The aim of this study was to evaluate the species distribution, antibiotic-resistance profile and presence of enterotoxin (SE) genes in staphylococci isolated from the Dilúvio stream in South Brazil. Eighty-eight staphylococci were identified, 93.18% were identified as coagulase-negative (CNS) and 6.82% coagulase-positive (CPS). Fourteen Staphylococcus species were detected and the most frequently were Staphylococcus cohnii (30.48%) and S. haemolyticus (21.95%). Resistance to erythromycin was verified in 37.50% of the strains, followed by 27.27% to penicillin, 12.50% to clindamycin, 6.81% to trimethoprim-sulfamethoxazole, 5.68% to chloramphenicol and 2.27% to norfloxacin. None of the investigated strains showed gentamicin and ciprofloxacin resistance. The strains were tested for the presence of sea, seb, sec, sed and see genes by PCR and only CNS strains (43.18%) showed positive results to one or more SE genes. The scientific importance of our results is due to the lack of data about these topics in polluted waters in Brazil. In conclusion, polluted waters from the Dilúvio stream may constitute a reservoir for disseminating antibiotic-resistance and enterotoxin into the community. In addition, the detection of staphylococci in the polluted waters of the Dilúvio stream indicated a situation of environmental contamination and poor sanitation conditions.

Keywords
Coagulase negative staphylococcus, coagulase-positive staphylococcus, antibiotic resistant staphylococcus, enterotoxin genes, polluted water.