

Specimen Collection and Preparation

Laboratory test results are dependent on the quality of the specimen submitted. It is important that all specimens and request slips be properly labeled two patient identifiers, collection date/time, and origin (source) of specimen when applicable.

If there is any doubt or question regarding type of specimen that should be collected, Call Laboratory Services at 616-355-3801 to clarify the order and specimen requirements.

Blood Collection

Most laboratory tests are performed on anticoagulated whole blood, plasma, or serum. In general, specimens should be refrigerated until placed in the courier box for transport to the laboratory. Please see test catalogue for specific requirements.

- **Plasma:** Gently mix blood collection tube by inverting 6 to 10 times immediately after draw. If required, separate plasma from cells by centrifugation within 20 to 30 minutes.
- **Serum:** Allow blood to clot at ambient temperature, and then, separate serum from clot by centrifugation within 20 to 30 minutes. Caution: avoid hemolysis.
- **Whole Blood:** Gently mix blood collection tube by inverting 6 to 10 times immediately after draw.

Phlebotomy Order of Draw

Tube Color	Additive	Specimen Type	Comments
Blood Culture			Special Handling Requirements - Contact Lab for Instructions
Blue	Sodium Citrate	Plasma	Must fill to the 'fill line' otherwise specimen will be rejected
Gold/Orange	Clot Activator	Serum	Allow to clot 20-30 mins before centrifuging (Orange can be spun after 10 minutes)
Red	Clot Activator	Serum	
Royal Blue (Plain)	N/A	Serum	
Mint	Lithium Heparin	Plasma	
Dark Green	Sodium Heparin	Plasma	
Lavender/Pink	EDTA	Plasma	
Royal Blue (EDTA)	EDTA	Plasma	
Grey	EDTA	Plasma	Used as a preservative for Sugar testing
Yellow	Acid A or B	Plasma	

All specimens should be inverted 8-10 times to mix thoroughly

Draw order for Microtainer:

1. Lavender – EDTA
2. Mint – Lithium Heparin
3. Gold - SST

Non-Blood Specimen Submission

Each specimen container must be labeled on its side with the following:

- Patient's name
- Source of specimen and location (for Histology Specimens)
- Patient's Date of Birth

Office specimens: Additional information is required for proper billing of office specimens:

- Telephone number of patient
- Person responsible (relationship) for bill
- Insurance through employer or private
- Medicare or Medicaid number
- Marital status

Reasons for specimen rejection or delay in processing:

- Specimen container not identified with patient's name, date of birth and/or source of specimen
- No specimen received with requisition
- No requisition received with specimen
- Dissimilar correlation between specimen and requisition (i.e., requisition states "left" and specimen states "right")
- Source of specimen not indicated on requisition or no clinical diagnosis is indicated on requisition
- Course of action:
 - Unlabeled specimens, if irretrievable, may be returned to their origin for identification along with the Holland Hospital Laboratory Services Patient Identification Form
 - Incomplete requisitions will result in a delay in processing until the proper information can be obtained
 - If the birth date, anatomic site of the specimen, or clinical diagnosis are not present on the requisition, the laboratory will call for this data before processing the specimen

Histopathology Collection Sample Submission

Fixation of surgical specimens: Specimens may be submitted without fixative if they are delivered to the Surgical Pathology Laboratory promptly or if a frozen section is requested. When a fixative is used, it should be 10% buffered formalin. Specimens received in fixative should have enough fixative in the container to accommodate the specimen. Please call the Department of Pathology at 616-394-3185 if there are questions regarding the handling of specimens.

To assure proper and expedient handling of tissue specimens, a correct and accurately completed requisition and specimen container will minimize delays in processing and in issuing the final report.

Labeling of specimen containers and histopathology requisition: The following information is to be recorded on a requisition using a stamp/plate, typewriter, or neatly printed:

- Patient's name
- Doctor's name
- Sex
- Date of birth and age
- Address
- Preoperative diagnosis
- Surgeon/Doctor
- Clinical data and operative procedure
- Source of specimen and location