

Date: June 24, 2014
To: Edmonton Zone
From: All Physicians, Nurses, and Laboratory Directors and Managers
Re: AHS Laboratory Services
On-site C-Reactive Protein (CRP) Testing at GNH, MIS, RAH, SCH

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Key Messages:

Effective July 15, 2014, on-site CRP testing will be implemented at the Grey Nuns Hospital (GNH), Misericordia Community Hospital (MIS), Royal Alexandra Hospital (RAH), and Sturgeon Community Hospital (SCH).

All four sites will offer on-site testing for both pediatric and adult patients. Testing can be requested as STAT, priority (PO), or routine.

Background:

CRP shows a rapid response to infection and inflammation, increasing within an hour of stimulus and returning rapidly to normal following resolution/therapy. Moreover, CRP correlates well with the severity of inflammation.

CRP (mg/L)	
8-40*	Mild inflammation, viral or bacterial infection
40-100*	Moderate inflammation, viral or bacterial infection
>100*	Marked inflammation, severe bacterial infection, vasculitis, severe arthritis

*Concentrations are estimates only and are derived from literature values.

AHS Laboratory Services recently made recommendations for the use of CRP over ESR when investigating inflammation/infection¹.

Why this is important:

Until now, the majority of CRP requests were sent off-site with 2-6 hr turnaround times. On-site CRP testing is expected to decrease turnaround times to 60-90 minutes, and approval from on call laboratory medical/scientific staff will no longer be required. (Note: ESR testing will continue to be available for the foreseeable future.)

Action Required:

Effective July 15, 2014, samples for CRP testing at GNH, MIS, RAH, and SCH must be collected into a lithium heparin plasma separator tube (LIGHT GREEN top).

Continue to fill out requisitions in the same way as previously.

References:

1. AHS Laboratory Report. April 2013. "C-Reactive Protein (CRP): The Best Lab Test for Inflammation/Infection."

Inquiries and feedback may be directed to:

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This bulletin has been reviewed and approved by:

Dr. Carolyn O'Hara, AHS Medical/Scientific Director and ZCDH, Laboratory Services – Edmonton Zone