# Medical Emergency Treatment Recommendations

**Emergency Protocol** (revised 4/2014)

**Emergency Contacts:** Nursing/Allied Health Division Office- 423-697-4450

<table>
<thead>
<tr>
<th>Category</th>
<th>Signs and Symptoms</th>
<th>Procedure Protocol and Treatment Recommendations</th>
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<tbody>
<tr>
<td><strong>Asthma Attack</strong></td>
<td>Dyspnea, wheezing, coughing, increased sputum, nervousness, cyanosis, chest tightness, increased heart rate, confusion, sweating, &amp; flushed appearance</td>
<td><em>Place patient’s bronchodilator on bracket trayt</em></td>
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<td>Emergency Protocol:</td>
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<td></td>
<td>1. Stop treatment</td>
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<td>2. Position patient upright</td>
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<td>3. Have patient administer own bronchodilator</td>
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<td>4. Administer oxygen (6 liters)</td>
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<td>5. Doctor administer epinephrine from emergency kit if attack is life-threatening</td>
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<td>6. Call EMS</td>
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<td><strong>Syncope (Fainting) Vasopressor</strong></td>
<td>Unconsciousness</td>
<td>1. Stop all treatment</td>
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<td>Early signs: Feeling of warmth, loss of color; pale or ashen-gray, heavy perspiration, nausea, bp may be low, tachycardia</td>
<td>2. Place patient in supine position</td>
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<td>Late signs: pupillary dilation, yawning, hyperpea, cold hands &amp; feet, hypotension, bradycardia, dizziness</td>
<td>3. Assess for ABC (airway, breathing, circulation)</td>
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<td>4. Administer oxygen, if needed</td>
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<td>5. Monitor vital signs</td>
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<td>6. Use ammonia capsule</td>
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<td>7. If individual remains unconscious longer than 15-20 minutes, summon EMS</td>
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<td>8. Reschedule patient and document information in record</td>
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<tr>
<td><strong>Postural Hypotension</strong></td>
<td>Causes: Administration &amp; ingestion of drugs, prolonged convalescence, late-stage pregnancy, advanced age, various defects in legs (varicose veins), Addison’s disease, physical exhaustion, starvation, chronic postural hypotension</td>
<td>Prevention:</td>
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<td>1. Slowly reposition patient upright</td>
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<td>2. Stand nearby after patient stands after treatment</td>
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### Diabetic Hypoglycemia

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<tr>
<th>Symptoms: hunger, headache, irritable (sudden crying), anger, blurred vision, numbness of lips &amp; tongue, slurred speech, fainting, trembling, dizziness, weakness, fatigue, rapid heartbeat, pale, sweating, perspiration, personality changes, anxiety</th>
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<tr>
<td><em>Treat all diabetic emergencies as hypoglycemia if unknown</em></td>
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**If conscious administer sugar source:**

**Administer 15 g of carbs:**

- 2-3 glucose tablets, 4-5 oz juice or cola
- 4 teaspoons of table sugar or cake icing
- 5-6 pieces of hard candy
- 2 TBLS raisins

Check glucose level in 15-20 minutes after treating hypoglycemia

**If unconscious:**

1. Give injection of glucagon
2. Call EMS
3. Stay with emergency personnel until patient is taken care of
4. Document in patient’s dental chart

### Diabetic Hyperglycemia

| Increased thirst & urination, shortness of breath, fruity breath (acetone), loss of appetite, nausea & vomiting, fatigue, abdominal pain, Kaussmaul breathing (rapid breathing) |

**If conscious:** Have patient administer own insulin

**If unconscious:** Call EMS

### Airway Obstruction

| Partial obstruction with good air exchange: forceful cough, wheezing between coughs, ability to breath |
| Partial obstruction with poor air exchange: weak, ineffective cough, a "crowing" sound on inspiration, paradoxical respiration, absent or altered voice sounds, possible cyanosis, lethargy, disorientation |

**Complete airway obstruction - inability to speak, breath, or cough; universal sign for choking, panic**

**Partial airway obstruction w/good air exchange** - encourage patient to cough until object is expelled; do not intervene

**Partial obstruction w/inadequate air exchange** - treat as a complete airway obstruction

**Complete** - administer Heimlich maneuver (with a pregnant patient administer chest thrust instead of abdominal thrusts)
### Medical Emergency Treatment Recommendations

<table>
<thead>
<tr>
<th>Condition</th>
<th>Symptoms</th>
<th>Treatment Overview</th>
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</table>
| **Hyperventilation**          | Palpitations, tachycardia, dizziness, disturbances in consciousness & vision, numbness & tingling in extremities, shortness of breath, chest pain, dryness of mouth, muscle pain & cramps, tremor, stiffness, tension, anxiety, nightmares | 1. Stop treatment  
2. Position patient upright  
3. Remove objects from mouth  
4. Have patient breath in paper bag or cupped hands  
5. Reassure patient  
6. Encourage to breathe very slowly and deeply (4-6 breaths a minute)  
7. Continue treatment (if doctor & patient comfortable doing so) or dismiss |
| **Seizure/Epilepsy**          | May be preceded by an aura (change in smell, taste, or sight), loss of consciousness.  
**Tonic phase** - Contraction of voluntary muscles (body stiffens). Lungs contract & force air through glottis causing an “epileptic cry.” Irregular breathing, cyanosis, occasional loss of bladder or bowel  
**Clonic phase** - Limbs jerk, caused by muscles contracting & relaxing, patient may bite tongue & inside of cheeks | 1. Stop treatment  
2. Position patient in supine  
3. Cushion head to protect from injury; loosen tight clothing  
4. Do not stop convulsion or restrain patient  
5. Monitor vital signs  
6. Reassure patient  
7. Call EMS if seizure continues after 5 minutes |
| **Myocardial Infarction/Heart Attack** | Sudden loss of responsiveness                                                               | Immediate action required! Call EMS  
1. Retrieve AED  
2. Begin CPR |
| **Angina Pectoris**           | Chest pain  
Discomfort (crushing, burning, or squeezing pain radiates in shoulder, arm, neck, mandible  
Pain can last from 1-15 min Patient may have excess sweating, labored breathing; precipitated by exertion or stress | 1. Stop treatment  
2. Allow patients to position themselves comfortably  
3. BLS as needed  
4. Administer nitroglycerin  
5. Administer oxygen, preferably by nasal cannula  
6. Monitor vital signs  
7. Provide BLS as needed |
### Congestive Heart Failure (CHF) or Acute Pulmonary Edema

**Heart Failure:** Pallor, cool skin, sweating, weakness & undue fatigue, dyspnea on exertion, hyperventilation, nocturia, wheezing  

**Pulmonary Edema:** all the symptoms above plus: increased anxiety, dyspnea at rest. Tachypnea, cyanosis, frothy pink sputum  

1. Stop treatment  
2. Position comfortably in upright position  
3. Remove all dental materials  
4. Activate EMS  
5. Calm patient  
6. Administer oxygen  
7. Monitor vital signs  
8. Administer vasodilator (nitroglycerin)

### Generalized Anaphylaxis

Lightheadedness, generalized weakness, syncope, chest pain, tachycardia  

1. Stop treatment  
2. Position patient in supine  
3. BLS as needed  
4. Activate EMS  
5. Administer Epinephrine from emergency kit  
6. Administer oxygen  
7. Monitor vital signs

### Stroke

Sudden numbness/weakness of face, arm or leg, especially on one side of body. Patient may exhibit: sudden confusion, trouble speaking, or understanding, trouble seeing in one or both eyes, trouble walking, & dizziness, loss of balance or coordination, headaches with no known cause  

**FAST** = easy way to remember sudden signs of stroke:  

F = face drooping  
A = Arm weakness  
S = speech difficulty  
T = time to call 911  

1. Call EMS  
2. Stop treatment  
3. Position patient head slightly elevated  
4. Monitor vital signs  
5. Administer oxygen  
6. Monitor airway  
7. Provide BLS as necessary

Ask patient to: **S** to smile; **T** to talk; **R** to raise both arms

### References:

Malamed, “Medical Emergencies in the Dental Office, 6th Ed.”  
Wilkins, “Clinical Practice of the Dental Hygienist, 11th Ed.”