



**PARTICIPANT STATISTICS**

Specimen 1 - 3 year old Male, sore throat

Organisms	Extent 1	2	3	4	5
430 <i>Neisseria</i> sp., NOS		2			
562 <i>Streptococcus</i> sp., beta-hemolytic Gp A ( <i>S. pyogenes</i> )	7	87	67	9	
563 <i>Streptococcus</i> sp., beta-hemolytic, not Group A		1			
587 <i>Streptococcus sanguis</i> type I			2		
662 Pos for beta-hemolytic strep screen		3	2		
663 Neg for Grp A strep screen by culture	1	2			
664 Pos for Grp A strep screen by culture	34	51	77	17	1
666 Pos for Grp B strep screen by culture		1			
690 Aerobe found, but referred for ID	1	1	1		
772 Pos for strep Group A antigen	2	7	1		
892 Organism is gram-positive	3		16		
TOTAL PARTICIPANTS	41	72	189	84	

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, 587 and any of the codes listed in Extent 1, 2 and 3.

This swab had beta hemolytic, Gp. A *Streptococcus pyogenes*, alpha *Streptococcus* sp. and *Neisseria* sp.

The usual suspect for infection in this age group is the sibling who is in school and introduces it to the mother and siblings at home. The mother may be the asymptomatic carrier; the youngest child has no immunity to this **Panic Value, Stat** pathogen. The pediatrician's lab will swab the throat with a Group A Direct Antigen Swab, and a positive swab will ID the pathogen within minutes, allowing the penicillin or erythromycin to be started. If a negative swab results, it is frequently because of an insufficient inoculum; repeat with another D.A swab.

It is medically important to obtain a true positive and same-day treatment for this dangerous pathogen, and it is cost-effective as well. The alternative would be to do a routine blood agar plate isolation, overnight, pick a beta-hemolytic colony and test it with polyvalent *Streptococcus* typing sera. - which is neither time-effective, nor cost-effective.

Treatment was done yesterday, on clinical judgment, so this added time and expense is but confirmatory. AST may be done in case a possible, not probable, penicillin-Resistant organism is found.

The other two organisms are normal throat flora, not to be reported.

Specimen 2 - 14 year old Male, sore throat, stable boy

Organisms	Extent 1	2	3	4	5
546 <i>Staphylococcus epidermidis</i>			1		
661 Neg for beta-hemolytic strep screen		1			
662 Pos for beta-hemolytic strep screen	1				
663 Neg for Grp A strep screen by culture	28	34	7		
664 Pos for Grp A strep screen by culture	3	6	4		
665 Neg for Grp B strep screen by culture	1				
690 Aerobe found, but referred for ID		1			
771 Neg for strep Group A antigen	2	4			
TOTAL PARTICIPANTS	35	46	12		

Extent 1, 2 and 3 flagging appears for failure to report 563, 662, 663, 665, 690 or 771.  
 Extent 4 and 5 flagging appears for failure to report 563.

In addition to the required organism, participants in all extents may report 540, 542, 546, 892, 912, 992 and any of the codes listed in Extent 1, 2 and 3.

This swab found Gp. C, *Streptococcus* sp. and *Staphylococcus epidermidis*.

Group C streptococci are occupational hazards to stable hands. There are four species in the Group, and speciation is unnecessary. A Gp. A. Direct Antigen Swab, will be negative and force the use of a routine blood agar swab, incubated in a 'candle jar' / 10% carbon dioxide pack, for better isolation of capnophilic beta strep. Positives are tested with A-F antisera and Gp.C will be found; all are penicillin-Susceptible. The *S. epidermidis* is normal throat flora.

Note on your report: **Warning:** Find, isolate and treat any sick animals: this *Streptococcus* can wipe out the whole stable! It is more deadly to horses than to humans."

Specimen 3 - 8 year old Male, sinus drainage

Organisms	Extent 1	2	3	4	5
422 <i>Moraxella catarrhalis</i>			1		
546 <i>Staphylococcus epidermidis</i>			1		
661 Neg for beta-hemolytic strep screen	1	1			
663 Neg for Grp A strep screen by culture	3	38	9		
664 Pos for Grp A strep screen by culture		1			

**THROAT CULTURE**

665 Neg for Grp B strep screen by culture				
696 No aerobic growth on blood agar		2		1
698 No aerobic growth		1		
771 Neg for strep Group A antigen		2	4	
TOTAL PARTICIPANTS		8	45	12

Extent 1, 2 and 3 flagging appears for failure to report 422, 661, 663, 665, 696, 771 or 891.  
 Extent 4 and 5 flagging appears for failure to report 422.  
 In addition to the required organism, participants in all extents may report 540, 542, 546, 892, 912, 992 and any of the codes listed in Extent 1, 2 and 3.

This swab had *Branhamella catarrhalis* and *Staphylococcus epidermidis*.

*Branhamella* (*Moraxella*, *Neisseria*) *catarrhalis* is able to cause sinusitis in children; adults have acquired immunity as a rule. Once called a 'non-pathogenic *Neisseria* (NPN)', that grew on nutrient agar, it differs from all other *Neisseriae* by being DNase positive. It will respond to treatment with penicillin / ampicillin.

Specimen 4 - 13 year old female, acute pharyngitis

Organisms	Extent 1	2	3	4	5
430 <i>Neisseria</i> sp., NOS			1		
665 Neg for Grp B strep screen by culture	1				
664 Pos for Grp A strep screen by culture		1			
696 No aerobic growth on blood agar		4		1	
771 Neg for strep Group A antigen		2	4		
663 Neg for Grp A strep screen by culture	29	38	9		
697 No pathogens isolated		1			
698 No aerobic growth		1			
661 Neg for beta-hemolytic strep screen		1			
TOTAL PARTICIPANTS	36	46	11		

Flagging in all extents appears for reporting other than 430, 661, 663, 665, 696, 697, 698, 771, 891 or 991.

This swab contained only *Neisseria* sp.

The normal flora indicates that antibiotics have not been used. Viral infection is assumed. At this age, a place to start would be to send out a slip stating "No pathogens found. Request repeat swab. Suggest Mono Spot Test for IM"

Infectious mononucleosis (IM), called "the kissing disease." It produces terrible looking throats, clinically, but results in nothing pathogenic on throat cultures. Treating with the usual antibiotics, penicillin or ampicillin on clinical evidence, may result in a full-body rash and hospitalization for an otherwise incurable, but limited duration, affliction. That is proof of IM.

Specimen 5 - 5 year old Male, sore throat nursery school

Organisms	Extent 1	2	3	4	5
562 <i>Streptococcus</i> sp., beta-hemolytic Gp A ( <i>S. pyogenes</i> )		2			
661 Neg for beta-hemolytic strep screen		1			
663 Neg for Grp A strep screen by culture	1	1			
664 Pos for Grp A strep screen by culture	34	33	12		
666 Pos for Grp B strep screen by culture		1			
772 Pos for strep Group A antigen		2	4		
TOTAL PARTICIPANTS	37	42	12		

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 and any of the codes listed in Extent 1, 2 and 3.

This swab revealed beta hemolytic, Gp.A *Streptococcus pyogenes*.

As soon as school starts in the Fall, mini-epidemics of upper respiratory diseases are passed from grade to grade by both the siblings and the parents at home. The youngest infected member usually goes to the pediatric clinic.

The throat is swabbed with a Gp.A. Direct Antigen Swab that will reveal a positive in a few minutes. When positives are found, penicillin-therapy is started immediately.

This exact scenario is truly a lifesaver for this is a **Panic Value, Stat** organism with many sequellae waiting for delayed treatment. Do AST only to determine that penicillin-resistance is not present.

**SECOND QUADRIMESTER 2011**