

2009

Michigan Health Career Institute

Phlebotomy Career Training LLC

Certified Phlebotomy Technician Study Guide

## Introduction

For many phlebotomy student graduates, finding the right study guide to pass the national certification exams is a daunting task. For one thing, not every study guide is reputable and can mislead the student into studying material that is not necessarily pertinent to the certification exam. Phlebotomy Career Training takes great care in the education and training of developing an elite group of phlebotomy technicians. PTC also produces the necessary study materials that will give all phlebotomy graduate students the edge at passing any of the national certifications that are currently available. The Phlebotomy Technician Certification Study Guide contains several practice tests with answers included following each of the tests. Information on such topics such as HIPPA laws and OSHA protocol are also included. The student is encouraged to read the guide and practice the tests until a thorough understanding of all subjects regarding phlebotomy are mastered. We at Phlebotomy Career Training wish to thank all phlebotomy students for their interest in the guide and hope that they have rewarding successful careers in the field of phlebotomy.

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### Infection Control Principals

1. Universal Precautions
  - (a) What to wear, ie. Gloves , gown, mask
  - (b) When to wear personal protection equipment
  - (c) Hand washing
2. Hepatitis B, C, A and D
  - (a) Methods of contact
  - (b) Disease process, organs affected
  - (c) Vaccination protocol, 3 shots over a series of 6 months
  - (d) Signs and symptoms; Jaundice, fatigue
3. Needle stick precautions
  - (a) Proper procedure to disposing of needles in sharps containers.
  - (b) How to treat a needle stick, proper hospital protocol and follow up treatment.
  - (c) Procedure to recap needle with one hand in emergency situations.
4. Signs and symptoms of infection
  - (a) Heat (the area is warm or hot to the touch)
  - (b) Redness
  - (c) Swelling
  - (d) Tenderness and or pain
  - (e) Pus (greenish drainage)
5. HIV Aids
  - (a) Time frame of incubation
  - (b) CD4 count that signifies infection
  - (c) How transmission occurs
6. TB (Tuberculosis)
  - a. Testing positive, what to look for; induration of 15 mm
  - b. Signs and symptoms; fatigue, chronic cough, night sweats, low grade fever
  - c. Hospital protocol for testing positive
  - d. TB skin tests, Gold Test, purified protein derivative
7. Donning and Doffing of Personal Protective equipment
  - a. Don implies to put on personal protective equipment
  - b. Doff implies to take off personal protective equipment
  - c. Proper method of donning and doffing according to infection control principals.

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1. HIPPA Privacy ACT
  - (1) How do health care workers protect patients privacy
  - (2) The significance of the Act
  - (3) Violations of the act, How are you as a health care worker responsible?
2. OSHA (Occupational Safety and Health Act)
3. Protecting a Patients rights

## Patient's Bill of Rights

4. **Information Disclosure.** *Consumers have the right to receive accurate, easily understood information and some require assistance in making informed health care decisions about their health plans, professionals, and facilities.*
5. **Choice of Providers and Plans.** *Consumers have the right to a choice of health care providers that is sufficient to ensure access to appropriate high-quality health care.*
6. **Access to Emergency Services.** *Consumers have the right to access emergency health care services when and where the need arises. Health plans should provide payment when a consumer presents to an emergency department with acute symptoms of sufficient severity -- including severe pain -- such that a "prudent layperson" could reasonably expect the absence of medical attention to result in placing that consumer's health in serious jeopardy, serious impairment to bodily functions, or serious dysfunction of any bodily organ or part.*
7. **Participation in Treatment Decisions.** *Consumers have the right and responsibility to fully participate in all decisions related to their health care. Consumers who are unable to fully participate in treatment decisions have the right to be represented by parents, guardians, family members, or other conservators.*
8. **Respect and Nondiscrimination.** *Consumers have the right to considerate, respectful care from all members of the health care system at all times and under all circumstances. An environment of mutual respect is essential to maintain a quality health care system.*
9. **Confidentiality of Health Information.** *Consumers have the right to communicate with health care providers in confidence and to have the confidentiality of their individually identifiable health care information protected. Consumers also have the right to review and copy their own medical records and request amendments to their records.*
10. **Complaints and Appeals.** *All consumers have the right to a fair and efficient process for resolving differences with their health plans, health care providers, and the institutions that serve them, including a rigorous system of internal review and an independent system of external review.*

11. **Consumer Responsibilities.** *In a health care system that protects consumers' rights, it is reasonable to expect and encourage consumers to assume reasonable responsibilities. Greater individual involvement by consumers in their care increases the likelihood of achieving the best outcomes and helps support a quality improvement, cost-conscious environment.*

12. Liability, and Torts, How to Protect Yourself from Lawsuits

13. Health Care Workers Code of Ethics

### **American Phlebotomist Code of Ethics**

The phlebotomist provides services with respect for human dignity and the uniqueness of the client, unrestricted by considerations of social or economic status, personal attributes, or the nature of health problems.

The phlebotomist safeguards the client's right to privacy by judiciously protecting information of a confidential nature.

The phlebotomist acts to safeguard the client and the public when health care and safety are affected by the incompetent, unethical or illegal practice of any person.

The phlebotomist assumes responsibility and accountability for individual judgments and actions within the scope of their practice.

The phlebotomist maintains competence in their profession of phlebotomy.

The phlebotomist exercises informed judgment and uses individual competence and qualifications as criteria in seeking consultation, accepting responsibilities,

The phlebotomist participates in activities that contribute to the ongoing development of the profession's body of knowledge.

The phlebotomist participates in the profession's efforts to implement and improve standards of phlebotomy.

The phlebotomist participates in the profession's effort to establish and maintain conditions of employment conducive to high quality performance standards and the protection of the patient from harm.

## Phlebotomy Career Training 2009

### What is Therapeutic Communication?

Nursing is a caring profession. It is also a profession that is more and more evidenced based in practice. In as much as the scientific aspects of nursing is increasing due to the complex technological advancement of medicine and the machinery that is used at the patients bedside, the fact remains that the nurse is the first person that the client usually comes in contact with in any emergency or hospital setting.

Having said this, the term, "caring" is an essential emotion that all nurses, for that matter, all individuals in the health profession must possess. With caring comes the trained ability of the nurse to facilitate therapeutic communication. One might ask, what is therapeutic communication? To better answer this question, the term communication should first be defined.

Communication can be defined as "The Process of transmitting messages and interpreting meaning." (Wilson and others, 1995) With therapeutic communication, the sender, or nurse seeks to illicit a response from the receiver, the patient that is beneficial to the patients mental and physical health. Just as stress has been proven to adversely affect the health of individuals, the therapeutic approach to communication can actually help. In any given situation everyone uses communication.

Everyone has seen the individual that looks like they are either angry, stressed, feeling ill or maybe sad. These emotions are communicated to others not always by words, but by gestures and facial expressions. A nurse must always be aware of these expressions in clients, for these expressions may be the only way that the nurse can tell if there is something else going on that needs their attention. The term given to this type of non-verbal communication is called, meta-communication. In meta-communication, the client may look at their amputated stump and say that it doesn't really look that bad, while at the same time tears are rolling down from their eyes.

In a case such as this the nurse should stay and further explore how the person actually feels. There are many factors associated with the healing and comforting aspects of therapeutic communication. Circumstances, surroundings, and timing all play a role in the effect of therapeutic communication. If a client is being rushed down for an emergency surgery there might not be time for a bedside conversation, but the holding of a hand could convey much more than words to the client at such a moment.

Ideally, for therapeutic communication to be effective the nurse must be aware of how they appear to the client. If a nurse appears rushed, for example, they are speaking quickly, their

countenance looks harried, and they are breathing heavily, their eyes not on the client but perhaps on an intravenous bag on the client in the next bed. In a case like this, there is nothing that this nurse could say to the client in a therapeutic manner that the client would believe. The helping relationship has not been established and therefore therapeutic communication cannot be facilitated. Some of the emotions associated with therapeutic communication include but are not limited to the following: Professionalism, Confidentiality, Courtesy, Trust, Availability, Empathy, and Sympathy. (Potter, Patricia A., Perry, Anne G., Co. 2003, Basic Nursing Essentials for Practice, pg. 123, Mosby)

All of these emotions go into the client nurse relationship, which must be established by the nurse as soon as possible upon first meeting the client. To begin to establish this nurse client relationship, the nurse must assess the overall message that the client is communicating to the nurse, such as fear, pain, sadness, anxiety or apathy. The nurse should be trained in keying into the message that the client is sending. Only then can the nurse determine the best therapeutic approach. Anyone that has to be thrust in to a hospital or emergency room environment has level of anxiety.

This level can go up considerably when the client feels that they have been abandoned or that there is no one there that really cares about how they feel. When a client is the recipient of therapeutic communication from a caring individual, a level of trust is achieved and more than, that the clients entire countenance can change for the better. Their blood pressure, respirations and levels of stress can simultaneously decrease. When this takes place, the management of pain, if any is involved, can be resolved more quickly. The goal for a nurse is to become proficient in the medical

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Diabetes/Blood Pressure/Pharmacology

Name: \_\_\_\_\_

1. When taking a person's blood pressure it is important to first assess the baseline pressure by which of the following steps...
  - a. Find the radial pulse, pump the cuff until the pulse is occluded, then quickly release the pressure, next re-inflate cuff to 30mmHg above the point where the radial pulse was occluded, next let out the air from the cuff slowly listening for the first beat and the last beat.
  - b. Find the brachial pulse, pump the cuff until the pulse is occluded, then quickly release the pressure, next re-inflate cuff to 30mmHg above the point where the radial pulse was occluded, next let out the air from the cuff slowly listening for the first beat and the last beat.
  - c. Find the radial pulse, pump the cuff until the pulse is occluded, then slowly release the pressure, next re-inflate cuff to 60mmHg above the point where the radial pulse was occluded, next let out the air from the cuff slowly listening for the first beat and the last beat.
  
2. Diabetes is a prevalent health problem in the healthcare environment, which of the following about diabetes is true?
  - a. Diabetes is a viral immune disease. True or False
  - b. Diabetes can be cured. True or False
  - c. Diabetics are subject to many health complications such as heart disease, kidney disease and hypertension. True or False
  
3. There are 100 Units in \_\_\_\_\_ mL's.
  
4. A low blood sugar is ...
  - a. Less than 70
  - b. Causes profuse sweating
  - c. Lethargy
  - d. Confusion
  - e. Can be reversed by insulin

- f. Can be reversed by glucose
  - g. All of the above
  - h. a, b, c, d, and f
5. High blood sugar can cause a condition known as.
- a. Diabetic Keto Acidosis
  - b. Hypoglycemia
  - c. Hyperthermia
6. Your patient has a blood glucose of 105, you are ordered to give them 8 Units of Regular Insulin. You would.
- a. Give the insulin and monitor the patient for any ill effects.
  - b. Do not give the insulin based on the low blood sugar results and report to the supervisor your reasoning.
  - c. Give the insulin as ordered.
7. You are to give 3 Units of insulin.
- a. Draw up the insulin using a 3mL syringe
  - b. Draw up the insulin using a 100 Unit syringe
  - c. Draw up the insulin in a 1 mL syringe
8. You take a manual blood pressure on a client and get a reading of 189/90. You would ....
- a. Retake the reading with a monitored cuff
  - b. Report your findings to the nurse
  - c. Retake the blood pressure manually on the opposite arm
9. You are to give 35 Units of Lantus. You begin by drawing up..
- a. 35 Units of Lantus
  - b. 35 Units of Humalog
  - c. 15 Units of Lantus long acting and 20 Units of Novolog fast acting
10. You are about to take a patient's blood sugar. You would begin by doing which of the following...
- a. First Calibrate the glucose monitor, greet the patient and ask them if you can test their blood sugar, use an alcohol wipe on the finger of their choice, wait until it has dried then explain that they are going to feel a little poke, use the lancet at a 90 degree angle on the side of the finger and then wipe away the first drop of blood, gently pump until another drop of blood is expelled and hold the test strip at a 45 degree angle at the base of the drop of blood until the blood saturates the strip. Then insert the strip for reading, and cover the patient's finger with gentle pressure until no further blood is observed from the site. Thank the patient and let them know their blood sugar level .

- b. First Calibrate the glucose monitor, greet the patient and ask them if you can test their blood sugar, wash your hands, and put on gloves, use a alcohol wipe on the finger of their choice, wait until it has dried then explain that they are going to feel a little poke, use the lancet at a 90 degree angle on the side of the finger and then wipe away the first drop of blood, gently pump until another drop of blood is expelled and hold the test strip at a 45 degree angle at the base of the drop of blood until the blood saturates the strip. Then insert the strip for reading, and cover the patients finger with gentle pressure until no further blood is observed from the site. Thank the patient and let them know their blood sugar level .
- c. First Calibrate the glucose monitor, greet the patient and ask them if you can test their blood sugar, wash your hands and put on clean gloves, use a betadine wipe on the finger of their choice, wait until it has dried then explain that they are going to feel a little poke, use the lancet at a 90 degree angle on the side of the finger and then wipe away the first drop of blood, gently pump until another drop of blood is expelled and hold the test strip at a 45 degree angle at the base of the drop of blood until the blood saturates the strip. Then insert the strip for reading, and cover the patients finger with gentle pressure until no further blood is observed from the site. Thank the patient and let them know their blood sugar level .

11. The cranial nerve that can affect the blood pressure is called...

- a. The vagus nerve
- b. The hypoglossal nerve
- c. The abducens

12. You find a patient lying in bed, dripping profusely in sweat, the patient is lethargic and their mentation is obtunded. Knowing that the patient is a diabetic you would immediately..

- a. Adminster fast acting glucose in the form of a high glycemic snack, such as orange juice with sugar and then perform a blood sugar test.
- b. Administer the 11:00 AM dose of insulin that they missed at 10:00 AM
- c. Check their blood sugar first.

13. Digoxin is a heart medication that requires.....

- a. The patient's apical pulse to be checked prior to administration
- b. Regular blood draws to assess levels.
- c. Potassium level assessment
- d. All of the above.

14. When giving beta blocker medication it is not unusual for the patient to have...

- a. Difficulty with respiration
- b. Lowered heart rate

- c. Increase in blood pressure
  - d. All of the above
  - e. A and B only
15. A doctor's orders reads... give catapres 1mg stat...for a BP of 197/89 Upon reading this order you would...
- a. Give the medication
  - b. Recognize that the medication is too high a dose and would drop the patient's blood pressure too low.
  - c. Hold the medication, and consult the nurse due to the high dosage.
16. Foods that are high on the glycemic index include all but which of the following..
- a. White bread
  - b. Brown rice
  - c. Soda
  - d. Cookies
  - e. Pancakes
17. A long distance runner would benefit more from which of the following foods prior to their run?
- a. A dish of spaghetti
  - b. A candy bar
  - c. A glass of juice
18. You have to take a blood pressure on a patient who has very large arms. You notice that your cuff is too small. Realizing this, if you were to take the patient's BP with this cuff then the reading would be.
- a. Slightly elevated but acceptable since there are no other cuffs around.
  - b. Elevated and you should use instead a large cuff of appropriate size
  - c. Lower than normal
19. Lisinopril is a blood pressure medication that is known as a ....
- a. Angiotensin conversion enzyme inhibitor
  - b. Beta blocker
  - c. Benzodiazepine
20. Your patient's blood pressure runs low. They stand up to fast and feel like they are going to pass out... this type of symptom is known as...
- a. Low blood pressure side effects
  - b. Orthostatic hypotension
  - c. Orthorhombic hypertension

## Phlebotomy Career Training 2009

## Test 2

Name: \_\_\_\_\_

1. When going into an isolation room the healthcare worker must don personal protective equipment in which of the following orders?
  - a. Gloves, gown, goggles, mask
  - b. Gown, gloves, goggles, mask
  - c. Gown, mask, goggles, gloves
2. When leaving the isolation room the healthcare worker must doff their equipment in which of the following orders?
  - a. Gown, gloves, goggles, mask
  - b. Goggles, mask, gloves, gown
  - c. Mask, gloves, goggles, gown
3. When using a blue top tube, the following can be inferred.
  - a. The patient is a bleeder.
  - b. The lab could be a PT (Prothrombin Time) or PTT (Partial Thrombin Time) and the patient may have bleeding tendencies.
  - c. It is the first tube to be used if no blood cultures are ordered. The lab could be a PT (Prothrombin Time) or PTT (Partial Thrombin Time) and the patient may have bleeding tendencies.
4. The needle gage indicates the...
  - a. The size of the bevel
  - b. The length of the needle
  - c. The thickness of the needle
5. You walk into a room and see a child holding their doll tightly, looking away with fear. Your first approach would be to...
  - a. Walk up to the child and tell them what you are about to do, (explain venipuncture)
  - b. Get another phlebotomist or nurse to assist you with the child.
  - c. Greet the child with a smile and ask, "what is the name of your doll?"
6. You have just left the lab with your schedule of draws for the morning, and you notice a patient in a wheel chair crying quietly in the corridor. You would .....

- a. Approach the patient and kneel down so that you were at eye level, and ask them if they would like to talk about what is bothering them.
  - b. Walk over to them and ask them if they are o.k..
  - c. Find a nurse on the floor and let them know about the patient then continue your day.
7. You are to perform a venipuncture on a patient whom has two I.V.'s in each antecubital fossa. Understanding the rules of draw, your first action would be to..
  - a. Turn off the I.V. drip, wait 3 minutes, then draw below the site.
  - b. Seek out a nurse and ask them to shut off the I.V., wait 3 minutes, then draw and remind the nurse to turn the I.V. back on.
  - c. Ask the nurse to turn the I.V. off, wait 10 minutes, then draw above the I.V.
8. You are getting ready to draw a patient that has a heparin lock (I.V access port which is not connected to any I.V. tubing). Knowing that blood is accessible from this port, you would do which of the following..
  - a. Cleanse the port access with alcohol, wait until it is dry, then draw blood from the port.
  - b. Assess the other arm for possible veins to draw from and proceed to draw.
  - c. Draw on the hand of the arm with the access port.
9. Upon walking into a patient's room, you notice that the patient is sleeping. You would ...
  - a. Approach the patient from the end of the bed where their feet are, and ask in a even polite tone of voice, "hello Mr. Smith, I am sorry to have to wake you"
  - b. Realize that the patient is sleeping and that they probably won't feel the needle puncture and prep the site for draw.
  - c. Approach the patient and tap on their shoulder asking them to wake up.
10. You are about to draw on a patient who has been talking with you for a few minutes and then you notice that they closed their eyes and nodded their head. You would....
  - a. Assume that they went to sleep, leave the room and draw another patient then come back.
  - b. Keep talking to the patient until they wake up.

- c. Attempt to wake the patient by calling their name in a low gentle tone, if unable to rouse them, check to see if they are breathing and if they cannot be aroused, remain in the room and call for help.
  
- 11. You are about to draw on a patient and notice a bulging vein in their right hand. You would...
  - a. Realize that this is a varicose vein and that these types of veins, though big, have poor venous flow.
  - b. Apply the tourniquet and draw from that vein.
  - c. Draw from that vein but do not use tourniquet.

### Phlebotomy Test 3

For the questions below list the order of draw according to tube color, number of tubes used and any preparation needed such as inversion times and whether or not it is a fresh frozen specimen. You may refer to your lab handouts as reference.

1. Your labs are as follows; TSH, Electrolytes, Lipid Panel, Blood Cultures
2. Your labs are as follows; Dilantin level, Gentamycin Peak, Sickle Cell
3. Your labs are as follows; Hgb (hemoglobin), Hct (hematocrit), AST, ALT, PTT
4. Fasting 6 hour Glucose, Hgb A1C, Depakene level
5. Serum Albumin, Alk Phos, Na, K, Cl, CO2
6. Hepatic Function, T3, T4, CBC/Diff
7. Bili Direct, Bili Total, BUN(Blood urea nitrogen)
8. Blood Alcohol level, PT, Blood Cultures
9. Serum Amylase, BMP, TIBC(total iron binding capacity)

10. LDL, HDL, lithium level, ESR (erythrocyte sedimentation rate)

11. Tegretol level, Vancomycin trough, Cardiac enzyme profile

12. Cre (creatinine), Ca, T3 uptake, Electrolytes

13. HDL, Triglycerides, ALT, Phenobarbital level, PTT

14. Renal Function, BMP (Basic Metabolic Profile)

15. WBC/Diff, Hgb, Theophylline level, Cl

16. Serum Dilantin level, Hemogram

17. Lipid profile, IgM, IgE

18. PTT, CMP, Hepatitis Profile

19. HgbA1C, 4 hour fasting Glucose, serum digoxin level

20. HCG Serum, Na, K, Hct

21. Electrolytes, Mg, Ca, Albumin, Erythrocyte count

22. HBsAG, CBC, Renal Function

23. Blood alcohol level, PTT, PT

24. FSH, LDH, Dilantin level, Hgb

25. ESR, BUN, CRE, PT
26. HCG, Cardiac enzymes, Hgb A1C
27. HB core IgM, D. Bilirubin, PT
28. BNP, PSA, Rheumatoid Factor
29. GFR, ICA (ionized Calcium), C-Reactive Protein
30. AFP Maternal, Salicylate level, Acetaminophen level
31. Platelet Count, PT, RF
32. AST (SGOT), ABO/Rh, LH (lutening hormone)
33. PRG (Progesterone), Mg, Homocysteine
34. BMP, PTT
35. CMV IgM Antibody, CK Total, Iron, creatinine GFR,
36. Lead Blood level, Aldosterone, BMP
37. PTT, Blood Cultures, BUN
38. Epstein-Barr Abs, Blood Glucose Type and screen
39. HDL, WBC, Varicella IgG Ab

40. Theophylline level, Hep B surface Ab(HBSAB), fasting 2 hour glucose

The following questions are multiply choice and true or false, and matching

41. When performing a venipuncture, a number of things can go awry. However, a good phlebotomist takes every precaution to eliminate error and protect both themselves and the patient. Match the venipuncture errors with the probable cause.

- |  |   |
|--|---|
| a. Ischemia from cutting off circulation | 1. Drawing in or near an infected site    |
| b. Septicemia                            | 2. Too deep of needle insertion           |
| c. Hematoma                              | 3. Improper pressure dressing             |
| d. Bleeding out                          | 4. Moving needle back and froth/side/side |
| e. Nerve injuries                        | 5. Not sterilizing area/needle unsterile  |
| f. Local infection                       | 6. Tourniquet left on too long            |

42. It doesn't matter how long the needle is left uncapped.

- a. True
- b. False

43. When preparing to do a venipuncture for a blood alcohol level you would...

- a. Prepare the site with an alcohol swab and let air dry.
- b. Prepare the site with a betadine swab and let air dry.
- c. Wash site with soap and water only.

44. When preparing to do a blood glucose level you would....

- a. Prepare the site with an alcohol swab and let air dry.

- b. Prepare the site with a betadine swab and let air dry.
- c. Wash site with soap and water only.

45. It is preferable to always use a butterfly when drawing blood.

- a. True
- b. False

46. If a patient's mentation changes while you are in the room you should..

- a. Immediately call for assistance using the call light
- b. Check patients breathing, airway, and pulse
- c. Remain with the patient until help arrives
- d. All of the above

47. Improper collection techniques can result in which of the following?

- a. Death of the patient
- b. Laboratory error
- c. Omission of treatment due to improper lab results
- d. Possible law suit
- e. All of the above

48. A phlebotomist should record which of the following on their lab slips?

- a. I.V. medication infusing
- b. Anatomical draw site
- c. Needle gage
- d. Needle type, ie, butterfly, vs vacutainer and needle
- e. Patients comments

f. All of the above

g. A, b, c, d, only

49. When drawing around a bandaged arm, you would..

a. Never draw around a bandaged arm because it could be infected

b. Attempt to draw lower than the bandage

c. Use a butterfly at a smaller angle

50. When using a tourniquet, you would.....

a. Lift up the patients sleeve and make sure that you can see the tourniquet at all times.

b. Place the tourniquet around the patients clothes to prevent injury.

c. Remove the tourniquet prior to finishing the draw.

d. All of the above

e. A and C only

## Phlebotomy Career Training 2009

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  - e. Gown, gloves, goggles, mask
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- 9) Upon walking into a patient's room, you notice that the patient is sleeping. You would ...
- a) Approach the patient from the end of the bed where their feet are, and ask in a even polite tone of voice, "hello Mr. Smith, I am sorry to have to wake you"
  - b) Realize that the patient is sleeping and that they probably won't feel the needle puncture and prep the site for draw.
  - c) Approach the patient and tap on their shoulder asking them to wake up.
- 10) You are about to draw on a patient who has been talking with you for a few minutes and then you notice that they closed their eyes and nodded their head. You would....
- a) Assume that they went to sleep, leave the room and draw another patient then come back.
  - b) Keep talking to the patient until they wake up.
  - c) Attempt to wake the patient by calling their name in a low gentle tone, if unable to rouse them, check to see if they are breathing and if they cannot be aroused, remain in the room and call for help.
- 11) You are about to draw on a patient and notice a bulging vein in their right hand. You would...

- a) Realize that this is a varicose vein and that these types of veins, though big, have poor venous flow.
  - b) Apply the tourniquet and draw from that vein.
  - c) Draw from that vein but do not use tourniquet.
- 12) You are with a patient and you notice that the patient begins speaking incoherently. Your first reaction would be to ....
- a) Stay with the patient and use the call button or intercom and ask for immediate assistance
  - b) Finish your draw and go on to the next patient, mentioning to the nurse on the way out the type of behavior that the patient exhibited.
  - c) Ask the patient if they can state their name, date and time, and if not stay with the patient and use the intercom or call light to get help.
- 13) A patient tells you that they feel like they want to die. You would.....
- a) Tell the patient that he or she will get better soon.
  - b) Explore their feelings using open ended questions and ascertain if they have a plan to carry out their suicide. If so, then stay with the patient and call for help.
  - c) Tell the patient that you are going for some help and will be right back.
- 14) You notice that a patient's hands are deformed from rheumatoid arthritis and they are not able to lift or move their arms to help you. You would.....
- a) Ask them if you could gently assist their arm onto the blue pad for draw.
  - b) Inquire what their level of pain is, and if greater than 8, explain that you will let the nurse know and you will be back in a set amount of time to draw them.
  - c) Inquire as to their level of pain, and if greater than 8, attempt to make them comfortable and explain that they will let the nurse know about their pain and that you will be back at a later time to draw their blood, specifying a time frame.
- 15) Your blood draws indicate that you must draw a CBC, Hgb A1C, and a PTT. Knowing the order of draw, you would...
- a) Draw the blue top tube first, then the red top tube, using only one red top tube.
  - b) Draw the red top tube first, then the blue top tube, then after the red top tube sits for about 10 minutes you would centrifuge the red top tube only.

- c) Draw the blue top tube first, , then the lavender top tube.
- 16) Improper inversion of blood tubes or vigorous shaking can cause...
- a) Hemolysis
  - b) Blood clots
  - c) Serum lysis
- 17) You are drawing a patient with a heparin drip IV in their left arm. You would..
- a) Ask the nurse to shut off the IV for 3 minutes
  - b) Ask the nurse to shut off the IV for 15 to 20 minutes
  - c) Turn off the IV and let the patient know that you will be back in 15 to 20 minutes to draw their blood.
- 18) You notice that your patient has two IV's, one in the left hand and the other in the right ante cubital fossa. Your first action would be to....
- a) Ask the nurse if you can draw the patient from the left arm in the ante cubital fossa
  - b) Ask the nurse if you can draw from the right hand.
  - c) Inspect each of the arms and look for the best veins with permission from the patient, then ask the nurse if you can draw from either the left ante cubital fossa or the right hand.
- 19) You walk into a patient's room knowing that you have a stat blood draw and see the doctor speaking with the patient. Your first action would be to ....
- a) Politely interrupt the doctor and ask if you can draw the stat lab
  - b) Go on to the next patient on the same floor
  - c) Approach the patient while the doctor is speaking and ask if you can draw their blood.
- 20) Your patient is unable to spell their name adequately for you to identify them. Your first action would be to ...
- a) Chat with the patient a while longer to get further identification, then excuse yourself and find a nurse who can identify that patient.
  - b) Knowing that they are alert and oriented x 3 (A&Ox3) you would begin to draw.
  - c) Knowing that they are alert and oriented x2, you would also use their arm band, and get a nurse to identify them without it being obvious to the patient that you need further identification.

- 21) You have the following draws. A. electrolytes, CMP, glucose, serum Dilantin level. Your order of draw is the following;
- electrolytes, CMP, (yellow); / serum Dilantin level (red)/ glucose (grey)
  - Electrolytes, CMP (red),/ serum Dilantin (Yellow)/ glucose (grey)
  - Electrolytes, CMP (grey)/ serum Dilantin (yellow)/ glucose (grey)
- 22) You must prepare the serum dilantin. Your first step would be...
- Let the specimen sit after 5 inversions, then centrifuge for approximately 15 minutes, then pipette off the serum and place into another red tube for freezing.
  - Let the specimen sit after 10 inversions, then centrifuge for approximately 15 minutes, then pipette off the plasma, leaving the serum, and then freeze the serum.
  - Let the specimen sit, then after 4 minutes centrifuge for approximately 15 to 20 minutes, then pipette off the serum from the top, place into a container for fresh frozen specimens and freeze.
- 23) You have just finished drawing a patient's blood.....you would...
- Next label the tubes with the patient's name and medical number.
  - Pull the tubes that you have previously labeled with the patient's name and medical record number.
  - Label the tube with the patient's name only.
- 24) You have the following draws...Tegretol level, HAVAB, and HCT, the order of draw would be which of the following.
- Use Yellow tube for HAVAB (hepatitis viral antigen B), red tube for Tegretol, and lavender tube for HCT (hematocrit)
  - Yellow tube for Tegretol, lavender tube for hematocrit, red tube for HAVAB
  - Lavender tube for hematocrit/ red tube for tegretol,/ yellow tube for HAVAB
- 25) You are in a patient's room and the patient grasps their chest all of a sudden in pain, then they fall limp. Your first action would be..
- Call a code blue using patient's phone and pulling the call light from the wall
  - Check for breathing and pulse, if none call a code blue, remain in the room with the patient, and perform CPR

- c) Check for pulse and respiration, if none call a code.
- 26) You are to draw the following labs.... Lipid Profile, PHOS, blood cultures, and PTT. Your color tube and order of draw is .....
- a) Lipid Profile (red), Blood Cultures (yellow), PTT (Blue), PHOS (Yellow)
  - b) Blood Cultures (yellow), Lipid Profile & PHOS (yellow), PTT (blue)
  - c) Blood Cultures (yellow), PTT (blue), Lipid Profile (yellow)
- 27) You notice that your patient is a 79 year old female and that her arms appear black and blue from previous venipuncture. You are to draw a PT, and PTT. Upon your assessment you would .....
- a) Choose not to use a tourniquet because it would cause more bruising and to use a butterfly with a needle gage of 22, and attempt to find a vein in the hand.
  - b) Use a 21 gage, use a tourniquet, and find use the accessory cephalic.
  - c) Use a 23 gage without a tourniquet and find a vein in the hand.
- 28) The importance in the order of draw cannot be under estimated due to which of the following factors?
- a) Order of draw prevents contamination of the blood from the interior needle so that lab results are not falsely high or low.
  - b) Order of draw is based on the preservatives in each of the tubes. Each of the preservatives carry ions that mix with the blood.
  - c) Order of draw has a base standard across the U.S. and Canada, except for some hospital preferences.
  - d) All of the above.
- 29) You have to draw a PT on a patient. Know that they are probably a bleeder you would ....
- a) Make sure that you have a pressure dressing and keep constant gentle pressure on the draw site until there is no further pooling of blood at the site.
  - b) Understand that patients who are on blood thinners have blood that takes longer to clot than normal people.
  - c) That a PT is a prothrombine time.
  - d) Alll of the above

- 30) A Prothrombine time is a test that is done on a patient to measure their blood clotting time and to determine the strength of their next dose of...
- a) Coumadine
  - b) Heparin
  - c) Dopamine
- 31) The endocrine system is a part of the body that is responsible for...
- a) Hormonal, and enzymatic secretions and regulation
  - b) Glucose levels in the blood
  - c) Thyroid level regulations
  - d) A and B only
  - e) All of the above
- 32) Elderly skin changes can cause which of the following?
- a) Loss of body temperature more quickly
  - b) Loss of elasticity
  - c) Increased risk of injury
  - d) Increased risk of infection.
  - e) A,B,C
  - f) All of the above
- 33) There is a layer of epidermis that cannot regenerate.
- a) True
  - b) False
- 34) Cellulitis is .....
- a) Infection in the epidermal layers of skin
  - b) Results in fever, redness, and swelling
  - c) Is a eye disease

- d) Must be treated with IV antibiotic therapy
- e) All of the above
- f) A, B, D only

35) When drawing blood near an infected area the following can happen...

- a) The infection can be spread throughout the blood stream
- b) The infection can become systemic
- c) The patient can become seriously ill
- d) All of the above
- e) A and B only

36) It is important for a phlebotomist to assess their client thoroughly because...

- a) Helps to facilitate therapeutic communication
- b) Makes the patient feel at ease
- c) Helps the phlebotomist to recognize sites not to draw
- d) Noticing changes in the patient or problems with skin, IV, mentation changes, will assist the patient to get treated before a problem gets worse.
- e) Makes the phlebotomist more adept at finishing their draw more quickly
- f) A,B,C,D, only
- g) All of the above

37) You are going to draw a PTT from a patient that has very poor veins. Knowing this you will ...

- a) Use a 22 gage butterfly, run the first few milliliters of blood into a red tube, and then draw the blood in the blue tube
- b) Use a 22 gage butterfly, and dispense into a blue tube
- c) Use a 21 gage butterfly and dispense into a red tube.

38) When drawing a PTT you realize that...

- a) This is a test for Partial Thrombin Time
- b) This test is based on Heparin protocol

- c) That you must use a red top tube
- d) You will use a blue top tube
- e) All of the above
- f) A,B, D only

39) You patient is a infant, knowing this you would...

- a) Expect to have a heel warmer handy
- b) Be sure to have another phlebotomist hold the infant during the draw
- c) Use a capillary tube
- d) Draw from the medial cubital
- e) All of the above
- f) A,B,C, only

40) You have to draw a series of Cardiac enzyme profiles. You are drawing the first one. You would watch the patient for....

- a) Severe chest pain
- b) Possible cardiac arrest
- c) Blood thinner therapy
- d) Expect to use a pressure dressing
- e) All of the above
- f) A,and B only

41) You see a patient in the bed next to your patient who asks if you can get them some water. You would...

- a) Request that they put on their call light and wait for a nurse or aide
- b) Greet the patient, identify yourself and tell them that you will be glad to assist them.
- c) Explain to the patient that you do not have the time right now but that you will get someone to help them.

- 42) Your lunch break is in 10 minutes, and a patient has just slipped in their bathroom and is having a hard time getting up. You would...
- a) Immediately go and assist the patient
  - b) Call for help
  - c) Find someone to help them and continue on schedule
  - d) A and B only
- 43) A patient stops and asks you when are they going to be discharged. You would....
- a) Explain to the patient that you do not work on this floor regularly, but you will let the nurse know their concerns, and come back to verify with the patient after speaking with the nurses.
  - b) Tell the patient that you have a very busy schedule and cannot help them right now.
  - c) Walk by the patient and pretend you didn't hear them.
- 44) You notice a patient in the bed shivering, they are not fully alert. You would...
- a) Grab a blanket and place it over them, explaining what you are doing
  - b) Notify a nurse that the patient is shivering, and that you provided a blanket.
  - c) Find a nurse's and ask them to get that patient a blanket.
  - d) A and B only
  - e) A, B, and C
- 45) You have to draw on a patient who is comatose, they cannot respond. Upon drawing this patient you would.....
- a) Look for the most patent veins
  - b) Explain the procedure while looking for a vein,
  - c) Let the patient know the steps that you are taking, such as, "the alcohol will feel cold, you will feel a slight pinch, I am putting a tourniquet around your arm.
  - d) Greet the patient as you would a patient who is alert and oriented.
  - e) A, C, and D
  - f) A, B,C only

- 46) You notice that a patient who you must draw begins vomiting.... You would...
- a) Come back later
  - b) Assist the patient by getting them an emesis basin
  - c) Push the call light and ask for help.
  - d) A and B
  - e) B and C only
- 47) You notice that your patient is not alert and oriented, and that their lips are dry. You also notice that their lunch tray has not been touch. Before drawing you would...
- a) Offer the client sips of water,
  - b) Make sure to tell the nurse or aide that the patient needs to be fed
  - c) Help to make sure that the patient is comfortable prior to leaving.
  - d) All of the above
- 48) You notice a patient in the room who is having difficulty breathing.. you would
- a) Stop the draw immediately, stay with the patient and call for assistance.
  - b) Finish the draw, then call for assistance
  - c) Stop the draw and go get assistance.
- 49) You are to draw the following labs....Bun, Creatinine, and a TSH, along with WBC. The order of draw..
- a) Yellow tube for the BUN,Creatine, and TSH, lavender tube for the WBC.
  - b) Red tube for the BUN, Yellow for the TSH and Blue for the Creatinine
  - c) Yellow for the BUN and Creatinine, then Red for the TSH and CBC
- 50) You are going to lunch when a patient approaches you and asks you where a particular building is located. You do not know, but you.....
- a) Explain to the patient that you do not know, but that you will find out. Go and find out and come back to let the patient know.
  - b) Explain to the patient that you do not know, but someone in the kiosk might be able to help, then direct them to the kiosk.

- c) Tell the patient that you do not know, and tell them to ask someone else.

Phlebotomy Career Training 2009

Skin Changes in the Elderly or (Geriatric)

### ***Geriatric Essentials***

- The overall result of age-related structural changes is an increase in skin dryness, roughness, wrinkling, and laxity, and a decrease in skin elasticity.
- The overall result of age-related functional changes is a decline in skin barrier function, mechanical protection, sensory perception, wound healing, immunologic responsiveness, thermoregulation, and vitamin D production.

Aging leads to many changes in the skin, hair, and nails. These changes can be broadly categorized as either age-related or photoaging. Age-related changes are presumed to be due to age alone, whereas photoaging is due to chronic exposure to ultraviolet (UV) radiation superimposed on aging itself. Popular notions of "old skin" often correspond more closely to photoaging than to aging itself, and dramatic differences between aged skin protected from UV light and younger unprotected skin are evident to patients and clinicians alike. Other factors that affect the skin include smoking, which accelerates wrinkle development, and disease, most notably connective tissue disorders.

The overall result of structural changes is an increase in skin dryness, roughness, wrinkling, and laxity, and a decrease in skin elasticity. The overall result of functional changes is a decline in skin barrier function, mechanical protection, sensory perception, wound healing, immunologic responsiveness, thermoregulation, and vitamin D production. Aging may also affect the absorption of some topical drugs, although clinically important differences have not been identified.

**Epidermis:** The epidermis gives rise to the outer barrier layer of dead cells, the stratum corneum, through terminal differentiation of keratinocytes, the predominant cell type. The epidermis recognizes invading pathogens and other foreign substances and generates abundant cytokines. Melanocytes reside in the epidermal basal layer, producing and distributing photoprotective melanin to the keratinocytes.

With aging, the dermal-epidermal junction flattens--the number of interdigitations dramatically decreases--resulting in a smaller contact surface area between the dermis and epidermis. As a result, dermal-epidermal separation occurs more readily in elderly skin, and elderly skin is more likely to tear or blister. The change probably also compromises communication and nutrient transfer between epidermis and dermis, affecting the mechanical, barrier, and immunologic functions of the epidermis.

Elderly skin often appears dry and flaky, especially over the lower extremities, at least partly due to a dramatic age-associated decrease in epidermal filaggrin, a protein required for the binding of keratin filaments into macrofibrils.

Epidermal turnover rates decrease by about 30 to 50% between a person's 20s and 70s. This decrease slows the replacement rate of the stratum corneum, likely resulting in a rougher skin surface and a less adequate barrier. Slow replacement of the surface layer is also thought to be responsible for the prolonged healing times for epidermal wounds as well as the decreased barrier function that results from slow replacement of neutral lipids. The number of active melanocytes decreases by about 10 to 20% per decade, probably explaining in part the increased vulnerability to ultraviolet (UV) radiation in old age. An accompanying age-associated decline in DNA repair capacity compounds the loss of melanin protection and increases the risk for developing skin cancers. The prevalence of melanocytic nevi also declines, from a peak between ages 20 and 40 to near zero after age 70.

Vitamin D production, which depends on sun exposure, declines with aging, possibly because of a 75% decrease between early and late adulthood in the amount of epidermal 7-dehydrocholesterol, the immediate biosynthetic precursor of vitamin D. Decreased vitamin D production is often compounded by reduced outdoor activity, leading to insufficient sun exposure.

**Dermis:** The dermis contains the blood vessels, lymphatics, nerves, and deeper portions of the hair follicles and glands that arise from the epidermis. It is composed largely of extracellular matrix and gives skin its strength and elasticity.

Dermal thickness decreases by about 20% in the elderly and often even more in photodamaged areas. UV damage produces hyperplastic changes initially, followed by atrophic changes, particularly in fair-skinned people. These opposing changes probably explain observed variations in the effects of photodamage.

Even when elderly skin has been consistently protected against the sun, within the dermis there is about a 50% decrease in mast cells and a 30% decrease in venular cross-sectional area. Basal and peak levels of cutaneous blood flow are reduced by about 60%. As a result of these decreases, there is a decrease in release of histamine (a mast cell product) and other measures of inflammatory response after exposure to UV radiation or immune challenge. Vascular responsiveness during injury or infection is also compromised. The striking involution of vertical capillary loops in dermal papillae is thought to account for the pallor, decreased temperature, and impaired thermoregulation found in elderly skin. As well, the decline in vascular supply to hair bulbs and to the eccrine, apocrine, and sebaceous glands may contribute to their senescence.

Reduced synthesis and increased degradation of collagen, the major component of the dermal matrix, probably contribute to impaired wound healing in the elderly. Elastic fibers decrease in number and diameter with aging, accounting for decreased elasticity in elderly skin. Fragmentation, progressive cross-linkage, and calcification of elastic fibers also occur.

Alterations of mucopolysaccharides that normally bind water in the dermal matrix may affect skin turgor.

**Subcutaneous fat:** Subcutaneous fat acts as a shock absorber, protecting the body from trauma, and plays a role in thermoregulation by limiting conductive heat loss. The overall volume of subcutaneous fat usually diminishes with aging. Distribution changes as well; eg, there is a relative decrease in subcutaneous fat on the face and hands but a relative increase on the thighs and abdomen. These changes can alter the appearance of the face and hands and reduce the pressure diffusion over bony areas that prevents some pressure ulcers and fractures.

**Hair:** Hair substantially grays in about 50% of people by age 50, apparently due to loss of melanocytes. Although the degree of hair graying often runs in families, the responsible genes are unknown.

Linear growth rate decreases with aging because the follicular keratinocytes that normally differentiate to form the hair shaft proliferate more slowly. Hair loss (more correctly, conversion from terminal to vellus hairs) in the vertex and frontotemporal regions (androgenetic alopecia) in men begins between the late teens and the late 20s; by the time they reach their 60s, 80% of men are substantially bald. In women, the same pattern of hair loss may occur after menopause, although it is rarely pronounced. Hair thinning, or diffuse hair loss sometimes termed female alopecia, is more correctly termed miniaturization of hairs. The cause is a shortened anagen (growth) phase and decreased proliferation of follicular keratinocytes. Diffuse hair loss normally occurs in both sexes with aging and should be distinguished from diffuse hair loss caused by iron deficiency, hypothyroidism, chronic renal failure, undernutrition, and use of certain drugs (especially anabolic steroids and antimetabolites).

Excessive or unwanted hair growth becomes common after menopause in women as a result of altered estrogen-androgen balance in hormonally sensitive hair follicles. The most distressing symptom may be the appearance of scattered terminal hairs in the beard area. Men may notice excessive hair growth in the eyebrows, nares, or ears.

**Nails:** Linear growth rate and thickness ("strength") of nails decreases with aging because of a decrease in the proliferative rate of nail matrix keratinocytes, which differentiate to form the nail plate. Nails become dry and brittle and flat or concave instead of convex, often with longitudinal ridging. Longitudinal pigment banding, common among blacks, often becomes more pronounced with aging. Nail color may vary from yellow to gray, reflecting changes in the nail bed. The lunulae can become poorly defined. Occasionally, the nails become grossly thickened and distorted.

Lamellar dystrophy manifests as brittle nails with split ends or layering and commonly occurs in elderly people, though it may also occur in middle-aged women.

**Nerves and glands:** The density of cutaneous sensory end organs decreases progressively between the ages of 10 and 90 by about 1/3. The result is an age-related reduction in sensations

of light touch, vibration, corneal sensitivity, 2-point discrimination, and spatial acuity. The cutaneous pain threshold increases by about 20%.

Eccrine glands decline in number by an average of 15% during adulthood. Decreased gland secretion results in marked decreases in spontaneous sweating in response to dry heat. These changes, compounded by decreased cutaneous vascularity, make the elderly more vulnerable to heat. Apocrine glands also decrease in size and function with aging, but these changes do not appear to have any clinically significant effect (except possibly a decline in body odor).

The size and number of sebaceous glands do not appear to decrease with aging. However, sebum production decreases by about 23% per decade, beginning in early adulthood, probably due to the concomitant decrease in production of gonadal or adrenal androgens, to which sebaceous glands are exquisitely sensitive.

**Immunologic function:** The number of epidermal Langerhans' cells (immune cells in skin responsible for antigen presentation) decreases by 20 to 50% during adulthood. Alterations in the production of ILs and cytokines by other cells such as keratinocytes may also contribute to overall immunologic decline observed in the elderly. The result is presumed to be increased susceptibility to infections and increased incidence of neoplasms.

## Phlebotomy Career Training

Fall 2009

## Test 5

1. Being a phlebotomist is a rewarding career. The correct term for the procedure that the phlebotomist performs is known as.....
  - a. Removing blood
  - b. Venipuncture
  - c. Intrapuncture
2. The most important single action that a phlebotomist can take to prevent the spread infection is...
  - a. Wearing gloves
  - b. Sanitizing their hands
  - c. Washing their hands after each draw
3. Phlebotomist are constantly faced with the danger of needle sticks in the health care area, which can transmit.....
  - a. Hepatitis B and or Hepatitis C
  - b. HIV
  - c. Blood borne pathogens
  - d. All of the above
4. Inversion is a technique which the phlebotomist performs on each tube of blood a specific number of times for which of the following reasons?
  - a. To enhance its clotting properties
  - b. To prevent clots from forming
  - c. To mix the preservative with the blood
  - d. A and B
  - e. B and C
5. The human heart has how many chambers?

- a. 3
  - b. 2
  - c. 4
6. Blood flows to the heart from the \_\_\_\_\_ and from the heart through the \_\_\_\_\_.
- a. Veins, arteries
  - b. Arteries, veins
  - c. Capillaries, arteries

#### Phlebotomy Career Training 2009 Midterm

7. In the incident of a needle stick, the phlebotomist should immediately .....
- a. Wrap the affected area with gauze
  - b. Vigorously cleanse the area with antiseptic soap under warm running water and with gentle pumping action attempt to remove as much blood from the area until no further blood can be removed.
  - c. Wash area with soap and water, then dry.
8. The hepatitis B vaccine is recommended for health care workers who have increased risk of needle sticks. The hepatitis B vaccine is given in a series of....
- a. Two immunizations over a period of 2 months.
  - b. Four immunizations over a period of 3 months.
  - c. Three immunizations over a period of 6 months.
9. When preparing to draw blood, the needle should be ....
- a. Bevel down
  - b. Bevel up
  - c. Bevel sideways
10. The size of the bevel is called the needle gauge. Needle gauges vary. Given the following gauges, list them in order of largest to smallest.  
23g, 18g, 21g, 20g
- a. 23g, 21g, 20g, 18g
  - b. 18g, 20g, 21g, 23g
  - c. All of the gauges are the same, it is only the length that varies.
11. The needle gauge of choice for most phlebotomist is a 21 gauge. The reason for this is which of the following?
- a. A 21 gauge needle works better.
  - b. There is less suction.
  - c. It is a small gauge that can readily fill a tube of blood.
12. You are preparing to draw blood on a patient. You notice that the patient is holding their arms close to their side. You smile and introduce yourself, asking how the patient is doing today. The patient replies that they are fine and smiles faintly back to you. Observing the patients non-verbal actions, you assume the following.

- a. The patient is fearful of having their blood drawn, but is afraid to say anything.
  - b. The patient is not afraid of having their blood drawn.
  - c. The patient is just shy.
13. It is important to have two phlebotomists in the room when drawing blood on a toddler or younger child because....
- a. You may need the other phlebotomist to stabilize the child's arm while you draw the blood.
  - b. To help with moral support.
  - c. To engage the child's attention away from the needle.

#### Phlebotomy Career Training 2009, Midterm

14. When preparing to draw a patient's blood it is important to help make them feel relaxed. Some of the ways of doing this is with.....
- a. A warm smile
  - b. Genuinely caring about their feelings, inquiring about their health.
  - c. Always ask if you may inspect their arms
  - d. Ask if they are comfortable
  - e. Being calm and relaxed yourself
  - f. All of the above
15. List the following procedures in order for drawing a patient's blood.
- a. Greet the patient by name, ask them how they are feeling, ask if you may inspect their arms, wash your hands, sanitize your hands, look for a visible vein, apply the tourniquet, cleanse the area with a alcohol wipe, prepare needle and vacutainer, verify order of draw with the labs on the form, don gloves, palpate for vein, using bevel up at a 30 degree angle gently push needle into vein, insert blood vial let fill, take gauze and place gauze directly above the needle, gently remove the needle while simultaneously rolling gauze down over site, apply gently pressure until bleeding stops, cover with tape, thank the patient.
  - b. Greet the patient by name, ask them how they are feeling, wash your hands, ask the patient their name, and date of birth, match this with their lab slip, ask if you may inspect their arms, cleanse the area with a alcohol wipe, prepare needle and vacutainer, verify order of draw with the labs on the form, don gloves, palpate for vein, using bevel up at a 30 degree angle gently push needle into vein, insert blood vial let fill, take gauze and place gauze directly above the needle, gently remove the needle while simultaneously rolling gauze down over site, apply gently pressure until bleeding stops, cover with tape, thank the patient.
  - c. Greet the patient by name, ask them how they are feeling, wash your hands then sanitize, ask the patient their name, and date of birth, match this with their lab slip, ask if you may inspect their arms, apply tourniquet, palpate for vein and look for a landmark, cleanse the area with a alcohol wipe, let dry, prepare needle and

vacutainer, verify order of draw with the labs on the form, don gloves, using bevel up at a 30 degree angle gently push needle into vein, insert blood vial, let fill, remove vial, take gauze and place gauze directly above the needle, gently remove the needle while simultaneously rolling gauze down over site, apply gently pressure until bleeding stops, cover with tape, thank the patient, dispose of needle in sharps container, and dispose of vacutainer.

16. When the blood vial is punctured prior to insertion of the needle, the suction...
- Remains the same
  - Is broken and no longer be used
  - Can be reused since no blood entered the tube

Phlebotomy Career Training, Midterm 2009

17. When going into an isolation room the healthcare worker must don personal protective equipment in which of the following orders?
- Gloves, gown, goggles, mask
  - Gown, gloves, goggles, mask
  - Gown, mask, goggles, gloves
18. When leaving the isolation room the healthcare worker must doff their equipment in which of the following orders?
- Gown, gloves, goggles, mask
  - Goggles, mask, gloves, gown
  - Mask, gloves, goggles, gown
19. When using a blue top tube, the following can be inferred.
- The patient is a bleeder.
  - The lab could be a PT (Prothrombin Time) or PTT (Partial Thrombin Time) and the patient may have bleeding tendencies.
  - It is the first tube to be used if no blood cultures are ordered. The lab could be a PT (Prothrombin Time) or PTT (Partial Thrombin Time) and the patient may have bleeding tendencies.
20. The needle gage indicates the...
- The size of the bevel
  - The length of the needle
  - The thickness of the needle

Phlebotomy Career Training;  
Test 6

Phlebotomy Career Training 2009

Work Sheet;

Labs, order of draw, color of tubes;

Directions: Given the labs that are needed to be drawn, determine the color of tube necessary for the labs and then the order of the draw according to the color of the blood collection tubes. In cases where serum or plasma are requested write the procedure for the collection steps. (i.e., centrifuging the specimen and then pipette the serum out into another container, time for centrifuge of specimen).

1.

<u>Labs ordered</u>	<u>Tube color</u>	<u>Order of draw</u>	Preparation
Dilantin level			
Electrolytes			
CMP			
Sickle cell			
PT (prothrombine time)			

2.

<u>Labs ordered</u>	<u>Tube color</u>	<u>Order of draw</u>	Preparation
Liver Panel			
BNP (Brain Naturetic Peptide)			
IgG			
RF (Rheumatoid Factor)			
Lead			

3.

<u>Labs ordered</u>	<u>Tube color</u>	<u>Order of draw</u>	Preparation
Serum Cholesterol			
Bili Direct			
PSA (Prostatic Surface Antigen)			
Depekane Level			
Tegretol Level			

4.

<u>Labs ordered</u>	<u>Tube color</u>	<u>Order of draw</u>	Preparation
Dilantin level			
Electrolytes			
CMP			
Sickle cell			
PT (prothrombine time)			

5.

<u>Labs ordered</u>	<u>Tube color</u>	<u>Order of draw</u>	Preparation
CBC			
Hgb			
Hct			
Retic Count			
Phenobarbital Level			

6.

<u>Labs ordered</u>	<u>Tube color</u>	<u>Order of draw</u>	Preparation
Fasting Blood Glucose			

Hgb A1C			
SGOT			
SGPT			
Serum Mg (Magnesium)			

7.

<u>Labs ordered</u>	<u>Tube color</u>	<u>Order of draw</u>	Preparation
Thyroid Panel			
WBC			
Hep Profile			
CBC with Diff			
IgE			

8.

<u>Labs ordered</u>	<u>Tube color</u>	<u>Order of draw</u>	Preparation
Serum/Plasma Lithium			
Na, K, CO2, Cl			
Renal Function Panel			
HCG Quantitative			
Blood Alcohol Level			

9. When drawing blood insert the needle .....

- a. just past the bevel
- b. all the way in
- c. half way

10. When drawing with a syringe....
  - a. never push back on the syringe
  - b. always push back on the syringe
  - c. pull gently on the syringe until blood flow is obtained
  - d. A and C only
  
11. Pushing air into a vein can cause...
  - a. death by embolism
  - b. pain
  - c. occlusion of the vein
  - d. all of the above
  
12. A centrifuge machine works to separate serum from plasma by...
  - a. using centrifugal force which separates out blood components by weight according to gravity.
  - b. separates blood into three components
  - c. coagulates blood
  
13. The Latin term, "Hemo", and "Lysis" form the word, hemolysis, which is defined by...
  - a. plasma separation
  - b. blood separation
  - c. serum separation
  
14. Veins are found in many different diameters and thicknesses. When assessing a patient's veins the phlebotomist will choose the ones that have the most...
  - a. patency and spring
  - b. flaccidity and turgor
  - c. elasticity and flow
  
15. The system that is best described by the insertion of the needle into the vein and then attaching the blood vial is called...
  - a. a open system
  - b. a closed system
  - c. a vacuum
  
16. You are a phlebotomist in the hospital and you notice that your patient has I.V.'s in both arms in the ante cubital fossa, your best plan of action would be to...
  - a. draw below the IV if the IV is in the area of the ante cubital fossa
  - b. draw above the IV
  - c. draw below the IV with permission from the nurse

17. A phlebotomist realizes that the IV must be turned off for a minimum of 2 to 4 minutes prior to drawing blood. The phlebotomist should...
- turn off the IV, wait 2 to 4 minutes, then draw the patient's blood and restart the IV
  - Ask the attending nurse if they could shut off the IV, wait 2 to 4 minutes, draw the blood, then restart the IV and let the nurse know that you have restarted the IV
  - Ask the attending nurse if they could shut off the IV, wait 2 to 4 minutes, draw the patient's blood, then let the nurse know to re-start the IV prior to leaving the floor.
18. You notice that a patient has a heparin lock, or IV access port in one arm. Knowing that this port goes directly into the vein and that the patient is a hard draw you would do which of the following...
- attempt to draw from the IV access port
  - look for the best veins in the opposite arm
  - draw from the hand on the arm that has the IV port
19. If the nurse tells you that a patient is A&O x 3, you would expect that the patient will be able to tell you their...
- name, date of birth, date, time and place
  - name and place only
  - date of birth and name
20. When attempting a draw on a patient who is alert and oriented times 2, or A&O x2, your best means at identifying them would be to do which of the following...
- ask the patient to state and spell their name
  - ask the patient to state and spell their name, match their name against the lab requisition and their arm identification band.
  - ask the patient to state and spell their name, match their name against the lab requisition and their arm band as well as checking the room number.

Answer Section:

Phlebotomy Test Answers

Written by Nancy Kimmel RN, PhD, CHMM, CPI(ACA), NHA

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Diabetes/Blood Pressure/Pharmacology

Name: \_\_\_\_\_

Correct Answers are Highlighted in Blue

1. When taking a person's blood pressure it is important to first assess the baseline pressure by which of the following steps...

- d. Find the radial pulse, pump the cuff until the pulse is occluded, then quickly release the pressure, next re-inflate cuff to 30mmHg above the point where the radial pulse was occluded, next let out the air from the cuff slowly listening for the first beat and the last beat.
- e. Find the brachial pulse, pump the cuff until the pulse is occluded, then quickly release the pressure, next re-inflate cuff to 30mmHg above the point where the radial pulse was occluded, next let out the air from the cuff slowly listening for the first beat and the last beat.
- f. Find the radial pulse, pump the cuff until the pulse is occluded, then slowly release the pressure, next re-inflate cuff to 60mmHg above the point where the radial pulse was occluded, next let out the air from the cuff slowly listening for the first beat and the last beat.

2. Diabetes is a prevalent health problem in the healthcare environment, which of the following about diabetes is true?

- d. Diabetes is a viral immune disease. **True** or False
- e. Diabetes can be cured. True or **False**
- f. Diabetics are subject to many health complications such as heart disease, kidney disease and hypertension. **True** or False

3. There are 100 Units in **1** mL's.

4. A low blood sugar is ...

- i. Less than 70

- j. Causes profuse sweating
  - k. Lethargy
  - l. Confusion
  - m. Can be reversed by insulin
  - n. Can be reversed by glucose
  - o. All of the above
  - p. a, b, c, d, and f
5. High blood sugar can cause a condition known as.
- d. Diabetic Keto Acidosis
  - e. Hypoglycemia
  - f. Hyperthermia
6. Your patient has a blood glucose of 105, you are ordered to give them 8 Units of Regular Insulin. You would.
- d. Give the insulin and monitor the patient for any ill effects.
  - e. Do not give the insulin based on the low blood sugar results and report to the supervisor your reasoning.
  - f. Give the insulin as ordered.
7. You are to give 3 Units of insulin.
- d. Draw up the insulin using a 3mL syringe
  - e. Draw up the insulin using a 100 Unit syringe
  - f. Draw up the insulin in a 1 mL syringe
8. You take a manual blood pressure on a client and get a reading of 189/90. You would ....
- d. Retake the reading with a monitored cuff
  - e. Report your findings to the nurse
  - f. Retake the blood pressure manually on the opposite arm
9. You are to give 35 Units of Lantus. You begin by drawing up..
- d. 35 Units of Lantus in a 100 Unit insulin syringe
  - e. 35 Units of Homolog
  - f. 15 Units of Lantus long acting and 20 Units of Novolog fast acting
10. You are about to take a patient's blood sugar. You would begin by doing which of the following...
- d. First Calibrate the glucose monitor, greet the patient and ask them if you can test their blood sugar, use an alcohol wipe on the finger of their choice, wait until it has dried then explain that they are going to feel a little poke, use the lancet at a 90 degree angle on the side of the finger and then wipe away the first drop of blood, gently pump until another

drop of blood is expelled and hold the test strip at a 45 degree angle at the base of the drop of blood until the blood saturates the strip. Then insert the strip for reading, and cover the patients finger with gentle pressure until no further blood is observed from the site. Thank the patient and let them know their blood sugar level .

- e. First Calibrate the glucose monitor, greet the patient and ask them if you can test their blood sugar, wash your hands, and put on gloves, use a alcohol wipe on the finger of their choice, wait until it has dried then explain that they are going to feel a little poke, use the lancet at a 90 degree angle on the side of the finger and then wipe away the first drop of blood, gently pump until another drop of blood is expelled and hold the test strip at a 45 degree angle at the base of the drop of blood until the blood saturates the strip. Then insert the strip for reading, and cover the patients finger with gentle pressure until no further blood is observed from the site. Thank the patient and let them know their blood sugar level .
- f. First Calibrate the glucose monitor, greet the patient and ask them if you can test their blood sugar, wash your hands and put on clean gloves, use a betadine wipe on the finger of their choice, wait until it has dried then explain that they are going to feel a little poke, use the lancet at a 90 degree angle on the side of the finger and then wipe away the first drop of blood, gently pump until another drop of blood is expelled and hold the test strip at a 45 degree angle at the base of the drop of blood until the blood saturates the strip. Then insert the strip for reading, and cover the patient's finger with gentle pressure until no further blood is observed from the site. Thank the patient and let them know their blood sugar level .

11. The cranial nerve that can affect the blood pressure is called...

- d. The vagus nerve
- e. The hypoglossal nerve
- f. The abducens

12. You find a patient lying in bed, dripping profusely in sweat, the patient is lethargic and their mentation is obtunded. Knowing that the patient is a diabetic you would immediately..

- d. Administer fast acting glucose in the form of a high glycemic snack, such as orange juice with sugar and then perform a blood sugar test.
- e. Administer the 11:00 AM dose of insulin that they missed at 10:00 AM
- f. Check their blood sugar first.

13. Digoxin is a heart medication that requires.....

- e. The patient's apical pulse to be checked prior to administration
- f. Regular blood draws to assess levels.
- g. Potassium level assessment
- h. All of the above.

14. When giving beta blocker medication it is not unusual for the patient to have...
- f. Difficulty with respiration
  - g. Lowered heart rate
  - h. Increase in blood pressure
  - i. All of the above
  - j. A and B only**
15. A doctor's orders reads... give catapres 1mg stat...for a BP of 197/89 Upon reading this order you would...
- d. Give the medication
  - e. Recognize that the medication is too high a dose and would drop the patient's blood pressure too low.
  - f. Hold the medication, and consult the nurse due to the high dosage.**
16. Foods that are high on the glycemic index include all but which of the following..
- f. White bread
  - g. Brown rice**
  - h. Soda
  - i. Cookies
  - j. Pancakes
17. A long distance runner would benefit more from which of the following foods prior to their run?
- d. A dish of spaghetti**
  - e. A candy bar
  - f. A glass of juice
18. You have to take a blood pressure on a patient who has very large arms. You notice that your cuff is too small. Realizing this, if you were to take the patient's BP with this cuff then the reading would be.
- d. Slightly elevated but acceptable since there are no other cuffs around.
  - e. Elevated and you should use instead a large cuff of appropriate size**
  - f. Lower than normal
19. Lisinopril is a blood pressure medication that is known as a ....
- d. Angiotensin conversion enzyme inhibitor**
  - e. Beta blocker
  - f. Benzodiazepine
20. Your patient's blood pressure runs low. They stand up to fast and feel like they are going to pass out... this type of symptom is known as...
- d. Low blood pressure side effects
  - e. Orthostatic hypotension**
  - f. Orthorhombic hypertension

## Answers to Test 2

## Phlebotomy Test

For the questions below list the order of draw according to tube color, number of tubes used and any preparation needed such as inversion times and whether or not it is a fresh frozen specimen. You may refer to your lab handouts as reference.

1. Your labs are as follows; TSH, Electrolytes, Lipid Panel, Blood Cultures

Blood Cultures 1<sup>st</sup> draw (if you are drawing with a butterfly needle, waste the first flow into a red tube and discard, then draw aerobic prior to anerobic)

Next In no particular order, use 2 Yellow top (serum separator tubes), one for lipid panel and one for TSH and Electrolytes. Always use 1 tube for just panels. Total tubes used 3

2. Your labs are as follows; Dilantin level, Gentamycin Peak, Sickle Cell

You would use two red tubes, one for the Dilantin level and one for the Gentamycin level then one Lavender for the Sickle Cell. Total Tubes used 3

3. Your labs are as follows; Hgb (hemoglobin), Hct (hematocrit), AST, ALT, PTT

PTT would be drawn first in a blue tube, then one yellow tube for the AST, ALT, then one Lavender for the Hgb and HCT. Total tubes used 3

4. Fasting 6 hour Glucose, Hgb A1C, Depakene level

The Depakene level would be the first draw in a red tube, then the HgbA1C in a Lavender, then the Fasting Glucose in a grey tube. Total tubes 3

5. Serum Albumin, Alk Phos, Na, K, Cl, CO<sub>2</sub>

One yellow top (SST) or red for the Serum Albumin. Preparation includes centrifugation for 15-20 minutes, then pipette the serum into a container and freeze. One yellow top (SST) for the balance of the tests which are part of the Comprehensive Metabolic Profile Total tubes 2

## 6. Hepatic Function, T3, T4, CBC/Diff

Use one Yellow top tube (SST) for the Hepatic Function, One Yellow for the T3 and T4, and one lavender for the CBC with Diff. Total tubes used 3

## 7. Bili Direct, Bili Total, BUN (Blood urea nitrogen)

All are yellow top SST tubes, the Bilirubin Direct and Total can be drawn in one tube and the BUN in another Yellow Top. Rule of thumb, if there are more than 2 tests on one tube, get another tube of blood, since these tests are not usually part of a lab function. Total tubes 2

## 8. Blood Alcohol level, PT, Blood Cultures

Blood Cultures go first, if Anaerobic and Aerobic ordered, Aerobic is first, remember to waste a few drops of blood into a red top tube if using a butterfly needle, PT is next (blue top), then a grey top or lavender for Blood Alcohol level, (remember to clean the area prior to venipuncture with betadine, because using alcohol wipes will cause an elevation in the blood alcohol level as well as an error in blood culture, by destroying growth of viral or bacterial organisms)

## 9. Serum Amylase, BMP, TIBC (total iron binding capacity)

Begin with three yellow tubes, one for each lab, the serum must be isolated for the amylase from centrifugation, then prepared as a fresh frozen specimen.

## 10. LDL, HDL, lithium level, ESR (erythrocyte sedimentation rate)

Yellow top for LDL and HDL, then red top for Lithium level then Lavender for ESR,

## 11. Tegretol level, Vancomycin trough, Cardiac enzyme profile

Yellow first for Cardiac Enzyme Profile, these will be stat, and could possibly be in a green top tube as well, then two red top tubes for each of the medications. Keep in mind that the Vancomycin trough is a timed draw and must be completed in a timely fashion. This is because pharmacy must calculate the next dose based on the results of the medication concentration in the blood stream.

## 12. Cre (creatinine), Ca, T3 uptake, Electrolytes

Two yellow top tubes should suffice for these draws, since the T3 may have to be run at an outside lab.

## 13. HDL, Triglycerides, ALT, Phenobarbital level, PTT

Start with a Blue top tube for the PTT, then two yellow top tubes, then a red top tube for the Phenobarbital level.

## 14. Renal Function, BMP (Basic Metabolic Profile)

Two yellow top tubes are needed. Remember that the Renal function is the same thing as a renal panel, and requires 1 tube by itself.

## 15. WBC/Diff, Hgb, Theophylline level, Cl

Start with a yellow for Chloride, then red for Theophylline level, lavender for the WBC/Diff, and Hgb,

## 16. Serum Dilantin level, Hemogram

Two tubes total, begin with red for the Dilantin then Lavender for the Hemogram

## 17. Lipid profile, IgM, IgE

Two yellow tubes, one for the lipid profile, then one for the IgM, and IgE

## 18. PTT, CMP, Hepatitis Profile

Three tubes, first Blue for PTT then Yellow for a CMP, then another Yellow for the Hep Profile

## 19. HgbA1C, 4 hour fasting Glucose, serum digoxin level

Three tubes, a red for the serum digoxin, (centrifuged with removal of serum and stored as a fresh frozen specimen), then lavender or grey for the HgbA1C, then grey for the fasting Glucose

## 20. HCG Serum, Na, K, Hct

Three tubes, Yellow for Na and K, then Yellow for HCG (pregnancy test) then lavender for HCT

## 21. Electrolytes, Mg, Ca, Albumin, Erythrocyte count

Three tubes, Two yellow and one lavender for the Erythrocyte count

## 22. HBsAG, CBC, Renal Function

Three tubes, one Yellow for the Hep B surface antigen, one yellow for the renal function, then lavender for the CBC

## 23. Blood alcohol level, PTT, PT

Two tubes, one blue for PTT and PT, then one grey for the blood Alcohol level

## 24. FSH, LDH, Dilantin level, Hgb

Three tubes, one yellow for the FSH and LDH, one red for the Dilantin level and one Lavender for the Hgb

## 25. ESR, BUN, CRE, PT

Three tubes, one blue for the PT, one Yellow for BUN and CRE, and one lavender for ESR

## 26. HCG, Cardiac enzymes, Hgb A1C

Three tubes, one Yellow for HCG, one Yellow for Cardiac Enzymes, and one Lavender for HgbA1C

27. HB core IgM, D. Bilirubin, PT

Three tubes, 2 yellow for the Core HB, IgM and Bili Direct, then one Blue for PT

28. BNP, PSA, Rheumatoid Factor

Two to three yellow tubes, one for the BNP, one for PSA, and one for the Rh Factor, possibly two are sent off to another lab

29. GFR, ICA (ionized Calcium), C-Reactive Protein

Two yellow tubes, use the rule of three, if there are three or more test performed on one tube and they are not panels, functions or profiles then use two or more tubes.

30. AFP Maternal, Salicylate level, Acetaminophen level

Three tubes, one yellow for AFP, and two red for each medication

31. Platelet Count, PT, RF

Three tubes, Blue for PT first, then yellow for RF, then lavender for platelet count

32. AST (SGOT), ABO/Rh, LH (lutening hormone)

Three tubes, two yellows and one Pink for the ABO/Rh

33. PRG (Progesterone), Mg, Homocysteine

Two to three yellow tubes, one for each test if two have to be sent out to another lab

34. BMP, PTT

Two tubes, one yellow and one Blue for the PTT

35. CMV IgM Antibody, CK Total, Iron, creatinine GFR,

4 Tubes Total, 3 yellow one for CMV IgM Antibody, one for CK total, and one for Creatinine and GFR, then a lavender for Iron

36. Lead Blood level, Aldosterone, BMP

Three tubes total, two yellow, and one red for lead levels.

37. PTT, Blood Cultures, BUN

Three tubes total, one for Blood cultures, one Blue for PTT, and one yellow for BUN

38. Epstein-Barr Abs, Blood Glucose, Type and screen

Three tubes, one yellow for Epstein Barr, one Pink for Type and Screen (stat) and one grey for Blood Glucose

39. HDL, WBC, Varicella IgG Ab

Three tubes, two yellow for HDL, and Varicella, and one Lavender for WBC

40. Theophylline level, Hep B surface Ab(HBSAB), fasting 2 hour glucose

Three tubes, one yellow for the Hep B, one red for the Theophylline, and one grey for the glucose fasting.

The following questions are multiply choice and true or false, and matching

41. When performing a venipuncture, a number of things can go awry. However, a good phlebotomist takes every precaution to eliminate error and protect both themselves and the patient. Match the venipuncture errors with the probable cause.

- |  |   |   |
|--|---|---|
| g. Ischemia from cutting off circulation | 6 | 1. Drawing in or near an infected site    |
| h. Septicemia                            | 1 | 2. Too deep of needle insertion           |
| i. Hematoma                              | 4 | 3. Improper pressure dressing             |
| j. Bleeding out                          | 3 | 4. Moving needle back and froth/side/side |
| k. Nerve injuries                        | 2 | 5. Not sterilizing area/needle unsterile  |
| l. Local infection                       | 5 | 6. Tourniquet left on too long            |

42. It doesn't matter how long the needle is left uncapped.

- c. True
- d. False

43. When preparing to do a venipuncture for a blood alcohol level you would...

- d. Prepare the site with an alcohol swab and let air dry.
- e. Prepare the site with a betadine swab and let air dry.
- f. Wash site with soap and water only.

44. When preparing to do a blood glucose level you would....

- d. Prepare the site with an alcohol swab and let air dry.

e. Prepare the site with a betadine swab and let air dry.

f. Wash site with soap and water only.

45. It is preferable to always use a butterfly when drawing blood.

c. True

d. False

46. If a patient's mentation changes while you are in the room you should..

e. Immediately call for assistance using the call light

f. Check patients breathing, airway, and pulse

g. Remain with the patient until help arrives

h. All of the above

47. Improper collection techniques can result in which of the following?

f. Death of the patient

g. Laboratory error

h. Omission of treatment due to improper lab results

i. Possible law suit

j. All of the above

48. A phlebotomist should record which of the following on their lab slips?

h. I.V. medication infusing

i. Anatomical draw site

j. Needle gage

k. Needle type, ie, butterfly, vs vacutainer and needle

l. Patients comments

m. All of the above

n. A, b, c, d, only

49. When drawing around a bandaged arm, you would..

d. Never draw around a bandaged arm because it could be infected

e. Attempt to draw lower than the bandage

f. Use a butterfly at a smaller angle

50. When using a tourniquet, you would.....

a. Lift up the patients sleeve and make sure that you can see the tourniquet at all times.

b. Place the tourniquet around the patient's clothes to prevent injury.

c. Remove the tourniquet prior to finishing the draw.

d. All of the above

e. A and C only

## Phlebotomy Career Training 2009

## Answers to Test 3

Name: \_\_\_\_\_

1. When going into an isolation room the healthcare worker must don personal protective equipment in which of the following orders?

- j. Gloves, gown, goggles, mask
- k. Gown, gloves, goggles, mask
- l. Gown, mask, goggles, gloves**

2. When leaving the isolation room the healthcare worker must doff their equipment in which of the following orders?

- a. Gown, gloves, goggles, mask**
- b. Goggles, mask, gloves, gown
- c. Mask, gloves, goggles, gown

3. When using a blue top tube, the following can be inferred.

- d. The patient is a bleeder.
- e. The lab could be a PT (Prothrombin Time) or PTT (Partial Thrombin Time) and the patient may have bleeding tendencies.
- f. It is the first tube to be used if no blood cultures are ordered. The lab could be a PT (Prothrombin Time) or PTT (Partial Thrombin Time) and the patient may have bleeding tendencies.**

4. The needle gage indicates the...

- g. The size of the bevel
- h. The length of the needle
- i. The thickness of the needle**

5. You walk into a room and see a child holding their doll tightly, looking away with fear. Your first approach would be to....

- j. Walk up to the child and tell them what you are about to do, (explain venipuncture)
- k. Get another phlebotomist or nurse to assist you with the child.
- l. Greet the child with a smile and ask, "what is the name of your doll?"**

6. You have just left the lab with your schedule of draws for the morning, and you notice a patient in a wheel chair crying quietly in the corridor. You would .....

- m. Approach the patient and kneel down so that you were at eye level, and ask them if they would like to talk about what is bothering them.
- n. Walk over to them and ask them if they are o.k..
- o. Find a nurse on the floor and let them know about the patient then continue your day.

7. You are to perform a venipuncture on a patient whom has two I.V.'s in each antecubital fossa. Understanding the rules of draw, your first action would be to..

- p. Turn off the I.V. drip, wait 3 minutes, then draw below the site.
- q. Seek out a nurse and ask them to shut off the I.V., wait 3 minutes, then draw below the IV and remind the nurse to turn the I.V. back on.
- r. Ask the nurse to turn the I.V. off, wait 10 minutes, then draw above the I.V.

8. You are getting ready to draw a patient that has a heparin lock (I.V access port which is not connected to any I.V. tubing). Knowing that blood is accessible from this port, you would do which of the following...

- s. Cleanse the port access with alcohol, wait until it is dry, then draw blood from the port.
- t. Assess the other arm for possible veins to draw from and proceed to draw.
- u. Draw on the hand of the arm with the access port.

9. Upon walking into a patient's room, you notice that the patient is sleeping. You would ...

- v. Approach the patient from the end of the bed where their feet are, and ask in a even polite tone of voice, "hello Mr. Smith, I am sorry to have to wake you"
- w. Realize that the patient is sleeping and that they probably won't feel the needle puncture and prep the site for draw.
- x. Approach the patient and tap on their shoulder asking them to wake up.

10. You are about to draw on a patient who has been talking with you for a few minutes and then you notice that they closed their eyes and nodded their head. You would....

y. Assume that they went to sleep, leave the room and draw another patient then come back.

z. Keep talking to the patient until they wake up.

aa. Attempt to wake the patient by calling their name in a low gentle tone, if unable to rouse them, check to see if they are breathing and if they cannot be aroused, remain in the room and call for help.

11. You are about to draw on a patient and notice a bulging vein in their right hand. You would...

bb. Realize that this is a varicose vein and that these types of veins, though big, have poor venous flow.

cc. Apply the tourniquet and draw from that vein.

dd. Draw from that vein but do not use tourniquet.

12. You are with a patient and you notice that the patient begins speaking incoherently. Your first reaction would be to ....

ee. Stay with the patient and use the call button or intercom and ask for immediate assistance

ff. Finish your draw and go on to the next patient, mentioning to the nurse on the way out the type of behavior that the patient exhibited.

gg. Ask the patient if they can state their name, date and time, and if not stay with the patient and use the intercom or call light to get help.

13. A patient tells you that they feel like they want to die. You would.....

a. Tell the patient that he or she will get better soon.

b. Explore their feelings using open ended questions and ascertain if they have a plan to carry out their suicide. If so, then stay with the patient and call for help.

c. Tell the patient that you are going for some help and will be right back.

14. You notice that a patient's hands are deformed from rheumatoid arthritis and they are not able to lift or move their arms to help you. You would.....
- Ask them if you could gently assist their arm onto the blue pad for draw.
  - Inquire what their level of pain is, and if greater than 8, explain that you will let the nurse know and you will be back in a set amount of time to draw them.
  - Inquire as to their level of pain, and if greater than 8, attempt to make them comfortable and explain that they will let the nurse know about their pain and that you will be back at a later time to draw their blood, specifying a time frame.
15. Your blood draws indicate that you must draw a CBC, Hgb A1C, and a PTT. Knowing the order of draw, you would...
- Draw the blue top tube first, then the red top tube, using only one red top tube.
  - Draw the red top tube first, then the blue top tube, then after the red top tube sits for about 10 minutes you would centrifuge the red top tube only.
  - Draw the blue top tube first, then the lavender top tube.
16. Improper inversion of blood tubes or vigorous shaking can cause...
- Hemolysis
  - Blood clots
  - Serum lysis
17. You are drawing a patient with a heparin drip IV in their left arm. You would..
- Ask the nurse to shut off the IV for 3 minutes
  - Ask the nurse to shut off the IV for 15 to 20 minutes
  - Turn off the IV and let the patient know that you will be back in 15 to 20 minutes to draw their blood.

18. You notice that your patient has two IV's, one in the left hand and the other in the right ante cubital fossa. Your first action would be to....
- Ask the nurse if you can draw the patient from the left arm in the ante cubital fossa
  - Ask the nurse if you can draw from the right hand.
  - Inspect each of the arms and look for the best veins with permission from the patient, then ask the nurse if you can draw from either the left ante cubital fossa or the right hand. (only experienced phlebotomist with training can draw from the hand therefore the best option is to draw below the IV that is in the antecubital fossa without a tourniquet).
19. You walk into a patient's room knowing that you have a stat blood draw and see the doctor speaking with the patient. Your first action would be to ....
- Politely interrupt the doctor and ask if you can draw the stat lab
  - Go on to the next patient on the same floor
  - Approach the patient while the doctor is speaking and ask if you can draw their blood.
20. Your patient is unable to spell their name adequately for you to identify them. Your first action would be to ...
- Chat with the patient a while longer to get further identification, then excuse yourself and find a nurse who can identify that patient.
  - Knowing that they are alert and oriented x 3 (A&Ox3) you would begin to draw.
  - Knowing that they are alert and oriented x2, you would also use their arm band, and get a nurse to identify them without it being obvious to the patient that you need further identification.
21. You have the following draws. A. electrolytes, CMP, glucose, serum Dilantin level. Your order of draw is the following;
- electrolytes, CMP, (yellow); / serum Dilantin level (red)/ glucose (grey)
  - Electrolytes, CMP (red),/ serum Dilantin (Yellow)/ glucose (grey)
  - Electrolytes, CMP (grey)/ serum Dilantin (yellow)/ glucose (grey)

22. You must prepare the serum dilantin. Your first step would be...
- Let the specimen sit after 5 inversions, then centrifuge for approximately 15 minutes, then pipette off the serum and place into another red tube for freezing.
  - Let the specimen sit after 10 inversions, then centrifuge for approximately 15 minutes, then pipette off the plasma, leaving the serum, and then freeze the serum.
  - Let the specimen sit, then after 4 minutes centrifuge for approximately 15 to 20 minutes, then pipette off the serum from the top, place into a container for fresh frozen specimens and freeze.
23. You have just finished drawing a patient's blood.....you would...
- Next label the tubes with the patient's name and medical number.
  - Pull the tubes that you have previously labeled with the patient's name and medical record number.
  - Label the tube with the patient's name only.
24. You have the following draws...Tegretol level, HAVAB, and HCT, the order of draw would be which of the following.
- Use Yellow tube for HAVAB (hepatitis viral antigen B), red tube for Tegretol, and lavender tube for HCT (hematocrit)
  - Yellow tube for Tegretol, lavender tube for hematocrit, red tube for HAVAB
  - Lavender tube for hematocrit/ red tube for tegretol,/ yellow tube for HAVAB
25. You are in a patient's room and the patient grasps their chest all of a sudden in pain, then they fall limp. Your first action would be..
- Call a code blue using patient's phone and pulling the call light from the wall
  - Check for breathing and pulse, if none call a code blue, remain in the room with the patient, and perform CPR
  - Check for pulse and respiration, if none call a code.

26. You are to draw the following labs.... Lipid Profile, PHOS, blood cultures, and PTT. Your color tube and order of draw is .....
- Lipid Profile (red), Blood Cultures (yellow), PTT (Blue), PHOS (Yellow)
  - Blood Cultures (yellow), Lipid Profile & PHOS (yellow), PTT (blue)
  - Blood Cultures (yellow), PTT (blue), Lipid Profile (yellow)
27. You notice that your patient is a 79 year old female and that her arms appear black and blue from previous venipuncture. You are to draw a PT, and PTT. Upon your assessment you would .....
- Choose not to use a tourniquet because it would cause more bruising and to use a butterfly with a needle gage of 22, and attempt to find a vein in the hand.
  - Use a 21 gage, use a tourniquet, and find use the accessory cephalic.
  - Use a 23 gage without a tourniquet and find a vein in the hand.
28. The importance in the order of draw cannot be under estimated due to which of the following factors?
- Order of draw prevents contamination of the blood from the interior needle so that lab results are not falsely high or low.
  - Order of draw is based on the preservatives in each of the tubes. Each of the preservatives carry ions that mix with the blood.
  - Order of draw has a base standard across the U.S. and Canada, except for some hospital preferences.
  - All of the above.
29. You have to draw a PT on a patient. Know that they are probably a bleeder you would ....
- Make sure that you have a pressure dressing and keep constant gentle pressure on the draw site until there is no further pooling of blood at the site.
  - Understand that patients who are on blood thinners have blood that takes longer to clot than normal people.

- c. That a PT is a prothrombine time.
  - d. All of the above
30. A Prothrombine time is a test that is done on a patient to measure their blood clotting time and to determine the strength of their next dose of...
- a. Coumadin
  - b. Heparin
  - c. Dopamine
31. The endocrine system is a part of the body that is responsible for...
- a. Hormonal, and enzymatic secretions and regulation
  - b. Glucose levels in the blood
  - c. Thyroid level regulations
  - d. A and B only
  - e. All of the above
32. Elderly skin changes can cause which of the following?
- a. Loss of body temperature more quickly
  - b. Loss of elasticity
  - c. Increased risk of injury
  - d. Increased risk of infection.
  - e. A,B,C
  - f. All of the above
33. There is a layer of epidermis that cannot regenerate.
- a. True
  - b. False

34. Cellulitis is .....

- a. Infection in the epidermal layers of skin
- b. Results in fever, redness, and swelling
- c. Is a eye disease
- d. Must be treated with IV antibiotic therapy
- e. All of the above

f. A, B, D only

35. When drawing blood near an infected area the following can happen...

- a. The infection can be spread throughout the blood stream
- b. The infection can become systemic
- c. The patient can become seriously ill

d. All of the above

e. A and B only

36. It is important for a phlebotomist to assess their client thoroughly because...

- a. Helps to facilitate therapeutic communication
- b. Makes the patient feel at ease
- c. Helps the phlebotomist to recognize sites not to draw
- d. Noticing changes in the patient or problems with skin, IV, mentation changes, will assist the patient to get treated before a problem gets worse.
- e. Makes the phlebotomist more adept at finishing their draw more quickly

f. A,B,C,D, only

- g. All of the above
37. You are going to draw a PTT from a patient that has very poor veins. Knowing this you will ...
- a. Use a 22 gage butterfly, run the first few milliliters of blood into a red tube, and then draw the blood in the blue tube
  - b. Use a 22 gage butterfly, and dispense into a blue tube
  - c. Use a 21 gage butterfly and dispense into a red tube.
38. When drawing a PTT you realize that...
- a. This is a test for Partial Thrombin Time
  - b. This test is based on Heparin protocol
  - c. That you must use a red top tube
  - d. You will use a blue top tube
  - e. All of the above
  - f. A,B, D only
39. You patient is a infant, knowing this you would...
- a. Expect to have a heel warmer handy
  - b. Be sure to have another phlebotomist hold the infant during the draw
  - c. Use a capillary tube
  - d. Draw from the medial cubital
  - e. All of the above
  - f. A,B,C, only

40. You have to draw a series of Cardiac enzyme profiles. You are drawing the first one. You would watch the patient for....
- a. Severe chest pain
  - b. Possible cardiac arrest
  - c. Blood thinner therapy
  - d. Expect to use a pressure dressing
  - e. All of the above**
  - f. A, and B only
41. You see a patient in the bed next to your patient who asks if you can get them some water. You would...
- a. Request that they put on their call light and wait for a nurse or aide
  - b. Greet the patient, identify yourself and tell them that you will be glad to assist them.**
  - c. Explain to the patient that you do not have the time right now but that you will get someone to help them.
42. Your lunch break is in 10 minutes, and a patient has just slipped in their bathroom and is having a hard time getting up. You would...
- a. Immediately go and assist the patient
  - b. Call for help
  - c. Find someone to help them and continue on schedule
  - d. A and B only**

43. A patient stops and asks you when are they going to be discharged. You would....
- a. Explain to the patient that you do not work on this floor regularly, but you will let the nurse know their concerns, and come back to verify with the patient after speaking with the nurses.
  - b. Tell the patient that you have a very busy schedule and cannot help them right now.
  - c. Walk by the patient and pretend you didn't hear them.
44. You notice a patient in the bed shivering, they are not fully alert. You would...
- a. Get a blanket and place it over them, explaining what you are doing
  - b. Notify a nurse that the patient is shivering, and that you provided a blanket.
  - c. Find a nurse's and ask them to get that patient a blanket.
  - d. A and B only
  - e. A, B, and C
45. You have to draw on a patient who is comatose, they cannot respond. Upon drawing this patient you would.....
- a. Look for the most patent veins
  - b. Explain the procedure while looking for a vein,
  - c. Let the patient know the steps that you are taking, such as, "the alcohol will feel cold, you will feel a slight pinch, I am putting a tourniquet around your arm.
  - d. Greet the patient as you would a patient who is alert and oriented.
  - e. A, C, and D
  - f. A, B,C only

46. You notice that a patient who you must draw begins vomiting.... You would...
- a. Come back later
  - b. Assist the patient by getting them an emesis basin
  - c. Push the call light and ask for help.
  - d. A and B
  - e. B and C only**
47. You notice that your patient is not alert and oriented, and that their lips are dry. You also notice that their lunch tray has not been touch. Before drawing you would...
- a. Offer the client sips of water,
  - b. Make sure to tell the nurse or aide that the patient needs to be fed
  - c. Help to make sure that the patient is comfortable prior to leaving.
  - d. All of the above**
48. You notice a patient in the room who is having difficulty breathing.. you would
- a. Stop the draw immediately, stay with the patient and call for assistance.**
  - b. Finish the draw, then call for assistance
  - c. Stop the draw and go get assistance.
49. You are to draw the following labs...Bun, Creatinine, and a TSH, along with WBC. The order of draw..
- a. Yellow tube for the BUN,Creatine, and TSH, lavender tube for the WBC.**
  - b. Red tube for the BUN, Yellow for the TSH and Blue for the Creatinine
  - c. Yellow for the BUN and Creatinine, then Red for the TSH and CBC
50. You are going to lunch when a patient approaches you and asks you where a particular building is located. You do not know, but you.....
- a. Explain to the patient that you do not know, but that you will find out. Go and find out and come back to let the patient know.**
  - b. Explain to the patient that you do not know, but someone in the kiosk might be able to help, then direct them to the kiosk.

- c. Tell the patient that you do not know, and tell them to ask someone else.

Phlebotomy Career Training 2009

Answers to test 4

Labs, order of draw, color of tubes;

Directions: Given the labs that are needed to be drawn, determine the color of tube necessary for the labs and then the order of the draw according to the color of the blood collection tubes. In cases where serum or plasma are requested write the procedure for the collection steps. (i.e., centrifuging the specimen and then pipette the serum out into another container, time for centrifuge of specimen).

1.

<u>Labs ordered</u>	<u>Tube color</u>	<u>Order of draw</u>	Preparation
Dilantin level	Red	blue	Inversion 3-4
Electrolytes	yellow	yellow	Inversion 8-10
CMP	yellow	yellow	Inversion 8-10
Sickle cell	lavender	red	Inversion 8-10
PT (prothrombine time)	Blue	lavender	Inversion 5-6

2.

<u>Labs ordered</u>	<u>Tube color</u>	<u>Order of draw</u>	Preparation
Liver Panel	yellow	yellow	
BNP (Brain Naturetic Peptide)	yellow	yellow	
IgG	yellow	yellow	
RF (Rheumatoid Factor)	yellow	yellow	
Lead	lavender	lavender	

3.

<u>Labs ordered</u>	<u>Tube color</u>	<u>Order of draw</u>	Preparation
Serum Cholesterol	yellow	Same as order	
Bili Direct	yellow		
PSA (Prostatic Surface Antigen)	yellow		
Depekane Level	red		
Tegretol Level	red		

4.

<u>Labs ordered</u>	<u>Tube color</u>	<u>Order of draw</u>	Preparation
Dilantin level	red	blue	
Electrolytes	yellow	yellow	
CMP	yellow	yellow	
Sickle cell	lavender	red	
PT (prothrombine time)	blue	lavender	

5.

<u>Labs ordered</u>	<u>Tube color</u>	<u>Order of draw</u>	Preparation
CBC	lavender	red	
Hgb	lavender	lavender	
Hct	lavender	lavender	
Retic Count	lavender	lavender	
Phenobarbital Level	red	lavender	

6.

<u>Labs ordered</u>	<u>Tube color</u>	<u>Order of draw</u>	Preparation
Fasting Blood Glucose	grey	yellow	Betadine cleanse
Hgb A1C	lavender	yellow	
SGOT	yellow	yellow	
SGPT	yellow	lavender	
Serum Mg (Magnesium)	yellow	grey	Centrifuge 15min, prepare as FFS

7.

<u>Labs ordered</u>	<u>Tube color</u>	<u>Order of draw</u>	Preparation
Thyroid Panel	yellow	yellow	
WBC	lavender	yellow	
Hep Profile	yellow	yellow	
CBC with Diff	lavender	lavender	
IgE	yellow	lavender	

8.

<u>Labs ordered</u>	<u>Tube color</u>	<u>Order of draw</u>	Preparation
Serum/Plasma Lithium	red	yellow	Centrifuge prepare as FFS
Na, K, CO <sub>2</sub> , Cl	yellow	yellow	
Renal Function Panel	yellow	yellow	
HCG Quantitative	yellow	red	
Blood Alcohol Level	grey	grey	Betadine cleanse

9. When drawing blood insert the needle .....

- a. just past the bevel
- b. all the way in
- c. half way

10. When drawing with a syringe.....

- a. never push back on the syringe
- b. always push back on the syringe
- c. pull gently on the syringe until blood flow is obtained
- d. A and C only

11. Pushing air into a vein can cause...

- a. death by embolism
- b. pain
- c. occlusion of the vein
- d. all of the above

12. A centrifuge machine works to separate serum from plasma by...

- a. using centrifugal force which separates out blood components by weight according to gravity.
- b. separates blood into three components
- c. coagulates blood

13. The Latin term, "Hemo", and "Lysis" form the word, hemolysis, which is defined by....
- plasma separation
  - blood separation**
  - serum separation
14. Veins are found in many different diameters and thicknesses. When assessing a patient's veins the phlebotomist will choose the ones that have the most....
- patency and spring**
  - flaccidity and turgor
  - elasticity and flow
15. The system that is best described by the insertion of the needle into the vein and then attaching the blood vial is called...
- a open system
  - a closed system**
  - a vacuum
16. You are a phlebotomist in the hospital and you notice that your patient has I.V.'s in both arms in the ante cubital fossa, your best plan of action would be to....
- draw below the IV if the IV is in the area of the ante cubital fossa
  - draw above the IV
  - draw below the IV with permission from the nurse**
17. A phlebotomist realizes that the IV must be turned off for a minimum of 2 to 4 minutes prior to drawing blood. The phlebotomist should...
- turn off the IV, wait 2 to 4 minutes, then draw the patient's blood and restart the IV
  - Ask the attending nurse if they could shut off the IV, wait 2 to 4 minutes, draw the blood, then restart the IV and let the nurse know that you have restarted the IV
  - Ask the attending nurse if they could shut off the IV, wait 2 to 4 minutes, draw the patient's blood, then let the nurse know to re-start the IV prior to leaving the floor.**
18. You notice that a patient has a heparin lock, or IV access port in one arm. Knowing that this port goes directly into the vein and that the patient is a hard draw you would do which of the following...
- attempt to draw from the IV access port
  - look for the best veins in the opposite arm**
  - draw from the hand on the arm that has the IV port
19. If the nurse tells you that a patient is A&O x 3, you would expect that the patient will be able to tell you their...
- name, date of birth, date, time and place**
  - name and place only

c. date of birth and name

20. When attempting a draw on a patient who is alert and oriented times 2, or A&O x2, your best means at identifying them would be to do which of the following...

a. ask the patient to state and spell their name

b. ask the patient to state and spell their name, match their name against the lab requisition and their arm identification band.

c. ask the patient to state and spell their name, match their name against the lab requisition and their arm band as well as checking the room number.(also get a nurse to verify patient, and have nurse initial lab slip.)

## Test 5 Answers

## Phlebotomy Career Training

Fall 2009

1. Being a phlebotomist is a rewarding career. The correct term for the procedure that the phlebotomist performs is known as.....

- d. Removing blood
- e. Venipuncture
- f. Intrapuncture

2. The most important single action that a phlebotomist can take to prevent the spread of infection is...

- d. Wearing gloves
- e. Sanitizing their hands
- f. Washing their hands after each draw (as well as prior to each draw)

3. Phlebotomists are constantly faced with the danger of needle sticks in the health care area, which can transmit.....

- e. Hepatitis B and or Hepatitis C
- f. HIV
- g. Blood borne pathogens
- h. All of the above

4. Inversion is a technique which the phlebotomist performs on each tube of blood a specific number of times for which of the following reasons?

- a. To enhance its clotting properties
- B. To prevent clots from forming
- c. To mix the preservative with the blood
- d. A and B
- e. B and C

5. The human heart has how many chambers?

- d. 3
- e. 2
- f. 4

6. Blood flows to the heart from the \_\_\_\_\_ and from the heart through the \_\_\_\_\_.
- Veins, arteries
  - Arteries, veins
  - Capillaries, arteries

#### Phlebotomy Career Training 2009 Midterm

7. In the incident of a needle stick, the phlebotomist should immediately .....
- Wrap the affected area with gauze
  - Vigorously cleanse the area with antiseptic soap under warm running water and with gentle pumping action attempt to remove as much blood from the area until no further blood can be removed.
  - Wash area with soap and water, then dry.
8. The hepatitis B vaccine is recommended for health care workers who have increased risk of needle sticks. The hepatitis B vaccine is given in a series of....
- Two immunizations over a period of 2 months.
  - Four immunizations over a period of 3 months.
  - Three immunizations over a period of 6 months.
9. When preparing to draw blood, the needle should be ....
- Bevel down
  - Bevel up
  - Bevel sideways
10. The size of the bevel is called the needle gauge. Needle gauges vary. Given the following gauges, list them in order of largest to smallest.
- 23g, 18g, 21g, 20g
  - 23g, 21g, 20g, 18g
  - 18g, 20g, 21g, 23g
  - All of the gauges are the same, it is only the length that varies.
11. The needle gauge of choice for most phlebotomist is a 21 gauge. The reason for this is which of the following?
- A 21 gauge needle works better.
  - There is less suction.
  - It is a small gauge that can readily fill a tube of blood.
12. You are preparing to draw blood on a patient. You notice that the patient is holding their arms close to their side. You smile and introduce yourself, asking how the patient is doing today. The patient replies that they are fine and smiles faintly back to you. Observing the patients non-verbal actions, you assume the following.
- The patient is fearful of having their blood drawn, but is afraid to say anything.
  - The patient is not afraid of having their blood drawn.
  - The patient is just shy.

13. It is important to have two phlebotomists in the room when drawing blood on a toddler or younger child because...

- d. You may need the other phlebotomist to stabilize the child's arm while you draw the blood.
- e. To help with moral support.
- f. To engage the child's attention away from the needle.

Phlebotomy Career Training 2009, Midterm

14. When preparing to draw a patient's blood it is important to help make them feel relaxed. Some of the ways of doing this is with.....

- g. A warm smile
- h. Genuinely caring about their feelings, inquiring about their health.
- i. Always ask if you may inspect their arms
- j. Ask if they are comfortable
- k. Being calm and relaxed yourself
- l. All of the above

15. List the following procedures in order for drawing a patient's blood.

- d. Greet the patient by name, ask them how they are feeling, ask if you may inspect their arms, wash your hands, sanitize your hands, look for a visible vein, apply the tourniquet, cleanse the area with a alcohol wipe, prepare needle and vacutainer, verify order of draw with the labs on the form, don gloves, palpate for vein, using bevel up at a 30 degree angle gently push needle into vein, insert blood vial let fill, take gauze and place gauze directly above the needle, gently remove the needle while simultaneously rolling gauze down over site, apply gently pressure until bleeding stops, cover with tape, thank the patient.
- e. Greet the patient by name, ask them how they are feeling, wash your hands, ask the patient their name, and date of birth, match this with their lab slip, ask if you may inspect their arms, cleanse the area with a alcohol wipe, prepare needle and vacutainer, verify order of draw with the labs on the form, don gloves, palpate for vein, using bevel up at a 30 degree angle gently push needle into vein, insert blood vial let fill, take gauze and place gauze directly above the needle, gently remove the needle while simultaneously rolling gauze down over site, apply gently pressure until bleeding stops, cover with tape, thank the patient.
- f. Greet the patient by name, ask them how they are feeling, wash your hands then sanitize, ask the patient their name, and date of birth, match this with their lab slip, ask if you may inspect their arms, apply tourniquet, palpate for vein and look for a landmark, cleanse the area with a alcohol wipe, let dry, prepare needle and vacutainer, verify order of draw with the labs on the form, don gloves, using bevel up at a 30 degree angle gently push needle into vein, insert blood vial, let fill, remove vial, take gauze and place gauze directly above the needle, remove

tourniquet prior to finishing then gently remove the needle while simultaneously rolling gauze down over site, apply gently pressure until bleeding stops, cover with tape, thank the patient, dispose of needle in sharps container, and dispose of vacutainer.

16. When the blood vial is punctured prior to insertion of the needle, the suction...
- d. Remains the same
  - e. Is broken and no longer be used
  - f. Can be reused since no blood entered the tube

Phlebotomy Career Training, Midterm 2009

17. When going into an isolation room the healthcare worker must don personal protective equipment in which of the following orders?
- m. Gloves, gown, goggles, mask
  - n. Gown, gloves, goggles, mask
  - o. Gown, mask, goggles, gloves
18. When leaving the isolation room the healthcare worker must doff their equipment in which of the following orders?
- hh. Gown, gloves, goggles, mask
  - ii. Goggles, mask, gloves, gown
  - jj. Mask, gloves, goggles, gown
19. When using a blue top tube, the following can be inferred.
- kk. The patient is a bleeder.
  - ll. The lab could be a PT (Prothrombin Time) or PTT (Partial Thrombin Time) and the patient may have bleeding tendencies.
  - mm. It is the first tube to be used if no blood cultures are ordered. The lab could be a PT (Prothrombin Time) or PTT (Partial Thrombin Time) and the patient may have bleeding tendencies.
20. The needle gage indicates the...
- nn. The size of the bevel
  - oo. The length of the needle
  - pp. The thickness of the needle

## Phlebotomy Career Training 2009

## Assessing the skin; Where not to draw, when to ask a nurse

1. Never draw from the paralyzed side of a patient. (reasoning: the blood flow is less, so is muscle tone. There is also decreased venous flow and hence the veins are not as spongy and springy.)
2. Never draw from an arm that has been bandaged. (reasoning: you are not aware of what the nature of the bandage represents, it could be cellulitis, and by drawing from that area you could cause systemic blood infection or septicemia .)
3. Never draw from a site where you notice swelling, redness, purulent drainage, or it is warm to the touch. (reasoning: these signs indicate an active infection process, and drawing from this site could cause a systemic blood infection)
4. Never draw from the side of a patient who has had a mastectomy. (reasoning: the lymph glands have been removed and blood flow is reduced to the area. It is also possible to cause a lymphatic infection or cause a thrombosis (blood clot). If a patient has had a bilateral mastectomy, then you must consult the nurse to get permission to draw from a distal site.)
5. Never draw from a limb that looks blue or is very cold, without first identifying why the limb is in this state and making an attempt to warm the patient, (offer blanket, turn up the heat in the room).
6. Never draw from a combative person without assistance of someone to hold the arm. (protect yourself)
7. Never draw from a person who is vomiting, emotionally distraught, or is on a bed pan, (attempt to calm the patient, ask for help and wait until the patient has finished toileting)
8. Never draw a patient or ask to draw a patient if they are in the middle of eating. (nourishment is life and health, and patient's need to eat. Give them their time and privacy.)

9. Never draw a patient when they are in conference with a doctor. If however the nurse is in the room, it is o.k. to approach and interrupt politely, asking permission to draw.)
10. Never draw on the side of a patient that has had an angioplasty. ( surgeons go in from the femoral artery)