

## IM 2 Pharmacology Worksheet

**Use the drop-down menu next to each generic drug to select its brand name**

furosemide	<input type="text"/>	enoxaparin	<input type="text"/>
morphine sulfate	<input type="text"/>	losartan	<input type="text"/>
ondansetron	<input type="text"/>	lisinopril	<input type="text"/>
metoclopramide	Reglan	propranolol	<input type="text"/>
ceftriaxone	<input type="text"/>	carvedilol	<input type="text"/>
acetaminophen	<input type="text"/>	amlodipine	<input type="text"/>
levofloxacin	<input type="text"/>	diltiazem	<input type="text"/>
Insulin lispro	<input type="text"/>	pantoprazole	<input type="text"/>
Insulin glargine	<input type="text"/>		

**Use the drop-down menu next to each drug to match it with the correct class/subclass**

furosemide	<input type="text"/>	levofloxacin	<input type="text"/>
metoprolol	<input type="text"/>	morphine	<input type="text"/>
ceftriaxone	<input type="text"/>	acetaminophen	<input type="text"/>
Insulin lispro	<input type="text"/>	vancomycin	<input type="text"/>
enoxaparin	<input type="text"/>	metoclopramide	<input type="text"/>

**Fill in the Blank**

A healthcare provider may choose between these two types of rapid acting insulin for sliding scale regular insulin and insulin lispro.

Human regular insulin is the only insulin that can be administered via the intravenous route.

Two especially important nursing interventions for patients receiving an opioid are assess rate and quality of respirations and monitor bowel and bladder habits. Monitor level of consciousness.

This lab must be assessed prior to administration of enoxaparin complete blood cell count

**Answer the following questions:**

What does the mnemonic CLABSI stand for?

Central line associated blood stream infection

List 5 signs/symptoms of hypoglycemia:

Fatigue, dizziness, sweating, confusion, shakiness

List 5 signs/symptoms of hyperglycemia:

Fruity smelling breath, nausea, weakness, confusion, shortness of breath

Give 5 causes for change in mental status:

Infection, certain medication, hypoglycemia, hyperglycemia, low blood pressure, high fever

List the 6 “P’s” for peripheral neurovascular assessment:

Pain, pallor, pulse, paresthesia, paralysis, poikilothermia

What does MEWS stand for and why is it important?

Modified early warning score. It is important because it helps to identify patient deterioration and ensure early interventions.

Many patients in the hospital receive enoxaparin as part of treatment. What is the rationale for this treatment?

Many patients receive enoxaparin to prevent deep vein thrombosis (blood clot). It is used on surgical patients, immobile patients, and to prevent angina (chest pain) and pulmonary embolus.

What is medical asepsis?

Clean technique. Practices to confine or limit growth of contamination or spread. Use of chlorhexidine and alcohol.

List 4 examples of medical asepsis in the hospital setting:

cleaning hands with soap and water, donning clean procedure gloves, using clean supplies, cleaning the environment around patient

Other than diabetes, list 4 reasons a patient’s blood glucose could be elevated:

Pancreas issues (cancer or pancreatitis), certain medications such as steroids and diuretics, severe illnesses and infections, lack of physical activity

What is the reason for the use of the incentive spirometer?

It helps prevent post-op pulmonary complications (atelectasis), provides voluntary deep breathing, gives visual feedback.

Describe how you would teach a patient to use the incentive spirometer:

Sit up straight, hold the spirometer in one hand and the mouthpiece in the other, exhale and put mouthpiece in mouth, take a nice slow deep breath in (inhale), keep indicator between the arrows on the right, watch the piston go up to the highest number you can get, once you’re at highest number hold breath, then breathe out (exhale), put target marker on highest number you got, repeat

***In the IV lecture you were asked to read the article on best practices for intravenous medication administration. The answers to the following 6 questions can be found in that article.***

What does ISMP stand for?

Institution for Safe Medication Practices

What does ISMP state regarding dilution of medications for the intravenous push route?

“Dilute IV push medications only when recommended by the manufacturer, supported by evidence in peer-reviewed biomedical literature, or in accordance with approved institutional guidelines.”

How does a nurse determine if a central venous device is functional/patent?

“Assess the patency of central venous access devices using, at a minimum, a 10 mL diameter-sized syringe filled with preservative-free 0.9% sodium chloride. Once patency has been confirmed, I.V push administration of the medication can be given in a syringe appropriately sized to measure and administer the required dose.” To determine the patency do the same thing as you would on the peripheral iv site but aspirate for blood return before you flush with the normal saline.

How does a nurse determine if a peripheral IV site is functional/patent?

Assess the patency of peripheral site by slowly pushing 9 ml of normal saline and make sure the site is not infiltrating or hurting your patient. This will allow you to know/feel if there are any clots in the iv.

Why is a 10 mL diameter-sized syringe recommended for establishing patency of a central venous device?

“Manufacturers recommend using, at minimum, a 10 mL diameter-sized syringe for assessing patency because a syringe of this size generates lower injection pressure than a syringe with a small diameter, such as a 5 mL syringe.”

List 3 reasons why a nurse should not withdraw IV push medication from a commercially available, cartridge-type syringe into another syringe for administration.

- 1.” Using the cartridges as vials can lead to contamination because the cartridges were not intended to be used this way.”
- 2.” This unsafe practice also can lead to dosing errors, drug mix-ups, and other types of medication errors, particularly because the prepared syringes are often unlabeled.”
3. “Utilizing the cartridges as vials is also not economical when comparing the cost of prefilled syringes or vials on the same medication.”

***Other questions related to intravenous therapy:***

What are the signs and symptoms of air embolism?

Dyspnea, tachypnea, lightheadedness, palpitations, drop in blood pressure, weakness, cyanosis, expiratory wheezes

Describe the treatment for air embolism:

Call for help, position patient in Trendelenburg on their left side, administer oxygen, monitor vital signs, have emergency equipment ready

What are the signs and symptoms of fluid overload?

Shortness of breath, cramping, headache, dependent edema, rapid weight gain, crackles in lungs

Describe the treatment for fluid overload

Do a respiratory assessment, give a diuretic, slow down the administration rate

List the steps when administering and intravenous medication via a triple lumen subclavian intermittent site:

Pick a lumen, assess the site, prime 2 saline syringes, unclamp lumen, clean the lumen, attach 9 ml syringe of normal saline, aspirate for blood return, flush with 9 ml saline, clean lumen, attach medication syringe and push for recommended rate, remove med syringe, clean lumen, attach 9 ml syringe of normal saline, push first 2-3 ml slow then finish the 9 ml, remove syringe and clamp, orange cap.

Name the only intravenous fluid (crystalloid) that can be used for blood administration.

Normal saline