Campylobacteriosis is a zoonosis of worldwide distribution and is most commonly associated with consumption of chicken meat, with significant repercussions on public health. The objective of this study was to enumerate thermophilic *Campylobacter* by two methods SimPlate most probable number (rapid method) and by direct plating on agar modified charcoal cefoperazone deoxycholate (conventional method) and detect *C. jejuni* on chiken cuts processed in slaughterhouses at State of Minas Gerais. Thigh and drumstick after cold tank at deboning line (n = 25) and frozen samples from trade (n = 25) were evaluated by rinsing technique. *Campylobacter* were detected in 60% of deboning line samples, but none in frozen samples, independently of the method. Thermophilic *Campylobacter* spp mean counts (log10 cfu.g-1) range from 0.66 ± 0.27 to 1.08 ± 0.24 for deboning line samples and log10 < 0.3 cfu g-1 (below the detection limit of the methods) for frozen samples. For the 75 isolates from deboning line samples, 17.3% were identified as *C. jejuni*, characterized by biochemical and morphological identification. Proposed European standards for *Campylobacter* spp counts is < 4 log cfu g-1. None of the samples has been observed scores above the infective dose for *Campylobacter* spp (500 cels). Although the scores were low, this pathogen could be at viable nonculturable (VNC) state, which may become infective. Therefore, care must be taken at processing plant to reduce risks and to prevent cross contamination and outbreaks.