

Suspected Overdose Or Exposure To An Unknown Drug:

Utilize ACLS and PALS guidelines as needed

Call poison control at **1-800-222-1222**

Obtain good patient history (scene where patient was found, look for possible overdose agents, gather all pill bottles, take pictures, look for things out of place (e.g. antifreeze in the kitchen). May need to obtain information from EMS, friend, or family member

Determine if a **toxidrome** is present by looking at signs and symptoms
VS: Heart rate, blood pressure, temperature, respiratory rate, oxygenation
Physical Exam: ENT, neuro, pulmonary, CV, GI/GU, dermatologic, and odors

Obtain and assess **laboratory** data:

CMP – assess for acidosis (low bicarb or CO₂), hyper/hypoglycemia, electrolyte abnormalities, renal and liver function

Calcium/Magnesium – low calcium, magnesium or potassium may contribute to QTc prolongation

ABG – obtain in all patients with hypotension or respiratory failure

Lactic acid – obtain if acidotic or if suspecting cyanide or metformin

CPK – obtain if patient was seizing, found down, or persistent agitation

Coagulation studies – may be elevated in liver injury or after anticoagulant exposure

Serum Osmolality – aids in determining if a toxic alcohol was ingested (a normal osmolality cannot rule out toxic alcohol ingestion)

Urinalysis – may detect myoglobinuria, hematuria, or crystalluria (ethylene glycol ingestion cannot be ruled out just because calcium oxalate crystals are absent)

CBC – obtain if risk of exposure to a bone marrow suppressing agent (e.g. colchicine or methotrexate)

Pregnancy test – should be checked in all women of childbearing age

Specific toxicology testing – quantitative salicylate, ethanol, and 4 hour acetaminophen levels; other drug levels may be indicated based on circumstances

Carboxyhemoglobin – obtain if patient was found down indoors, in proximity to open flames or a machine that produces CO (even if machine was not running)

Methemoglobin – obtain if blood has brown color, cyanosis is unresponsive to oxygen, or exposure to methemoglobin inducing agent

Urine drug screen – may or may not be helpful as there are numerous false positives and false negatives

Antidotes

Contact the poison control center at **1-800-222-1222** for questions or specific dosing instructions.

Activated Charcoal - Most effective if given within the first hour post-ingestion. Do **NOT** give to a patient with an unprotected airway; who is unconscious, semiconscious or may soon lose consciousness; who is seizing

Flumazenil (Romazicon®)- The use of flumazenil in overdoses involving benzodiazepines is generally not recommended. Flumazenil can lower the seizure threshold and cause withdrawal and seizures in patients chronically taking benzodiazepines.

Naloxone (Narcan®)- Naloxone should be used with caution in patients with opioid overdoses. Naloxone's clinical effect last only approximately 30-45 minutes, which is a much shorter duration than the effects of most most opioids. Sedation and decreased respiratory rate or apnea may reappear, with potentially lethal results.

Arizona Opioid Assistance and Referral (OAR) Line 1-888-688-4222 WWW.OARLINE.COM

Provides 24/7 assistance to both health care professionals and the public. Calls are answered by registered nurses and pharmacists that can assist with emergent and non-urgent information about: opioid medications and effects; give referrals for patient support; treating patients with acute opioid complications or withdrawal; chronic pain issues. Physicians are available for consultation with providers. Calls are free and confidential.

CTPER | Center for Toxicology and Pharmacology Education and Research
The Poison and Drug Information Centers of Arizona and the University of Arizona
College of Medicine – Phoenix

National Poison Data System

The National Poison Data System (NPDS) is the only real-time surveillance database in the U.S. De-identified poison center data from across the entire U.S. is collected in the NPDS. Unusual patterns in the data are identified and real-time automated alerts are sent to the appropriate poison control center to determine if the unusual pattern is an indicator of a possible public health threat. To help in accurate identification of potential threats, it is important to have all poisoning cases reported to poison control centers.

Exposures handled by the Poison Control Center

Venomous bites and stings (e.g. scorpion, snake, spider, bee)
Automotive products
Biological, chemical, and radiological terrorism
Drugs of abuse
Drug overdoses (e.g. therapeutic, illicit, foreign, veterinary)
Eye exposures
Fertilizers, herbicides, and pesticides
Food poisonings
Food and drug recalls
Hazardous materials
Household and OTC products
Industrial chemicals
Medication errors
Plant and mushroom ingestion

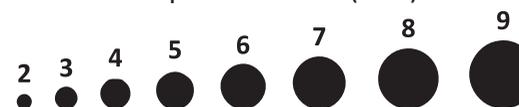
POISON
Help
1-800-222-1222

Poison Management Guide

When calling the poison control center please provide the following if available:

- Patient's name and age
- Drugs or chemicals involved
 - o Quantity
 - o Strength
 - o Formulation (e.g. IR, SR, XR)
- Route used (e.g. ingested, snorted, inhaled, injected)
- Time of exposure
- Medical history and allergies
- Present condition and mental status
- Vital signs
- Fluids and medications given
- Laboratory results
- X-ray and CT results
- Facility name and if referring to another facility

Pupil Size Guide (mm)



	Sympathomimetic (Stimulant)	Anticholinergic	Cholinergic	Opioid	Ethanol or Sedative-Hypnotic	Salicylate	Methemoglobinemia	Serotonin Syndrome
Pupils	Dilated	Normal/Dilated	Constricted	Constricted	Constricted/Dilated	No Change	No Change	Dilated
BP	Increased	No Change/Increased	Increased/Decreased	Normal/Decreased	Normal/Decreased	Decreased (severe OD)	Decreased	Increased
HR	Increased	Increased	Increased	Decreased	Decreased	Increased	Increased	Increased
RR	Increased	Increased/Decreased	No Change/Increased	Decreased	Decreased	Increased	Increased	Increased
Temp	Increased	Increased	No Change	No Change/Decreased	No Change/Decreased	Increased	No Change	Increased
Mental Status	Agitation, psychosis, seizures	Delirium, hallucinations, seizures, coma	Confusion, stupor, seizures, coma	Euphoria, stupor, coma	Confusion, agitation, coma	Confusion, delirium, lethargy, seizures	No change, lethargy, seizures	Confusion, agitation, seizures, coma
Neuromuscular	Tremors	Weakness, muscular incoordination	Muscle fasciculations, weakness, paralysis	Hyporeflexia	Ataxia, hyporeflexia	No specific findings	No specific findings	Tremor, hyperreflexia, clonus and rigidity (legs>arms)
Other signs & symptoms	Flushing, sweating, tachydysrhythmias	Dry mucous membranes, flushed/hot/dry skin, Hypoactive bowel sounds, urinary retention, QRS prolongation	Bronchorrhea, bronchospasm, diarrhea, lacrimation, salivation, sweating, urination	Hypoactive bowel sounds	Ataxia, nystagmus	Metabolic acidosis, respiratory alkalosis, tinnitus, vomiting	Metabolic acidosis, chocolate brown colored blood, cyanosis not relieved with oxygen, dizziness, headache, nausea	Metabolic acidosis, rhabdomyolysis
Treatment & antidote	Benzodiazepines, active cooling, low threshold to intubate and sedate	Benzodiazepines, sodium bicarbonate (for wide QRS)	Atropine, pralidoxime, benzodiazepines, intubate for airway protection	Naloxone, Intubate as needed, do not give naloxone to intubated patients, naloxone drip may be required	Airway protection, correct fluids and electrolytes	Sodium bicarbonate, IV fluids, dialysis	Oxygen, methylene blue	Benzodiazepines, cyproheptadine
Common drugs in category	Amphetamines Caffeine Cocaine MDMA (Ecstasy) Methylphenidate Synthetic cathinones (Bath Salts) Theophylline	Antihistamines (diphenhydramine) Atropine Jimson Weed Phenothiazines (olanzapine) Tricyclic antidepressants	Organophosphate and carbamate insecticides Muscarinic mushrooms Physostigmine Nerve Agents (e.g. Sarin)	Codeine Fentanyl Heroin Hydrocodone Methadone Morphine Oxycodone	Alcohol Barbiturates Benzodiazepines GHB Skeletal muscle relaxants	Aspirin Bismuth subsalicylate Methyl salicylate Salicylic acid Salsalate	Aniline dyes Dapsone Local anesthetics- (e.g. benzocaine) Nitrates/Nitrites Phenazopyridine	SSRI's (multiple & single agent overdose) Drug interactions MDMA (Ecstasy) LSD

The constellation of findings depends upon the severity of the **toxidrome**. A severe case will have most or all of the findings listed, while less severe cases may have only a few of the findings. *Adapted from the Iowa Poison Control Center by the Arizona Poison Centers.*