

Target Organism	CentralStar PCR Test Available	Description	Ct Value Ranges			
			SEVERE (+++)	MODERATE (++)	MILD (+)	SUSPECT
<i>Mycoplasma species</i>	Complete 16	Contagious pathogen spread through milk and blood. Can also cause pneumonia and arthritis. Not able to be identified by typical on-farm culture.	<21	21-31	31.1-37	>37
<i>Mycoplasma bovis</i>	Contagious 4, Complete 16, Individual	Most common <i>Mycoplasma</i> in mastitis cases. Not able to be identified by typical on farm culture.	<22	22-32	32.1-37	>37
<i>Streptococcus agalactiae</i>	Contagious 4, Complete 16	Generally not found in the environment. Relatively uncommon.	<24	24-32	32.1-37	>37
<i>Streptococcus uberis</i>	Contagious 4, Complete 16	Grouped as an environmental organism but can also behave as a contagious pathogen.	<21	21-31	31.1-37	>37
<i>Streptococcus dysgalactiae</i>	Complete 16	High numbers associated with straw bedding used in deep-bedded packs or maternity pens.	<22	22-30	30.1-37	>37
<i>Enterococcus faecalis & faecium</i>	Complete 16	High numbers associated with straw bedding used in deep-bedded packs or maternity pens.	<24	24-28	28.1-37	>37
<i>Staphylococcus aureus</i>	Contagious 4, Complete 16, Individual	One of the most significant contagious mastitis pathogens.	<25	25-30	30.1-37	>37
<i>Staphylococcus species</i>	Complete 16	Coagulase-negative <i>Staph</i> (CNS). Found in the environment	<24	24-31	31.1-37	>37
Staphylococcal beta-lactamase gene	Complete 16	A sub-group of <i>Staphylococcus</i> resistant to treatment with a beta-lactamase IMM products (dominantly penicillin).	<24	24-30	30.1-37	>37
<i>Escherichia coli</i>	Complete 16	Coliform bacteria found in high concentration in organic matter such as bedding and manure. Mild or moderate cases tend to have a high rate of spontaneous cure. Severe cases may require systemic and supportive therapy.	<24	24-34	34.1-37	>37
<i>Klebsiella pneumoniae & oxytoca</i>	Complete 16	Coliform bacteria found in high concentration in organic material such as bedding and manure. Some infections become chronic, cause long-term decreased milk production.	<24	24-32	32.1-37	>37
<i>Serratia marcescens</i>	Complete 16	Commonly found in the environment of dairy cows.	<31	31-34	34.1-37	>37
<i>Prototheca species</i>	Complete 16	Colorless algae, widespread in the dairy environment in wet or humid areas.	<21	21-31	31.1-37	>37
Yeast	Complete 16	Very common in dairy environment, cases suggest a look at certain management practices.	<22	22-32	32.1-37	>37
<i>Arcanobacterium pyogenes & Peptostreptococcus indolicus</i>	Complete 16	Commonly found in wounds, more common in warmer months.	<24	24-30	30.1-37	>37
<i>Corynebacterium bovis</i>	Complete 16	Rare; lives in the teat canal. Can be considered contagious.	<22	22-28	28.1-37	>37

The information provided is a general description of the pathogens summarized from various university publications. Treatment of any of these pathogens should be done under the advisement of a veterinarian.