## Título: RELASHIONSHIP BETWEEN PATHOGENS CAUSING MASTITIS AND GOOD MILKING PRACTICES IN FARMS FROM NORTHEAST OF SÃO PAULO STATE – PRELIMINARY RESULTS

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## Resumo:

The World Health Organization has recognized the importance of keeping integrated production systems adapted to the requirements of farmers and availability of the system. The dissemination of pathogens can be minimized with the evaluation of critical control points by implementation of sanitary programs. This study aimed to evaluate the occurrence of Staphylococcus spp. and Streptococcus spp. and its relationship with the technical skills in good milking practices of producers in four farms from northeast region of São Paulo State. Two samplings with 30 days interval were performed in four farms, one before training in good milking practices (investigative step) and other after the technical assistance (TA). Analyses included standard plate count (SPC), coagulase-positive Staphylococcus spp. and Streptococcus spp. and were performed in water (W), hands of operators (H), teat cups (TC), bulk tank milk (BMT) and milk from five cows (CM), randomly selected. Before TA the averages obtained for SPC were 6.70 log CFU/mL in W, 5.27 log CFU/cm<sup>2</sup> in H, 4.11 log CFU/cm<sup>2</sup> in TC, 7.90 log CFU/mL in BMT. After TA the averages were 4.27 log CFU/mL in W, 5.17 log CFU/cm<sup>2</sup> in H, 6.76 log CFU/cm<sup>2</sup> in TC and 5.83 log CFU/mL in BMT. Before the TA the averages for Staphylococcus spp. were 4.03 log CFU/mL in W, 4.90 log CFU/cm<sup>2</sup> in H, 4.63 log CFU/cm<sup>2</sup> in TC, 5.96 log CFU/mL in BMT and was detected in 35% of CM. After TA the values were 2.19 log CFU/mL in W, 4.32 log CFU/cm<sup>2</sup> in H, 6.69 log CFU/cm<sup>2</sup> in TC, 5.22 log CFU/mL in BMT and detected in 38% of CM. Regarding Streptococcus spp., before TA the averages were 3.96 log CFU/mL in W, 6.58 log CFU/cm<sup>2</sup> in H, 6.34 log CFU/cm<sup>2</sup> in TC, 6.79 log CFU/mL in BMT and detected in 25 % CM. After TA were 2.19 log CFU/mL in W, 3.20 log CFU/cm<sup>2</sup> in H, 6.15 log CFU/cm<sup>2</sup> in TC, 6.47 log CFU/mL in BMT and detected in 8.3 % CM. During the investigative step, water, hands of operators and teat cups were found as major sources of contamination. Considering the persistence of the pathogens in farms, it was observed a decrease from 35% to 24%; and from 25% to 17% for Staphylococcus spp. and Streptococcus spp., respectively, after performing TA. These results demonstrate the importance of enhancing farmers and handlers' skills and the need to address other topics to point out deficiencies in the management of milk producing.

Keywords: GMP, Streptococcus, Staphylococcus, sanitary programs.

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