

## URINALYSIS WITH REFLEX TO CULTURE

As of January 16<sup>th</sup> 2018, for urine specimens ordered as “urinalysis (UA) with reflex to culture” the Methodist Pathology Center laboratory is optimizing internal reflex criteria. Based on review of laboratory data, this change is anticipated to result in a significant reduction in unnecessary urine cultures and the urine culture contamination rate. The new criteria are as follows:

- **Culture WILL be performed when urinalysis shows:**
  - Positive Leukocyte Esterase and/or >10 WBCs per high power field
  - AND
  - Fewer than 6 squamous epithelial cells per high power field
  
- **Culture WILL NOT be performed when urinalysis shows:**
  - Positive nitrites or bacteria in the absence of pyuria
  - OR
  - Greater than or equal to 6 squamous epithelial cells per high power field

### **Background:**

Pyuria, defined as a positive leukocyte esterase and/or > 10 WBCs per high power field, is nonspecific for a urinary tract infection (UTI). However, the absence of pyuria is a strong indicator that a UTI is not present.

Previously, the presence of bacteria or nitrites triggered a reflex to culture. Nitrites and bacteria in the absence of pyuria suggest contamination rather than true infection, thus these are no longer part of the criteria for culture.

The presence of squamous cells was previously not considered in the decision to reflex to culture. Now if there are 6 or more squamous epithelial cells per high power field, the specimen will not automatically reflex to culture, as this finding indicates a contaminated collection. Recollection is strongly recommended if a urine culture is desired.

### **Additional Notes:**

Please note that this change will **only** affect automatic UA/reflex orders performed at Methodist main laboratory and Methodist Women’s laboratory. **Urine culture is still orderable separately.** If you wish to add on a culture to a UA/reflex order that did not meet reflex criteria, you may call the laboratory at 4-4541. UA specimens are retained for 24 hours.

Please direct any questions regarding this change to Dr. Tess Karre, Microbiology Medical Director (402)354-7842 or Dr. Deb Perry, Methodist Hospital Medical Director (402)354-4559.