

# MANUAL OF EMERGENCY DRUGS

BRYAN E. BLEDSOE



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## **Manual of Emergency Drugs**

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# CONTENTS

<b>PREFACE</b>	<b>iv</b>
<b>ACKNOWLEDGMENTS</b>	<b>v</b>
<b>1 QUICK DRUG REFERENCE</b>	<b>1</b>
<b>2 EMERGENCY DRUGS BY CLASSIFICATION</b>	<b>77</b>
<b>3 EMERGENCY IV FLUIDS</b>	<b>81</b>
<b>4 PEDIATRIC EMERGENCY DRUGS</b>	<b>95</b>
<b>5 HOME MEDICATION REFERENCE GUIDE (Omitted)</b>	<b>117</b>
<b>6 EMERGENCY TREATMENT PROTOCOLS</b>	<b>189</b>
<b>REFERENCES</b>	<b>199</b>
<b>APPENDICES</b>	<b>203</b>
• Pharmacological Abbreviations	204
• Travenol Conversion Table	208
• Metric Conversion Tables	209
<b>INDEX</b>	<b>211</b>

## PREFACE

*Manual of Emergency Drugs* was designed to provide emergency medical personnel with a handy reference to the most commonly used emergency medications. Chapter 1 profiles over 60 emergency medications in a standard, easy-to-read format. Chapter 2 lists the same medications by drug actions. The commonly used IV fluids, both crystalloids and colloids, are profiled in detail in Chapter 3. Chapter 4, Pediatric Emergency Drugs, contains a detailed breakdown of emergency medications by patient weight to help ensure correct and rapid drug administration when managing a pediatric emergency crisis. Chapter 5 provides a listing of over 1100 home medications, both prescription and non-prescription, to aid emergency personnel in elucidating patient drug histories. Overall, emergency medical personnel will find *Manual of Emergency Drugs* to be a useful and handy guide to many of the pharmacological agents encountered in prehospital and in-hospital emergency care.

## ACKNOWLEDGMENTS

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This listing of prehospital drugs is derived from prehospital drug lists from across the United States. It does not constitute a recommendation by the author or the publisher of the drugs presented herein.

Although every attempt has been made to assure that the drug dosages and indications presented are in accordance with national standards and recommendations, neither the author or the publisher are responsible for any accidental deletions or discrepancies encountered.



# CONTENTS

<b>PREFACE</b>	<b>iv</b>
<b>ACKNOWLEDGMENTS</b>	<b>v</b>
<b>1 QUICK DRUG REFERENCE</b>	<b>1</b>
<b>2 EMERGENCY DRUGS BY CLASSIFICATION</b>	<b>77</b>
<b>3 EMERGENCY IV FLUIDS</b>	<b>81</b>
<b>4 PEDIATRIC EMERGENCY DRUGS</b>	<b>95</b>
<b>5 HOME MEDICATION REFERENCE GUIDE (Omitted)</b>	<b>117</b>
<b>6 EMERGENCY TREATMENT PROTOCOLS</b>	<b>189</b>
<b>REFERENCES</b>	<b>199</b>
<b>APPENDICES</b>	<b>203</b>
• Pharmacological Abbreviations	204
• Travenol Conversion Table	208
• Metric Conversion Tables	209
<b>INDEX</b>	<b>211</b>



## 1

**QUICK  
DRUG  
REFERENCE**

## INTRODUCTION

This section provides a quick reference to over 60 of the most commonly used emergency medications. The dosages and indications have been taken from the most recent Advanced Cardiac Life Support (ACLS) standards of the American Heart Association. Drugs not covered in ACLS are taken from the American Medical Association's *Drug Evaluation*. It is important to keep in mind that specific drugs, dosages, indications, and routes may vary in your particular area. It is essential to be familiar with these variations and follow the guidelines established by the medical director of the system in which you work.

## ACTIVATED CHARCOAL

- class:** Adsorbent
- actions:** Adsorbs toxins by chemical binding and large surface area
- indications:** Poisoning following emesis or where emesis is contraindicated
- contraindications:** None in severe poisoning
- precautions:** Should only be administered following emesis in cases where it is so indicated
- side effects:** Rare
- dosage:** Two tablespoons (50 grams) mixed with a glass of water to form a slurry
- route:** Oral
- pediatric dosage:** Two tablespoons (50 grams) mixed with a glass of water to form a slurry

## AMINOPHYLLINE

<b>class:</b>	Xanthine
<b>actions:</b>	Smooth muscle relaxant Causes bronchodilation Has mild diuretic properties Positive chronotrope
<b>indications:</b>	Bronchial asthma Reversible bronchospasm associated with chronic bronchitis and emphysema Congestive heart failure Pulmonary edema
<b>contraindications:</b>	Patients with history of hypersensitivity to the drug Hypotension Patients with peptic ulcer disease
<b>precautions:</b>	Monitor for arrhythmias Monitor blood pressure
<b>side effects:</b>	Convulsions Arrhythmias Vomiting Palpitations
<b>dosage:</b>	<b>METHOD 1.</b> 250-500 mg in 90 or 80 ml of D <sub>5</sub> W respectively infused over 20-30 minutes

## Aminophylline (continued)

**METHOD 2.** 250-500 mg (5-7 mg/kg) in 20 ml of D<sub>5</sub>W infused over 20-30 minutes

**route:** Slow IV

**pediatric dosage:** *Status asthmaticus.* 3-4 mg/kg loading dose to be infused over 20-30 minutes. Maximum dose not to exceed 12 mg/kg per 24 hours.

## AMYL NITRITE

<b>class:</b>	Nitrate
<b>actions:</b>	Causes coronary vasodilation Removes cyanide-ion via complex mechanism
<b>indications:</b>	Cyanide poisoning (bitter almond smell to breath)
<b>contraindications:</b>	None when used in the management of cyanide poisoning
<b>precautions:</b>	Hypotension Has tendency for abuse
<b>side effects:</b>	Headache Nausea
<b>dosage:</b>	Inhalant should be broken and inhaled, repeated as needed until patient is delivered to ED. Effects diminish after 20 minutes.
<b>route:</b>	Inhalation
<b>pediatric dosage:</b>	Inhalant should be broken and inhaled, repeated until patient is delivered to ED

# ATROPINE

<b>class:</b>	Parasympatholytic
<b>actions:</b>	Blocks acetylcholine receptors Positive chronotrope Decreases GI secretions
<b>indications:</b>	Bradycardia Hypotension secondary to bradycardia Third degree heart block Asystole Organophosphate poisoning
<b>contraindications:</b>	None when used in emergency situations
<b>precautions:</b>	Dose of 2.0 mg should not be exceeded except in cases of organophosphate poisonings Tachycardia Hypertension
<b>side effects:</b>	Palpitations Headache Dry mouth
<b>dosage:</b>	<i>Bradycardia.</i> 0.5 mg every 5 minutes to a maximum of 2.0 mg <i>Asystole.</i> 1.0 mg <i>Organophosphate poisoning.</i> 2-5 mg



## Atropine (continued)

**route:**

IV

**pediatric dosage:**

*Bradycardia.* 0.01-0.03 mg/kg

*Organophosphate poisoning.* 0.05 mg/kg

## BRETYLIUM (Bretylol®)

- class:** Antiarrhythmic
- actions:** Increases ventricular fibrillation threshold  
Blocks the release of norepinephrine from peripheral sympathetic nerves
- indications:** Ventricular fibrillation refractory to lidocaine  
Ventricular tachycardia refractory to lidocaine
- contraindications:** None when used in the management of life-threatening arrhythmias
- precautions:** Postural hypotension occurs in approximately 50% of patients receiving Bretylum  
Patient must be kept supine  
Decrease dosage in patients being treated with catecholamine sympathomimetics
- side effects:** Hypotension  
Increased frequency of arrhythmias