

Lakeland Laboratory

Technical Bulletin

12/27/2021

ESR Instrumentation Testing Update

On December 30, 2021, Spectrum Health Lakeland laboratory St. Joseph will upgrade its ESR testing instrumentation.

Lakeland Laboratory is pleased to announce that a new analyzer, the iSED® Erythrocyte Sedimentation Analyzer (iSED), will be implemented for ESR testing. The iSED utilizes photometric rheoscopy as its methodology and has been found to have greater than 95% correlation with the Westergren method, which is considered the reference method. The iSED's advanced automation assures improved repeatability by removing external variables such as mixing, vibration, temperature, timing, and other factors that introduce imprecision in other methods.

The iSED technology is not affected by hemoglobin/ hematocrit and MCV levels in the same way as the other methodologies and is less likely to cause false elevations in the ESR result. Therefore, if the ESR is being used to follow the progress of a patient's inflammatory disease, during treatment, there may be some variation from prior results, and the patient may need to have a new baseline established.

Specimen collection for the ESR is a 13 x 75mm, EDTA blood collection tube (purple top), or a BD Microtainer® MAP Microtube. Specimens are stable for 6 hours at room temperature or 24 hours refrigerated. EPIC Test ordering and specimen collection instructions will not change.

The reference range for the new method will be:

Sedimentation Rate Reference Value (mm/hr)	
Males <50 years old	<15
Males ≥50 years old	<20
Females <50 years old	<20
Females ≥50 years old	<30

For additional information or questions please contact Spectrum Health Lakeland Laboratory Client Services:
Call (269) 983-8311 or
1-800-513-9193

Or visit the Lakeland Laboratory website: <https://www.spectrumhealthlakeland.org/medical-services/laboratory-services> then select laboratory test catalog from the drop down menu.