Emergency Department (ED) Nursing Knowledge Assessment Exam: Study Guide

Review Calculations related to medications and IV drips. Basic Safety and Infection Control, Core Measures, National Patient Safety Goals, Pain Management, and Blood Administration.

Review assessment, interventions, monitoring, and care for conditions commonly encountered in emergency department (ED) nursing, including:

- Acute coronary syndrome (ACS), pain unrelieved by medications, cardiac cath
- Agitation, anger
- Alcoholism
- Cerebrovascular accident (CVA)
- Cholecystitis
- Diabetic ketoacidosis (DKA)
- Epiglottitis
- Pregnant patient/motor vehicle crash, position to side
- Pregnancy-induced hypertension (PIH)
- Sepsis due to urinary tract infection (UTI)
- Suspected child abuse, reporting
- Head injury, signs and symptoms
- Intracranial pressure (ICP), earliest sign of increase
- Kidney injury, signs and symptoms
- Pain assessment with facial fractures, flail chest, unresponsive to verbal stimuli
- Renal calculi, signs and symptoms, diagnostic procedures and treatment
- Skin assessment and documentation

Review action, preparation, monitoring, and precautions related to medications commonly used in critical care, such as

- Acetaminophen, poisoning treatment [acetylcysteine (Mucomyst®)]
- Albuterol/Ipratorprium (Combivent®)
- Alteplase (tPA)/Fibrinolytic therapy, indications/contraindications
- Aspirin
- Atropine
- Benzodiazepines
- Beta 2 Agonists, such as albuterol (Proventil®)
- Fluid bolus, pediatric guideline

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● Heparin protocol
● Lorazepam (Ativan®)
● Insulin sliding scale
● Ipratropium (Atrovent®)
● IV drops/minute calculation
● Metaprolol, tablet calculation
● Morphine
● Nitroglycerin
● Oxygen
● Thiamine (Betamin®)
● Normal Saline (NS)
● Phenobarbital (Luminal®)
● Phenytoin (Dilantin®)
● Vasopressors
● Warfarin (Coumadin®), reversal (fresh frozen plasma, vitamin K)

Review **treatments and procedures**, including

- ACLS Algorithms
  - Symptomatic sinus bradycardia
  - Ventricular fibrillation
- Blood transfusion reaction
- Intubation, assessment of breath sounds

Review **cardiac rhythm strip interpretation**, including

- Sinus rhythm with multifocal PVCs
- Ventricular fibrillation
- Ventricular tachycardia (V-tach)

A great source for ACLS protocol review is [www.acls.net](http://www.acls.net)

A great source for rhythm review is the RN.com course [Telemetry Interpretation](http://www.acls.net)

Also recommended:
Review Laboratory Results commonly encountered in critical care, such as

- aPTT
- INR
- Serum glucose

Review principles and practices related to safety and infection prevention, including

- CAUTI-prevention bundle
- Fall risk, elderly/benzodiazepines
- Handwashing w/ C. Diff
- Patient identifiers

Review principles and practices of communication with patients and family, including

- Cast care and precautions
- Patient satisfaction

Review measures to prevent CMS Hospital Acquired Conditions, including

- Blood transfusion reaction
- CAUTI prevention
- DKA management
- Skin assessment
- Risk for falling

Review calculations, including

- Medication protocols
- Sliding scale
- IV drip rate, calculating drops per minute

To calculate the infusion rate: IV drip rate in drops per minute =
Volume to be infused (mL) over 1 hour/Drop factor constant

<table>
<thead>
<tr>
<th>Common drop factors</th>
<th>Drop factor constant</th>
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</thead>
<tbody>
<tr>
<td>60 gtt/m/L - minidrip set</td>
<td>1</td>
</tr>
<tr>
<td>10 gtt/m/L – regular drip set</td>
<td>6</td>
</tr>
<tr>
<td>15 gtt/mL – regular drip set</td>
<td>4</td>
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Common drop factors are also known as the clock method – drop factors are obtained by dividing 60 minutes by the number of gtts per mL that the IV set delivers.