Mass General Brigham Wentworth-Douglass Hospital Department of Pathology and Laboratory Medicine **Laboratory Section: Phlebotomy** **Revision Date 7/5/2021, 2/21/22, 2/5/25, 4/28/25**	**POLICY / PROCEDURE TITLE:** Collection Process Section 2	**Approvals:** Medical Director: David Gray Prepared By: Darlene Bickford Edited by: Arielle Vachon Effective Date: 2/17/2021 Retired Date:_____

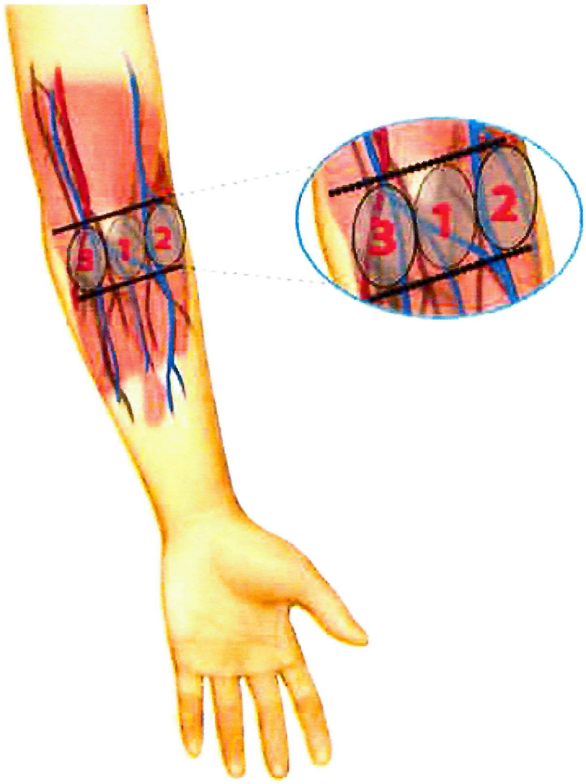
Purpose: To establish guidelines for the collection of laboratory samples from patients that align with the Clinical Laboratory Standards Institutes best practices.

2.1 Collection: After the pre-collection process has been successfully completed the collection process can begin.

1. **Done Gloves**: Isolation/Precaution patients will require additional PPE (Personal Protective Equipment) prior to contact with the patient, please refer to the hospital policy on Ellucid for additional information (Standard Precautions Policy).
    1. Perform proper hand hygiene
    2. Put on a new pair of gloves
    3. Ensure the gloves stay intact during the entire collection and post collection process
    4. Fingertips of the gloves must NOT be removed.

2. **Tourniquet application:**
    1. Apply tourniquet just proximal to the site being considered for venipuncture.
    2. Tourniquet application must not exceed ***one minute*** before accessing the vein.
       NOTE: Application longer than one minute will cause hemoconcentration.
    3. If the tourniquet has been on longer than ***one minute*** before accessing a vein, remove the tourniquet and ***wait two minutes*** before reapplying.
    4. After applying the tourniquet check with the patient to ensure it is not too restrictive and causing pain.
    5. When possible apply tourniquets over clothing for comfort and to prevent pinching of the skin, this is especially important with elderly and children patients.
3. **Vein Selection:**
    1. After the tourniquet is applied palpate for the optimal vein for the venipuncture.
    2. Site Selection:
        - Preferred venipuncture site is the antecubital fossa. The area of either arm that is anterior to the bend of the elbow.
        - When the antecubital is not available the veins on the back of the hand are the second best for venipunctures.
        - Collection outside the two recommended areas must be attempted with extreme caution due to the increased risk of injury.
        - Veins on the palmar surface of the wrist and the lateral wrist above the thumb to the mid forearm must NOT be used due to the increase risk of injury per CSLI guidelines.
        - Venipunctures must NOT be performed on the scalps of newborns by phlebotomists.
        - Draws on the ankle or feet must be authorized by a physician. Check with RN prior to performing an ankle or foot draw to validate an order has been approved by the physician. All ankle and foot draws must be documented in the LIS system.

3. When making the vein selection the phlebotomist should prioritize according to lowest risk (*Refer to the picture below for optimal vein selection recommendations*).
   - Veins in the median and lateral aspect of the median cubital vein are ideal (1). Attempt to locate one of these in either arm before considering another location.
   - Cephalic and accessory cephalic vein would be the secondary veins (2). Injury to the nerve that lies near these veins is rare but should be considered as a risk.
   - Basilica vein and medial aspect of the median cubital vein should be considered last (3). Venipuncture attempts in these veins have a higher risk of injury and should be used only if there are no other alternatives. Hand veins should be considered prior to using one of these higher risk veins. Refer to the table on page 3 (Table 1) for additional vein selection considerations.



(CLSI, Quick guide GP41, 7th ed. QG. 2017)

d. During vein selection/palpating, fist clenching is suggested. Fist clenching is not mandatory, but veins will become more prominent when the fist is clenched. Ask the patient to make a fist and hold. Ensure the patient does **not** pump their fist. Fist pumping can cause an elevation in Potassium levels.

Table 1: Site Selection Limitations when collecting Venous Blood Specimens (CLSI 7th Edition GP41 Collection of Diagnostic Venous Blood Specimens)

Sites That Must NOT be USED	
Sites:	**Rationale:**
Fistula, arm with a fistula or vascular graft	• Threatens the integrity of fistulas and vascular grafts, which can lead to serious patient complications.
Arteries	• Risk of misinterpretation of results and patient mismanagement if arterial blood is used rather than venous blood; NOTE: Arterial and venous blood specimens are not equivalent for many analytes. • Poses a significant higher risk of injury and complications than venous access.
Veins on lateral and palmar surface of the wrist	• Increased risk of nerve, tendon and arterial involvement.
Infected sites	• Potential for altered test results, exacerbation of infection, and patient discomfort.
Sites that Require Physician's Permission	
Site:	**Rationale:**
Limbs on the side of a mastectomy	• Risk of lymphedema and the potential for altered test results.
Any part of the lower extremities.	• Risks tissue necrosis in diabetic patients and thrombophlebitis in patients with coagulopathies.
Sites that Should be Avoided	
Site:	**Rationale:**
Extensive scarring, healed burns	• Palpation and needle insertion complications • Inability to detect adverse reactions
Hematoma	• May cause discomfort to the patient and potential altered test results
Above and below infusing fluids	• Possible contamination of specimen with IV fluid. See Policy LAB-02
Inflamed sites (including inflamed tattoos)	• Patient discomfort and possible complications
Edematous sites	• Potential altered test results
Extremity affected by stroke and injury	• Inability to detect adverse reaction, ex: nerve injury, pain, infection etc…

(CLSI, 2017)

Table 2: Pediatric Recommended maximum allowable blood draw volumes. Additional consideration must be made prior to drawing a pediatric patient. Pediatric patients have a smaller blood volume than adults. Too much blood taken from a pediatric patient may have adverse results for the patient, resulting in further medical intervention. Prior to drawing a pediatric patient, you must consider the following:

1. How much blood is necessary to perform all tests required for the test(s) ordered.
2. Consult the chart to determine if it is within the suggested guidelines. If required volume exceeds the charts recommendation you must consult with the patient's nurse and or physician for guidance and further instruction.

NOTE: A physician approval is required if the maximum volume is to be exceeded for a one time draw or daily maximum.

Patient's Weight		Patient's Total Volume	Maximum mL in one blood draw or 24 hours period
Kg	lbs.		
1	2.2	100	2.5
2	4.4	200	5
3	6.6	240	6
4	8.8	320	8
5	11	400	10
6	13.2	480	12
7	15.4	560	14
8	17.6	640	16
9	19.8	720	18
10	22	800	20
11 thru 15	24 thru 33	880-1200	22-30
16 thru 20	35 thru 44	1280-1600	32-40
21 thru 25	46 thru 55	1680-2000	42-50
26 thru 30	57 thru 66	2080-2400	52-60
31 thru 35	68 thru 77	2480-2800	62-70
36 thru 40	79 thru88	2880-3200	72-80
41 thru 45	90 thru 99	3280-3600	82-90
46 thru 50	101 thru 110	3680-4000	92-100
51 thru 55	112 thru 121	4080-4400	102-110
56 thru 60	123 thru 132	4480-4800	112-120
61 thru 65	134 thru 143	4880-5200	122-130
66 thru 70	145 thru 154	5280-5600	132-140
71 thru 75	156 thru 165	5680-6000	142-150
76 thru 80	167 thru 176	6080-6400	152-160
81 thru 85	178 thru 187	6480-6800	162-170
86 thru 90	189 thru 198	6880-7200	172-180
91 thru 95	200 thru 209	7280-7600	182-190
96 thru 100	211 thru 220	7680-8000	192-200

(Seattle Children's Hospital. 8 Aug. 2019)

*This information is similar to that used by the Committee of Clinical Investigations at Children's Hospital in Los Angeles and at Baylor College of Medicine in Dallas, TX.

2.1 Site Cleansing: Cleansing the venipuncture site prior to the venipuncture is a crucial step in the collection process. Cleansing the site will minimize microbiological contamination of the specimen and reduce the patient's risk of infection.

a. Proper cleansing method for venipunctures:

- Cleanse the site with back-and-forth friction using 70% isopropyl alcohol solution. For blood culture collections, cleanse with Chlorascrub swab. (Review the Blood culture collection guidelines in the laboratory test menu Laboratory Test Directory | Tests)
- Allow the area to air dry. The practice of air drying prevents the patient from experiencing a burning sensation when the venipuncture is performed and allows for optimal decontamination.
- Do not touch the site after it has been cleansed. If the site needs to be re-palpated the site will need to be cleansed again prior to the venipuncture. *Note: Re-cleansing may result in prolonged tourniquet constriction. Refer to 2.2*
- Never place an alcohol swab on the attended venipuncture site after cleansing. After cleansing dispose of the alcohol swab.

2.2 Venipuncture:

5. Evacuated Tube Method with a straight needle or butterfly:

- Assemble needle selected (straight needle or butterfly needle) for the patient's unique needs into a needle holder. Unpackaging and needle assembly must be done in the presence of the patient. Never place an unpackaged needle back onto a phlebotomy tray, cart or workstation to be used on another patient. Any needle removed from the package must be used on the patient or disposed of.
- Gather the appropriate tube(s) and place within reach on a stable surface in the plastic bins.
- Hold the patient's arm firmly distal to the intended puncture site.
- Draw the skin taut to anchor the vein approximately 1 to 2 inches below the puncture site in a manner to not impede the needle insertion. Anchoring above the vein is not recommended due to the increased risk of needle stick/injury to the Phlebotomist.
- Verbally notify the patient that the venipuncture is going to occur, unless asked not to by the patient.
- With the bevel up, perform the venipuncture with a steady, forward motion in the direction of venous blood flow. The needle should be at a 30-degree angle or less in most situations.
  NOTE: If using a butterfly needle, maintain needle placement by holding or otherwise securing the device throughout the collection.
- Once the needle has been inserted, advance the first tube into the needle holder ensuring the interior needle pierces the rubber stopper completely and straight. Ensure the needle is stabilized during the advancing of the tubes and changing of the tubes.
- After successful blood flow has been obtained, ask the patient to release their fist.
  NOTE: Once the needle is inserted be prepared to react to syncope and sudden unexpected movement.
  Also, be prepared to remove the needle if the patient is experiencing extreme pain to prevent nerve or other damage

- Ensure the safety device is immediately activated upon completion of the venipuncture. When using a butterfly need with in arm safety activation do not remove the needle prior to engaging the safety device.

6. **Syringe Method:** The use of a syringe for a venipuncture should be avoided for safety reasons. If a syringe collection cannot be avoided the following procedure should be followed:
    1. Assemble the needle and syringe.
    2. Break the seal of the plunger according to the manufacturer's instructions.
    3. Ensure all air is expelled before use.
    4. Gather the appropriate tube and place within reach on a stable surface
    5. Hold the patient's arm firmly distal to the intended puncture site.
    6. Draw the skin taut to anchor the vein approximately 1 to 2 inches below the puncture site in a manner to not impede the needle insertion. Anchoring above the vein is not recommended due to the increased risk of needle stick.
    7. Verbally notify the patient that the venipuncture is going to occur.
    8. With the bevel up, perform the venipuncture with a steady, forward motion in the direction of venous blood flow. The needle should be at a 30-degree angle or less in most situations.
    9. Keeping the needle as stable as possible in the vein, slowly withdraw the desired amount of blood by pulling the syringe plunger back with a slow, steady motion. Avoid excessive pulling pressure. Excessive pulling can hemolyze the specimen.
    10. Release the tourniquet as soon as blood flow is established to minimize hemoconcentration, unless the blood flow is slow, releasing may cause the vein to collapse
    11. After optimal blood volume has been met activate the safety device of the needle.
    12. Remove and discard the needle from the syringe.
    13. Apply a safety transfer device to the syringe
    14. Immediately insert the first tube into the safety transfer device. Allow the tube to fill without applying pressure to the plunger.
    15. Fill additional tubes following the order of draw.

4. ***Collection Tube requirements***
    a. All additive tubes must be filled completely. To prevent rejection and to achieve optimal blood to additive ration allow the tube to fill completely exhausting the vacuum.

    b. When the tube is filled, and the vacuum is exhausted remove the tube from the needle and mix gently by inverting the tube (see below chart). Do not shake or mix vigorously, this will cause hemolysis.

    c. If additional tubes are required repeat the a-b. Fill additional tube according to the order of draw (see below chart).

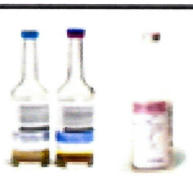
    d. Always remove the last tube from the needle and release the tourniquet before withdrawing the needle from the patient's vein.

    e. Closures must not be removed to fill tubes or transfer blood from one tube to the other.

6.1 Order of Draw and Inversion Chart:

ORDER OF DRAW

FIRST

Blood Cultures	
Light Blue (Citrate) Tube MUST be completely Full	
Serum Separator Tube (SST, Gel)	
Plasma Separator (PST- Heparin)	
Red Top Tube (No Gel, Serum)	
Lavender (EDTA	
Royal Blue (EDTA)	
Gray (Sodium Fluoride)	

Tubes with Additive

Yellow (Citrate Acid)	

LAST

Tube Type	Stopper Color	Number of Inversions
EDTA	Lavender	8-10
Citrate	Light Blue	3-4
SST with Gel	Red/Black, Gold	5
Serum	Red	5
Sodium Fluoride	Gray	8-10
Heparin	Green	8-10

7. Removing the needle, disposing and applying pressure:

1. After removing the needle from the patient, place a clean cotton ball or gauze pad over the venipuncture site.
2. Immediately activate the safety device upon removal. Some needles have an in-arm safety device. This safety device should be activated prior to removing the needle from the arm. Refer to the manufacturer's instructions.
3. Ask the patient if they can apply pressure to the site. Do not allow the patient to bend their arm at the elbow as a substitute for direct pressure.
4. Dispose of needle into a sharp's container. Do not lay the needle back down on any surface after use.
5. Needles must never be re-sheathed, bent, broken, or cut, nor removed from disposable syringes unless attaching to a safety transfer device.

a. **Post Venipuncture Care:** Check to ensure bleeding has stopped. Observe the location for 10 seconds before bandaging the area.

- If bleeding has not stopped pressure must be applied until it has stopped.
- Observe the venipuncture location for a hematoma
- Once bleeding has stopped, and the site has been evaluated for hematomas apply gauze/cotton or self-adhering bandage tightly around the arm to keep the pad in place.
- Instruct the patient to leave the bandage on for at least 15 minutes.
- Instruct the patient to carry their bags on the opposite site and to protect the arm from over exertion for several hours in an effort to not re-open the wound.
- Check the patient's arm to ensure the tourniquet has been removed.
- **Inpatients**: Prior to leaving the patient's room ensure the room is safe from all tripping hazards, remotes, call bells and trays are within reach. Ensure the bedrails are up and the bed is lowered if you raised it. In addition, be sure to check and see if the bed alarm needs to be set and that it is on if necessary. This will be indicated by a sign above the bed.
- Ensure all supplies and trash is removed from the patient's bed and bedside.

b. When blood specimens cannot be obtained.

Repositioning the needle without establishing vein location is considered probing and should be avoided. Probing can be painful, cause nerve damage, arterial perforation and hematoma. Some injuries can lead to complications which may result in permanent damage.

a. When blood flow is not established or when blood flow stops during collection, the phlebotomist must evaluate the situation and then consider the following:
   - Is the needle placement is too shallow, advance the needle further?
   - Is the needle is inserted too far into the vein you will need to withdraw slightly
   - Has the vein collapsed onto the bevel? If yes, release the vacuum pressure by removing the tube, wait for the vein to fill and reapply vacuum pressure by re-inserting the tube. If this does not establish blood flow a second draw will be required. Consider a small needle and smaller tubes if possible.
   - Has the tube lost its vacuum? If yes, try another tube to determine if the vacuum is deficient.

b. Lateral relocation: if all other attempts fail a lateral relocation may be attempted, only if a precise vein location has been established.
   - Never attempt a sideways needle relocation, this may cause nerve or artery damage or injury. .

c. If all the above attempts fail, discontinue the blood draw and re-attempt in a new location.

Each phlebotomist only has 2 venipuncture attempts per patient, per visit. ***Even if the patient asks the phlebotomist to try again.*** *If after two attempts the venipuncture is still not successful ask for assistance or ask the patient to return on another day.*

10. **Specimen Labeling:** Specimens must be labeled immediately upon the completion of the venipuncture and in the presence of the patient.
    a. Specimen identification and labeling requirements when there are **NO** printed labels available at the time of collection.

Handwrite the following information on the primary specimen container:

1. Patient's full name (last, first) – *Must be verbally confirmed with patient or verified against hospital ID bracelet when verbal verification is not practical.*
2. Patient's date of birth- *Must be verbally confirmed with patient or verified against hospital ID bracelet when verbal verification is not practical.*
3. See hospital policy PC-096: Obtaining and Labeling the Blood Bank Specimen *for pre-transfusion and transfusion patients for blood bank labeling policy.*
4. Phlebotomist's initials
5. Date and time of collection

b. When there is a lab label available at the time of sample collection:

Outreach patients:

1. Verbally verify the patient's full name and date of birth prior to drawing the patient. After positive verification is confirmed obtain the specimen(s).
2. After obtaining the specimen(s), verify the patient's full name and date of birth against the lab generated labels
3. After positive verification, affix the labels to the primary specimen container while the patient is still present.
4. Handwrite the following on the label after affixing to the specimen if not visible or present on the label:
    a. Date (if not visible on the printed label)
    b. Time of collected (if not visible on the printed label)
    c. Phlebotomist's initials. The tech code will be accepted if visible and accurate on the label <u>for non-blood bank specimens only.</u>
        - Blood Bank samples: Initials are REQUIRED (see policy PC-096 Obtaining and Labeling the Blood Bank Specimen for labeling requirements)
        - Aliquots and Add-Ons MUST be initialed by the person affixing the label to the specimen.

c. In-House Patients:

1. Log onto Collect on the WOW:
    a. Username= Partner's ID
    b. Password=Sunquest Password

    **Note you cannot change your password in Collect. This is done in Sunquest.
2. Collect must be used on all lab collect inpatients.
3. Refer to the Collect training guideline for more information on the Collect process.

- **All specimens** must be labeled with two unique identifiers.
- Label <u>must</u> be affixed to the primary container. **Never** Label the removal cover on any specimen

- **Always** verify the patient's identity at the time of registering (Outpatients) or during the collect process at the Confirmation screen for all Epic released orders with the exception of precaution rooms where identity will be verified against Sunquest pre-printed label(s).
- **All tubes** must have a bar code label affixed to the tube prior to delivering to the Lab.
- Labels **must** be affixed with the name of the patient at the top end of the tube.
- ***Do not*** *wrap the label around the tube like a flag (except for blood bank tubes) this will cause difficulties running the specimen through the automated instruments.*
- ***Always*** *label the tubes so that the colored stripe on the top of the tube is visible.*
- ***Always*** *try to leave a window on the tube so that the level of serum or plasma can be seen.*
- *Capillary specimens collected by finger or heel stick. (see above for proper verification procedure for preprinted labels and no preprinted labels)*
- *All specimens are to be labeled at the patient's bedside or chair-side while the patient is present.*
- ***Never*** *pre-label any specimen or pre-initial any labels not affixed to a tube.*

d. Processing non-blood specimens collected by nursing or patients:
   1. All specimens submitted for testing must be labeled with two unique identifiers on the innermost container. (i.e. patient name and date of birth)
   2. Inhouse specimen must be labeled with Lab labels or be accompanied by a valid requisition.
   3. If specimens are received with a requisition, follow the labeling instruction above (Section 10).

e. Specimen received with no phlebotomist initials or tech code (excluding blood bank samples, see blood bank policy PC-096 **Obtaining and Labeling the Blood Bank Specimen** for more information):
   1. When receiving a specimen without any initials on the label(s) or tech code, do not hold up specimen processing unless the specimen integrity or validity is being questioned.
   2. When no initials or tech code are present on the tube(s) the "collecting" phlebotomist that is documented in Sunquest and or Epic will be held accountable for the specimen(s).

f. Specimen without a time (excluding blood bank samples, see blood bank policy PC-096 **Obtaining and Labeling the Blood Bank Specimen** for more information):
   1. When receiving a specimen without a time on the label(s), do not hold up specimen processing unless the specimen integrity or validity is being questioned.
   2. Collection time that is documented in Sunquest and Epic will be used when there is not a handwritten time on the specimen.
   3. If there is a timing critical sample, and there is not a time written on the tube, look up the accession in Sunquest to determine the time of collect.

g. Unlabeled Specimens:
   1. Any specimen received in the lab unlabeled (without 2 unique identifiers) will be discarded except for a specimen collected by an invasive procedure.
   2. Notify the nursing floor that the specimen was discarded, and a new sample will need to be collected.
   3. Specimens collected by an invasive procedure will be not be discarded.
      1. Call the nursing floor.
   4. The person that collected the specimen must come to the lab and identify the specimen and label it properly. Consult a Pathologist prior to processing the specimen(s) enter a disclaimer in the computer stating the specimen was unlabeled when it came to the laboratory.

h. Labeling of CSF tubes
   1. When the physician does not indicate which test he/she would like tested on which tube label as follows:
      - Tube 1 – Chemistries
      - Tube 2 – Save and Freeze or Pathology tests

- Tube 3 – Hematology
- Tube 4 – Microbiology

i. When the physician indicates a cell count is to be performed on both tubes 1 and 4 label the remaining tubes as follows unless otherwise indicated by the ordering physician:

- Tubes 1 and 4: Hematology
- Tube 2: Chemistry
- Tube 3: Microbiology
- Pathology testing will need to be shared with the remaining specimens after all in-house test are performed.

ED – Emergent Situation exception: In emergent situations, the ED staff may accept blood specimens from EMS with one unique identifier linking to a bracelet with two unique identifiers. Upon receipt of the specimen(s) the ED staff must label the specimen with a hospital label containing the patient's full name and date of birth. The bracelet must stay on the patient throughout their ED stay.

11. Isolation Patients:

a. Patients are placed in isolation

1. To prevent transmitting disease to employees or other patients.
2. To prevent transmission of disease to the patient.
3. Reverse isolation
4. To prevent the immunocompromised patient or infants from having a contagious disease transmitted to them.
5. A sign will be placed outside the patient's room.
    a. The card will describe the type of isolation and the precautions that should be followed.
    b. All those entering the room must follow the precautions
    c. The necessary protective clothing and PPE should be available at the door of the patient's room.

b. Prior to entering the patient's room:

1. Pre-print the specimen labels for the isolated patient.
2. Prepare two bags with supplies
    a. Bag 1 will be all the supplies necessary to complete the tests ordered
    b. Bag 2 will be "extra" supplies in case of a miss etc…

c. While in the patient's room

1. Place paper towel on the table and place your equipment on the towel.
2. Follow patient identification protocol using the pre-printed labels.
3. Perform venipuncture in usual manner, avoiding unnecessary contact with the patient and the bed.
4. Discard needle and holder in proper container
5. Discard tourniquet in the regular trash in the patient's room
6. Wash hands using soap and water
7. Place specimens in a specimen bag.
8. Wipe down all the outside of the specimen bags prior to placing them on the cart for both the specimens and the extra supplies.

d. See the below for quick isolation references

1. Personal Protective Equipment "Quick Reference Guide"
2. Transmission based Precautions/Isolation "Quick Reference Guide"
3. For complete policy on isolation patients refer online to WDH policy "Instituting and Complying with Isolation Precautions" (WDH policy IC-03).

Transmission Based Precautions/Isolation "Quick Reference Guide"		
Infection/Condition	**Type of Precautions**	**Duration**
Abscess		
Draining, Major	Contact	Till Drainage Ends
Draining, Minor	Standard	
Cellulitis, Uncontrolled Drainage	Contact	Till Drainage Ends
Chickenpox (Varicella)	Airborne, Contact	Until lesions are crusted. Place exposed pts on Airborne at Day 10 through day 21 after last exposure
Conjunctivitis		
Acute viral	Contact	Till Drainage Ends
Decubitus ulcer, infected		
Major	Contact	Till Drainage Ends
Gastroenteritis		
Clostridium. difficile	Contact	
Escherichia coli	Standard	Use Contact for diapered or incontinent children age <6, duration of illness.
Hepatitis, viral		
Type A	Standard	
Diapered or incontinent patients	Contact	Maintain for <3, age 3-14 until 2 weeks after onset of sx, all others 1 wk after onset of sx
Type B & C and all other non-A, non-B	Standard	
Herpes simplex		
Recurrent, skin, oral, genital	Standard	
Neonatal	Contact	For infants born vaginally or C-section **AND** mother has active infection, with membranes ruptured for more than 4 hours
Herpes zoster (varicella-zoster)		
Immunocompromised patient, or disseminated	Contact Airborne	Duration of illness
Normal patient	Standard	Immune Caregivers, no risk

Transmission Based Precautions/Isolation "Quick Reference Guide"		
Infection/Condition	**Type of Precautions**	**Duration**
Impetigo	Contact	Until 24 hrs. after starting treatment
Infectious mononucleosis Standard		
Influenza	Droplet	Private room, cohorting, Low risk patients, Droplet for 5 days from onset of Sx, if 24hrs afebrile off day 6
Measles (rubeola)	Airborne	Duration of illness
Meningitis		
Haemophilus influenza	Droplet	Until 24 hrs. after starting treatment
Neisseria meningitidis	Droplet	Until 24 hrs. after starting treatment
Meningococcal pneumonia	Droplet	Until 24 hrs. after starting treatment
(MRSA) Multi-Drug Resistant Organisms, infection or colonization		
Gastrointestinal	Contact	Until off antibiotics **AND** culture neg (-)
Respiratory	Contact	Until off antibiotics **AND** culture neg (-)
Skin, Wound, Burn	Contact	Until off antibiotics **AND** culture neg (-)
Pertussis (Whooping cough)	Droplet	Until 5 days after patient is placed on effective therapy
Mycoplasma	Droplet	Duration of illness
RSV-respiratory syncytial virus infection	Contact	Duration of illness
Scabies	Contact	Until 24 hrs. after starting treatment
Staphylococcal/Streptococcal Disease (S aureus/group A)		
Major, Skin, wound, or burn	Contact	Duration of illness if no dressing or drainage not contained
Tuberculosis,		
Pulmonary, confirmed/suspected	Airborne	Until TB pt is on therapy **AND** has 3 consecutive neg (-) sputum smears/8 hours apart, one in a.m.
(VRE) Vanco-Resistant Enterococcus	Contact	Until off antibiotics AND culture neg (-)

Cohort means putting same organism with same organism i.e. MRSA w/MRSA
Surgical Pt's can cohort with any pt that is not on precautions, including Pneumonia.

***NOTE: All labels must be affixed to the primary specimen container. The primary specimen container is defined as the innermost container that holds the original specimen prior to processing and or testing. ***

References:

Clinical and Laboratory Standards Institute. April 2017. 7th Edition. GP41 Collection of Diagnostic Venous Blood Specimens.

Ruth E. McCall, Tankersley, Cathee M, Phlebotomy Essentials, Third Edition , 2003, pp 256-273 Ernst, Dennis, J, Center of Phlebotomy Education's 2006 "Accurate Results begin with me" lecture series, attended October 18, 2006

Kiechle, Frederick,L., So You're Going to Collect a Blood Specimen An Introduction to Phlebotomy, Eleventh Edition, Pp 15-31.

Seattle Children's Hospital, research, foundation. Recommended maximum allowable blood draw volumes. 8 Aug. 2019.