Glennview Farm quarter-level culture summary

Type of intramammary infection (IMI)	***Number of IMI over study period***		*Type of intramammary infection*	***Average quarter-level SCC by infection type***	***Range of quarter-level SCC:*** *Min*	*Max*
Staph. species	27		Strep. species	3,587,375	8,000	16,000,000
Corynebacterium species	18		*Mixed infection:* Strep. species, Unknown organism	3,300,000	3,300,000	3,300,000
Strep. species	7		Staph. aureus	1,076,000	36,000	2,400,000
Mixed infection: Staph. species, Strep. species	3		*Mixed infection:* Staph. species, Strep. species	821,167	87,000	3,900,000
Staph. aureus	3		*Mixed infection:* Staph. aureus, Strep. species	610,000	370,000	850,000
Mixed infection: Strep. sp., Corynebacterium sp.	2		Staph. species	265,793	4,000	6,100,000
Mixed infection: Staph. aureus, Strep. species	1		*Mixed infection:* Strep. sp., Corynebacterium sp.	193,333	10,000	380,000
Mixed infection: Staph. sp., Corynebacterium sp.	1		*Mixed infection:* Strep. species, E. coli	140,000	140,000	140,000
Mixed infection: Coryne. sp., Unknown organism	1		*Mixed infection:* Staph. sp., Corynebacterium sp.	26,000	26,000	26,000
Mixed infection: Strep. species, E. coli	1		Corynebacterium species	23,238	2,000	120,000
Mixed infection: Strep. sp., Unknown organism	1					

Summary of quarter-level results: As seen in the first table, most intramammary infections on your farm were caused by Staph. species (27), followed by infections with Corynebacterium sp. (18) and Strep sp. (7). Looking at the average quarter-level SCC of infected quarters (right-hand table), you can see that the infected quarters contributing most to a higher bulk tank SCC would be the quarters infected with Strep. sp and Staph. aureus. Although infections with Staph. species (CNS) and Corynebacterium sp. were very common, the average SCC for these quarters wasn't greatly elevated (avg 265,000 and 23,000 cells/mL). The fairly large range of quarter-level SCC for Staph. species quarters could likely be explained by identifying exactly what species of Staph is causing the infection, as some species of CNS are more of a concern than others. We are currently in the process of identifying all Staph to species level, but don't yet have these results.

Take home message: The primary opportunity identified by these quarter-level culture results for milk quality improvement would be decreasing the level of Strep. species infections in the herd. Strep. species are environmental pathogens, and best controlled by adequate amounts of clean, dry bedding in all stalls, and improved lot sanitation. Staph. aureus infections were a relatively small proportion of infections, but identifying and managing these quarters within the herd is important to prevent the spread of this contagious pathogen.