

This Exam Outline was developed to help you prepare for the knowledge exam.

This Exam Outline is not meant to cover all aspects of the knowledge exam, but to guide your preparation for questions that may occur in the knowledge exam.

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

Review exam, interventions, monitoring, and care for conditions commonly encountered in critical care

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

Review calculations

- To calculate drip rate for mcg/kg/min:
  - Infusion rate (mL/hr) =  $\frac{\text{dose (mcg)} \times \text{weight (kg)} \times 60 \text{ (min)}}{\text{Concentration in mg/mL} \times 1000}$
  - Example: A patient who weighs 80 kg has an order for dopamine (Intropin®) 5 mcg/kg/min. You place 400 mg of dopamine in a 500 mL bag of IV solution and administer at a rate of \_\_\_\_\_ mL/hr.
  - Concentration = 400 mg/500 mL = 0.8 mg/mL
  - Dose = 5 mcg; weight = 80 kg
  - $\frac{5 \text{ mcg} \times 80 \text{ kg} \times 60 \text{ min}}{0.8 \text{ mg/mL} \times 1000} = \frac{24000}{800} = 30 \text{ mL/min}$

Review treatments and procedures

Review cardiac rhythm strip interpretation

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

Also recommended:

- ECG Library (Jenkins, J & Gerrend, S., 2009)  
<http://www.ecglibrary.com/ecghome.html>

Review Laboratory Results commonly encountered in critical care

Review principles and practices related to safety and infection prevention Patient identifiers

Review principles and practices of communication with patients and family

Review measures to prevent CMS Hospital Acquired Conditions