse, check heart rate and blood pressure; record vital signs at least every 5 minutes
If no pulse, call 911; move to **Cardiac Arrest Algorithm**

D - Diagnosis, Definitive Therapy
Call 911-EMS will administer *insulin* as needed
If glucometer is available, measure blood glucose (best to check blood sugar on diabetic patients before and after treatment)

E - Emergency medical services
If EMS activated, facilitate access of emergency personnel by waiting for arrival and escorting to office (if third office person)

*Adults: 1 breath every 5-6 seconds; infants to adolescents: 1 breath every 3-5 seconds. Watch for chest rise; avoid stomach insufflation

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Hypoglycemia Algorithm (AO 2015)

R - Recognition of emergency
Diaphoresis, tachycardia, confusion, and potentially loss of consciousness
Medical history evidence of hypoglycemia risk (e.g., history of insulin-dependent diabetes)
Call for assistance: retrieve O_2, AED, and emergency kit
Remove materials from mouth

P - Position
Comfortable for patient, usually sitting upright
If unconscious, supine with legs elevated

A - Airway
Assess airway patency
If obstructed, head tilt–chin lift (reposition if necessary with airway adjuncts like jaw thrust, oral/nasal airway)

B - Breathing
Assess breathing
If breathing, oxygen as directed by pulse oximetry; otherwise 100% O_2 @ 10 L/min via facemask
If not breathing, call 911; positive pressure ventilation with BVM @ 10L/min 100% O_2*

C - Circulation
Assess pulse
If pulse, check heart rate and blood pressure; record vital signs at least every 5 minutes
If no pulse, call 911; move to **Cardiac Arrest Algorithm**

D - Diagnosis, Definitive Therapy
If glucometer is available, measure blood glucose (best to check blood sugar on diabetic patients before and after treatment)
If awake, administer oral fluids containing *sugar*
If unconscious, call 911

E - Emergency medical services
If EMS activated, facilitate access of emergency personnel by waiting for arrival and escorting to office (if third office person)

*Adults: 1 breath every 5-6 seconds; infants to adolescents: 1 breath every 3-5 seconds. Watch for chest rise; avoid stomach insufflation

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Hypertension Algorithm (AO 2015)

R - Recognition of Emergency

Take blood pressure
Hypertensive urgency: BP above 220/120 mm Hg but no signs or symptoms
Hypertensive crisis: hypertension with evidence of myocardial ischemia, neurologic dysfunction, significant bradycardia, pulmonary edema, signs of stroke or visual disturbances
Call for assistance: retrieve O_2, AED, and emergency kit
Remove materials from mouth

P - Position

Comfortable for patient, usually sitting upright

A - Airway

Assess airway patency
If obstructed, head tilt–chin lift (reposition if necessary with airway adjuncts like jaw thrust, oral/nasal airway)

B - Breathing

Assess breathing
If breathing, oxygen as directed by pulse oximetry; otherwise 100% O_2 @ 10 L/min via facemask
If not breathing, call 911; positive pressure ventilation with BVM @ 10L/min 100% O_2*

C - Circulation

Assess pulse
If pulse, check heart rate and blood pressure; record vital signs at least every 5 minutes
If no pulse, call 911; move to **Cardiac Arrest Algorithm**

D - Diagnosis, Definitive Therapy

Look for specific cause of hypertension (e.g., anxiety, cardiovascular disease, drug interaction, full bladder, hypoxia, pain) and treat specific cause (e.g., provide additional local anesthesia for pain control)
If hypertensive urgency, consider immediate physician referral
If hypertensive crisis, call 911

E - Emergency Medical Services

If EMS activated, facilitate access of emergency personnel by waiting for arrival and escorting to office (if third office person)

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Hypotension Algorithm (AO 2015)

R - Recognition of emergency

Blood pressure is significantly below normal for the patient or causing signs and symptoms of hypoperfusion (e.g., dizziness, lightheadedness, nausea)
Call for assistance: retrieve O_2, AED, and emergency kit
Remove materials from mouth

P - Position

Supine with legs elevated

A - Airway

Assess airway patency
If obstructed, head tilt–chin lift (reposition if necessary with airway adjuncts like jaw thrust, oral/nasal airway)

B - Breathing

Check breathing
If breathing, oxygen as directed by pulse oximetry; otherwise, 100% O_2 @ 10 L/min via facemask
If *not breathing,* call 911; positive pressure ventilation with BVM @ 10L/min 100% O_2*

C - Circulation

Check pulse (carotid artery)
If pulse, check heart rate and blood pressure; record vital signs at least every 5 minutes
If no pulse, call 911; move to **Cardiac Arrest Algorithm**

D - Diagnosis, Definitive Therapy

Look for specific cause of hypotension (e.g., anxiety, cardiovascular disease, hypovolemia, drugs, hypercarbia, hypoxia, pain, postural change)
Treat the specific cause (e.g., give O_2 for hypoxia)
If treatment of the specific cause fails to resolve the problem, call 911

E - Emergency medical services

If EMS activated, facilitate access of emergency personnel by waiting for arrival and escorting to office (if third office person)

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Hyperventilation Syndrome Algorithm (AO 2015)

R - Recognition of Emergency
Increased rate of ventilation; patient visibly anxious; chest pain/palpitation, paresthesia
Call for assistance: retrieve O_2, AED, and emergency kit
Remove materials from mouth

P - Position
Comfortable for patient, usually sitting upright

A - Airway
Monitor for upper airway obstruction

B - Breathing
Monitor breathing rate-try to get them to slow down and relax
Reassure patient

C - Circulation
Check heart rate and blood pressure; record vital signs at least every 5 minutes

D - Diagnosis, Definitive Therapy
Auscultate lungs
If wheezing, go to **Bronchospasm Algorithm**
Coach patient to breathe more slowly
Have patient rebreathe CO_2
Consider *nitrous oxide*
If unable to reverse signs and symptoms, consider calling 911

E - Emergency Medical Services
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Syncope Algorithm (AO 2015)

R - Recognition of emergency

Sudden loss of consciousness
Call for assistance: retrieve O_2, AED, and emergency kit
Remove materials from mouth

P – Position

Supine with legs elevated

C – Circulation

Check pulse (up to 10 seconds; carotid artery ages ≥ 1 year)
If pulse, check heart rate and blood pressure; record vital signs at least every 5 minutes
If no pulse, call 911; move to **Cardiac Arrest Algorithm**

A – Airway

Assess airway patency
If obstructed, head tilt–chin lift (reposition if necessary with airway adjuncts like jaw thrust, oral/nasal airway)

B – Breathing

Check breathing
If breathing, oxygen as directed by pulse oximetry; otherwise 100% oxygen, 10 L/min via facemask
If not breathing, call 911; positive pressure ventilation with BVM @ 10L/min 100% O_2*

D - Diagnosis, Definitive Therapy

Search for cause of syncope (e.g., fear, hypotension, hypoxia, hypoglycemia, arrhythmia, stroke, postural hypotension, epilepsy)
Call 911 if there is suspicion that the loss of consciousness may reflect a potentially serious condition

E - Emergency medical services

If EMS activated, facilitate access of emergency personnel by waiting for arrival and escorting to office (if third office person)

*Adults: 1 breath every 5-6 seconds; infants to adolescents: 1 breath every 3-5 seconds. Watch for chest rise; avoid stomach insufflation

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Angina Algorithm (6/2015)

R - Recognition of Emergency

Patient complains of chest/upper gastric pain/pressure; may radiate to left arm, jaw, back
May have nausea, dyspnea, palpitation, dizziness, anxiety, diaphoresis, hypotension, jugular venous distension
Call for assistance: retrieve O2, AED, and emergency kit
Remove material from mouth

P - Position

Comfortable for patient, usually sitting upright

A - Airway

Assess airway patency
If obstructed, head tilt–chin lift (reposition if necessary with airway adjuncts like jaw thrust, oral/nasal airway)

B - Breathing

Assess breathing
If breathing, provide supplement oxygen via facemask @ 10L/min 100% O2
If evidence of breathing difficulty not breathing, call 911; positive pressure ventilation with BVM @ 10L/min 100% O2

C - Circulation

Assess pulse
If pulse, check heart rate and blood pressure, record vital signs at least every 5 minutes
If no pulse, call 911; move to **Cardiac Arrest Algorithm**

D - Diagnosis, Definitive Therapy

If no history of angina pectoris or pain different from patient's experience, call 911
If systolic BP > 90mm Hg and no recent phosphodiesterase inhibitor use (e.g., Viagra ®, Cialis ®, Levitra ®), administer ***nitroglycerin*** 0.4mg sublingual tablet or spray*
May give up to 3 doses over 10 minutes
If no relief after one dose of nitroglycerin, consider it to be a myocardial infarction; call 911
If 911 called, administer 325mg ***aspirin*** chewed then swallowed with water (*Contraindicated* if aspirin allergy)
If chest pain is severe, may consider 50% ***nitrous oxide***

E - Emergency Medical Services

Facilitate access of emergency personnel by waiting for arrival and escorting to office (if third office person)

*Nitrates may cause severe hypotension refractory to vasopressor agents

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Myocardial Infarction Algorithm (AO 2015)

R - Recognition of Emergency

Patient may complain of substernal, crushing chest pain or pressure that may radiate to the left side of the body (shoulder, jaw, arm); nausea; dyspnea; palpitation; dizziness; anxiety; diaphoresis
Call for assistance: retrieve O_2, AED, and emergency kit
Call 911
Remove all materials from mouth

P - Position

Position patient comfortably, usually sitting upright

C - Circulation

Assess pulse (carotid artery)
If pulse, check heart rate and blood pressure; record vital signs at least every 5 minutes; continuously monitor pulse oximetry and heart rate
If no pulse, call 911; move to **Cardiac Arrest Algorithm**

A - Airway

Patients will be conscious and talking to you verifying a patent airway

B - Breathing

Patients will be conscious and talking to you verifying breathing

D - Drugs

Administer *O_2* via facemask @ 10L/min 100% O_2
If systolic BP > 90mm Hg and no recent phosphodiesterase inhibitor use (e.g., Viagra ®, Cialis ®, Levitra ®), administer *nitroglycerin* 0.4mg sublingual tablet or spray*
Administer 50% *nitrous oxide*
Administer 325mg *aspirin* chewed then swallowed with water (*Contraindicated* if aspirin allergy)

E - Emergency Medical Services

Facilitate access of emergency personnel by waiting for arrival and escorting to office (if third office person)

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Cardiac Arrest Algorithm (AO 2015)

R - Recognition of Emergency
Sudden loss of consciousness (not breathing and no pulse)
Call for assistance: retrieve O_2, AED, and emergency kit
Remove all materials from mouth

P - Position
Supine with legs elevated

C - Circulation
Assess pulse (up to 10 sec; carotid artery for ages ≥ 1 year)
If no pulse, call 911; start BLS: "*Push Hard, Push Fast*," at least 100 compressions/min; 30:2 compressions:breaths; 15:2 for children (ages 1 year to prepubescent) with 2 rescuers; continue until AED available or patient starts to move

A - Airway
Head tilt-chin lift
If it is difficult to provide positive pressure ventilation with BVM, consider airway adjuncts (jaw thrust, oral/nasal airway)

B - Breathing
Positive pressure ventilation with BVM @ 10L/min 100% O_2 (2 breaths for every 30 compressions)

D - Defibrillation *(ages ≥ 1 year)*
As soon as AED is available, turn it on
Follow instructions from AED
Connect adult or pediatric pads
Stop compressions while AED is analyzing rhythm
Immediately resume compressions after shock or no shock
AED will prompt you to the analyze rhythm every 2 minutes

E - Emergency Medical Services
Facilitate access of emergency personnel by waiting for arrival and escorting to office (if third office person)

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Stroke Algorithm (AO 2015)

R - Recognition of emergency

Sudden headache, loss of balance, or altered consciousness, thought, speech, or vision; complaint of sudden numbness or weakness of the face, arm, or leg, especially on one side of the body

Call for assistance: retrieve O_2, AED, and emergency kit

Remove materials from mouth

P - Position

Comfortable for patient, usually sitting upright

A - Airway

Assess airway patency

If obstructed, head tilt–chin lift (reposition if necessary with airway adjuncts like jaw thrust, oral/nasal airway)

B - Breathing

Assess breathing

If breathing, oxygen as directed by pulse oximetry; otherwise 100% O_2 @ 10 L/min via facemask

If not breathing, call 911; positive pressure ventilation with BVM @ 10L/min 100% O_2*

C - Circulation

Assess pulse

If pulse, check heart rate and blood pressure; record vital signs at least every 5 minutes

If no pulse, call 911; move to ***Cardiac Arrest Algorithm***

D - Diagnosis, Definitive Therapy

Look for altered speech, facial droop, arm drift (Cincinnati Prehospital Stroke Scale)

If stroke suspected, call 911

E - Emergency medical services

If EMS activated, facilitate access of emergency personnel by waiting for arrival and escorting to office (if third office person)

*Adults: 1 breath every 5-6 seconds; infants to adolescents: 1 breath every 3-5 seconds. Watch for chest rise; avoid stomach insufflation

Agenda Item (5)(a):

PENDING APPROVAL
Anesthesia Algorithms for simulated emergencies

Laryngospasm Algorithm

R - Recognition of Emergency

Assess mild vs. severe airway obstruction

Mild: good air exchange; responsive and can cough forcefully

Severe: poor or no air exchange; weak or ineffective cough or no cough; high-pitched noise while inhaling or no noise at all; increased respiratory difficulty; possible cyanosis; unable to speak; unable to move air

Typically caused by water, fluid, foreign body or tooth debris when a patient is too deeply sedated

Most often, patient will cough, then show signs of difficulty breathing

Remove all retrievable material from mouth

Call for assistance: retrieve O_2, AED, and emergency kit

P - Position

Supine

A - Airway

Suction airway with yankauer suction device

Perform head tilt-chin lift, jaw thrust

If partial obstruction and can cough, encourage vigorous coughing; call 911 if problem worsens or persists

If total obstruction or with significant partial obstruction and inability to cough, call 911; place in supine position; begin positive pressure ventilation using BVM at 10 L/min 100% O_2; begin CPR if no pulse

If patient becomes unresponsive, call 911; place in supine position; begin positive pressure ventilation using BVM at 10 L/min 100% O_2; begin CPR if no pulse

B - Breathing

Breathing check incorporated above

C - Circulation

If no pulse, move to **Cardiac Arrest Algorithm**

D - Diagnosis, Definitive Therapy

Administer reversal agents until the patient is able to breath on their own or until EMS arrives

Naloxone 0.4 mg IV/IM (every 2-3 minutes) [Opioid reversal]

Flumazenil 0.5 mg IV (every 1 minute) [Benzodiazepine reversal]

E - Emergency Medical Services

If EMS is activated, facilitate access of emergency personnel by waiting for arrival and escorting to office

Bronchospasm (Asthma Attack) Algorithm

R - Recognition of Emergency

Check for evidence of bronchospasm (expiratory wheezing; dyspnea; may be gradual to sudden in onset)
May have increased respiratory efforts
Call for assistance: retrieve O_2, AED, and emergency kit
Remove materials from mouth

P - Position

Comfortable for patient, usually sitting upright

A - Airway

Assess airway patency

B - Breathing

Assess breathing
If breathing, reassure patient; may consider oxygen as directed by pulse oximetry with 100% O_2 @ 10 L/min via facemask
If not breathing, call 911; positive pressure ventilation with BVM @ 10L/min 100% O_2*

C - Circulation

Assess pulse
If pulse, check heart rate and blood pressure; record vital signs at least every 5 minutes
If no pulse, call 911; move to **Cardiac Arrest Algorithm**

D - Diagnosis, Definitive Therapy

Auscultate lungs; examine airway for signs of airway edema
Administer ***albuterol*** inhaler 1-3 puffs (90 mcg each puff) repeat every 2-3 minutes up to 12 puffs
Consider calling 911 if symptoms not relieved
May use spacer (*AeroChamber*) for child or sedated/unconscious adult
For severe bronchospasm not responsive to ***albuterol***
Administer ***1:1000 epinephrine*** (1mg/mL), 0.3 mg (0.3 mL) IM (upper thigh), repeat every 5 minutes until stable
May use ***EpiPen®*** IM (upper thigh) in adults, ***EpiPen Jr®*** IM (upper thigh) in children
Call 911

E - Emergency Medical Services

If EMS activated, facilitate access of emergency personnel by waiting for arrival and escorting to office

*Adults: 1 breath every 6 seconds
*Infants/Adolescents: 1 breath every 3-5 seconds
(Watch for chest rise; avoid stomach insufflation)

Foreign Body/Airway Obstruction Algorithm

R - Recognition of Emergency

Assess mild vs. severe airway obstruction

Mild: good air exchange; responsive and can cough forcefully

Severe: poor or no air exchange; weak or ineffective cough or no cough; high-pitched noise while inhaling or no noise at all; increased respiratory difficulty; possible cyanosis; unable to speak; clutching the neck with the thumb and fingers, making the universal choking sign; unable to move air

Sudden disappearance of tooth, instrument, foreign object, or debris in mouth

Remove all retrievable material from mouth

Call for assistance: retrieve O_2, AED, and emergency kit

P - Position

If sudden loss of object without airway obstruction, let the patient attempt to expel the foreign object

If partial or total loss of airway, position yourself to perform the Heimlich maneuver

If patient is unconscious, place into supine position

A - Airway

If patient is cooperative and breathing, let the patient attempt to expel the foreign object

If partial obstruction and can cough, encourage vigorous coughing; examine airway for retrieval of lost object; repeat sequence; call 911 if problem worsens or persists

If total obstruction or with significant partial obstruction and inability to cough, perform *Heimlich* maneuver (ages $\geq$ 1 year; chest thrusts in pregnant women, obese patients; back blows and chest compressions in infants) until ventilation restored or patient becomes unresponsive

If patient becomes unresponsive, call 911; place in supine position; examine airway quickly and remove an object if you see it; begin CPR

B - Breathing

Breathing check incorporated above

C - Circulation

If awake, check pulse and blood pressure; record vital signs at least every 5 minutes

If pulse but unresponsive, call 911; open the airway, remove the object if you see it; begin CPR; each time you give breaths, open the victim's mouth wide and look for the object; if you see an object, remove it with your fingers; if you do not see an object, keep doing CPR

If no pulse, move to **Cardiac Arrest Algorithm**

D - Diagnosis, Definitive Therapy

Consider chest, head and neck, and/or abdominal radiographs to identify location of object

E - Emergency Medical Services

If EMS is activated, facilitate access of emergency personnel by waiting for arrival and escorting to office

Aspiration Algorithm

R - Recognition of Emergency

Wheezing and tachypnea usually following an episode of vomiting
Remove all retrievable material from mouth
Call for assistance: retrieve O_2, AED, and emergency kit

P - Position

Position patient comfortably
If unconscious, supine

A - Airway

Assess airway patency

B - Breathing

Auscultate lungs for signs of wheezing

C - Circulation

Assess pulse (carotid artery)
If pulse, check heart rate and blood pressure; record vital signs at least every 5 minutes
If no pulse, call 911; move to **Cardiac Arrest Algorithm**

D - Diagnosis, Definitive Therapy

Call EMS for patient transport if wheezing and tachypnea continue or if $SpO_2 < 90\%$
Consider ***albuterol***, 4-6 puffs inhalation for bronchospasm
For severe bronchospasm
Administer ***1:1,000 epinephrine*** (1mg/mL) 0.3mg IM (upper thigh), repeat every 5 minutes until stable
May use ***EpiPen®*** IM (upper thigh) in adults, ***EpiPen Jr®*** IM (upper thigh) in children

E - Emergency Medical Services

If EMS is activated, facilitate access of emergency personnel by waiting for arrival and escorting to office

Angina Algorithm

R - Recognition of Emergency

Patient complains of chest/upper gastric pain/pressure; may radiate to left arm, jaw, back
May have nausea, dyspnea, palpitations, dizziness, anxiety, diaphoresis, hypotension, jugular venous distension
Call for assistance: retrieve O_2, AED, and emergency kit
Remove material from mouth

P - Position

Comfortable for patient, usually sitting upright

A - Airway

Assess airway patency
If obstructed, head tilt–chin lift (reposition if necessary with airway adjuncts like jaw thrust, oral/nasal airway)

B - Breathing

Assess breathing
If breathing, provide supplement oxygen via facemask @ 10L/min 100% O_2
If evidence of breathing difficulty or not breathing, call 911; positive pressure ventilation with BVM @ 10L/min 100% O_2

C - Circulation

Assess pulse
If pulse, check heart rate and blood pressure, record vital signs at least every 5 minutes
If no pulse, call 911; move to **Cardiac Arrest Algorithm**

D - Diagnosis, Definitive Therapy

If no history of angina pectoris or if the pain is different from patient's previous experience, call 911
If systolic BP > 90mm Hg and no recent phosphodiesterase inhibitor use (e.g., Viagra ®, Cialis ®, Levitra ®), administer ***nitroglycerin*** 0.4mg sublingual tablet or spray*
If no relief after one dose of nitroglycerin, consider it to be a myocardial infarction; call 911
If 911 called, administer 325mg ***aspirin*** chewed then swallowed with water (*Contraindicated* if aspirin allergy)
If chest pain is severe, may consider 50% ***nitrous oxide***

E - Emergency Medical Services

Facilitate access of emergency personnel by waiting for arrival and escorting to office

*Nitrates may cause severe hypotension refractory to vasopressor agents

Myocardial Infarction Algorithm

R - Recognition of Emergency

Patient may complain of substernal, crushing chest pain or pressure that may radiate to the left side of the body (shoulder, jaw, arm); nausea; dyspnea; palpitations; dizziness; anxiety; diaphoresis
Call for assistance: retrieve O_2, AED, and emergency kit
Call 911
Remove all materials from mouth

P - Position

Position patient comfortably, usually sitting upright

A - Airway

Patients will be conscious and talking to you verifying a patent airway

B - Breathing

Patients will be conscious and talking to you verifying breathing

C - Circulation

Assess pulse (carotid artery)
If pulse, check heart rate and blood pressure; record vital signs at least every 5 minutes; continuously monitor pulse oximetry and heart rate
If no pulse, move to **Cardiac Arrest Algorithm**

D - Drugs

Administer ***O_2*** via facemask @ 10L/min 100% O_2
If systolic BP > 90mm Hg and no recent phosphodiesterase inhibitor use (e.g., Viagra ®, Cialis ®, Levitra ®), administer ***nitroglycerin*** 0.4mg sublingual tablet or spray*
Administer 50% ***nitrous oxide***
Administer 325mg ***aspirin*** chewed then swallowed with water (*Contraindicated* if aspirin allergy)

E - Emergency Medical Services

Facilitate access of emergency personnel by waiting for arrival and escorting to office

Hypotension Algorithm

R - Recognition of Emergency

Blood pressure is significantly below normal for the patient or causing signs and symptoms of hypo-perfusion (e.g., dizziness, lightheadedness, nausea)
Call for assistance: retrieve O_2, AED, and emergency kit
Remove materials from mouth

P - Position

Supine with legs elevated

A - Airway

Assess airway patency
If obstructed, head tilt–chin lift (reposition if necessary with airway adjuncts like jaw thrust, oral/nasal airway)

B - Breathing

Check breathing
If breathing, O_2 as directed by pulse oximetry with 100% O_2 @ 10 L/min via facemask
If *not breathing*, call 911; positive pressure ventilation with BVM @ 10L/min 100% O_2*

C - Circulation

Check pulse (carotid artery)
If pulse, check heart rate and blood pressure; record vital signs at least every 5 minutes
If no pulse, call 911; move to **Cardiac Arrest Algorithm**

D - Diagnosis, Definitive Therapy

Look for specific cause of hypotension (e.g., anxiety, cardiovascular disease, hypovolemia, drugs, hypercarbia, hypoxia, pain, postural change)
Treat the specific cause (e.g., give O_2 for hypoxia)
Give IV fluid bolus (100-500 mL)
Consider ***0.5 mg atropine IV*** if heart rate < 60 (every 3-4 minutes) up to 3 mg
Consider ***10 mg ephedrine IV*** if heart rate 60-100 (every 3-4 minutes)
If treatment of the specific cause fails to resolve the problem, call 911

E - Emergency Medical Services

If EMS activated, facilitate access of emergency personnel by waiting for arrival and escorting to office

*Adults: 1 breath every 6 seconds
(Watch for chest rise; avoid stomach insufflation)

Hypertension Algorithm

R - Recognition of Emergency

Take blood pressure
Hypertensive urgency: BP above 220/120 mm Hg but no signs or symptoms
Hypertensive crisis: hypertension with evidence of myocardial ischemia, neurologic dysfunction, significant bradycardia, pulmonary edema, signs of stroke or visual disturbances
Call for assistance: retrieve O_2, AED, and emergency kit
Remove materials from mouth

P - Position

Comfortable for patient, usually sitting upright

A - Airway

Assess airway patency
If obstructed, head tilt–chin lift (reposition if necessary with airway adjuncts like jaw thrust, oral/nasal airway, LMA)

B - Breathing

Assess breathing
If breathing, O_2 as directed by pulse oximetry with 100% O_2 @ 10 L/min via facemask
If not breathing, call 911; positive pressure ventilation with BVM @ 10L/min 100% O_2*

C - Circulation

Assess pulse
If pulse, check heart rate and blood pressure; record vital signs at least every 5 minutes
If no pulse, call 911; move to **Cardiac Arrest Algorithm**

D - Diagnosis, Definitive Therapy

Look for specific cause of hypertension (e.g., anxiety, cardiovascular disease, drug interaction, full bladder, hypoxia, pain) and treat specific cause (e.g., provide additional local anesthesia for pain control)
Consider ***IV Labetalol 5-10mg*** (titrated every 2 minutes, up to 20mg)
If hypertensive urgency, consider immediate physician referral
If hypertensive crisis, call 911

E - Emergency Medical Services

If EMS activated, facilitate access of emergency personnel by waiting for arrival and escorting to office

*Adults: 1 breath every 6 seconds
*Infants/Adolescents: 1 breath every 3-5 seconds
(Watch for chest rise; avoid stomach insufflation)

Cardiac Arrest Algorithm

R - Recognition of Emergency

Sudden loss of consciousness (not breathing and no pulse)
Call 911
Call for assistance: retrieve O_2, AED, and emergency kit
Remove all materials from mouth

P - Position

Supine with legs elevated

Assess Circulation, Airway and Breathing simultaneously for less than 10 seconds

C - Circulation

Assess pulse (up to 10 sec; carotid artery for ages ≥ 1 year)
If no pulse, start BLS: "*Push Hard, Push Fast*," 100-120 compressions/min; 30:2 compressions:breaths; 15:2 for children (ages 1 year to prepubescent) with 2 rescuers; continue until AED available or patient starts to move

A - Airway

Head tilt-chin lift
If it is difficult to provide positive pressure ventilation with BVM, consider airway adjuncts (jaw thrust, oral/nasal airway, LMA)

B - Breathing

Positive pressure ventilation with BVM @ 10L/min 100% O_2 (2 breaths for every 30 compressions)

D - Defibrillation *(ages ≥ 1 year)*

As soon as AED is available, turn it on
Follow instructions from AED
Connect adult or pediatric pads
Stop compressions while AED is analyzing rhythm
Immediately resume compressions after shock or no shock
AED will prompt you to the analyze rhythm every 2 minutes

D – Drug therapy

Follow ACLS protocols
Administer ***1 mg Epinephrine (1:10,000) IV*** every 3-5 minutes

E - Emergency Medical Services

Facilitate access of emergency personnel by waiting for arrival and escorting to office

Allergic Reaction Algorithm

R - Recognition of Emergency

Check for evidence of an acute allergy (flushing, urticaria, nausea, angioedema, wheezing, hypotension, itching)
Call for assistance: retrieve O_2, AED, and emergency kit
Remove all materials from mouth

P - Position

Position patient comfortably
If unconscious, supine

A - Airway

Assess airway patency
If obstructed, head tilt-chin lift (reposition if necessary with airway adjuncts like jaw thrust, oral/nasal airway)
Monitor for upper airway obstruction (due to airway edema)

B - Breathing

Check breathing
If breathing, O_2 as directed by pulse oximetry with 100% O_2 @ 10 L/min via facemask
If not breathing, call 911; positive pressure ventilation with BVM @ 10L/min 100% O_2

C - Circulation

Assess pulse (carotid artery)
If pulse, check heart rate and blood pressure; record vital signs at least every 5 minutes
If no pulse, call 911; move to **Cardiac Arrest Algorithm**

D - Diagnosis, Definitive Therapy

Auscultate lungs; examine airway for signs of airway edema
For cutaneous reaction, consider ***diphenhydramine*** (*Benadryl*®), 50 mg (0.5 mg/kg in children) IM (deltoid or upper thigh)
For anaphylaxis
(1.) Administer ***1:1,000 epinephrine*** (1mg/mL) 0.3mg IM (upper thigh), repeat every 5 minutes until stable
May use ***EpiPen***® IM (upper thigh) in adults, ***EpiPen Jr***® IM (upper thigh) in children
(2.) Call 911
(3.) Administer ***diphenhydramine***, 50 mg (0.5 mg/kg in children) IV or IM (deltoid or upper thigh)
(4.) Consider ***albuterol***, 4-6 puffs inhalation for bronchospasm
If hypotensive, place in supine position with legs elevated (see **Hypotension Algorithm**)

E - Emergency Medical Services

If EMS activated, facilitate access of emergency personnel by waiting for arrival and escorting to office

Seizure Algorithm

R - Recognition of Emergency

Generalized tonic-clonic (*grand mal*) or clonic seizures
Call for assistance: retrieve O_2, AED, and emergency kit
Remove materials from mouth

P - Position

Supine position
Protect the patient against physical injury

A - Airway

Assess airway patency
If obstructed, perform head tilt–chin lift (reposition if necessary with airway adjuncts like jaw thrust, oral/nasal airway, LMA)

B - Breathing

Assess breathing
If breathing, O_2 as directed by pulse oximetry with 100% O_2 @ 10 L/min via facemask
If not breathing, call 911; positive pressure ventilation with BVM @ 10L/min 100% O_2*
Patient may experience respiratory depression while in a postictal state; be prepared to assist breathing

C - Circulation

Assess pulse (carotid artery)
If pulse, check heart rate and blood pressure; record vital signs at least every 5 minutes if possible
If no pulse, call 911; move to **Cardiac Arrest Algorithm**

D - Diagnosis, Definitive Therapy

Call for a family member to come assist you in evaluating the seizure (they will have a better idea of what is typical vs. atypical for this particular patient)
Look for specific cause of seizure (e.g., epilepsy history, syncope)
May administer ***midazolam***
IV: 2 mg (every 2 minutes)
IM: 0.075 mg/kg up to a total dose of 10 mg (adults) or 0.1 mg/kg up to a total dose of 3 mg IM (children), usually for prolonged, repeated seizures
IN (intra-nasal): 0.2 mg/kg up to 10 mg
Call 911 for new, continuous, or recurring seizures

E - Emergency Medical Services

If EMS activated, facilitate access of emergency personnel by waiting for arrival and escorting to office

*Adults: 1 breath every 6 seconds
*Infants/Adolescents: 1 breath every 3-5 seconds
(Watch for chest rise; avoid stomach insufflation)

Hypoglycemia Algorithm

R - Recognition of Emergency

Diaphoresis, tachycardia, confusion, and potentially loss of consciousness
Medical history evidence of hypoglycemia risk (e.g., history of insulin-dependent diabetes)
Call for assistance: retrieve O_2, AED, and emergency kit
Remove materials from mouth

P - Position

Comfortable for patient, usually sitting upright
If unconscious, supine with legs elevated

A - Airway

Assess airway patency
If obstructed, head tilt–chin lift (reposition if necessary with airway adjuncts like jaw thrust, oral/nasal airway, LMA)

B - Breathing

Assess breathing
If breathing, O_2 as directed by pulse oximetry with 100% O_2 @ 10 L/min via facemask
If not breathing, call 911; positive pressure ventilation with BVM @ 10L/min 100% O_2*

C - Circulation

Assess pulse
If pulse, check heart rate and blood pressure; record vital signs at least every 5 minutes
If no pulse, call 911; move to **Cardiac Arrest Algorithm**

D - Diagnosis, Definitive Therapy

If glucometer is available, measure blood glucose (best to check blood sugar on diabetic patients before and after treatment)
If awake, administer oral fluids containing ***sugar***
If unable to administer oral fluids containing sugar or unconscious, call 911
Consider 50% dextrose IV (50 mL)

E - Emergency Medical Services

If EMS activated, facilitate access of emergency personnel by waiting for arrival and escorting to office

*Adults: 1 breath every 6 seconds
*Infants/Adolescents: 1 breath every 3-5 seconds
(Watch for chest rise; avoid stomach insufflation)

Respiratory Depression/Oversedation/Apnea Algorithm

R - Recognition of Emergency

Absence of breathing or decrease in respiratory rate/volume
Generally associated with loss of consciousness or altered mentation
Call for assistance: retrieve O_2, AED, and emergency kit
Stop dental procedure
Remove materials from mouth

P - Position

Supine

A - Airway

Assess airway patency
If obstructed, head tilt–chin lift (reposition if necessary with airway adjuncts like jaw thrust, oral/nasal airway, LMA)
If apneic, perform rescue breathing*

B - Breathing

Check breathing
If breathing, O_2 as directed by pulse oximetry with 100% O_2 @ 10 L/min via facemask
If not breathing, call 911; positive pressure ventilation using BVM at 10L/min 100% O_2*

C - Circulation

Check pulse (up to 10 seconds; carotid artery ages ≥ 1 year)
If pulse, check heart rate and blood pressure; record vital signs at least every 5 minutes
If no pulse, call 911; move to **Cardiac Arrest Algorithm**

D - Diagnosis, Definitive Therapy

Auscultate lungs
May consider the use of airway adjuncts
Search for cause of respiratory depression (e.g., syncope, medications, hypoglycemia, stroke, hypercarbia)
Call 911 if the respiratory depression is not easily managed (difficult airway), no likely cause is identified (e.g., syncope), or does not resolve within a few minutes
Consider reversal agents
Naloxone 0.4 mg IV/IM (every 2-3 minutes) or ***2 mg IN*** (Intra-nasal) [Opioid reversal]
Flumazenil 0.2-0.5 mg IV (every 1 minute) [Benzodiazepine reversal]

E - Emergency Medical Services

If EMS activated, facilitate access of emergency personnel by waiting for arrival and escorting to office (if third office person)

*Adults: 1 breath every 6 seconds
(Watch for chest rise; avoid stomach insufflation)

Local Anesthesia Overdose Algorithm

R - Recognition of Emergency

Patient begins to act differently after local anesthesia is given (agitated, confused, slurred speech, drowsy/unconscious, seizures)
Call for assistance: retrieve O_2, AED, and emergency kit

P - Position

Remove materials from mouth
Supine position
Protect the patient against physical injury

A - Airway

Assess airway patency
If obstructed, perform head tilt–chin lift (reposition if necessary with airway adjuncts like jaw thrust, oral/nasal airway)

B - Breathing

Check breathing
If breathing, O_2 as directed by pulse oximetry with 100% O_2 @ 10 L/min via facemask
If not breathing, call 911; positive pressure ventilation with BVM @ 10L/min 100% O_2*
I*f the patient has a seizure*, they may experience respiratory depression while in a postictal state; be prepared to assist breathing

C - Circulation

Check pulse (carotid artery)
If pulse, check heart rate and blood pressure; record vital signs at least every 5 minutes
If no pulse, call 911; move to **Cardiac Arrest Algorithm**

D - Diagnosis, Definitive Therapy

Call 911, inform them that you think it might be a local anesthetic overdose
For the most part, this is a preventable condition

E - Emergency Medical Services

If EMS activated, facilitate access of emergency personnel by waiting for arrival and escorting to office

*Adults: 1 breath every 6 seconds
*Infants/Adolescents: 1 breath every 3-5 seconds
(Watch for chest rise; avoid stomach insufflation)

Hyperventilation Algorithm

R - Recognition of Emergency

Increased rate of ventilation; patient visibly anxious; chest pain/palpitation, paresthesia
Call for assistance: retrieve O_2, AED, and emergency kit
Remove materials from mouth

P - Position

Comfortable for patient, usually sitting upright

A - Airway

Monitor for upper airway obstruction

B - Breathing

Monitor breathing rate-try to get them to slow down and relax
Reassure patient

C - Circulation

Check heart rate and blood pressure; record vital signs at least every 5 minutes

D - Diagnosis, Definitive Therapy

Auscultate lungs
If wheezing, go to **Bronchospasm Algorithm**
Coach patient to breathe more slowly
Have patient rebreathe CO_2
Consider ***nitrous oxide***
If unable to reverse signs and symptoms, consider calling 911

E - Emergency Medical Services

If EMS activated, facilitate access of emergency personnel by waiting for arrival and escorting to office

Syncope Algorithm

R - Recognition of Emergency

Sudden loss of consciousness
Call for assistance: retrieve O_2, AED, and emergency kit
Remove materials from mouth

P – Position

Supine with legs elevated

A – Airway

Assess airway patency
If obstructed, head tilt–chin lift (reposition if necessary with airway adjuncts like jaw thrust, oral/nasal airway, LMA)

B – Breathing

Check breathing
If breathing, O_2 as directed by pulse oximetry with 100% O_2 @ 10 L/min via facemask
If not breathing, call 911; positive pressure ventilation with BVM @ 10L/min 100% O_2*

C – Circulation

Check pulse (up to 10 seconds; carotid artery ages ≥ 1 year)
If pulse, check heart rate and blood pressure; record vital signs at least every 5 minutes
If no pulse, call 911; move to **Cardiac Arrest Algorithm**

D - Diagnosis, Definitive Therapy

Search for cause of syncope (e.g., fear, hypotension, hypoxia, hypoglycemia, arrhythmia, stroke, postural hypotension, epilepsy)
Call 911 if there is suspicion that the loss of consciousness may reflect a potentially serious condition

E - Emergency Medical Services

If EMS activated, facilitate access of emergency personnel by waiting for arrival and escorting to office

*Adults: 1 breath every 6 seconds
*Infants/Adolescents: 1 breath every 3-5 seconds
(Watch for chest rise; avoid stomach insufflation)

Airway Obstruction/Oversedation/Apnea Algorithm

R - Recognition of Emergency

Decrease in respiratory rate/volume or absence of breathing
Generally associated with loss of consciousness or altered mentation
Call for assistance: retrieve O_2, AED, and emergency kit
Stop dental procedure
Remove materials from mouth

P - Position

Supine

A - Airway

Assess airway patency
If obstructed, head tilt–chin lift (reposition if necessary with airway adjuncts like jaw thrust, oral/nasal airway, LMA)
If hypoventilation is present, assist breathing with positive pressure ventilation using BVM at 10L/min 100% O_2
If apneic, perform rescue breathing*

B - Breathing

Check breathing
If breathing, O_2 as directed by pulse oximetry with 100% O_2 @ 10 L/min via facemask
If not breathing, call 911; positive pressure ventilation using BVM at 10L/min 100% O_2*

C - Circulation

Check pulse (up to 10 seconds; carotid artery ages ≥ 1 year)
If pulse, check heart rate and blood pressure; record vital signs at least every 5 minutes
If no pulse, call 911; move to **Cardiac Arrest Algorithm**

D - Diagnosis, Definitive Therapy

May consider the use of airway adjuncts
Consider reversal agents
Naloxone 0.4 mg IV/IM (every 2-3 minutes) or ***2 mg IN*** (Intra-nasal) [Opioid reversal]
Flumazenil 0.2-0.5 mg IV (every 1 minute) [Benzodiazepine reversal]
Call 911 if the airway obstruction is not easily managed (difficult airway), no likely cause is identified (e.g., oversedation), or does not resolve within a few minutes

E - Emergency Medical Services

If EMS activated, facilitate access of emergency personnel by waiting for arrival and escorting to office (if third office person)

*Adults: 1 breath every 6 seconds
(Watch for chest rise; avoid stomach insufflation)

Hyperglycemia Algorithm

R - Recognition of Emergency

Hyperventilation, tachycardia, confusion, possibly 'sweet' breath, hypotension
Medical history evidence of hyperglycemia risk (e.g., history of insulin-dependent diabetes)
Call for assistance: retrieve O_2, AED, and emergency kit
Remove materials from mouth

P - Position

Comfortable for patient, usually sitting upright
If unconscious, supine with legs elevated

A - Airway

Assess airway patency
If obstructed, head tilt–chin lift (reposition if necessary with airway adjuncts like jaw thrust, oral/nasal airway)

B - Breathing

Check breathing
If breathing, O_2 as directed by pulse oximetry with 100% O_2 @ 10 L/min via facemask
If not breathing, call 911; positive pressure ventilation with BVM @ 10L/min 100% O_2*

C - Circulation

Check pulse (up to 10 seconds; carotid artery ages ≥ 1 year)
If pulse, check heart rate and blood pressure; record vital signs at least every 5 minutes
If no pulse, call 911; move to **Cardiac Arrest Algorithm**

D - Diagnosis, Definitive Therapy

Call 911-EMS will administer ***insulin*** as needed
If glucometer is available, measure blood glucose (best to check blood sugar on diabetic patients before and after treatment)

E - Emergency Medical Services

If EMS activated, facilitate access of emergency personnel by waiting for arrival and escorting to office

*Adults: 1 breath every 6 seconds
*Infants/Adolescents: 1 breath every 3-5 seconds
(Watch for chest rise; avoid stomach insufflation)

Stroke Algorithm

R - Recognition of Emergency

Sudden headache, loss of balance, or altered consciousness, thought, speech, or vision; complaint of sudden numbness or weakness of the face, arm, or leg, especially on one side of the body

Call for assistance: retrieve O_2, AED, and emergency kit

Remove materials from mouth

P - Position

Comfortable for patient, usually sitting upright

A - Airway

Assess airway patency

If obstructed, head tilt–chin lift (reposition if necessary with airway adjuncts like jaw thrust, oral/nasal airway, LMA)

B - Breathing

Assess breathing

If breathing, O_2 as directed by pulse oximetry with 100% O_2 @ 10 L/min via facemask

If not breathing, call 911; positive pressure ventilation with BVM @ 10L/min 100% O_2*

C - Circulation

Assess pulse

If pulse, check heart rate and blood pressure; record vital signs at least every 5 minutes

If no pulse, call 911; move to ***Cardiac Arrest Algorithm***

D - Diagnosis, Definitive Therapy

Look for altered speech, facial droop, arm drift (Cincinnati Prehospital Stroke Scale)

If stroke suspected, call 911

E - Emergency Medical Services

If EMS activated, facilitate access of emergency personnel by waiting for arrival and escorting to office

*Adults: 1 breath every 6 seconds

*Infants/Adolescents: 1 breath every 3-5 seconds

(Watch for chest rise; avoid stomach insufflation)

Agenda Item (6)(i):

Inspection and Evaluation Form

Moderate Sedation

Nevada State Board of Dental Examiners
6010 S. Rainbow Blvd., Bldg. A, Ste. 1
Las Vegas, NV 89118
(702) 486-7044 • (800) DDS-EXAM • Fax (702) 486-7046

MODERATE SEDATION
INSPECTION AND EVALUATION REPORT

☐ ON-SITE/ADMINISTRATOR EVALUATION	☐ SITE ONLY INSPECTION
Name of Practitioner:	Proposed Dates:
Location to be Inspected:	Telephone Number:
Date of Evaluation:	Time of Evaluation/Inspection: Start Time: / Finish Time:

Evaluators

1.
2.
3.

INSTRUCTIONS FOR COMPLETING MODERATE SEDATION ON-SITE INSPECTION AND EVALUATION FORM:

1. Prior to evaluation, review criteria and guidelines for Moderate Sedation (MS) On-Site/Administrator and Site Only Inspection in the Examiner Manual.

2. Each evaluator should complete a MS On-Site/Administrator or Site Only Inspection report independently by checking the appropriate answer box to the corresponding question or by filling in a blank space.

3. After answering all questions, each evaluator should make a separate overall "pass" or "fail" recommendation to the Board. "Fail" recommendations must be documented with a narrative explanation.

4. Sign the report and return to the Board office within **72 hours** after evaluation has been completed.

SITE INSPECTION

OFFICE FACILITIES AND EQUIPMENT	YES	NO
1. Operating Room		
a. Is operating room large enough to adequately accommodate the patient on a table or in an operating chair?		
b. Does the operating theater permit an operating team consisting of at least three individuals to freely move about the patient?		
2. Operating Chair or Table		
a. Does operating chair or table permit the patient to be positioned so the operating team can maintain the airway?		
b. Does operating chair or table permit the team to quickly alter the patient's position an emergency?		
c. Does operating chair or table provide a firm platform for the management of cardiopulmonary resuscitation?		
3. Lighting System		
a. Does lighting system permit evaluation of the patient's skin and mucosal color?		
b. Is there a battery powered backup lighting system?		
c. Is backup lighting system of sufficient intensity to permit completion of any operation underway at the time of general power failure?		
4. Suction Equipment		
a. Does suction equipment permit aspiration of the oral and pharyngeal cavities?		
b. Is there a backup suction device available which can operate at the time of General power failure?		
5. Oxygen Delivery System		
a. Does oxygen delivery system have adequate full face masks and appropriate connectors and is capable of delivering oxygen to the patient under positive pressure?		
b. Is there an adequate backup oxygen delivery system which can operate at the time of general power failure?		
6. Recovery Area (Recovery area can be operating room)		
a. Does recovery area have available oxygen?		
b. Does recovery area have available adequate suction?		
c. Does recovery area have adequate lighting?		
d. Does recovery area have available adequate electrical outlets?		
7. Ancillary Equipment *Must be* in Good Operating Condition		
a. Are there oral airways?		
b. Is there a tonsilar or pharyngeal type suction tip adaptable to all office suction outlets?		
c. Is there a sphygmomanometer and stethoscope?		
d. Is there adequate equipment for the establishment of an intravenous infusion?		
e. Is there a pulse oximeter?		

SITE INSPECTION

DRUGS	DRUG NAME	EXPIRES	YES	NO
1. Vasopressor drug available?				
2. Corticosteroid drug available?				
3. Bronchodilator drug available?				
4. Appropriate drug antagonists available?				
5. Antihistaminic drug available?				
6. Anticholinergic drug available?				
7. Coronary artery vasodilator drug available?				
8. Anticonvulsant drug available?				
9. Oxygen available?				

RECORDS – Are the following records maintained?	YES	NO
1. An adequate medical history of the patient?		
2. An adequate physical evaluation of the patient?		
3. Sedation records show patient's vital signs?		
4. Includes American Society of Anesthesiologists physical status classification?		
5. Sedation records listing the drugs administered, amounts administered, and time administered?		
6. Sedation records reflecting the length of the procedure?		
7. Sedation records reflecting any complications of the procedure, if any?		
8. Written informed consent of the patient, or if the patient is a minor, his or her parent or guardian's consent for sedation?		

	YES	NO
Is there moderate sedation administered at the dentist office to a patient of 12 years of age or younger (if yes, complete section below)		
ADDITIONAL EQUIPMENT FOR 12 YEARS OF AGE AND YOUNGER	YES	NO
1. Bag valve mask with appropriate size masks		
2. Appropriate size blood pressure cuffs		
3. Appropriate size oral and nasal airways		
ADDITIONAL EMERGENCY DRUG FOR 12 YEARS OF AGE AND YOUNGER	Yes	NO
1. Appropriate dosages of epinephrine or a pediatric epinephrine auto-injector		
ADDITIONAL RECORDS FOR 12 YEARS OF AGE AND YOUNGER	Yes	NO
1. Sedation records reflecting monitoring of patient that is consistent with the guide-lines of the American Academy of Pediatric Dentistry		

Evaluator Overall Recommendation of Site Inspection

☐ Pass ☐ Fail ☐ Pass Pending*

If Pass Pending, please list all deficiencies

Comments: _____

_____

_____

_____

_____ _____

Signature of Evaluator Date

THIS CONCLUDES THE SITE INSPECTION REPORT.

FOR AN <u>EVALUATION OF AN ADMINISTERING PERMIT</u>, CONTINUE TO NEXT SECTION.

EVALUATION

DEMONSTRATION OF MODERATE SEDATION	YES	NO
1. Who administered moderate sedation? Dentist's Name: _____		
2. Was sedation case demonstrated within the definition of moderate sedation?		
3. While sedated, was patient continuously monitored during the procedure with a pulse oximeter?		
4. Was the patient monitored while recovering from sedation? Monitored by whom: _____		
5. Is this person a licensed health professional experienced in the care and resuscitation of patients recovering from moderate sedation?		
6. Were personnel competent?		
7. Are all personnel involved with the care of patients certified in basic cardiac life support?		
8. Was dentist able to perform the procedure without any action or omission that could have resulted in a life threatening situation to the patient?		
9. What was the length of the case demonstrated? _____		
SIMULATED EMERGENCIES – Was dentist and staff able to demonstrate knowledge and ability in recognition and treatment of:	YES	NO
1. Laryngospasm?		
2. Bronchospasm?		
3. Emesis and aspiration of foreign material under anesthesia?		
4. Angina pectoris?		
5. Myocardial infarction?		
6. Hypotension?		
7. Hypertension?		
8. Cardiac arrest?		
9. Allergic reaction?		
10. Convulsions?		
11. Hypoglycemia?		
12. Asthma?		
13. Respiratory depression?		
14. Local anesthesia overdose?		
15. Hyperventilation syndrome?		
16. Syncope?		

Evaluator Overall Recommendation of Evaluation

☐ Pass ☐ Fail

Comments: _____

_____

_____

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_____

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_____

_____ _____

Signature of Evaluator Date

Agenda Item (6)(ii):

Inspection and Evaluation Form

General Anesthesia

Nevada State Board of Dental Examiners
6010 S. Rainbow Blvd., Bldg. A, Ste. 1
Las Vegas, NV 89118
(702) 486-7044 • (800) DDS-EXAM • Fax (702) 486-7046

GENERAL ANESTHESIA INSPECTION AND EVALUATION REPORT

☐ **SITE/ADMINISTRATOR EVALUATION** ☐ **SITE ONLY INSPECTION**

Name of Practitioner:	Proposed Dates:	
Location to be Inspected:	Telephone Number:	
Date of Evaluation:	Time of Evaluation:	
	Start Time:	**Finish Time:**

Evaluators

1.
2.
3.

INSTRUCTIONS FOR COMPLETING GENERAL ANESTHESIA INSPECTION AND EVALUATION FORM:

1. Prior to inspection/evaluation, review criteria and guidelines for General Anesthesia (GA) Inspection and Evaluation in the Examiner Manual.

2. Each evaluator should complete a GA Site/Administrator Evaluation or Site Only Inspection form independently by checking the appropriate answer box to the corresponding question or by filling in a blank space.

3. After answering all questions, each evaluator should make a separate overall "pass" or "fail" recommendation to the Board. "Fail" recommendations must be documented with a narrative explanation.

4. Sign the inspection/evaluation report and return to the Board office within **72 hours** after inspection/evaluation has been completed.

SITE INSPECTION

OFFICE FACILITIES AND EQUIPMENT (NAC 631.2227) ALL operatories used must meet criteria	YES	NO
1. Operating Room		
a. Is operating room large enough to adequately accommodate the patient on a table or in an operating chair?		
b. Does operating room permit an operating team consisting of at least three individuals to freely move about the patient?		
2. Operating Chair or Table		
a. Does operating chair or table permit the patient to be positioned so the operating team can maintain the airway?		
b. Does operating chair or table permit the team to quickly alter the patient's position in an emergency?		
c. Does operating chair or table provide a firm platform for the management of cardiopulmonary resuscitation?		
3. Lighting System		
a. Does lighting system permit evaluation of the patient's skin and mucosal color?		
b. Is there a battery powered backup lighting system?		
c. Is backup lighting system of sufficient intensity to permit completion of any operation underway at the time of general power failure?		
4. Suction Equipment		
a. Does suction equipment permit aspiration of the oral & pharyngeal cavities airway?		
b. Is there a backup suction device available which can operate at the time of general power failure?		
5. Oxygen Delivery System		
a. Does oxygen delivery system have adequate full face masks and appropriate connectors and is capable of delivering oxygen to the patient under positive pressure?		
b. Is there an adequate backup oxygen delivery system which can operate at the time of general power failure?		
6. Recovery Area (Recovery area can be operating room)		
a. Does recovery area have available oxygen?		
b. Does recovery area have available adequate suction?		
c. Does recovery area have adequate lighting?		
d. Does recovery area have available adequate electrical outlets?		

SITE INSPECTION

OFFICE FACILITIES AND EQUIPMENT (NAC 631.2227) ALL operatories used must meet criteria (continued)	YES	NO
7. Ancillary Equipment *Must be* in Good Operating Condition?	**YES**	**NO**
a. Are there oral airways?		
b. Is there a tonsilar or pharyngeal type suction tip adaptable to all office *suction* outlets?		
c. Is there a sphygmomanometer and stethoscope?		
d. Is there adequate equipment for the establishment of an intravenous infusion?		
e. Is there a pulse oximeter?		
f. A laryngoscope complete with an adequate selection of blades and spare batteries and bulbs?		
g. Endotracheal tubes and appropriate connectors?		
h. An endotracheal tube type forcep?		
i. An electrocardioscope and defibrillator?		
j. A capnography monitor		

DRUGS	DRUG NAME	EXPIRES	YES	NO
1. Vasopressor drug available?				
2. Corticosteroid drug available?				
3. Bronchodilator drug available?				
4. Appropriate drug antagonists available?				
5. Antihistaminic drug available?				
6. Anticholinergic drug available?				
7. Coronary artery vasodilator drug available?				
8. Anticonvulsant drug available?				
9. Oxygen available?				
10. Muscle relaxant?				
11. Antiarrhythmic?				
12. Antihypertensive?				
13. Intravenous medication for the treatment of cardiopulmonary arrest?				

SITE INSPECTION

RECORDS – Are the following records maintained?	YES	NO
1. An adequate medical history of the patient?		
2. An adequate physical evaluation of the patient?		
3. Includes American Society of Anesthesiologist physical status classification?		
4. Anesthesia records show patient's vital signs?		
5. Anesthesia records listing the drugs administered, amounts administered, and time administered?		
6. Anesthesia records reflecting the length of the procedure?		
7. Anesthesia records reflecting any complications of the procedure, if any?		
8. Written informed consent of the patient, or if the patient is a minor, his or her parent or guardian's consent for administration of anesthesia?		

	YES	NO
Is there general anesthesia or moderate sedation administered at the dentist office to a patient of 12 years of age or younger (if yes, complete section below)		
ADDITIONAL EQUIPMENT FOR 12 YEARS OF AGE AND YOUNGER	YES	NO
1. Bag valve mask with appropriate size masks		
2. Appropriate size blood pressure cuffs		
3. A laryngoscope complete with an adequate selection of blades for use on patients 12 years of age and younger		
4. Appropriately sized endotracheal tubes and appropriate connectors		
5. Appropriate pads for use with an electrocardioscope and defibrillator		
6. Small oral and nasal airways		
ADDITIONAL EMERGENCY DRUGS FOR 12 YEARS OF AGE AND YOUNGER	Yes	NO
1. Appropriate dosages of epinephrine or a pediatric epinephrine auto-injector		
ADDITIONAL RECORDS FOR 12 YEARS OF AGE AND YOUNGER	Yes	NO
1. Anesthesia/Sedation Records reflecting monitoring of patient that is consistent with the guidelines of the American Academy of Pediatric Dentistry		

SITE INSPECTION RESULTS

Evaluator Overall Recommendation of Site Inspection

☐ Pass ☐ Fail ☐ Pass Pending*

If Pass Pending, please list all deficiencies

Comments: _____

_____

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_____ _____

Signature of Evaluator Date

THIS CONCLUDES THE SITE INSPECTION REPORT.

FOR AN EVALUATION OF AN ADMINISTERING PERMIT, CONTINUE TO NEXT SECTION.

EVALUATION

DEMONSTRATION OF GENERAL ANESTHESIA / DEEP SEDATION	YES	NO
1. Who administered General Anesthesia? Dentist's Name: _____		
2. Was case demonstrated within the definition of general anesthesia?		
3. While anesthetized was patient continuously monitored during the procedure with a pulse oximeter and other appropriate monitoring equipment?		
4. Was the patient monitored while recovering from anesthesia? Monitored by whom:_____ Title:_____		
5. Is this person a licensed health professional experienced in the care and resuscitation of patients recovering from general anesthesia?		
6. Were personnel competent *and knowledgeable of equipment operation and location*?		
7. Are all personnel involved with the care of patients certified in basic cardiac life support?		
8. Was dentist able to perform the procedure without any action or omission that could have resulted in a life threatening situation to the patient?		
4. What was the length of the case demonstrated? _____		

SIMULATED EMERGENCIES – Was dentist and staff able to demonstrate knowledge and ability in recognition and treatment of:	YES	NO
1. Laryngospasm?		
2. Bronchospasm?		
3. Emesis and aspiration of foreign material under anesthesia?		
4. Angina pectoris?		
5. Myocardial infarction?		
6. Hypotension?		
7. Hypertension?		
8. Cardiac arrest?		
9. Allergic reaction?		
10. Convulsions?		

SIMULATED EMERGENCIES – Was dentist and staff able to demonstrate knowledge and ability in recognition and treatment of: (continued)	YES	NO
11. Hypoglycemia?		
12. Asthma?		
13. Respiratory depression?		
14. Local anesthesia overdose?		
15. Hyperventilation syndrome?		
16. Syncope?		

Evaluator Overall Recommendation of Evaluation

☐ Pass ☐ Fail

Comments: _____

_____

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_____ _____

Signature of Evaluator Date

Statutes & Regulations

NRS 449.442

NRS 631.265

NAC 631.2211-2256

NRS 449.442 Permit required for certain physicians' offices and facilities to offer services; national accreditation required; cessation of services for failure to maintain accreditation.

1. An office of a physician or a facility that provides health care, other than a medical facility, must obtain a permit pursuant to NRS 449.443 before offering to a patient a service of general anesthesia, conscious sedation or deep sedation. An office of a physician or a facility that provides health care, other than a medical facility, which operates at more than one location must obtain a permit for each location where a service of general anesthesia, conscious sedation or deep sedation is offered.

2. To offer to a patient a service of general anesthesia, conscious sedation or deep sedation in this State, an office of a physician or a facility that provides health care, other than a medical facility, must maintain current accreditation by a nationally recognized organization approved by the Board. Upon receiving an initial permit, the office or facility shall, within 6 months after obtaining the permit, submit proof to the Division of accreditation by such an organization.

3. If an office of a physician or a facility that provides health care, other than a medical facility, fails to maintain current accreditation or if the accreditation is revoked or is otherwise no longer valid, the office or facility shall immediately cease offering to patients a service of general anesthesia, conscious sedation or deep sedation.

(Added to NRS by 2009, 529)

NRS 631.265 Permit to administer or supervise administration of general anesthesia, minimal sedation, moderate sedation or deep sedation; regulations.

1. No licensed dentist or person who holds a restricted license issued pursuant to NRS 631.275 may administer or supervise directly the administration of general anesthesia, minimal sedation, moderate sedation or deep sedation to dental patients unless the dentist or person has been issued a permit authorizing him or her to do so by the Board.

2. The Board may issue a permit authorizing a licensed dentist or person who holds a restricted license issued pursuant to NRS 631.275 to administer or supervise directly the administration of general anesthesia, minimal sedation, moderate sedation or deep sedation to dental patients under such standards, conditions and other requirements as the Board shall by regulation prescribe.

(Added to NRS by 1983, 278; A 1989, 1740; 2001, 2692; 2015, 3876)

ADMINISTRATION OF GENERAL ANESTHESIA, MODERATE SEDATION OR DEEP SEDATION

NAC 631.2211 Scope; restrictions on administration of oral medication. (NRS 631.190, 631.265)

1. NAC 631.2213 to 631.2256, inclusive, do not apply to the administration of:

(a) Local anesthesia;

(b) Nitrous oxide-oxygen analgesia, if the delivery system for the nitrous oxide-oxygen contains a mechanism which guarantees that an oxygen concentration of at least 25 percent will be administered to the patient at all times during the administration of the nitrous oxide; and

(c) Oral medication that is administered to a patient to relieve anxiety in the patient, if the medication is not given in a dosage that is sufficient to induce in a patient a controlled state of depressed consciousness or unconsciousness similar to the state produced pursuant to the administration of general anesthesia, deep sedation or moderate sedation.

2. Any oral medication administered as described in paragraph (c) of subsection 1 must not be combined with the administration of any other method of sedation, including, without limitation, nitrous oxide-oxygen analgesia. A single dosage of a single sedative agent administered must be appropriate for anxiolysis. The dosage of enteral drugs must not be more than the maximum recommended dosage that can be prescribed for unmonitored home use.

(Added to NAC by Bd. of Dental Exam'rs, eff. 10-21-83; A by R005-99, 9-7-2000; R004-17, 5-16-2018)

NAC 631.2212 Board to determine degree of sedation. (NRS 631.190, 631.265) In a proceeding of the Board at which the Board must determine the degree of sedation or level of consciousness of a patient, the Board will base its findings on:

1. The type and dosage of medication that was administered or is proposed for administration to the patient; and

2. The degree of sedation or level of consciousness that should reasonably be expected to result from that type and dosage of medication.

(Added to NAC by Bd. of Dental Exam'rs by R005-99, eff. 9-7-2000)

NAC 631.2213 Permit required; qualifications of applicants. (NRS 631.190, 631.265)

1. Except as otherwise set forth in NAC 631.2211 to 631.2256, inclusive, no dentist may:

(a) Use general anesthesia or deep sedation for dental patients, except in a facility for which a permit is held as required by NRS 449.442, unless he or she first:

(1) Obtains a general anesthesia permit; or

(2) Employs a dentist who is licensed in this State and who holds a general anesthesia permit to administer general anesthesia to his or her patients, and obtains a certificate of site approval for each location at which general anesthesia, deep sedation or moderate sedation is administered to his or her patients;

(b) Use moderate sedation for dental patients who are 13 years of age or older, except in a facility for which a permit is held as required by NRS 449.442, unless he or she first:

(1) Obtains a general anesthesia permit or a moderate sedation permit pursuant to paragraph (a) of subsection 2; or

(2) Employs a dentist who is licensed in this State and who holds a general anesthesia permit or a moderate sedation permit pursuant to paragraph (a) of subsection 2 to administer moderate sedation to his or her patients who are 13 years of age or older, and obtains a certificate of site approval for each location at which moderate sedation is administered to his or her patients who are 13 years of age or older; or

(c) Use moderate sedation for dental patients who are 12 years of age or younger, except in a facility for which a permit is held as required by NRS 449.442, unless he or she first:

(1) Obtains a moderate sedation permit pursuant to paragraph (b) of subsection 2; or

(2) Employs a dentist who is licensed in this State and who holds a general anesthesia permit or a moderate sedation permit pursuant to paragraph (b) of subsection 2 to administer moderate sedation to his or her patients who are 12 years of age or younger, and obtains a certificate of site approval for each location at which moderate sedation is administered to his or her patients who are 12 years of age or younger.

2. To obtain a general anesthesia permit or moderate sedation permit, a dentist must apply to the Board for such a permit on a form prescribed by the Board, submit any fees that are set by the Board pursuant to NRS 631.345 and produce evidence showing that he or she is a dentist who is licensed in this State, and:

(a) For a moderate sedation permit to administer moderate sedation to a patient 13 years of age or older, the applicant must show evidence of:

(1) The completion of a course of study, subject to the approval of the Board, of not less than 60 hours dedicated exclusively to the administration of moderate sedation, and the successful administration as the operator of moderate sedation to not less than 20 patients; or

(2) The completion of a program for specialty training which is approved by the Commission on Dental Accreditation of the American Dental Association and which includes education and training in the administration of moderate sedation that is equivalent to the education and training described in subparagraph (1) and:

(I) Valid certification in Advanced Cardiac Life Support by the American Heart Association; or

(II) The completion of a course approved by the Board that provides instruction on medical emergencies and airway management.

(b) For a moderate sedation permit to administer moderate sedation to a patient 12 years of age or younger, the applicant must show evidence of:

(1) The completion of a course of study, subject to the approval of the Board, of not less than 60 hours dedicated exclusively to the administration of moderate sedation to patients 12 years of age or younger, and the successful administration as the operator of moderate sedation to not less than 25 patients who are 12 years of age or younger; or

(2) The completion of a program for specialty training which is approved by the Commission on Dental Accreditation of the American Dental Association and which includes education and training in the administration of moderate sedation that is equivalent to the education and training described in subparagraph (1) and:

(I) Valid certification in Pediatric Advanced Life Support by the American Heart Association; or

(II) The completion of a course approved by the Board that provides instruction on medical emergencies and airway management.

(c) For a general anesthesia permit, the applicant must show evidence of the completion of an Advanced Cardiac Life Support course given by the American Heart Association or a course providing similar instruction that is approved by the Board, and:

(1) The completion of a program, subject to the approval of the Board, of advanced training in anesthesiology and related academic subjects beyond the level of undergraduate dental school in a training program as described in

the *Guidelines for Teaching Pain Control and Sedation to Dentists and Dental Students*, published by the American Dental Association, 211 East Chicago Avenue, Chicago, Illinois 60611, and available, free of charge, at the Internet address **http://www.ada.org/~/media/ADA/Education%20and%20Careers/Files/ADA_Sedation_Teaching_Guidelines.pdf?la=en**; or

(2) The completion of a graduate program in oral and maxillofacial surgery or dental anesthesiology which has been approved by the Commission on Dental Accreditation of the American Dental Association.

3. A holder of a general anesthesia permit may administer general anesthesia, deep sedation or moderate sedation to a patient of any age.

(Added to NAC by Bd. of Dental Exam'rs, eff. 10-21-83; A by R005-99, 9-7-2000; R159-08, 4-23-2009; R004-17, 5-16-2018)

NAC 631.2217 Review of holder of permit; renewal of permit. (NRS 631.190**,** 631.265**)**

1. The holder of a general anesthesia permit or moderate sedation permit is subject to review by the Board at any time.

2. Each general anesthesia permit and moderate sedation permit must be renewed annually or biennially, as applicable, based on the renewal period set forth in NRS 631.330 for the type of license held by the holder of the permit.

(Added to NAC by Bd. of Dental Exam'rs, eff. 10-21-83; A by R005-99, 9-7-2000; R158-08, 12-17-2008; R004-17, 5-16-2018)

NAC 631.2219 Inspection and evaluation; renewal of permit; reevaluation of credentials. (NRS 631.190**,** 631.265**)**

1. The Board will require an inspection and evaluation of the facility, equipment, personnel, records of patients and the procedures used by every dentist who seeks or holds a general anesthesia permit or moderate sedation permit, and of the dentist himself or herself, before issuing such an original permit to the dentist, and at least once in every 5-year period thereafter.

2. The Board will renew general anesthesia permits and moderate sedation permits annually or biennially, as applicable, based on the renewal period set forth in NRS 631.330 for the type of license held by the holder of the permit, unless the holder is informed in writing, 60 days before the date for renewal, that a reevaluation of his or her credentials is required. In determining whether reevaluation is necessary, the Board will consider, among other factors, complaints by patients and reports of adverse occurrences. A reevaluation will, if appropriate, include an inspection of the facility, equipment, personnel, records of patients and the procedures used by the holder, and an examination of his or her qualifications.

(Added to NAC by Bd. of Dental Exam'rs, eff. 10-21-83; A 7-30-84; R005-99, 9-7-2000; R158-08, 12-17-2008; R004-17, 5-16-2018)

NAC 631.2221 Inspections and evaluations: Qualifications of inspectors and evaluators; authorized participation by members of Board. (NRS 631.190**,** 631.265**)**

1. When an inspection or evaluation is required to issue or renew a general anesthesia permit or moderate sedation permit, the Board may designate two or more persons, each of whom holds a general anesthesia permit or moderate sedation permit and has practiced general anesthesia, deep sedation or moderate sedation, as applicable, for a minimum of 3 years preceding his or her appointment, exclusive of his or her training in the administration of anesthesia or sedation. At least one of the inspectors or evaluators must have had experience in the evaluation of dentists using general anesthesia, deep sedation or moderate sedation, as applicable. At least one member of the inspection or evaluation team must have had substantial experience in the administration of the type of anesthesia or sedation contemplated for use by the dentist being evaluated and must hold the type of permit for which the dentist is applying.

2. Any member of the Board who is a dentist may observe or consult in any inspection or evaluation. A member of the Board who is not a dentist may be present at an observation but may not participate in any grading or evaluation resulting from the inspection or evaluation.

(Added to NAC by Bd. of Dental Exam'rs, eff. 10-21-83; A 7-30-84; R005-99, 9-7-2000; R004-17, 5-16-2018)

NAC 631.2223 Inspections and evaluations: General requirements. (NRS 631.190**,** 631.265**)** An inspection or evaluation ordered by the Board must be conducted in all offices where general anesthesia, deep

sedation or moderate sedation is to be administered and, except as otherwise required in NAC 631.2236, must consist of:

1. An evaluation of the office's facilities and equipment, records and emergency medications; and
2. A demonstration of:

(a) The administration to a patient who is receiving dental treatment of the type of anesthesia or sedation for which the dentist is applying for a permit;

(b) Simulated emergencies in the surgical area of the dental office with participation by the members of the staff who are trained to handle emergencies;

(c) A dental procedure utilizing the type of anesthesia or sedation for which the dentist is applying for a permit;

(d) Any anesthesia or sedation technique that is routinely employed during the administration of anesthesia or sedation;

(e) The appropriate monitoring of a patient during anesthesia or sedation; and

(f) The observation of a patient during recovery and the time allowed for recovery.

(Added to NAC by Bd. of Dental Exam'rs, eff. 10-21-83; A by R005-99, 9-7-2000; R004-17, 5-16-2018)

NAC 631.2225 Inspections and evaluations: Minimum standards for simulated emergencies. (NRS 631.190**,** 631.265**)** A dentist's office inspected or evaluated for the issuance or renewal of a general anesthesia permit or moderate sedation permit must meet the following minimum standards with regard to simulated emergencies. The dentist and his or her staff must demonstrate a knowledge of and a method of treatment for the following types of emergencies:

1. Airway obstruction laryngospasm;
2. Bronchospasm;
3. Emesis and aspiration of foreign material under anesthesia;
4. Angina pectoris;
5. Myocardial infarction;
6. Hypotension;
7. Hypertension;
8. Cardiac arrest;
9. Allergic reaction;
10. Convulsions;
11. Hypoglycemia;
12. Asthma;
13. Respiratory depression;
14. Overdose from local anesthesia;
15. Hyperventilation syndrome; and
16. Syncope.

(Added to NAC by Bd. of Dental Exam'rs, eff. 10-21-83; A by R005-99, 9-7-2000; R004-17, 5-16-2018)

NAC 631.2227 Inspections and evaluations: Minimum standards for physical facilities and equipment. (NRS 631.190**,** 631.265**)** A dentist's office inspected or evaluated for the issuance or renewal of a general anesthesia permit, moderate sedation permit or certificate of site approval must meet the following minimum standards with regard to physical facilities and equipment:

1. The operating theater must be large enough to accommodate the patient adequately on a table or in a dental chair and to allow an operating team consisting of at least three persons to move freely about the patient.
2. The operating table or dental chair must:

(a) Allow the patient to be placed in a position such that the operating team can maintain the airway;

(b) Allow the operating team to alter the patient's position quickly in an emergency; and

(c) Provide a firm platform for the management of cardiopulmonary resuscitation.

3. The lighting system must be adequate to allow an evaluation of the patient's skin and mucosal color. An alternate lighting system must derive its power from batteries and must be sufficiently intense to allow completion of any procedure underway at the time of a general power failure.
4. Suction equipment must be available that allows aspiration of the oral and pharyngeal cavities. An alternate suction device that will function effectively during a general power failure must be available.

5. A system for delivering oxygen must have adequate full-face masks and appropriate connectors, and be capable of delivering oxygen to the patient under positive pressure. An adequate alternate system for delivering oxygen is also required.

6. A recovery area must be provided that has available oxygen, adequate lighting, suction and electrical outlets. The recovery area may be the operating theater. A member of the staff must be able to observe the patient at all times during the recovery.

7. Except as otherwise provided in this subsection, ancillary equipment must include:

(a) A laryngoscope complete with an adequate selection of blades and spare batteries and bulbs;

(b) Endotracheal tubes and appropriate connectors;

(c) Oral airways;

(d) A tonsillar or pharyngeal suction tip adaptable to all office suction outlets;

(e) An endotracheal tube type forcep;

(f) A sphygmomanometer and stethoscope;

(g) An electrocardioscope and defibrillator;

(h) Adequate equipment for the establishment of an intravenous infusion;

(i) A pulse oximeter; and

(j) A capnography monitor.

Ê Except as otherwise provided in subsection 8, a dentist's office inspected or evaluated for the issuance or renewal of a moderate sedation permit is not required to have the ancillary equipment described in paragraphs (a), (b), (e), (g) and (j).

8. In addition to the requirements of subsection 7, if general anesthesia, deep sedation or moderate sedation is administered at the dentist's office to a patient 12 years of age or younger, the following equipment must be available at the dentist's office:

(a) A pediatric size ambu bag and masks;

(b) Pediatric blood pressure cuffs;

(c) A laryngoscope complete with an adequate selection of blades for use on pediatric patients;

(d) Appropriately sized endotracheal tubes and appropriate connectors;

(e) An electrocardioscope and defibrilator;

(f) Pediatric pads for use with an electrocardioscope and defibrillator; and

(g) Small oral and nasal airways.

(Added to NAC by Bd. of Dental Exam'rs, eff. 10-21-83; A by R005-99, 9-7-2000; R004-17, 5-16-2018)

NAC 631.2229 Inspections and evaluations: Minimum standards for records of patients. (NRS 631.190**,** 631.265**)** A dentist's office inspected or evaluated for the issuance or renewal of a general anesthesia permit, moderate sedation permit or certificate of site approval must meet the following minimum standards with regard to the records of patients:

1. Adequate medical history, records of physical evaluation and American Society of Anesthesiologists acuity classification.

2. Records of the administration of anesthesia must include:

(a) The patient's vital signs;

(b) The names of the drugs and the amounts and times administered;

(c) The length of the procedure; and

(d) Any complications of anesthesia.

(Added to NAC by Bd. of Dental Exam'rs, eff. 10-21-83; A by R005-99, 9-7-2000; R004-17, 5-16-2018)

NAC 631.2231 Inspections and evaluations: Maintenance of emergency drugs. (NRS 631.190**,** 631.265**)**

1. Except as otherwise provided in this section, a dentist's office inspected or evaluated for the issuance or renewal of a general anesthesia permit, moderate sedation permit or certificate of site approval must maintain emergency drugs of the following categories which must be immediately available for use on the patient:

(a) Vasopressor;

(b) Corticosteroid;

(c) Bronchodilator;

(d) Muscle relaxant;

(e) Intravenous medication for the treatment of cardiopulmonary arrest;

(f) Appropriate drug antagonist;
(g) Antihistaminic;
(h) Anticholinergic;
(i) Antiarrhythmic;
(j) Coronary artery vasodilator;
(k) Anti-hypertensive; and
(l) Anti-convulsive.

2. In addition to the requirements of subsection 1, if general anesthesia, deep sedation or moderate sedation is administered at a dentist's office to a patient 12 years of age or younger, the dentist's office must maintain the following emergency drugs:

(a) Appropriate dosages of epinephrine or a pediatric epinephrine auto-injector;
(b) Adenosine;
(c) Aminodarone;
(d) Magnesium sulfate; and
(e) Procainamide.

3. Except as otherwise provided in subsection 2, a dentist's office that is inspected or evaluated for the issuance or renewal of a moderate sedation permit is not required to maintain the emergency drugs described in paragraphs (d), (e), (i) and (k) of subsection 1.

(Added to NAC by Bd. of Dental Exam'rs, eff. 10-21-83; A by R005-99, 9-7-2000; R004-17, 5-16-2018)

NAC 631.2235 Inspections and evaluations: Grading; report of recommendation of evaluator; issuance of permit for passing; failure to pass; request for reevaluation; issuance of order for summary suspension. (NRS 631.190**,** 631.265**)**

1. The persons performing an inspection or evaluation of a dentist and his or her office for the issuance or renewal of a general anesthesia permit or moderate sedation permit shall grade the dentist as passing or failing to meet the requirements set forth in NAC 631.2219 to 631.2231, inclusive. Within 72 hours after completing the inspection or evaluation, each evaluator shall report his or her recommendation for passing or failing to the Executive Director, setting forth the details supporting his or her conclusion.

2. If the dentist meets the requirements set forth in NAC 631.2219 to 631.2231, inclusive, the Board will issue the general anesthesia permit or moderate sedation permit, as applicable.

3. If the dentist does not meet the requirements set forth in NAC 631.2219 to 631.2231, inclusive, the Executive Director shall issue a written notice to the dentist that identifies the reasons he or she failed the inspection or evaluation.

4. A dentist who has received a notice of failure from the Board pursuant to subsection 3:

(a) Must cease the administration of any general anesthesia, deep sedation or moderate sedation until the dentist has obtained the general anesthesia permit or moderate sedation permit, as applicable; and

(b) May, within 15 days after receiving the notice, request the Board in writing for a reevaluation. The request for a reevaluation must state specific grounds supporting it.

5. If the reevaluation is granted by the Board, it will be conducted by different persons in the manner set forth by NAC 631.2219 to 631.2231, inclusive, for an original evaluation.

6. No dentist who has received a notice of failing an inspection or evaluation from the Board may request more than one reevaluation within any period of 12 months.

7. Pursuant to subsection 3 of NRS 233B.127, if an inspection or evaluation of a dentist or his or her office indicates that the public health, safety or welfare imperatively requires emergency action, the President of the Board may, without any further action by the Board, issue an order of summary suspension of the license of the dentist pending proceedings for revocation or other action. An order of summary suspension issued by the President of the Board must contain findings of the exigent circumstances which warrant the issuance of the order of summary suspension. The President of the Board shall not participate in any further proceedings relating to the order.

(Added to NAC by Bd. of Dental Exam'rs, eff. 10-21-83; A by R005-99, 9-7-2000; R004-17, 5-16-2018)

NAC 631.2236 Certificate of site approval: Application; inspection; report of determination of inspector; issuance of certificate for passing; failure to pass; request for reevaluation; issuance of order for summary suspension. (NRS 631.190**,** 631.265**)**

1. A dentist who is licensed in this State may employ a dentist who is licensed in this State and who holds a general anesthesia permit or moderate sedation permit to administer general anesthesia, deep sedation or moderate sedation, as appropriate, to his or her patients at his or her office if he or she holds a certificate of site approval issued pursuant to this section.

2. A dentist who is licensed in this State and who desires to receive or renew a certificate of site approval must submit to the Board:

(a) An application for a certificate or for the renewal of a certificate, in a form approved by the Board;

(b) The fee for the inspection of a facility which is established by the Board pursuant to NRS 631.345; and

(c) Written documentation which demonstrates that the dentist who is to be employed to administer the general anesthesia, deep sedation or moderate sedation holds an appropriate permit issued by the Board to administer such anesthesia or sedation.

3. Upon receipt of an application pursuant to this section, the Board will appoint one of its members or a representative of the Board to inspect the office of the applicant to determine whether the office complies with the requirements set forth in NAC 631.2227, 631.2229 and 631.2231. The person conducting the inspection shall report his or her determination to the Board.

4. If the person conducting the inspection determines that the office of the applicant complies with the requirements of NAC 631.2227, 631.2229 and 631.2231 and the applicant has otherwise met the requirements of this section, the Executive Director shall issue a certificate of site approval to the applicant.

5. A holder of a certificate of site approval shall maintain the information described in paragraph (c) of subsection 2 at his or her office at all times.

6. If the office of the applicant does not meet the requirements set forth in NAC 631.2227, 631.2229 and 631.2231, the Executive Director shall issue a written notice to the licensed dentist who owns the dental practice conducted at the office that identifies the reasons the office failed the inspection.

7. A dentist who has received a notice of failure from the Executive Director pursuant to subsection 6:

(a) Must cease the administration of any general anesthesia, deep sedation or moderate sedation at his or her office until the Board has issued a certificate of site approval for the office; and

(b) May, within 15 days after receiving the notice, request the Board in writing for a reevaluation.

8. If the reevaluation is granted by the Board, it will be conducted by different persons in the manner set forth by NAC 631.2227, 631.2229 and 631.2231 for an original inspection.

9. Pursuant to subsection 3 of NRS 233B.127, if an evaluation or inspection of a dentist's office indicates that the public health, safety or welfare imperatively requires emergency action, the President of the Board may, without any further action by the Board, issue an order of summary suspension of the license of the dentist who owns the dental practice conducted at the office and the licenses of any or all of the other licensees employed at the office pending proceedings for revocation or other action. An order of summary suspension issued by the President of the Board must contain findings of the exigent circumstances which warrant the issuance of the order of summary suspension. The President of the Board shall not participate in any further proceedings relating to the order.

10. Each certificate of site approval issued by the Board must be renewed annually or biennially, as applicable, based on the renewal period set forth in NRS 631.330 for the type of license held by the holder of the certificate.

11. The Board may reinspect the office of the holder of a certificate of site approval at any time.

(Added to NAC by Bd. of Dental Exam'rs by R005-99, eff. 9-7-2000; A by R231-03, 5-25-2004; R158-08, 12-17-2008; R159-08, 4-23-2009; R004-17, 5-16-2018)

NAC 631.2237 Written consent and medical history of patient required before administration of anesthetic or sedation. (NRS 631.190, 631.265)

1. Written consent of the patient must be obtained before the administration of a general anesthetic, deep sedation or moderate sedation, unless the dentist determines that an emergency situation exists in which delaying the procedure to obtain the consent would likely cause permanent injury to the patient. If the patient is a minor, the consent must be obtained from his or her parent or legal guardian.

2. A medical history must be taken before the administration of a general anesthetic, deep sedation or moderate sedation. A patient should be asked to describe any current medical conditions or treatments, including, without limitation, medications, drug allergies, impending or past operations and pregnancy, and to give other information that may be helpful to the person administering the anesthetic or sedation. The dentist is not required to make a complete medical examination of the patient and draw medical diagnostic conclusions. If a dentist suspects a medical problem and calls in a physician for an examination and evaluation, he or she may then rely upon that

conclusion and diagnosis. Questions asked of and answers received from the patient must be permanently recorded and signed by the patient before the administration of any general anesthetic, deep sedation or moderate sedation, and this record must be a permanent part of the patient's record of treatment.

(Added to NAC by Bd. of Dental Exam'rs, eff. 10-21-83; A by R005-99, 9-7-2000; R004-17, 5-16-2018)

NAC 631.2239 Properly equipped facility required; qualifications of auxiliary personnel. (NRS 631.190**,** 631.265**)**

1. A dentist using general anesthesia, deep sedation or moderate sedation shall maintain a properly equipped facility for the administration of the anesthesia or sedation which is staffed with supervised auxiliary personnel who are capable of reasonably handling procedures, problems and emergencies incident thereto.

2. A dentist using general anesthesia, deep sedation or moderate sedation shall ensure that his or her auxiliary personnel are certified in basic cardiopulmonary resuscitation by the American Heart Association or a course providing similar instruction approved by the Board.

(Added to NAC by Bd. of Dental Exam'rs, eff. 10-21-83; A by R005-99, 9-7-2000; R004-17, 5-16-2018)

NAC 631.224 Employment of certified registered nurse anesthetist to administer anesthesia or sedation; restrictions on allowing persons to administer treatment. (NRS 631.190**,** 631.265**)**

1. Any dentist who holds a general anesthesia permit pursuant to the provisions of NAC 631.2211 to 631.2256, inclusive, may employ a certified registered nurse anesthetist to administer the general anesthesia, deep sedation or moderate sedation to a patient if the dentist is physically present and directly supervises the administration of the general anesthesia, deep sedation or moderate sedation to the patient. The holder of the permit must maintain at his or her office evidence in writing that the certified registered nurse anesthetist is licensed to practice in the State of Nevada and maintains unrestricted active staff privileges within the department of anesthesiology at a hospital or surgical center for which a permit is held as required by NRS 449.442.

2. Except as otherwise provided in NAC 631.2236, a dentist who does not hold a general anesthesia permit may not allow any person to administer general anesthesia, deep sedation or moderate sedation to his or her patients unless the treatment is rendered within a facility for which a permit is held as required by NRS 449.442.

(Added to NAC by Bd. of Dental Exam'rs, eff. 10-7-85; A by R005-99, 9-7-2000; R159-08, 4-23-2009; R004-17, 5-16-2018)

NAC 631.2241 Submission of report of injuries to patients; revocation of permit authorized for failure to report. (NRS 631.190**,** 631.265**)** Each holder of a general anesthesia permit, moderate sedation permit or certificate of site approval shall submit to the Board a complete report regarding any mortality or unusual incident which occurs outside a facility for which a permit is held as required by NRS 449.442 and which results in permanent physical or mental injury to a patient or requires the hospitalization of a patient, as a direct result of the administration of general anesthesia, deep sedation or moderate sedation. The report must be submitted within 30 days after the date of the incident. If a dentist fails to report any incident as required by this section, his or her permit may be revoked.

(Added to NAC by Bd. of Dental Exam'rs, eff. 10-21-83; A by R005-99, 9-7-2000; R159-08, 4-23-2009; R004-17, 5-16-2018)

NAC 631.2254 Temporary permits. (NRS 631.190**,** 631.265**)**

1. The Board may grant a temporary permit to administer general anesthesia and deep sedation or a temporary permit to administer moderate sedation to an applicant who meets the qualifications for a permit to administer that type of anesthesia or sedation pursuant to NAC 631.2213.

2. A temporary permit is valid for not more than 90 days, but the Board may, in any case it deems appropriate, grant a 90-day extension of the permit.

3. The Board may require the holder of a temporary permit to pass an on-site inspection as a condition of retaining the permit. If the holder fails the inspection, his or her permit will be revoked. In case of revocation, the holder of a temporary permit may apply to be reinspected in accordance with the procedures set forth in NAC 631.2235.

(Added to NAC by Bd. of Dental Exam'rs, eff. 11-28-90; A by R005-99, 9-7-2000; R004-17, 5-16-2018)

NAC 631.2256 Continuing education required. (NRS 631.190**,** 631.265**,** 631.342**)** Every 2 years, the holder of a general anesthesia permit or moderate sedation permit must complete at least 6 hours in courses of study that specifically relate to anesthesia or sedation, as applicable, before the permit may be renewed. This training will be credited toward any continuing education required by NAC 631.173.

(Added to NAC by Bd. of Dental Exam'rs, eff. 11-28-90; A by R005-99, 9-7-2000; R004-17, 5-16-2018)