



Using Labs Wisely During Global Blood Tube and Other Resource Shortages

COVID-19 has put extraordinary strain on laboratory medicine in Canada due to critical shortages in blood tubes, devices, and lab staffing. The current shortages are forcing health care institutions to take immediate action to conserve tubes and supplies. Physicians and patients are key partners with the laboratory in preserving supplies for testing where it is needed most.

Before ordering tests, please consider:

- If and how immediate this test result will change patient management.
- Strategies to minimize collections e.g., avoid or limit standing orders.
- Avoid duplications, e.g., check previous results.
- Talking to your local lab professionals about how you can help conserve tubes.

RECOMMENDATIONS FOR CONSERVING LAB RESOURCES IN HOSPITALS

In the inpatient setting, don't order repeated CBC and chemistry testing in the face of clinical and lab stability. | Internal Medicine

DID YOU KNOW that just one blood draw per day for 'routine' daily lab testing can add up to removing the equivalent of ½ a unit of blood per week? The result is 20-30 blood tubes wasted, and iatrogenic anemia has a negative effect on patient outcomes.

Don't order baseline laboratory studies (complete blood count, coagulation testing, or serum biochemistry) for asymptomatic patients undergoing low-risk non-cardiac surgery. Anesthesiology

DID YOU KNOW that 1 in 20 results for healthy individuals fall outside the reference interval? Testing without an indication provides no clinical value, involves numerous blood tubes, and unexpected abnormal results can unnecessarily delay surgery.

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Don't request a serum protein electrophoresis in asymptomatic patients in the absence of otherwise unexplained hypercalcemia, renal insufficiency, anemia or lytic bone lesions. Medical Biochemistry

DID YOU KNOW that serum protein electrophoresis and immunofixation are labour-intensive tests in the lab, and the results are affected by acute illness? Often ordering these tests in hospital only leads to repeat testing after the reactive process resolves.

Don't order ANA as a screening test in patients without specific signs or symptoms of systemic **lupus erythematosus or another connective tissue disease.** | Rheumatology

DID YOU KNOW Antinuclear antibodies (ANAs) are measurable in approximately 25% of the population, and testing in the lab is labour-intensive? Most individuals with a positive ANA do not have an autoimmune disease and are unlikely to develop one.

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Don't order an erythrocyte sedimentation rate (ESR) to screen asymptomatic patients or as a general test to look for inflammation in patients with undiagnosed conditions. Medical Biochemistry

DID YOU KNOW that ESR is a manual test in many laboratories, often drawn on a blood tube by itself, and takes up to 90 minutes of lab staff time to complete? Currently the special tube for this test is in short supply.