



Date: December 28, 2020
To: Central Zone Physicians, Laboratory Directors, Managers, Supervisors
From: Clinical Biochemistry, South Sector, Alberta Precision Laboratories (APL)
Re: Changes to Bilirubin Result Comments on Neonates

PLEASE POST OR DISTRIBUTE AS WIDELY AS APPROPRIATE

Key Message:

- Effective **January 7, 2021**, the following comments will be automatically attached to the results of bilirubin obtained on neonates:

Patient age	Neonatal bilirubin concentration	Comments attached to neonatal bilirubin results
<7 days	any	<i>Please interpret according to the Canadian Pediatric Society Guidelines for Phototherapy.</i>
0-48 hours	≥ 250 µmol/L	<i>Bilirubin levels of ≥250 µmol/L in the first 48 hours of life require pediatric consultation and further investigation.</i>
2-6 days	<250 µmol/L	<i>Values <250 µmol/L, not associated with rising bilirubin values, may be considered normal for this age group.</i>
2-6 days	250-299 µmol/L	<i>Bilirubin levels of ≥250 µmol/L after the first 48 hours of life require follow-up monitoring.</i>
	300-349 µmol/L	<i>Bilirubin levels ≥300 µmol/L require medical reassessment. RE: Possibility of blood group incompatibility, excessive weight loss or inadequate feeding pattern. In presence of blood group incompatibility, the initiation of phototherapy could be considered.</i>
	350-400 µmol/L	<i>Bilirubin levels ≥350 µmol/L, the use of phototherapy would be prudent after appropriate assessment even when no blood group incompatibility exists. Pediatric consultation is recommended.</i>
	>400	<i>Bilirubin levels > 400 µmol/L require prompt pediatric or neonatal consultation for potential need of exchange transfusion.</i>



Why this is Important:

- Laboratory nomenclature, reporting and processes within APL North and South Sector will be standardized in preparation for Connect Care implementation.

Action Required:

- Be aware of the new set of comments attached to the results of bilirubin obtained on neonates.

Inquiries and feedback may be directed to:

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This bulletin has been reviewed and approved by:

- Heidi Paulin, MD, General Pathologist, Red Deer Regional Hospital
- Alex Chin, PhD, Clinical Biochemist on behalf of Hossein Sadrzadeh, PhD, Section Chief, Clinical Biochemistry, South Sector
- Leland Baskin, MD, Associate Medical Director, South Sector