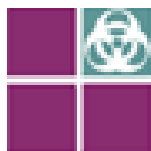


EMERGENCY DRILL KIT

A Guide to Conducting Emergency Drills
in a Washington State Dental Office



Preparing for a
Patient Emergency



HARRISBIOMEDICAL™

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Dental Office Emergency Drills

Washington State Department of Health, Dental Quality Assurance Commission requires licensed dentists who administer moderate sedation with enteral agents, parenteral agents, or general anesthesia to perform a minimum of twelve emergency drill scenarios at least two times per year. The following guide can be used as you perform each drill.

Conducting Your Emergency Drills

- **Plan** emergency drills
 - Schedule at least ten to fifteen minutes per drill
- **Select** which scenario(s) you'll perform this session
 - Conduct a total of twelve drills two times per year
- **Review** the selected scenario sheet(s)
 - Discuss the disorder, cause and symptoms – involve entire staff
- **Discuss** how the patient emergency can be avoided
 - i.e.: careful review of patient health history, checking vitals, etc.
- **Conduct** Emergency Drill, making it as realistic as possible
 - Have staff member play the role of the compromised patient
- **Evaluate** the results of each drill with all participants
 - Identify improvements to your emergency preparedness
- **Document** your drills on the EMERGENCY DRILL RECORD
 - Doctor signs the completed form and retains for three years



EMERGENCY DRILL RECORD

MAINTAIN THIS RECORD FOR THREE YEARS

WAC 246-817-774(3)(d) requires licensed dentists who administer moderate sedation with enteral agents, parenteral agents, or general anesthesia to perform a minimum of twelve emergency drill scenarios at least two times per year.

DATE OF DRILL	TYPE OF DRILL PERFORMED	DR. CONDUCTING DRILL

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I declare the above information is true and correct: _____
DOCTOR'S PRINTED NAME DOCTOR'S SIGNATURE DATE

TEAM RESPONSE TO ADRENAL CRISIS

Observe: does the patient exhibit **ANY** of these symptoms?

- Confusion
- Loss of consciousness
- High fever.
- Does the patient complain of:
 - Flank pain - between lower ribs and hips on the patient's sides and back?
 - Abdominal pain?
 - Severe fatigue or weakness?
 - Dizziness?
 - Headache?
- **ALERT TEAM** that you have an emergency
- Call **911 IMMEDIATELY** and report adrenal crisis symptoms the operator
 - Do not let the patient talk you out of calling 911
 - Call from closest landline phone
 - Use cordless phone if available
 - Stay on the phone and provide information to 911 operator as needed
- Have team member stand by with emergency equipment or Crash Cart
- Check pulse and observe breathing
- Check and record blood pressure
- Record time the symptoms were first observed
- Have team member wait outside to greet ambulance
 - When ambulance is observed, immediately begin hailing it
 - Lead EMS crew to patient
 - Provide relevant patient information to EMS crew
- Have team member print patient's health history to send to hospital with EMS crew

NOTE: *Prior to dental treatment, always ask known Addison's disease or adrenal insufficiency patients if they've taken their medications. Ask if they carry an emergency medical information card that includes the names and doses of their daily medications.*

ADRENAL CRISIS FACTS

Adrenal insufficiency can be caused by Addison disease or other autoimmune disorders. An adrenal crisis is a life-threatening condition in which the patient's adrenal glands don't make enough cortisol. Adrenal crisis can be caused by damage to adrenal glands and other stressors. Adrenal crisis is a serious medical emergency.

TEAM RESPONSE TO ALLERGIC REACTION

Observe: does the patient exhibit or report **ANY** of these symptoms?

- Itchy, watery eyes?
- Itchy, runny nose?
- Sneezing?
- Rashes?
- Hives (rash with raised red patches)?
- Stomach cramps?
- If symptoms are mild:
 - Administer antihistamine, such as Benadryl or Diphenhydramine
- If patient exhibits severe symptoms:
 - Airway constriction
 - Swollen tongue or throat
 - Wheezing difficulty breathing.
- Treat for Anaphylaxis:
 - Administer epinephrine from emergency medications
 - If patient carries epi-pen, allow them to administer and assist if necessary
- **ALERT TEAM** that you have an emergency
- Call **911 IMMEDIATELY** and report anaphylaxis symptoms the operator
 - Do not let the patient talk you out of calling 911
 - Call from closest landline phone
 - Use cordless phone if available
 - Stay on the phone and provide information to 911 operator as needed
- Monitor and record blood pressure
- Record time the symptoms were first observed
- Have team member wait outside to greet ambulance
 - When ambulance is observed, immediately begin hailing it
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ALLERGIC REACTION FACTS

An allergy occurs when the body's immune system sees a substance as harmful and overreacts to it, resulting in an allergic reaction. The substances that cause allergic reactions are allergens. Allergens, such as pollen, dust, mold spores, cat and dog dander, can be inhaled. Allergens, such as food and swallowed medications can be ingested. Allergens, such as venom from insect stings and bites, can be injected. Allergens, such as latex, poison ivy, and sumac, can be absorbed through your skin. Anaphylaxis is a most severe, life-threatening allergic reaction. It can happen seconds or minutes after a person has been exposed to something they're allergic to.

TEAM RESPONSE TO ANGINA

Observe: does the patient exhibit **ANY** of these symptoms?

- Pressing, squeezing, or crushing pain under the breastbone?
- Pain in upper back, both arms, neck or ear lobes?
- Pain radiating in arms, shoulders, jaw, neck or back?
- Sweating
- Does the patient complain of:
 - Shortness of breath?
 - Feeling faint?
 - Dizziness?
 - Nausea?
- **ALERT TEAM** that you have an emergency
- Call **911 IMMEDIATELY** and report symptoms to the operator
 - Call from closest landline phone
 - Use cordless phone if available
 - Stay on the phone to communicate with 911 operator as needed
 - Allow the patient remain seated and relaxed
 - Do not let the patient talk you out of calling 911
- If patient has history of angina, and has nitroglycerin, assist them – place it under their tongue
- If the patient has does not have a history of angina or does not have their nitroglycerin
 - Inform the 911 operator that you have the medication
 - follow operator/EMS instructions for administration of medication
- Have team member stand by with emergency equipment or Crash Cart
- Monitor pulse and observe breathing
- Check and record blood pressure
- Record time the symptoms were first observed
- Have team member wait outside to greet ambulance
 - When ambulance is observed, immediately begin hailing it
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ANGINA FACTS

Angina is caused by reduced blood flow to the heart. Blood carries oxygen, which the heart muscle needs to survive. When the heart isn't getting enough oxygen, it causes a condition called ischemia. During times of low oxygen demand, when resting, for example, the heart may still be able to work on the reduced amount of blood flow without triggering angina symptoms. When the demand for oxygen increases, such as when under emotional stress, or exercising, angina can result.

TEAM RESPONSE TO AN ASTHMA ATTACK

Observe: does the patient exhibit ANY of these symptoms?

- Coughing, severe and constant
- Wheezing when exhaling
- Rapid breathing
- Rapid heartbeat
- Drowsiness
- Confusion
- Blue lips or fingers.
- Syncope
- Does the patient complain of:
 - Difficulty getting enough air?
 - Tightness in the chest?
 - Dizziness?
 - Anxiety?
 - Sudden worsening of symptoms?
- Comfort the patient and have them sit up straight
 - If patient has an inhaler have them take one puff every 30 to 60 seconds
 - If patient has no inhaler, use bronchodilator (albuterol) from your emergency medications
 - Oversee patient taking up to 10 puffs
 - If 10 puffs do not relieve symptoms or if symptoms worsen:
- **ALERT TEAM** that you have an emergency
- Call **911 IMMEDIATELY** and report asthma attack symptoms the operator
 - Do not let the patient talk you out of calling 911
 - Call from closest landline phone
 - Use cordless phone if available
 - Stay on the phone and provide information to 911 operator as needed
- Monitor pulse and observe breathing
- Record time the symptoms were first observed
- Have team member wait outside to greet ambulance
 - When ambulance is observed, immediately begin hailing it
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ASTHMA FACTS

Asthma is a chronic condition that affects the airways in the lungs. If you have asthma, the airways can become inflamed and narrowed at times, making it harder for air to flow out of the airways when breathing. About 1 in 13 people in the U.S. has asthma. It affects people of all ages and often starts in childhood. Certain things can set off or worsen asthma symptoms, such as pollen, exercise, viral infections, or cold air. These are called asthma triggers. When symptoms get worse, it is called an asthma attack.

TEAM RESPONSE TO CHOKING

Observe: does the patient exhibit **ANY** of these symptoms?

- One or both hands clutched to the throat?
- A look of panic, shock or confusion?
- Inability to speak?
- Strained or noisy breathing?
- Squeaking sounds when trying to breathe?
- Discoloration of skin, lips and nails - turning blue or gray?
- If patient is coughing forcefully
 - Let the patient continue to cough, which might clear the airway
- If the patient is unable to cough
 - Stand behind and wrap your arms around the patient's waist
 - Place your forearms on the patient's hip bones and make a fist with your thumb in
 - Grasp the fist with the other hand
 - Thrust in with a quick, upward thrust as if trying to lift the person up
 - For a child, use gentle yet firm pressure to avoid damaging the internal organs.
 - Give five abdominal thrusts
 - Repeat as needed
- **If patient loses consciousness**, gently slide them down your body to the floor, protecting their head
 - Start CPR including 30 chest compressions and 2 rescue breaths
 - If the person is pregnant or you can't get your arms around the stomach, give chest thrusts
- **ALERT TEAM** that you have an emergency
- Call **911 IMMEDIATELY** and report choking symptoms the operator
 - Use cordless phone if available
 - Stay on the phone and provide information to 911 operator as needed
- Have team member wait outside to greet ambulance
 - When ambulance is observed, immediately begin hailing it
 - Lead EMS crew to patient
 - Provide relevant patient information to EMS crew
- Have team member print patient's health history to send to hospital with EMS crew

CHOKING FACTS

Choking is the stoppage of the flow of air from the environment into the lungs. Choking prevents breathing, and can be partial or complete, with partial choking allowing some, although inadequate, flow of air into the lungs.

Prolonged or complete choking results in asphyxia which leads to anoxia and is potentially fatal. Choking is leading cause of death in persons over the age of 65. A choking death occurs every two hours. Choking causes Over 100,000 visits to the ER yearly.

TEAM RESPONSE TO HEART ATTACK

Observe: does the patient appear unresponsive?

- Call patient's name loudly while tapping their chest firmly
- If unresponsive, check patient's pulse for at least five seconds, but not more than ten seconds
- While checking pulse, observe patient's chest for signs of breathing
- **ALERT TEAM** that you have an emergency
- Call **911 IMMEDIATELY** and report heart attack symptoms the operator
 - Call from closest landline phone
 - Use cordless phone if available
 - Stay on the phone and communicate with 911 operator as needed
- Recline chair and support if needed
- Begin CPR chest compressions
 - Adult patient: compress chest at least 2" but not more than 2.4"
 - Child or infant patient: compress 1/3 but not more than 1/2 the depth of the chest
 - Compress at least 100 per minute - not more than 120 per minute
- Have team member bring AED - immediately turn it on and prepare for use
 - With trauma sheers cut clothing from patient's chest
 - Shave pad placement area with surgical prep razor, if necessary
 - Apply AED pads as indicated
- **ALERT TEAM** that AED is analyzing – DO NOT TOUCH PATIENT
- Listen to AED and if instructed to shock, **ALERT TEAM THAT YOU ARE SHOCKING**
- When shock is delivered, observe patient to ensure nobody is touching
- Leave AED pads in place and, if needed, continue CPR beginning with compressions
- Have team member bring oxygen/bag-valve-mask and prepare for use
 - Open tank and set regulator to at least 4 liters per minute
 - Place bag-valve-mask on patient and open airway with head tilt – chin lift
 - Deliver 2 breaths as team member giving chest compressions pauses after 30 compressions
- Record time the symptoms were first observed
- Have team member wait outside to greet ambulance
 - When ambulance is observed, immediately begin hailing it
 - Lead EMS crew to patient
 - Provide relevant patient information to EMS crew
- Have team member print patient's health history to send to hospital with EMS crew

HEART ATTACK FACTS

A heart attack occurs when blood flow to the heart is blocked due to a clogged artery. The blockage prevents blood from reaching a section of the heart. If not reopened quickly, the section of the heart not receiving blood will begin to die.

Sudden Cardiac Arrest (SCA) occurs when the heart stops beating or develops a chaotic rhythm. Often, there are no warning signs or symptoms. The effective treatment of SCA is defibrillation with an AED or defibrillator.

TEAM RESPONSE TO HYPOGLYCEMIA

Observe: does the patient exhibit **ANY** of these symptoms?

- Confusion
- Irritability or impatience
- Nervousness or anxiety
- Sweating
- Does the patient complain of:
 - Feeling cold and clammy?
 - Feeling shaky?
 - Being lightheaded or dizzy?
 - Feeling a rapid heartbeat?
 - Hunger?
- If the patient is known to have diabetes
 - Give the patient glucose, fruit juice, regular (not diet) soda, or any sugary food or drink
- Observe patient – they should recover within about fifteen minutes
 - If patient has their own monitor, ask them to check their glucose level
- If the patient doesn't recover quickly or symptoms become more severe:
- **ALERT TEAM** that you have an emergency
- Call **911 IMMEDIATELY** and report symptoms to the operator
 - Do not let the patient talk you out of calling 911
 - Call from closest landline phone
 - Use cordless phone if available
 - Stay on the phone and provide information to 911 operator as needed
- Have team member stand by with emergency equipment or Crash Cart
- Check pulse and observe breathing
- Check and record blood pressure and pulse
- Record time the symptoms were first observed
- Have team member wait outside to greet ambulance
 - When ambulance is observed, immediately begin hailing it
 - Lead EMS crew to patient
 - Provide relevant patient information to EMS crew
- Have team member print patient's health history to send to hospital with EMS crew

NOTE: Ask known diabetic patients the last time they've eaten and closely observe their behavior prior to treatment.

HYPOGLYCEMIA FACTS

Hypoglycemia is a condition often related to diabetes, in which the patient's blood sugar (glucose) level is lower than the standard range. Certain drugs, and a variety of medical conditions can also cause low blood sugar in people who don't have diabetes. If blood glucose stays low for too long, starving the brain of glucose, it can lead to seizures, coma, and, in very rare cases, death.

TEAM RESPONSE TO POSTURAL HYPOTENSION

Observe: upon attempting to stand, does the patient exhibit **ANY** of these symptoms?

- Lightheadedness?
- Dizziness?
- Blurred vision?
- Weakness?
- Confusion?
- Syncope (fainting)?
- Immediately assist the patient in sitting down or laying back in the dental chair.
- Call for another team member to help you
- Monitor the patient. When patient reports that symptoms have subsided:
 - Assist the patient in sitting up
- If patient reports that symptoms have not returned:
 - With the assistance of second team member, carefully assist the patient in standing up
- If symptoms do not subside or new symptoms develop:
 - **ALERT TEAM** that you have an emergency
 - Call **911 IMMEDIATELY** and report symptoms the operator
 - Do not let the patient talk you out of calling 911
 - Call from closest landline phone
 - Use cordless phone if available
 - Stay on the phone and provide information to 911 operator as needed
 - Have team member stand by with emergency equipment or Crash Cart
 - Check pulse and observe breathing
 - Check and record blood pressure
 - Record time the symptoms were first observed
 - Have team member wait outside to greet ambulance
 - When ambulance is observed, immediately begin hailing it
 - Lead EMS crew to patient
 - Provide relevant patient information to EMS crew
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POSTURAL HYPOTENSION FACTS

Postural hypotension, also called orthostatic hypotension, is a form of low blood pressure that happens when standing after sitting or lying down. Postural hypotension can cause dizziness or lightheadedness and possibly fainting. Postural hypotension can be mild, and episodes might be brief. Typically, the body can regulate blood pressure during movements, but in people with postural hypotension, this regulation fails.

TEAM RESPONSE TO SEIZURE

Observe: does the patient exhibit **ANY** of these symptoms?

- Uncontrolled jerking movements of the arms and legs?
- Temporary confusion?
- A staring spell?
- Loss of awareness?
- Loss of consciousness?
- Does the patient exhibit cognitive or emotional changes:
 - Fear?
 - Anxiety?
 - Feeling of deja vu?
 - Repetitive movements such as hand rubbing or mouth movements?
 - Repeating certain words?
 - Walking in circles?

NOTE: *if patient's health history includes a controlled seizure disorder, 911 might not be necessary if symptoms are consistent with those reported on health history. If there is any doubt, EMS is necessary - call 911*

- **ALERT TEAM** that you have an emergency
- Call **911 IMMEDIATELY** and report seizure symptoms the operator
 - Do not let the patient talk you out of calling 911
 - Call from closest landline phone
 - Use cordless phone if available
 - Stay on the phone and provide information to 911 operator as needed
- If seizure includes uncontrolled movement or convulsions
 - Do not try to restrain the patient
 - Stand behind dental chair - grasp clothing on patient's upper arms to prevent falling from chair
 - If patient is on floor, move furniture or items that could cause injury
 - When seizure ends
 - Loosen tight clothing
 - If on floor, place patient in recovery position in case of vomiting
 - If in dental chair, stand by with suction in case of vomiting
- Have team member wait outside to greet ambulance
 - When ambulance is observed, immediately begin hailing it
 - Lead EMS crew to patient
 - Provide relevant patient information to EMS crew
- Have team member print patient's health history to send to hospital with EMS crew

SEIZURE FACTS

Seizures are sudden, uncontrolled bursts of electrical activity in the brain. It can cause changes in behavior, movements, feelings, and consciousness levels. Two or more seizures at least 24 hours apart, without a known cause, is epilepsy. Seizures have a range of symptoms and severity. Seizures vary by where they begin in the brain and how far they spread.

TEAM RESPONSE TO SEPSIS

Observe: does the patient exhibit **ANY** of these symptoms?

- Rapid heartbeat?
- Weak pulse?
- Fever, shivering, or feeling very cold?
- Confusion or disorientation?
- Shortness of breath?
- Extreme pain or discomfort?
- Clammy or sweaty skin?
- **ALERT TEAM** that you have an emergency
- Call **911 IMMEDIATELY** and report sepsis or septic shock symptoms the operator
 - Do not let the patient talk you out of calling 911
 - Call from closest landline phone
 - Use cordless phone if available
 - Stay on the phone and provide information to 911 operator as needed
- Immediately provide high flow oxygen
- Monitor and record oxygen saturation
- Have team member stand by with other emergency equipment or Crash Cart
- Monitor and record pulse and respiration
- Monitor and record blood pressure
- Record time the symptoms were first observed
- Have team member wait outside to greet ambulance
 - When ambulance is observed, immediately begin hailing it
 - Lead EMS crew to patient
 - Provide relevant patient information to EMS crew
- Have team member print patient's health history to send to hospital with EMS crew

SEPSIS FACTS

Sepsis is a serious condition in which the body reacts improperly to an infection. The infection-fighting processes turn on the body, causing the organs to work poorly. Sepsis may progress to septic shock. This is a dramatic drop in blood pressure that can damage the lungs, kidneys, liver and other organs. Sepsis can cause hypoperfusion, which is reduced blood flow to the organs. In the U.S., about 1.7 million adults develop sepsis annually.

Sepsis is sometimes referred to as septicaemia, however, they are not the same thing. Septicaemia is when bacteria enter the bloodstream and cause blood poisoning. This can trigger sepsis, but sepsis can also be caused by other infections.

TEAM RESPONSE TO A STROKE

Observe: does the patient exhibit **ANY** of these symptoms?

- Face drooping – ask patient to smile – is it equal on both sides of the face?
- Difficulty speaking - ask patient to say a phrase such as “Mary had a little lamb” – is it slurred or garbled?
- Muscle weakness – ask patient to extend arms in front of their body – is one side weaker?
- Does the patient complain of:
 - Headache?
 - Nausea?
 - Dizziness?
- **ALERT TEAM** that you have an emergency
- Call **911 IMMEDIATELY** and report stroke symptoms the operator
 - Do not let the patient talk you out of calling 911
 - Call from closest landline phone
 - Use cordless phone if available
 - Stay on the phone and provide information to 911 operator as needed
- Have team member stand by with emergency equipment or Crash Cart
- Check pulse and observe breathing
 - Most stroke patients don't require CPR but perform it if necessary
- Check and record blood pressure
- Record time the symptoms were first observed
- Do not let the patient go to sleep
- Do not give patient any medication, food or drink
- Have team member wait outside to greet ambulance
 - When ambulance is observed, immediately begin hailing it
 - Lead EMS crew to patient
 - Provide relevant patient information to EMS crew
- Have team member print patient's health history to send to hospital with EMS crew

STROKE FACTS

Stroke affects 800,000 people annually in the United States

Every 40 seconds, someone in the United States suffers a stroke

Every 4 minutes, someone dies from a stroke

87% of strokes are caused by a blood clot in the brain that can be treated medically but you must **act FAST**

ACT FAST:

FACE drooping - **ARM** weakness - **SPEECH** difficulty - **TIME** to call 911

TEAM RESPONSE TO SYNCOPE

Observe: does the patient exhibit **ANY** of these symptoms?

- Pre-syncope – the feeling that they’re about to faint
 - Dizziness
 - Visual “gray out”
 - Tunnel vision
 - Difficulty hearing
 - Weakness
 - Suddenly sweating
 - Palpitations

If the patient goes into syncope and does not regain consciousness **within one minute**

- Leave the patient in a recumbent position with feet slightly elevated
- Loosen belts and tight clothing
- **ALERT TEAM** that you have an emergency
- Call **911 IMMEDIATELY** and report symptoms the operator
 - Call from closest landline phone
 - Use cordless phone if available
 - Stay on the phone and provide information to 911 operator as needed
- Have team member stand by with emergency equipment or Crash Cart
- Check pulse and observe breathing
 - Perform CPR if necessary
- Check and record blood pressure
- Record time the symptoms were first observed
- Have team member wait outside to greet ambulance
 - When ambulance is observed, immediately begin hailing it
 - Lead EMS crew to patient
 - Provide relevant patient information to EMS crew
- Have team member print patient’s health history to send to hospital with EMS crew

SYNCOPE FACTS

Syncope is fainting or passing out. It occurs when there is not enough blood flow to the brain. A person is considered to have syncope if they become unconscious, go limp, and quickly recover. For most people, syncope occurs rarely, and it is not a sign of serious illness. However, syncope can be the first and only warning sign of Sudden Cardiac Arrest (SCA).

Reflex syncope: Vasovagal syncope affects about one third of the population. It is the most common form of reflex syncope. It can be triggered by a combination of dehydration and upright posture. Vasovagal syncope can also have an emotional trigger such as seeing the dental anesthetic syringe, or seeing blood (fainting at the sight of blood).

Syncope is more common as we age, affecting about 6% of people over 75.