

DATE:	15 April 2024
TO:	All Zones
FROM:	Molecular Genetics Laboratories North and South, APL
RE:	Genetics & Genomics Specimen Storage Guidelines

PLEASE POST OR DISTRIBUTE AS WIDELY AS APPROPRIATE

Key Message

- A Specimen and Diagnostic Materials Retention Schedule is available for APL. Below are key retention schedules for Molecular testing samples.

Item	Description	Retention Period	Notes
Primary specimens for testing	CVS or amnio cell pellet	1 year	
	Frozen tissue	5 years	Maybe stored as frozen tissue and/or extracted DNA
	Whole blood	12 weeks	
Residual Specimens post testing	DNA from postnatal sample	2 years	
	DNA from perinatal sample (including POCs and fetal demise)	5 years	
	DNA from prenatal sample	2 years	
	Chelex extracted DNA	2 weeks	
	HFE testing and NBS blood spots	3 months	
Specimen storage	Long term DNA storage	25 years	For whom future testing is anticipated AND a sample cannot be recollected. May be ordered by Clinical Geneticists, Pathologists and the Medical Examiner's office.
	Short Term DNA storage	2 years	For whom genetic testing is anticipated but no testing ordered at the time of collection.

- Ordering of long-term or short-term DNA storage can be done by either:
 - Connect Care using the DNA storage order (LAB2740) and indicating the appropriate reason for storage.
 - Selecting DNA storage on the General Molecular Genetics Laboratory requisition. If long-term storage is not indicated, short-term storage will be ordered.



Background

- Storage conditions and retention guidelines must meet or exceed accreditation standards.
- APL does not provide biorepository services (aka banking) and does not have the infrastructure to routinely store residual specimens long term.
- Recollection of specimens optimizes testing outcomes as sample prep methodologies change over time and past methods may not be optimal for current testing.

How this will impact you

- The Specimen and Diagnostic Materials Retention Schedule replaces all previous Specimen storage guidelines/policies in the Calgary and Edmonton Biochemical Genetics, Cancer Cytogenetics, Cytogenetics and Molecular Genetics Laboratories

Questions/Concerns

- Genetics and Genomics North – Genetic Counsellors, University of Alberta Hospital, 780-407-1015
- Genetics and Genomics South – Genetic Counsellors, Alberta Children’s Hospital, 403-955-3097

Approved by

- Dr. Dennis Bulman, Medical/Scientific Director, Genetics and Genomics, APL
- Dr. Carolyn O’Hara, Chief Medical Laboratory Officer (Interim), APL

Effective September 1, 2023, APL has become the sole provider of all public lab services in Alberta. As a result, community lab services formally provided by DynaLIFE Medical Labs will become the responsibility of Alberta Precision Labs (APL). This change impacts all zones.