



PARTICIPANT STATISTICS

Specimen 1 - Urine, 69 year old Male - Incontinent

Organisms	Extent 1	2	3	4	5
291 <i>Enterococcus faecalis</i>	1	92	69	6	
290 <i>Enterococcus</i> sp., NOS		2	96	7	2
690 Aerobe found, but referred for ID	47	4	3		
992 Growth of gram-positive organisms	24	3	7		
572 <i>Streptococcus</i> sp., Group D, <i>enterococcus</i>		1	18	1	2
892 Organism is gram-positive	3	4	11	4	
546 <i>Staphylococcus epidermidis</i>			9	1	
542 <i>Staphylococcus</i> sp., coagulase-negative, NOS			14	1	1
540 <i>Staphylococcus</i> sp., NOS			6	1	
554 <i>Streptococcus</i> sp., NOS			5	5	
570 <i>Streptococcus</i> sp., Group D		1	4		
663 Neg for Grp A strep screen by culture	3				
697 No pathogens isolated	3				
549 <i>Staphylococcus saprophyticus</i>				2	
556 <i>Streptococcus</i> sp., non-hemolytic			1	1	
891 Organism is gram-negative	1				
543 <i>Staphylococcus</i> sp., coagulase-positive, NOS			1		
574 <i>Streptococcus</i> sp., Group D, not <i>enterococcus</i>				1	
544 <i>Staphylococcus aureus</i>			1		
991 Growth of gram-negative organisms			1		
912 <i>Klebsiella</i> , <i>Staphylococcus</i> or <i>Streptococcus</i>			1		
576 <i>Streptococcus agalactiae</i>				1	
250 <i>Corynebacterium</i> sp., NOS			1		
698 No aerobic growth	1				
TOTAL PARTICIPANTS	82	16	270	101	12

Extent 1, 2 and 3 flagging appears for failure to report 290, 291, 554, 570, 572, 690, 892, 912 or 992.
 Extent 4 and 5 flagging appears for failure to report 290, 291 or 572.
 In addition to the required organism, participants in all extents may report 540, 542, 546 and any of the codes listed in Extent 1, 2 and 3.

This specimen contained *Streptococcus faecalis*, group D, (*enterococcus*), and *Staphylococcus epidermidis*. The *enterococcus* is the cause of subacute bacterial endocarditis, (SBE), while growing within the heart. The presence of a murmur indicates that this pathogen requires multiple blood cultures, because it is only detectable when incrustations break off the valves sporadically. This is a PANIC VALUE organism in urine, and should be reported as Stat, by phone to the doctor, and request blood cultures for SBE.

Do and report antibacterial sensitivities testing (AST) as quickly as these slow-growing organisms will permit. Multiple agents are commonly required for treatment. Penicillin plus Gentamicin are usually used.

Specimen 2 - Urine, 72 year old Female, Incontinuity

Organisms	Extent 1	2	3	4	5
691 Aerobe found, but referred for ID	44	1	3		
493 <i>Pseudomonas aeruginosa</i>			21	4	
991 Growth of gram-negative organisms	17	3	4		
490 <i>Pseudomonas</i> sp., NOS		1	16		
913 <i>Proteus</i> or <i>Pseudomonas</i>		2	5		
891 Organism is gram-negative	1	2	1		
663 Neg for Grp A strep screen by culture	3				
992 Growth of gram-positive organisms	2	1			
698 No aerobic growth	2				
546 <i>Staphylococcus epidermidis</i>			1	1	
542 <i>Staphylococcus</i> sp., coagulase-negative, NOS			1		
TOTAL PARTICIPANTS	69	9	53	5	

Extent 1, 2 and 3 flagging appears for failure to report 490, 493, 690, 891, 913 or 991.
 Extent 4 and 5 flagging appears for failure to report 493 or 497.
 In addition to the required organism, participants in all extents may report 540, 542, 546, 892, 992 and any of the codes listed in Extent 1, 2 and 3.

This urine found *Pseudomonas aeruginosa* and *Staphylococcus epidermidis*. Veterans of many antibiotic treatments end up with pseudomonads because they are resistant. Better sanitary patient care will prevent this nosocomial infection.

If green pigmented, the, *P. aeruginosa* is IDed; if there is only fluorescent yellow or chartreuse pigment, check its oxidase positive status and do DNase; positive is specific for *P. aeruginosa*. Polymyxin is the drug of choice, but do AST Urine Panel back-up.

The staph is normal skin flora.

Specimen 3 - Urine, 50 year old Female, Frequency

Organisms	Extent 1	2	3	4	5
690 Aerobe found, but referred for ID	44	1	3		
312 <i>Escherichia coli</i>	2	29	4		
991 Growth of gram-negative organisms	18	2	2		
911 <i>E. coli</i> , <i>Citrobacter</i> or <i>Enterobacter</i>	1	4	7		
310 <i>Escherichia</i> sp., NOS			6		
891 Organism is gram-negative	1	2	1		
663 Neg for Grp A strep screen by culture	3				
250 <i>Corynebacterium</i> sp., NOS		1		1	

THROAT/URINE CULTURE

Organisms	Extent 1	2	3	4	5
892 Organism is gram-positive					1
698 No aerobic growth					1
TOTAL PARTICIPANTS	67	12	50		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 250, 253, 892, 992 and any of the codes listed in Extent 1, 2 and 3.

Found here were *Escherichia coli* and *Corynebacterium* sp.
E. coli is the most frequent cause of urinary tract infections (UTI), 80%, in women, because of ascending infection from the perianal skin; vaginitis may also result.

E. coli is usually IDed by sight by experienced techs as it is the most commonly seen pathogen in the lab. On EMB agar it is a flat, dark colony with a green sheen. But do an oxidase test strip. Oxidase positives indicate "look-a-likes," which can be *Aeromonas* sp. Otherwise, indol and lactose or ONPG positives, and urea negatives, are sufficient to ID. Commercial kits are also available, at greater cost and next-day results.

Ampicillin is the choice here, but do AST Urine or Gram Neg. Panels, to confirm, especially since nosocomial strains are probably resistant, but "street strains" may still be susceptible. Diphtheroids are skin flora.

Specimen 4 - Throat, 2 week old Male, Fever

Organisms	Extent 1	2	3	4	5
663 Neg for Grp A strep screen by culture	44	57	22		
771 Neg for strep Group A antigen	2	4			
312 <i>Escherichia coli</i>	1	4			
661 Neg for beta-hemolytic strep screen	2	2			
696 No aerobic growth on blood agar	3	1			
310 <i>Escherichia</i> sp., NOS			3		
891 Organism is gram-negative	1		1		
698 No aerobic growth	2				
664 Pos for Grp A strep screen by culture			1		
665 Neg for Grp B strep screen by culture			1		
697 No pathogens isolated			1		
667 Neg for strep, not screened for GC			1		
691 Aerobe found, but referred for ID			1		
TOTAL PARTICIPANTS	54	69	31		

Extent 1, 2 and 3 flagging appears for failure to report 310, 312, 661, 663, 667, 696, 771, 891 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 produced only *Escherichia coli*. 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 indol and ONPG positive, and urea and oxidase negative.

Specimen 5 - Throat, 23 year old Female, mild sore throat

Organisms	Extent 1	2	3	4	5
664 Pos for Grp A strep screen by culture	48	54	25		
662 Pos for beta-hemolytic strep screen	1	5			
772 Pos for strep Group A antigen	2	4			
562 <i>Streptococcus</i> sp., beta-hemolytic Gp A (<i>S. pyogenes</i>)	3	3			
554 <i>Streptococcus</i> sp., NOS			3		
563 <i>Streptococcus</i> sp., beta-hemolytic, not Gp A			1		
558 <i>Streptococcus</i> sp., alpha-hemolytic			1		
698 No aerobic growth	1				
663 Neg for Grp A strep screen by culture		1			
690 Aerobe found, but referred for ID					
TOTAL PARTICIPANTS	52	67	34		

Extent 1, 2 and 3 flagging appears for failure to report 554, 562, 662, 664, 690, 772, 892 or 992.
 Extent 4 and 5 flagging appears for failure to report 562 or 664.
 In addition to the required organism, participants in all extents may report 430, 891 or 991 and any of the codes listed in Extent 1, 2 and 3.

This throat had Gp.A *Streptococcus pyogenes* and *Neisseria* sp.
 The Grade-schooler brings home the epidemic flora of his school, and gives it to the mother. The mother's sore throat will get merely a gargle. If she infects the household, the youngest will see the doctor. Then the use of the Gp.A Direct Antigen Swab will reveal the true Panic Value, Stat pathogen in minutes. Treatment for all of the infected household should be done, because it will ping-pong around the family until all are infected.

Penicillin is the drug of choice, but AST, Gram-Positive Panel may reveal alternatives if penicillin resistance is detected.
 Do not report the *Neisseria* sp; it is normal flora.

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