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Prevalence and Antibiotic Resistance of Staphylococcus aureus Isolated from Beef Carcasses at Abattoirs in North West Province

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ABSTRACT Staphylococcus aureus is notorious for causing human diseases, and is primarily associated with the consumption of contaminated meat and meat products. The aim of this paper was to determine the prevalence and the antibiotic resistant profiles of Staphylococcus aureus on beef carcasses isolated from different abattoirs in North West Province. A total of 600 swab samples were collected from beef carcasses, and cultured on Mannitol salt agar (MSA). The isolates were confirmed by morphological identification and biochemical tests. A total of 159 (26.5%) samples were contaminated with S. aureus. All the S. aureus isolates showed high susceptibility to Chloramphenicol (30µg), Gentamicin (10µg) and Tetracycline (10µg). However, all isolates were highly resistant to Penicillin (10µg), Ampicillin (30 µg) and Oxytetracycline (10µg). The study confirms the presence of S. aureus in beef carcasses, which might be a potential threat to the consumer's health.