



## EMS System for Metropolitan Oklahoma City and Tulsa 2019 Medical Control Board Treatment Protocols



Approved 9/12/18, Effective 1/15/19, replaces all prior versions

### 16A – ACTIVATED CHARCOAL

EMT
EMT-INTERMEDIATE 85
ADVANCED EMT
PARAMEDIC

**Class:** Adsorbant

**Actions/Pharmacodynamics:** Activated charcoal is a liquid suspension that adsorbs many drugs and chemicals. It acts by binding / adsorbing toxic substances, thereby inhibiting their GI absorption, uptake into the liver, and thus, their presence in the bloodstream for action, also called "bioavailability". Activated charcoal has a tremendous surface area, allowing for a large amount of adsorption. The combined complex formed by the adsorption process is excreted from the body in the feces. It is a general purpose emergency treatment of poisoning by most drugs and chemicals, e.g., acetaminophen, aspirin, atropine, barbiturates, digitalis, glycosides, phenytoin, propoxyphene, strychnine, and tricyclic antidepressants, among many others.

**Indications:** Poisonings - General Management (8A)

**Contraindications:** Activated charcoal is contraindicated for treatment of poisoning by cyanide, mineral acids, caustic alkalis, organic solvents, iron, ethanol, and methanol. Activated charcoal may not be administered in patients with current or suspected imminent altered mental status, dysphagia, or vomiting to prevent elevated risk of aspiration of charcoal.

**Pharmacokinetics:** Nonabsorbed; onset immediate; peak, duration, and half – life: unknown.

**Side Effects:** GI: vomiting following rapid ingestion of high doses, abdominal cramping, abdominal bloating, constipation (diarrhea from sorbitol additive).

**Dosage:** **Poisonings - General Management - Adult & Pediatric (8A)**  
1 gram/kg PO (**OLMC or OK Poison Center order required**; Consult for order only if transport time estimated to exceed 30 mins)

**How Supplied:** 25 grams of activated charcoal in aqueous suspension in bottle.  
(Always check concentration and dose per container at time of patient medication administration)

**Special Comment:** Activated charcoal, while historically often administered in the setting of ingested poisonings, is no longer utilized with frequency. The American Board of Medical Toxicology does not recommend administering activated charcoal to all suspected ingested poisonings. The purpose of OLMC or OK Poison Center order requirement is to prevent unnecessary use of activated charcoal and the side effects its use can create - especially vomiting and aspiration.