

Clinical Labs and Clinical Nurses: *Working Better Together*

Adapted with
permission from the
Kingston General
Hospital



College of Medical
Laboratory Technologists
of Ontario

Specimen Quality . . . It's Critical!

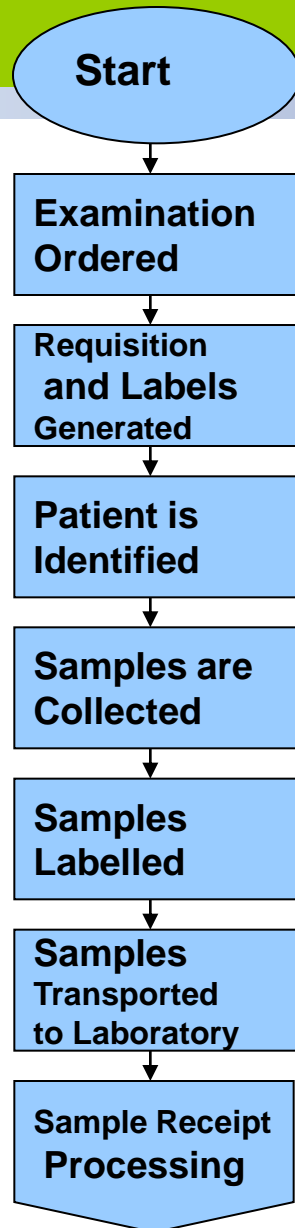
How many of you have experienced....

- Re-collecting another same sample?
- Frustration at the delay of results?

Session Purpose

1. Understand the importance of quality in specimen collection
2. Clarify your role
3. Give you tools and information to make specimen collection better for you, the lab and our patients

Sample Collection Process



Pre-analytical

“includes all activities from the time the laboratory examinations are ordered through the time that the samples are processed and delivered to the laboratory examination location or transported to referral laboratories”

CLSI/NCCLS GP-A5, Vol. 26, No.12 Laboratory Documents: Development and Control; Approved Guideline-5th Edition

The Six “Rights” of Specimen Collection

1. Right **PATIENT**
2. Right **REQUISITION**
3. Right **TEST**
4. Right **ORDER of DRAW**
5. Right **TUBE**
6. Right **LABELLING**



1 Right Patient

Review Administrative Policies, such as

- Patient Identification
- Identification of Newborns
- Blood Transfusion – Identification of Patient
- Lab Specimen Requisition and Labels
- Unlabelled or Incorrectly Labelled Specimens

Nursing Policy

- Venipuncture for Obtaining a Blood Sample: Added Nursing Skill for Registered Nurses and Registered Practical Nurses

#2 Right Requisition



Requisitions shall contain:

- Patient first and last name
- DOB
- Gender
- HC# &/or unique patient ID#
- Patient location
- Requestors name or unique identifier and destination for the report
- Type of specimen and the anatomic site of origin, where appropriate
- Examinations requested
- Date and time of specimen collection
- Clinical or additional information
i.e. medical history, medication, date of last menstrual period, previous abnormal results

What is the right test?

The order says: **PROTHROMBIN**

Is it Prothrombin Time?

A **BLUE** tube to assess coumadin therapy

Is it Prothrombin Assay?






A **BLUE** tube to assess a bleeding disorder

Is it Prothrombin Variant?

A **LAVENDER** tube to assess a clotting disorder

#4 Right Order of Draw

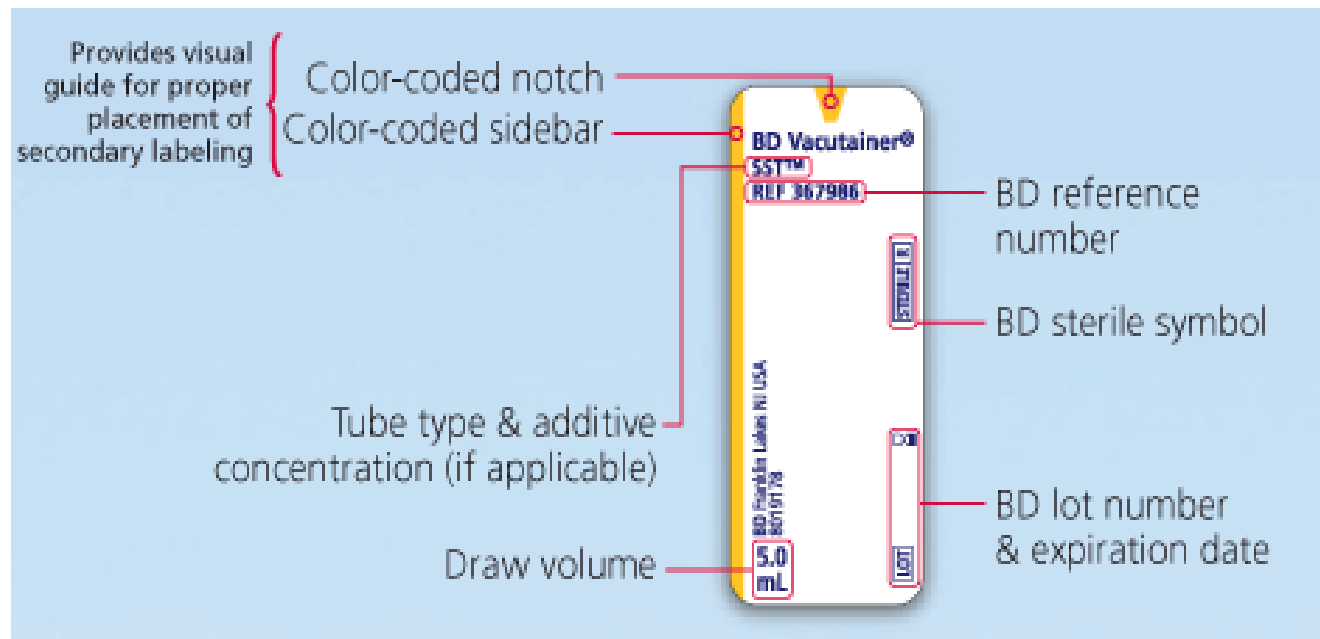
When drawing blood specimens for several examinations during a single venipuncture the order of draw shall be:

1. Blood Cultures
2. Coagulation Specimens  Light Blue
3. Serum tubes with or without clot activator or gel  Gold
4. Heparin tubes  Green
5. EDTA tubes  Lavender
6. Oxalate/fluoride tubes  Gray

OLA Requirement V.A.8 (*Version 4.1 Released July 2008*)

#5 Right Tube

- Correct Specimen Container for Test Requested
- Correct Anticoagulant Used for Blood Analysis



6 Right Labelling

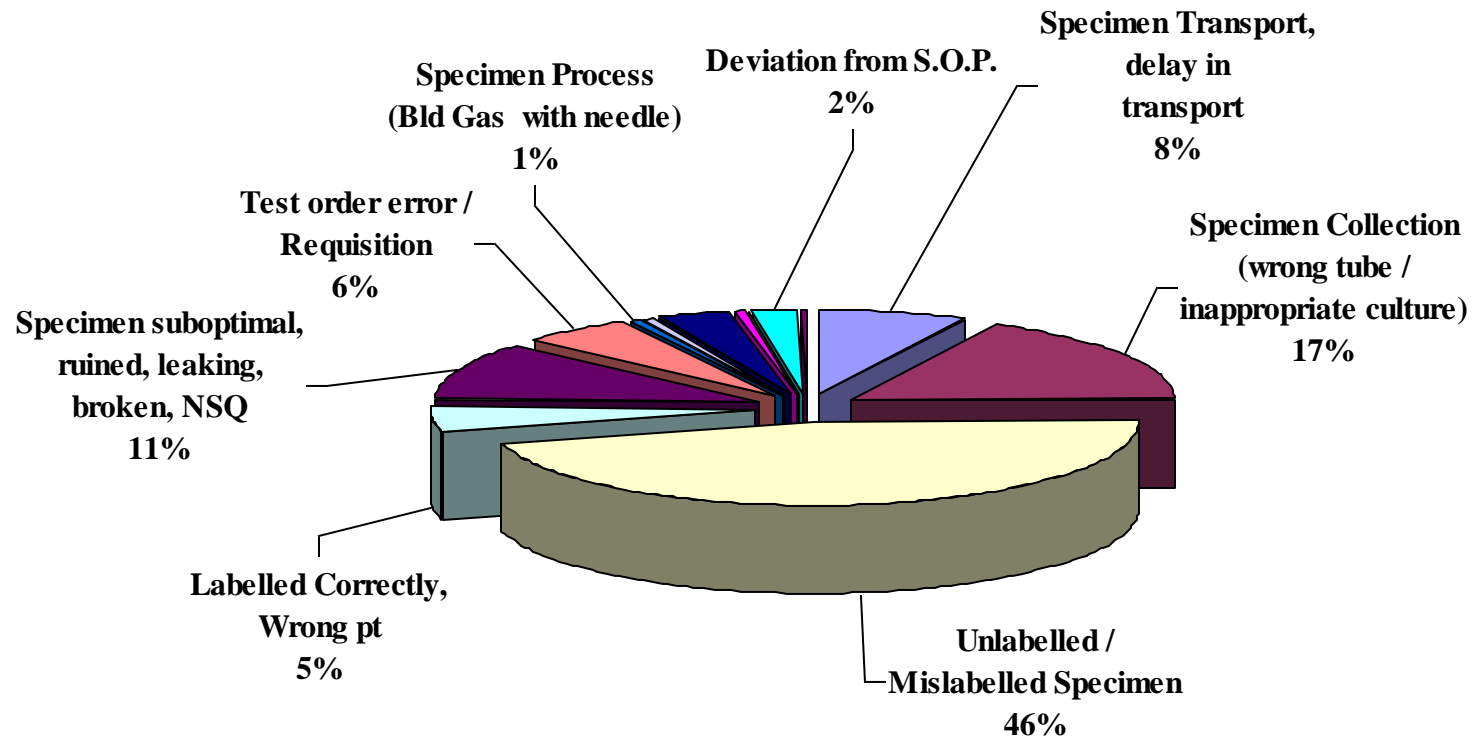
Specimen Labels MUST:

- Be **clear & legible**
- Include **patients full name** and **one other unique identifier**
- Include date & time of collection (time-sensitive tests)
- **Affixed at the time & point of collection (at patient's bedside after blood is collected)**

Proper Specimen Labeling ENSURES:

- The patient suffers no harm
- The hospital's risk is reduced
- The laboratory information is accurate

Clinical Laboratory Findings



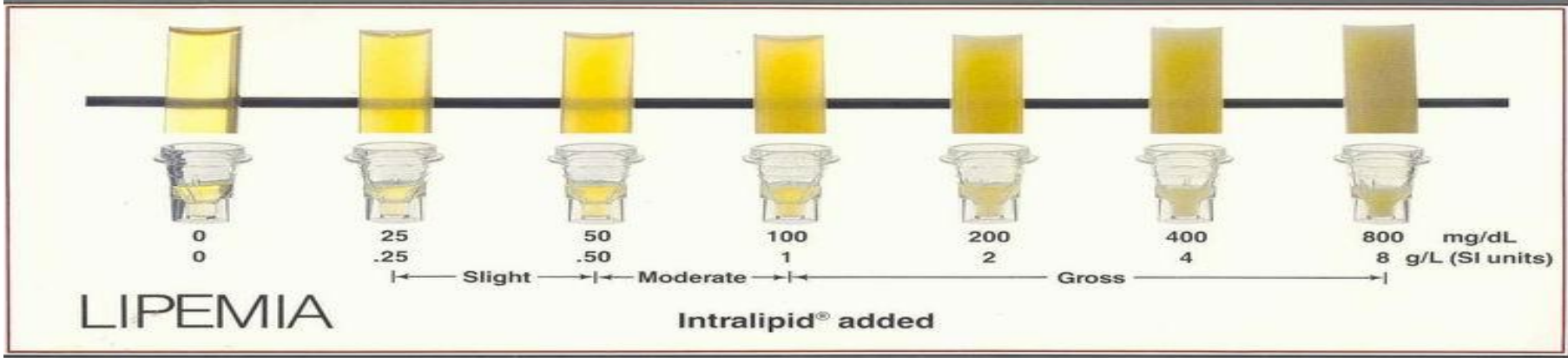
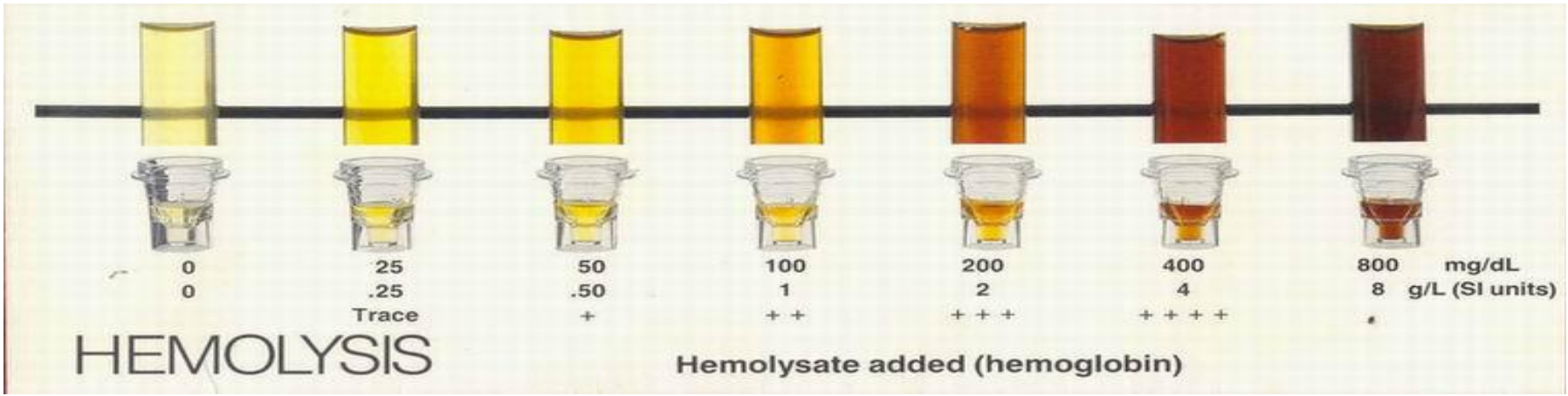
Is the sample difficult or impossible to recollect?



What Goes Wrong Most Often?

- Mislabelled/Unlabelled specimen
- NSQ – not sufficient quantity
- Clotted sample
- Sample contamination
- Sample processing/stability
- Hemolysed sample
- Lipemic sample

Hemolysis and Lipemia



Definitions & Examples

- **Hemolysis**

- red blood cells (RBCs) contain hemoglobin. When RBCs rupture, this hemoglobin leaves the RBC and give a red colour to the plasma or serum. This colour can interfere with may blood tests and cause inaccurate results. Hemolysed samples must be recollected.

- **Lipemia**

- Describes the milky white appearance of the plasma that can occur after a heavy meal or in certain diseases. Lipemia can interfere with blood tests. Patients may bee to return for their blood to be recollected after a period of fasting.

What Are The Benefits of Quality?

- Reduces medical errors
- Patient safety and satisfaction
- Decreases wait times and potential harmful delays in care
- Eliminates waste and rework
- Increases patient handling capacity and flow
- Organizational efficiencies



Summary

- Quality Specimen is critical to patient care
- Your role is to follow the SIX “Rights”
- When in doubt:
 1. Refer to Lab User Handbook
 2. Consult the Lab