ABSTRACT

Meat production at the Kingston and St. Andrew and Orchard Farm Abattoir is undertaken under grossly unsatisfactory conditions. Extensive microbial contamination could have adverse implications for the health of consumers of meat produced at the abattoirs. This study sought to determine the microbial quality and safety of the carcasses produced at the abattoirs as well as the knowledge, attitude and practice of abattoir workers with respect to sanitary slaughter and processing of animals.

Samples were taken from approximately 25% bovine and porcine carcasses produced at the abattoir over a two-week period. Laboratory analyses were performed on these samples to determine the coliform count, E. coli count and the presence of salmonella. The condition under which slaughtering took place was observed. Informal interviews with butchers to determine their knowledge, attitude and practice with respect to sanitary slaughter were also conducted.

The results showed extensive contamination of the carcasses produced. The E. coli count on carcasses, fell well outside acceptable standards. The presence of Salmonella also fell outside the limits of acceptable standards at one of the abattoirs. The presence of salmonella was detected on meat from the other abattoir though within acceptable limits. Poorly maintained facilities and equipment and lack of aseptic technique in processing and the use of untreated water in the
abattoir were factors which impacted on the quality of meat produced.

The study concluded that the meat produced at the Kingston and St. Andrew and Orchard Farm abattoirs places consumers at risk of contracting food borne disease. There were no significant differences between quality and safety of meat produced at the two establishments. There is need for effective quality control systems to be established in the abattoirs with a view to correcting process defects and ultimately reduce the levels of contamination of the carcass.