

Title: Detection of *tst* and *pvl* genes and characterization of antimicrobial-resistant staphylococci isolated from dairies.

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Abstrac:

The objectives of this study were detect *tst* and *pvl* genes in *Staphylococcus* sp. isolated from dairies and identify phenotypically the antimicrobial-resistant of them. Strains were isolated from milk tank, raw milk, cheese, pasteurized milk, floor, table, packer, cheese mold, brine and food handler from three different dairies localized in Brazil. The strains were identified in previous study as *S. aureus* (89 strains), *S. epidermidis* (6), *S. warneri* (2) and *S. hyicus* (4). The detection of genes was developed by duplex PCR and antimicrobial resistance by antibiograms to 10 antibiotics. Of the total, 101 strains, 2 strains (1.98%, *S. aureus*) isolated from raw milk and food handler and 1 strain (0.99%, *S. aureus*) isolated from raw milk were positives to *pvl* and *tst* genes, respectively. Resistance was observed to penicillin (49 strains, 48.51%), erythromycin (16 strains, 15.84%), oxacilin (18 strains, 17.82%), clindamycin (18 strains, 17.82%), cefoxitin (19 strains, 18.81%), tetracycline (10 strains, 9.90%), gentamicin (4 strains, 3.96%), tobramycin (7 strains, 6.93%), chloramphenicol (1 strain, 0.99%) and ciprofloxacin (3 strains, 2.97%). Intermediate resistance was observed in 11 strains (10.89%) to some antibiotics and 48 strains (47.52%) were sensible to all antibiotics tested. The strains positive to *pvl* and *tst* genes showed antimicrobial resistance to least four different antibiotics. These results showed that more prevention and control actions are required in herd management and food process.

Keywords: antibiotic resistance; milk ,virulence factor.

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