



PARTICIPANT STATISTICS

Specimen 1 - Urine - 24 year old Female, flank pain

Organisms	Extent 1	2	3	4	5
250 <i>Corynebacterium</i> sp., NOS			1	3	
470 <i>Proteus</i> sp., NOS	1	5	3		
472 <i>Proteus mirabilis</i>	3	16	15	11	
542 <i>Staphylococcus</i> sp., coagulase-negative, NOS				1	
690 Aerobe found, but referred for ID	43	2	2		
697 No pathogens isolated	2				
698 No aerobic growth	4				
891 Organism is gram-negative	4	2	17	4	
913 <i>Proteus</i> or <i>Pseudomonas</i>		2	11		
991 Growth of gram-negative organisms	22	5	5		
992 Growth of gram-positive organisms	1		1		
TOTAL PARTICIPANTS	77	19	56	23	11

Extent 1, 2 and 3 flagging appears for failure to report 470, 472, 690, 891, 913 or 991.

Extent 4 and 5 flagging appears for failure to report 472.

In addition to the required organism, participants in all extents may report 250, 253, 892, 992 and any of the codes listed in Extent 1, 2 and 3.

This urine had *Proteus mirabilis* and *Corynebacterium* sp.

Proteus are highly motile, even swarming bacteria with a pungent odor that reveals itself when the incubator is opened. Positive urea and phenylalanine tests prove it to be a Proteus, and negative indole proves it to be mirabilis. Motile anal flora migrate from anus to the bladder quickly and multiply. Pain is proof of cystitis.

Do AST on the Urine Panel, as agents change quickly in institutions. Ampicillin or carbenicillin used to work. Diphtheroids are skin flora.

Specimen 2 - Urine - 27 year old Female, frequency pain

Organisms	Extent 1	2	3	4	5
310 <i>Escherichia</i> sp., NOS			7		
312 <i>Escherichia coli</i>	1	3	5		
690 Aerobe found, but referred for ID	43	1	2		
698 No aerobic growth	1				
891 Organism is gram-negative	1	2	2		
892 Organism is gram-positive			1		
911 <i>E. coli</i> , <i>Citrobacter</i> or <i>Enterobacter</i>	1	4	5		
991 Growth of gram-negative organisms	19	2	3		
TOTAL PARTICIPANTS	65	10	23	5	

Extent 1, 2 and 3 flagging appears for failure to report 310, 312, 690, 891, 911 or 991.

Extent 4 and 5 flagging appears for failure to report 312.

In addition to the required organism, participants in all extents may report any of the codes listed in Extent 1, 2 and 3.

This specimen contained only *Escherichia coli*.

The major sex, age, symptoms and causative-organism are united. *E. coli* is IDed by its flat, green-sheen colony on EMB agar, confirmed by ONPG, or lactose and indole positives, and urea and oxidase negatives.

Ampicillin is the first choice for treatment, resistance dictates AST Urine Panel to confirm, or choose alternatives.

Specimen 3 - Urine - 24 year old Female, frequency

Organisms	Extent 1	2	3	4	5
540 <i>Staphylococcus</i> sp., NOS			4		
542 <i>Staphylococcus</i> sp., coagulase-negative, NOS	2	19			
546 <i>Staphylococcus epidermidis</i>			6	3	
549 <i>Staphylococcus saprophyticus</i>			1		
690 Aerobe found, but referred for ID	41	2	3		
697 No pathogens isolated			2	2	
698 No aerobic growth	3				
892 Organism is gram-positive	2	2	3		
912 <i>Klebsiella</i> , <i>Staphylococcus</i> or <i>Streptococcus</i>			2		
992 Growth of gram-positive organisms	19	4	1		
TOTAL PARTICIPANTS	65	10	41	5	

Flagging in all extents appears for reporting other than 540, 542, 546, 690, 697, 698, 892, 912 and 992.

Only *Staphylococcus epidermidis* was in this urine.

More than half of urine specimens are "no growth," or, "no pathogens found" reports. An

THROAT/URINE CULTURE

SECOND QUADRIMESTER 2011

"abused urine," collected early, but left unrefrigerated, allows small numbers of skin contaminants to grow to detectable numbers in colony-count dilutions. Request a repeat urine.

Do report, "No pathogens found." Do not report the staph - they may want to treat it

Specimen 4 - Throat - 2 week old Male, fever

Organisms	Extent 1	2	3	4	5
250 <i>Corynebacterium</i> sp., NOS		1		2	
310 <i>Escherichia</i> sp., NOS			6		
312 <i>Escherichia coli</i>	1	3	15	4	
661 Neg for beta-hemolytic strep screen	2	2			
663 Neg for Grp A strep screen by culture	18	14	14		
664 Pos for Grp A strep screen by culture	1				
690 Aerobe found, but referred for ID	21	2	2		
698 No aerobic growth 1					
891 Organism is gram-negative		2	2		
892 Organism is gram-positive	1		1		
911 <i>E. coli</i> , <i>Citrobacter</i> or <i>Enterobacter</i>	1	1	5		
991 Growth of gram-negative organisms	7	1	2		
TOTAL PARTICIPANTS	53	26	47	6	

Extent 1, 2 and 3 flagging appears for failure to report 310, 312, 661, 663, 690, 891, 911 or 991. Extent 4 and 5 flagging appears for failure to report 312.

In addition to the required organism, participants in all extents may report 250, 253, 892, 992 and any of the codes listed in Extent 1, 2 and 3.

This specimen produced *Escherichia coli* sp.

Mother's milk and immune system protects infants for awhile, but later the baby has to get his own immunity to one of the first organisms he encounters; the ubiquitous *E. coli*. It is a pathogen until he produces his own protective antibodies. Safe in the gut, the pathogen eventually becomes the child's normal flora. It is the doctor's call as to whether to treat or not. But the lab must ID the organism and do AST, Gram Negative Panel and report.

With severe symptoms of hemorrhagic colitis, typing for O157:H7 is done, but not in this age group, which is not yet ready for 'fast foods and undercooked hamburgers.'

Reagent strips will reveal it to be indole and ONPG positive, and urea and oxidase negative.

Specimen 5 - Throat - 45 year old Female, sore throat, bronchitis

Organisms	Extent 1	2	3	4	5
250 <i>Corynebacterium</i> sp., NOS		1		2	
360 <i>Klebsiella</i> sp., NOS		8			
366 <i>Klebsiella pneumoniae</i>	3	14	4		
661 Neg for beta-hemolytic strep screen	2	2			
663 Neg for Grp A strep screen by culture	17	13	14		
664 Pos for Grp A strep screen by culture	2				
690 Aerobe found, but referred for ID	21	2	2		
696 No aerobic growth on blood agar		1			
698 No aerobic growth	1				
891 Organism is gram-negative		3	1		
892 Organism is gram-positive			1		
911 <i>E. coli</i> , <i>Citrobacter</i> or <i>Enterobacter</i>			1		
913 <i>Proteus</i> or <i>Pseudomonas</i>	1				
914 <i>Klebsiella</i> or <i>Enterobacter</i>			5		
991 Growth of gram-negative organisms	7	2	1		
TOTAL PARTICIPANTS	51	27	47	6	

Extent 1, 2 and 3 flagging appears for failure to report 360, 366, 661, 663, 690, 696, 891, 912, 914 or 991.

Extent 4 and 5 flagging appears for failure to report 366.

In addition to the required organism, participants in all extents may report 250, 253, 892, 992 and any of the codes listed in Extent 1, 2 and 3.

This specimen produced *Klebsiella pneumoniae* and *Corynebacterium* sp.

Although more common in the urinary tract and wound infections, this gram negative rod can often cause pneumonia, thus the name. Throat infections are not common, but may indicate an underlying developing lung infection. The severe bronchitis is a clue here. Antibiotic resistant strains are a growing problem in the hospital environment. AST testing is imperative.