

Management of Medical Emergencies

For all emergencies

1. Discontinue dental treatment
2. Call for assistance/someone to bring oxygen and emergency kit
3. Position patient: ensure open and unobstructed airway
4. Monitor vital signs
5. Be prepared to support respiration, support circulation, call for additional help

Condition	Signs and symptoms	Treatment	Drug dosage	Drug delivery
Allergic reaction (mild or delayed)	Hives; itching; edema; erythema—skin, mucosa, conjunctiva	<ol style="list-style-type: none"> 1. Discontinue all sources of allergy-causing substances 2. Administer diphenhydramine 	Diphenhydramine 1 mg/kg Child: 10-25 mg qid Adult: 25-50 mg qid	Oral
Allergic reaction (sudden onset): anaphylaxis	Urticaria—itching, flushing, hives; rhinitis; wheezing/difficulty breathing; bronchospasm; laryngeal edema; weak pulse; marked fall in blood pressure; loss of consciousness	This is a true, life-threatening emergency <ol style="list-style-type: none"> 1. Call for medical help 2. Administer epinephrine 3. Administer oxygen 4. Monitor vital signs 	Epinephrine 1:1000 0.01 mg/kg every 5 min until recovery or until help arrives	IM or SubQ
Acute asthmatic attack	Shortness of breath; wheezing; coughing; tightness in chest; cyanosis; tachycardia	<ol style="list-style-type: none"> 1. Sit patient upright or in a comfortable position 2. Administer oxygen 3. Administer bronchodilator 4. If bronchodilator is ineffective, administer epinephrine 	<ol style="list-style-type: none"> 1. Try patient's inhaler or one from emergency kit 2. Epinephrine 1:1000 0.01 mg/kg every 15 min as needed 	Inhale IM or SubQ
Anesthetic toxicity	Light-headedness; changes in vision and/or speech; changes in mental status—confusion; agitation; tinnitus; tremor; seizure; tachypnea; bradycardia; unconsciousness; cardiac arrest	<ol style="list-style-type: none"> 1. Assess and support airway, breathing, and circulation 2. Administer oxygen 3. Monitor vital signs 4. Transport to emergency center as indicated 	Supplemental oxygen	Mask
Anesthetic reaction: vasoconstrictor	Anxiety; tachycardia/palpitations; restlessness; headache; tachypnea; chest pain; cardiac arrest	<ol style="list-style-type: none"> 1. Reassure patient 2. Assess and support airway, breathing, and circulation 3. Administer oxygen 4. Monitor vital signs 5. Transport to emergency center as indicated 	Supplemental oxygen	Mask
Overdose: benzodiazepine	Somnolence; confusion; diminished reflexes; respiratory depression; apnea; respiratory arrest; cardiac arrest	<ol style="list-style-type: none"> 1. Assess and support airway, breathing, and circulation 2. Administer oxygen 3. Monitor vital signs 4. Establish IV access and reverse with flumazenil 5. Monitor recovery 	Flumazenil 0.01 mg/kg (not to exceed a total of 1 mg) at a rate not to exceed 0.2 mg/min	IV
Overdose: narcotic	Decreased responsiveness; respiratory depression; respiratory arrest; cardiac arrest	<ol style="list-style-type: none"> 1. Assess and support airway, breathing, and circulation 2. Administer oxygen 3. Monitor vital signs 4. Reverse with naloxone 5. Monitor recovery 	Naloxone 0.01 mg/kg (may repeat after 2-3 min)	IV, IM, or SubQ
Seizure	Warning aura—disorientation, blinking, or blank stare; uncontrolled muscle movements; muscle rigidity; unconsciousness; postictal phase—sleepiness, confusion, amnesia, slow recovery	<ol style="list-style-type: none"> 1. Recline and position to prevent injury 2. Ensure open airway and adequate ventilation 3. Monitor vital signs 4. If status is epilepticus, give diazepam 	Diazepam Child up to 5 y: 0.2-0.5 mg slowly every 2-5 min with maximum=5 mg Child 5 y and up: 1 mg every 2-5 min with maximum=10 mg	IV
Syncope (fainting)	Feeling of warmth; skin pale and moist; pulse rapid initially then gets slow and weak; dizziness; hypotension; cold extremities; unconsciousness	<ol style="list-style-type: none"> 1. Recline, feet up 2. Loosen clothing that may be binding 3. Ammonia inhaler 4. Administer oxygen 5. Cold towel on back of neck 6. Monitor recovery 	Ammonia in vials	Inhale

Copyright of Pediatric Dentistry is the property of American Society of Dentistry for Children and its content may not be copied or emailed to multiple sites or posted to a listserv without the copyright holder's express written permission. However, users may print, download, or email articles for individual use.