

LAB TESTING UPDATE



NEW TROPONIN INTERPRETATIVE STATEMENT

The Medical Staff Executive Committee approved removal of troponin from the alert value list at the August 27, 2009, meeting. Following is the new troponin interpretative statement for the Edgewood, Covington, and Grant facilities, effective Monday August 31, 2009. The Florence and Ft. Thomas facilities already use a similar troponin range.

<u>Troponin Level</u>	<u>Significance</u>
<0.01 ng/mL	Negative
0.01 – 0.06 ng/mL	Detectable troponin of unknown significance
≥0.07 ng/mL	Possible myocardial injury

Note: A variety of mechanisms may cause myocardial injury. The diagnosis of myocardial infarction depends both on elevated levels of troponin and on clinical data that support ischemia as a cause. It is not possible to reliably discriminate ischemic from nonischemic causes by a single cutoff level. However, a rising or falling pattern of troponin values is helpful in discriminating acute injury from chronic causes.

A recent analysis of all low level troponin results at St. Elizabeth Edgewood during the months of April and May revealed detectable troponin in a variety of medical conditions, including renal disease, congestive heart failure, myocarditis, pneumonia, sepsis, valvular disease, COPD, and pulmonary embolism. This mirrors the findings that have been published in the recent medical literature. The cardiologists have been inundated with consults based on non-urgent low level troponin results. Please keep the following points in mind when ordering and interpreting troponin levels:

1. DETECTABLE TROPONIN IS NOT ALWAYS INDICATIVE OF MYOCARDIAL ISCHEMIA. The interpretation of the significance of a troponin level requires clinical data and often necessitates evaluation of multiple troponin levels several hours apart to confidently diagnose or exclude myocardial ischemia.
2. IN MOST CASES A TROPONIN SHOULD BE ORDERED IN THE CONTEXT OF AN ACUTE CORONARY SYNDROME. Casual ordering of troponin has generated unnecessary invasive procedures, including cardiac catheterizations.
3. IF YOU ORDER A TROPONIN TEST, BE PREPARED TO TAKE RESPONSIBILITY FOR THE RESULT. The laboratory will not routinely call the results back to the testing location unless requested. Please leave appropriate call back instructions for either the laboratory or nursing staff.

Please direct any questions to the Pathology Department at Edgewood (859) 301-2018.

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