



PARTICIPANT STATISTICS

Specimen 1 - 4 day old Female - Fever

Organisms	Extent 1	2	3	4	5
566 <i>Streptococcus</i> sp., Group B	4	44	3	4	
576 <i>Streptococcus agalactiae</i>		38	33	5	
666 Pos for Grp B strep screen by culture	1	6	41	9	
663 Neg for Grp A strep screen by culture		9	27	5	
563 <i>Streptococcus</i> sp., beta-hemolytic, not Gp A		1	22		
892 Organism is gram-positive	4	2	5	4	
690 Aerobe found, but referred for ID	2	3	1		
771 Neg for strep Group A antigen		3	1		
562 <i>Streptococcus</i> sp., beta-hemolytic Gp A (<i>S. pyogenes</i>)		3	1		
664 Pos for Grp A strep screen by culture		2	1		
662 Pos for beta-hemolytic strep screen	1	1	1		
564 <i>Streptococcus</i> sp., beta-hemolytic, not Group A, B or D			1	1	
430 <i>Neisseria</i> sp., NOS		1			
558 <i>Streptococcus</i> sp., alpha-hemolytic			1		
476 <i>Proteus vulgaris</i>			1		
436 <i>Neisseria meningitidis</i>				1	
554 <i>Streptococcus</i> sp., NOS				1	
891 Organism is gram-negative			1		
TOTAL PARTICIPANTS	39	84	195	86	12

Extent 1, 2 and 3 flagging appears for failure to report me 554, 563, 566, 576, 663, 666, 690, 771, 782, 892 or 992.

Extent 4 and 5 flagging appears for failure to report 563, 566, 576, 663 or 666.

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 Group B. *Streptococcus agalactiae* and *Neisseria* sp. Note: in a new-born there is no normal flora, only the pathogen.

A gram stain reveals a streptococcus; typing with A, B, C, and D antisera shows B pos. Group B streptococci are sexually transmitted, are found in the birth canal and infect the neonate. Fever indicates infection, usually respiratory, but which may become septicemic or meningitic within a few days. The shorter the time after birth, the greater the mortality rate is the rule. *S. agalactiae* thus has the highest mortality rate of all of the streptococci, making this a PANIC VALUE and Stat reporting infection Report penicillin as the drug of choice, but do AST back-up in case of resistance, for alternatives on the Gram Positive Panel.

Specimen 2 - 14 year old Female, sore throat

Organisms	Extent 1	2	3	4	5
663 Neg for Grp A strep screen by culture	24	4			
771 Neg for strep Group A antigen	2	4			
696 No aerobic growth on blood agar	3	2			
698 No aerobic growth 1	1				
661 Neg for beta-hemolytic strep screen	1	1			
664 Pos for Grp A strep screen by culture		1			
697 No pathogens isolated		1			
TOTAL PARTICIPANTS	31	14	9		

Flagging in all extents appears for reporting other than 661, 663, 696, 697, 698 and 771.

There were no organisms found from this swab.

The first logical reason is that antibiotics have been administered already, which would explain the lack of normal throat flora. If, however, there is a badly injected throat, in this age group, it suggests infectious mononucleosis (IM). Send out, "No organisms found. Request repeat specimen. Suggest IM Spot Test be done."

If this slip poses a problem, discuss it with your pathologist, first, or with the patient's doctor. If this really is IM, and the usual treatment with penicillin or ampicillin has already been done, a horrible-looking whole-body rash may occur. That is called, "erythema of the ninth-day." It will confirm the IM diagnosis. The only cure is patience - lots!

Specimen 3 - 8 year old Male, tonsillitis

Organisms	Extent 1	2	3	4	5
664 Pos for Grp A strep screen by culture	27	42	9		
772 Pos for strep Group A antigen	2	4			
662 Pos for beta-hemolytic strep screen	1	2			
562 <i>Streptococcus</i> sp., beta-hemolytic Gp A (<i>S. pyogenes</i>)		2			
TOTAL PARTICIPANTS	30	50	9		

Extent 1, 2 and 3 flagging appears for failure to report 554, 562, 662, 664, 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, 554, 891, 892, 991, 992 and any of the codes listed in Extent 1, 2 and 3.

THROAT CULTURE

FIRST QUADRIMESTER 2011

This swab had Gp.A *Streptococcus pyogenes*, alpha *Streptococcus* sp. and *Neisseria* sp. The beta-hemolytic *S. pyogenes* is a Panic Value, Stat organism when it is found. A Gp.A Direct Antigen Swab IDs this organism in minutes. If it does not, it is most likely insufficient mucus on the swab. It is infinitely better to repeat the DA swab, than to do the traditional isolation on a blood-agar plate overnight, then type with A-F antisera.

Penicillin is still the drug of choice: erythromycin if allergic. You may do AST, Gram-positive Panel to find others, if resistance is seen.

The other organisms are normal throat flora, nonpathogenic; do not report.

Specimen 4 - 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 - 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.