



Poison HOTLINE

Partnership between Iowa Health System and
University of Iowa Hospitals and Clinics

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Did you know

Each summer, the ISPCCC receives approximately 10-20 snake bite calls, some being from poisonous snakes (both local and exotic).

Four poisonous snakes can be found in Iowa: the prairie rattlesnake, the massasauga, the copperhead, and the timber rattlesnake. Each snake has specific territories within the state. ISPCCC specialists have access to information regarding the descriptions and territories of snakes found in Iowa.

Not all snake bites require antivenom. Call **1-800-222-1222** for assistance in diagnosis, along with indications for administering and assistance in locating specific antivenoms.

The Anticholinergic Toxidrome

A toxidrome is a group of symptoms associated with poisoning by a particular class of agents. One example is the opiate toxidrome, the triad of CNS depression, respiratory depression, and pinpoint pupils, and which usually responds to naloxone.

The anticholinergic toxidrome is most frequently associated with overdoses of diphenhydramine, a very common OTC medication. However, many drugs and plants can produce the anticholinergic toxidrome. A partial list includes: tricyclic antidepressants (amitriptyline), older antihistamines (chlorpheniramine), phenothiazines (promethazine) and plants containing the anticholinergic alkaloids atropine, hyoscyamine and scopolamine (Jimson Weed).

The mnemonic used to help remember the symptoms and signs of this toxidrome are derived from the *Alice in Wonderland* story:

- Blind as a Bat (mydriasis and inability to focus on near objects)
- Red as a Beet (flushed skin color)
- Hot as Hades (elevated temperature)
- Dry as a Bone (dry mouth and dry skin)
- Mad as a Hatter (hallucinations and delirium)
- Bowel and bladder lose their tone (urinary retention and constipation)
- Heart races on alone (tachycardia)

These patients can sometimes die of agitation-induced hyperthermia.

A patient who has ingested only an anticholinergic substance and is not tachycardic argues against a serious anticholinergic overdose.

Treatment is generally supportive. Slowed gastric emptying may cause these agents to stay in the stomach longer, and this may make them more amenable to absorption by charcoal later than one hour after ingestion. However this is a double edged sword as ileus can occur, leading to complications from charcoal administration.

Benzodiazepines are best for treating agitation. Physostigmine use is controversial and should never be used in a patient who has either (a) a TCA overdose or (b) any EKG abnormality. Anticholinergic delirium usually clears quickly after giving physostigmine, but physostigmine's effects are very short lived and the anticholinergic delirium usually returns.

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