

Global Shortages in Laboratory Supplies**Scope and Impact of the Problem**

As a result of the pandemic, clinical laboratories are experiencing significant interruptions in the supply of laboratory consumables, including but not limited to blood collection tubes, blood gas syringes, butterfly needles, test reagents. The supply challenges, combined with limited human resources, are eroding our ability to provide quality care to patients. All providers need to collaborate with laboratories to promote sustainable health care and conserve testing resources to high priority patients to mitigate the crisis.

What is being done to address this crisis?

Canadian clinical laboratories are taking steps to procure alternative supplies and to reduce waste. However, shortages are expected to continue throughout 2022, resulting in a significant and urgent need to promote sustainable healthcare practices in laboratory medicine.

Recommendations for Health Care Practitioners:

- **Before requesting tests, consider whether the test is essential for clinical management.** Only order tests when there is an evidence based clinical indication.
- **Delay ordering non-urgent laboratory tests** and extend time intervals for monitoring, whenever possible, until supply chains can be bolstered.
- **Plan testing and combine tests, where possible,** to reduce duplication of orders.
- **Utilize reflex or add-on testing, where available,** to avoid an additional collection.
- **Check if tests have been performed recently, prior to ordering.** Results may be pending, as testing may take time to collect and complete.
- Incorporate Choosing Wisely Canada recommendations [“Using Labs Wisely During Global Blood Tube and Other Resource Shortages”](#) into your practice.

Nursing/Phlebotomy:

- **Carefully follow protocols and requirements** to minimize errors that require recollections.
- **Only perform blood draws for requested testing.** Do not collect additional tubes (“just in case”/ “rainbow draws”), in anticipation of future orders.
- **Review and remove duplicate test orders** to avoid unnecessary blood draws.
- **Consult with your local clinical laboratory** on additional ways to conserve laboratory supplies.

Laboratorians:

- **Review testing volume requirements and consider consolidation of tubes** (e.g., one chemistry tube instead of two), or where testing needs may be addressed using aliquots or add-on testing.
- **Review sample stability and storage protocols** to allow for increased add-on testing.
- **Ensure all users have access to information regarding tube requirements** for each test to help support conservation efforts.
- **Consider the use of alternate products** with the same intended use based on product availability. Use recently expired tubes as a last resort.

If you have additional questions regarding the impact of the shortages in laboratory supplies may have on your practice, reach out to your local laboratory. They are ready to partner with you as we navigate this challenge.