An important public health problem is diseases transmitted by food contaminated by microorganisms, such as the case of the ice cream. In Chile, the microbiological criteria that must be met are set out in the health food regulation dependent on the Ministry of Health. Compliance with the microbiological criteria laid down in the health food regulation of the ice cream sold in the region of Bio Bio, Chile was studied. Analyzed six years approximately 450 samples of ice cream from different factories in the region of Bio Bio, which was determined counts of aerobic Mesophiles, coliform, Staphylococcus aureus, and Salmonella spp using methodologies set out in Manual of microbiological techniques for food and water from the Institute of Public Health of Chile. The results allowed to establish that 6 years of studies analyzed for Staphilococcus cream aureus 17% of were outside standard, for counting of aerobic mesophilos and coliform samples rejection came to 55%, in contrast to Salmonella spp where 100% of samples complied with the criteria set out. Analyzed in the summer ice cream presented higher counts for aerobic mesophilos. The high percentage of rejection in the count of aerobic mesophilos and coliforms in samples of ice cream can be associated to a handling problem and therefore to a deficiency in the training of the staff that makes.