University of California, Davis
Health System, Sacramento
Department of Pathology & Laboratory Medicine

PHLEBOTOMY Administrative Procedure #555.A

PURPOSE:

To establish a standardized phlebotomy procedure to be used for all UCDHS Clinical Laboratory phlebotomists.

DEFINITIONS:

UCDHS Certified Phlebotomy Technician II – Perform adult (18-64yrs), geriatric (65yrs and older), adolescent (9-18yrs), Children (12 months – 8 yrs), and neonatal venipuncture and neonatal skin punctures on inpatient and outpatient areas.

UCDHS Certified Phlebotomy Technician III Supervisor/Trainer - Perform adult (18-64yrs), geriatric (65yrs and older), adolescent (9-18yrs), Children (12 months – 8 yrs), and neonatal venipuncture and neonatal skin punctures on inpatient and outpatient areas.

STANDARDS AND GUIDELINES:

PREFACE:

All phlebotomists must possess a valid State of California Certified Phlebotomy Technician certification. It is the responsibility of each Phlebotomist to renew their CPT Certification in a timely manner before the expiration date. If the CPT Certification expires, the phlebotomist will not be allowed to work and will be sent home on Administrative Leave without pay. A UCDHS Patholgy Department phlebotomy trainer, regardless of prior certification, will evaluate all new phlebotomists. A copy of the training and orientation will be sent to the employee's training and competency personnel file in Pathology.

A. All UCDHS Clinical Laboratory phlebotomist will adhere to all UCDHS hospital and Laboratory & Medicine Phlebotomy policies and procedures.
B. Phlebotomy services will be provided in accordance with published policy and procedure.
C. All phlebotomists will wash hands before and after every patient with a Health System approved germicidal hand soap or alcohol gel. Alcohol gel cannot be used exclusively.
D. All phlebotomists will wear latex-free gloves while performing venipuncture. Gloves must be changed ***before each new patient is drawn.***
E. Phlebotomists will adhere to standard precautions when entering and exiting a patient's room. When exiting, all isolation attire must be removed before continuing to the next patient.
F. Unidentified or misidentified patients will not be drawn. Patients must be properly identified according to UCDHS hospital policy and procedures, Patient

Safety goals and Laboratory & Medicine Policy before proceeding with the venipuncture.

G. Phlebotomist will not draw leg veins from patients.

H. Phlebotomist will not draw from an arm in which an IV, PIC line, heparin or saline lock, or an arterial line is located; and will not draw from heparin locks, saline locks or arterial lines.

I. Phlebotomists in inpatient setting will ***not draw*** from any extremities that have active or occluded AV shunts, fistulas or vascular grafts*. Patients who are pre-op for new shunt placement will require special care. Blood should not be drawn from the extremity intended for placement of a shunt if at all possible. Blood can be drawn from extremity intended for the shunt, ***only with the expressed written permission of the attending physician.***

NOTE: *The phlebotomist may in some instances, not know of the presence of a shunt or fistula, occluded or otherwise. Patients most often, but do not always inform phlebotomists that they have been instructed by their physician not to allow blood to be drawn from a surgically prepared extremity; they may not remember to inform the phlebotomist or may sometimes be unable to speak for themselves. Therefore, it is crucial that a written notice or information sheet, originating from the transplant surgeon or the PCP that is unique to each patient be presented to the lab before a draw is considered. This documentation must be presented to the phlebotomist at each phlebotomy visit to the lab and a copy of the note included with the lab receipts for the day. Should it become known to the phlebotomist that a fistula or shunt does indeed exist and the blood has already been drawn, the nursing/physician staff must be notified and the phlebotomist will note this information on the lab slip (or in requisition comment field) that the blood was drawn from a shunt or fistula (whichever is applicable) and send the samples to the lab for testing.

J. Phlebotomist will require assistance with patients who refuse, who are abusive, or who are uncooperative.

K. Laboratory blood work should not be collected from patients during blood / blood products transfusion. **Requested lab work can be drawn 1-hour post transfusion.**

L. Phlebotomists do NOT perform STAT or timed inpatient draws.

N. Phlebotomists will draw ASAP specimens during their routine rounds.

1. PT/APTT requests should be drawn as early as possible during the 0500 AM draw. Phlebotomists should place specimens periodically in the designated area for routine courier pick-up, or transport specimens to the

Lab via the Tube System. This will ensure timely specimen transport to the lab.

O. Puncture unit (needles, lancets, butterflies) will not be used more than once.
P. Phlebotomists will assure that each puncture unit remains sterile before use.
Q. Tourniquets application should not exceed 1-minute.
Phlebotomists will cleanse the venipuncture site with sterile alcohol prep using concentric circles starting at the venipuncture site and wiping outward to approximately 2 – 3 inches, *Betadine* or *chlorohexidine* may be used if mandated.
S. Phlebotomists will always draw blood collection tubes in proper order, (See Addendum B).
T. Blood collection tubes will not be pre-labeled before obtaining the specimens. All specimens must be labeled and properly mixed immediately after collection.
U. Phlebotomist must exhibit good post venipuncture care and ensure that all bleeding has stopped; special care must be taken with hemophiliac, coumadin, and patients with other bleeding disorders to ensure all bleeding stops.
V. The phlebotomist must attempt to draw the minimum volume of blood possible for tests ordered, (ARUP Gateway | UCDavis and Addendum A).
W. A SARC Supervisor(s) will meet annually with the supervisors of all Pathology Department technical sections to evaluate test volumes. This group will evaluate volumes required for all tests performed by the department and adjust the blood draw in accordance with volumes required. Every effort should be made to minimize volumes required. In addition, Send Outs will annually review volumes requirements for all testing performed by outside laboratories and adjust blood volumes draw accordingly.
X. In the event that a patient suffers an adverse reaction in connection with a blood draw, the phlebotomist must access the situation quickly.
    1. If a patient is feeling faint, at an out-patient environment, the phlebotomist should advise the patient to remain seated and lay their head down on the table or between their legs.
    2. In the event that a patient actually does faint, 911 should be called and the patient must be evaluated by the emergency response team and/or seen by a Health System physician before they can be released to leave the facility.

PHLEBOTOMY Administrative Procedure #555.A

PROCEDURE:

A. General Information
   1. All lab request forms and EMR orders will include the patient's family name, medical record number, date of birth, test(s) requested, requesting physician and Physician Index number, floor/ward, room number, bed number, and requested draw date and time.
      a. "Next draw" is considered a specific draw time that refers to the posted schedules.
      b. Requests received that do not indicate a specific draw time will be held for the next routine draw.
   2. Request for phlebotomy services are placed into the Phlebotomy Draw List within the EMR by floor prior to the start of the scheduled draw.
      a. Adult draws are scheduled at 0500.
      b. Pediatric draws are scheduled at no earlier than 0730.
   3. Phlebotomists will adhere to all Standard Precautions.
   4. All physical restrictions that affect phlebotomy services will be clearly posted, i.e., latex allergies, tape allergies, mastectomy, shunts, PIC lines, etc. (All phlebotomist will adhere to these special restrictions).
   5. **Phlebotomists are limited to 2-attempts**. Request that another phlebotomist assist in drawing the patient or notify the nursing staff of the incomplete blood work.

B. Responsibilities: Shift Supervisor/trainer
   The shift supervisor or trainer is to facilitate and to follow up on the following:
   1. If phlebotomist are not available for a specific draw, (nursery, peds, etc.), the shift supervisor or trainer will notify the charge nurse as far in advance of the posted draw time as possible that phlebotomy services are not available.
   2. ***Review all phlebotomy incident reports filed; take appropriate action to resolve incidents when needed.***
   3. Ensure that published draw times are being met within a ten-minute delay time, ***maximum.***
   4. Monitor that phlebotomist sign in and out on the SARC Phlebotomy Log.
   5. Assure that all phlebotomist follow Standard Precautions.

C. Responsibilities: Phlebotomist
   1. Phlebotomist will log into the EMR, pull up the Phlebotomy Draw List.
   2. Phlebotomist will collect all orders with the appropriate scheduled date and time. (Except timed tests and STAT) With expected collection time of 0300 to one hour after the current draw time for the patient will be collected.
   3. Phlebotomist will place specimens periodically in the designated area for

routine courier pick-up, or transport via the Tube System to the Lab. This will ensure timely specimen transport to the lab.

4. Phlebotomist will leave the laboratory ***no later than 10 minutes*** after the published draw time.
5. Phlebotomist will complete the phlebotomy log by signing out when leaving and sign-in when returning to SARC. The number of patients taken and the number of patients successfully drawn will be indicated on the SARC phlebotomy documentation list, (See Attachment A).
6. "No draws" draws will be documented by printing the canceled test report from EMR or by placing the canceled barcode labels on the Phlebotomy Canceled Specimen form,(See Attachment B) and give to the ward clerk or charge nurse
7. Phlebotomist will rotate phlebotomy supplies on carts and when returning carts to the phlebotomy room each day. All expired supplies will be disposed of properly.
8. Phlebotomist will shut down and plug the laptop into an electrical outlet for charging when returned to the phlebotomy room. Too insure a full charge for the next shift.
9. Phlebotomist will use pre-stocked carts for routine phlebotomy draws. "Special/individual" restocking is not allowed. Phlebotomists are responsible for cleaning and restocking cart after each use.
10. Venipuncture Procedure:
    a. Obtain a SARC standardized phlebotomy cart.
    b. Log in to EMR access the Phlebotomy Draw List.
    c. Document destination(s), time out, number of patients taken per ward and the cart number on phlebotomy sign-out log.
    d. Go to patient's location/room, check for any isolation requirements.
    e. Release order from EMR.
    f. Obtain barcode label from the designated label printer on the phlebotomy cart or located at the nursing station that corresponds with the patient's room number.
    g. Wash hands, either with hospital issued germicidal soap or with alcohol gel. Alcohol gel cannot be used exclusively, wash hands with hospital issued germicidal soap, wash hands often.
    h. Select all needed supplies. Phlebotomists will not pre-assemble puncture device prior to entering patient's room.
    i. Put on gloves.
    j. Greet the patient, identifying yourself and your purpose. "Hello, my name is _____, I'm from the laboratory and I need to draw some blood from you today."

k. Ask the patient his or her full name. If patient is unable to answer, have the patient's nurse or a relative identify the patient.
l. Check the patient hospital ID band against the EMR bar code labels or request form(s). Proper identification of the patient ***must include:***
    1). Patient's complete name
    2). Hospital medical record number.
    3). Compare this information with the information on the EMR bar code labels or request form and the patient's ID band(s).
    4). ***Unidentified or misidentified patients will not be drawn.*** Inform attending RN to have identification issue that needs to be resolved.
        a. All patients must wear a hospital ID band containing proper ID #, patient's name, and date of birth unless patient's condition dictates alternative method of identification.
    5). If the hospital ID band is a "John Doe," but the unit number matches, and the request form or EMR bar code labels have both the "John Doe" name and the patient name, the patient may be drawn. Verify the "Doe" ID number set for the patient (e.g. 9KH). Ask at this time, that the nursing staff please replace the "John Doe" ID band with a current name band that reflects the patient's true name.
    6). All exceptions to the above guidelines can only be made by the phlebotomy or Core Lab Supervisor
m. Position patient, being aware of limiting factors, such as epidural precautions, restricted movement of patient, etc.
n. Apply the tourniquet.
o. Have patient close their hand if necessary (avoid pumping fist).
p. Select venipuncture site.
q. Cleanse the venipuncture site with alcohol swab. Allow area to air dry before proceeding.
r. Inspect the supplies to be used: needle bevel, vacutainer(s), and syringe to ensure that no defective supplies are being used.
s. Anchor the patient's vein.
t. Tell the patient that there will be a "stick" just prior to performing the venipuncture; make sure that the patient is awake and have nothing in mouth.
    - If the patient is not awake, check with the patient's nurse

before drawing the blood.

u. Perform the venipuncture. Draw required tubes in correct order, (See Addendum B). The puncture unit is a one time use only device.
   - When using a butterfly to collect a coagulation specimen, a sodium citrate tube must be drawn prior to the collection.

v. Reassure the patient during the collection.
w. Have the patient open their hand.
x. Release the tourniquet.
y. Position the gauze pad over the puncture site.
z. Remove the needle and activate the safety device on the needle, apply pressure until the bleeding stops.
aa. Check the venipuncture site, apply bandage. ***If bleeding has not stopped, remain with the patient until hemostasis has occurred.***
bb. Dispose of the puncture unit in an appropriate sharps container.
cc. Label specimen(s): ***All specimens drawn must be labeled immediately following the completion of the draw or collection***. Use a bar code or demographic label to label all specimens. Labels must include; patients full name, medical record number, date (including year), time of collection, and the phlebotomist's initials (in block letters) or See EMR. Check labels carefully for mechanical errors that may cause the labels to be incomplete, illegible, or cause other mislabeling errors. Rack or bag the specimens as required by Infection Control policies.
dd. When collecting blood for ABO and/or Rh testing **ALL** of the following criteria are must be met:
   1. **The blood sample must be collected by a different phlebotomist and drawn at least 5 minutes before or after the first blood sample.**
   2. **The blood sample and the corresponding request slip must be properly labeled with patient identification information (patient's name, MR#, & DOB), date/time of collection, and name of the phlebotomist (1st initial and last name).**
   3. **The blood sample with the corresponding request slip must be placed in a bag when sending to Transfusion Service.**

ee. Remove gloves.
ff. Wash hands.
gg. Move cart to the next patient.
hh. Deliver specimens to the lab within 90-minutes, or place in

designated specimen pick-up area for pick-up the Lab courier or transport specimens via the Tube System to the laboratory.

14. Should a patient not be in their bed upon arrival, go on to the next draw. After completing all other draws, return to the room(s) of the patient(s) that were bypassed earlier. **DO NOT** return more than once. If lab orders have been released from EMR cancel the specimen(s) and print the canceled report from EMR or by placing the canceled barcode labels on the Phlebotomy Canceled Specimen form, (See Attachment B) and give to the ward clerk or charge nurse.
15. The laboratory phlebotomist will adhere to all published phlebotomy training procedures ***without exception***.
16. Follow Standard/Universal Precautions.

REFERENCES:

A. NCCLS Procedures for the Collection of Diagnostic Blood Specimens by Veinpuncture; Approved Standard- Fifth Edition, NCCLS, 2003.
B. Clinical Laboratory Supervision, Becan-McBride K., Appleton-Century-Crolts, New York, 1982.
C. BD Diagnostics Preanalytical Systems, Franklin Lakes, NJ 2010

ADDENDUM A: MAXIMUM BLOOD VOLUMES DRAWN ON PEDIATRIC PATIENTS (A)

PATIENT'S WEIGHT IN POUNDS	PATIENT'S WEIGHT IN KILOGRAMS	MAX VOLUME PER DAY (ML)	MAX VOLUME PER MONTH (ML)
6-8	2.7-3.6	2.5	23
8-10	3.6-4.5	3.5	30
10-15	4.5-6.8	5	40
16-20	7.3-9.1	10	60
21-25	9.5-11.4	10	70
26-30	11.8-13.6	10	80
31-35	14.1-15.9	20	100
36-40	16.4-18.2	20	130
41-45	18.6-20.5	20	140
46-50	20.9-22.7	20	160
51-55	23.2-25.0	20	180
56-60	25.5-27.3	20	200
61-65	27.7-29.5	25	220
66-70	30.0-31.8	30	240
71-75	32.3-34.1	30	250
76-80	34.5-36.4	30	270
81-85	36.8-38.6	30	290
86-90	39.1-40.9	30	310
91-95	41.4-43.2	30	330
96-100	43.6-45.5	30	350

ADDENDUM B: ORDER OF DRAW FOR MULTIPLE TUBE VENIPUNCTURE

1. **Blood Culture / ACD Tubes (yellow top)**
2. **Coagulation Tubes (blue top)**
3. **Serum Tubes (SST or red top)**
4. **Heparin Tubes (green top)**
5. **EDTA Tubes(purple top)**
6. **Gray Top Tubes**

PHLEBOTOMY Administrative Procedure #555.A

PROCEDURE HISTORY

Date	Written/ Revised by	Revision	Approved Date	Approved by
6/94	G. Cooper	New	6/94	Dr. E. Larkin
1/95	G. Cooper	Revised	1/95	Dr. C. Marshal
12/96	D. Wright	Revised	12/96	Dr. E. Larkin
3/98	D. Wright	Annual Review	4/98	Dr. E. Larkin
10/98	R. Longoria	Revised	10/98	Dr. E. Larkin
11/99	D. Wright	Revised	11/29/99	Dr. E. Larkin
10/00	R. Longoria	Revised	10/00	Dr. E. Larkin
10/01	R. Longoria	Revised	10/01	Dr. E. Larkin
11/02	R. Longoria	Revised	11/02	Dr. E. Larkin
10/03	R. Longoria	Revised	10/03	Dr. E. Larkin
10/04	R. Longoria	Revised	10/04	Dr. E. Larkin
06/05	R. Longoria	Revised	6/05	Ralph Green, MD
9/06	D. Wright	Revised	9/06	Ralph Green, MD
4/07	D. Wright	Revised	4/07	Ralph Green, MD
4/08	D. Wright	Annual Review	4/08	Ralph Green, MD
8/08	R. Longoria	Revised	8/08	Dr. L. Howell
9/09	R. Longoria	Revised	9/09	Dr. L. Howell
11/09	C. White	Reviewed	12/09	Dr. J. Bishop
06/10	S. Paul	Revised	06/10	L. Howell
10/10	C. White	Revised	10/10	L. Howell
9/11	S. Paul/C.White	Revised	9/11	L. Howell
08/14	A.Castaneda	Revised	09/14	