

How to Collect a Quality Sample: Preventing QNS Collections

What is QNS?

QNS is the abbreviation used for "Quantity Not Sufficient".

Laboratory specimens are reported as QNS when:

- There is not enough specimen for the laboratory to perform the requested test(s).
- The amount of blood collected into the tube does not meet the proper blood: anticoagulant ratio. Testing samples with inadequate blood: anticoagulant ratios can result in the reporting of inaccurate test results.

What causes QNS?

- The use of expired tubes with decreased vacuum (i.e. tubes do not fill properly)
- Difficult patient draws
- Not ensuring tube is completely filled before removal

How can QNS specimens be prevented?

- For most serum and plasma tests, check to be certain that the tube is at least half full.

Note: Certain coagulation tests require a 90% to 100% full tube in order to achieve the proper blood-to-anticoagulant ratio.

What labs are primarily affected?

A variety of laboratory tests are adversely affected, resulting in **invalid** results. QNS specimens should be redrawn.

Examples of testing adversely affected by the QNS status

- *Coagulation: Prolonged clotting times for PT, aPTT, TT and fibrinogen*
- *Hematology: Reduced MCV, HCT; Falsely decreased RBC, WBC, PLT counts; Changes in leukocyte morphology*



Date Submitted: 11/10/2021

Submitted by: Teri Bishop, MLT (ASCP)