The clinical chemistry laboratory will implement the detection of fentanyl using the Fentanyl II Enzyme Immunoassay on September 7, 2022. This will be an additional component of our current qualitative urine emergency drug screen panel (EDS).

The illicit use of fentanyl has dramatically increased nationally and regionally in the recent years and a large percentage of opioid-related mortality involved fentanyl use. We have added this test in response to requests from various clinical departments and with support from the Clinical Laboratory Optimization Committee (CLOC).

The Fentanyl II Enzyme Immunoassay is a qualitative assay that screens for the presence of norfentanyl, the major metabolite of fentanyl, in human urine. Samples that contain greater than 5 ng/mL of norfentanyl will be reported as positive for fentanyl. Samples that are below the 5 ng/mL cutoff will be reported as negative. Please be aware that there may be occasional false positive (e.g., due to cross-reacting substances) and false negative (e.g., value below the cutoff, certain fentanyl analogs) fentanyl screens with this immunoassay method.

All positive EDS screen results should be considered presumptive positive unless confirmed by an alternative mass spectrometric method. Interpretation should be made in conjunction with the clinical presentation/assessment of patient. This immunoassay-based screening cannot be used for employee drug testing, medico-legal drug testing, or other purposes requiring chain of custody handling procedures.

If you have any questions, please contact me at 773-702-1318 or via email: jyeo@bsd.uchicago.edu