

## Prevalence and Trap Types of *Staphylococcus aureus* in Healthy Horses in Iran

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**Background & Objectives:** *Staphylococcus aureus* have been recently found to colonize the nasal mucosa of horses, raising important questions regarding substantial health hazard for both animals and humans. Little is known about the Iranian equine *Staphylococcus aureus* colonization status and the strain types involved.

**Methods:** In the present study, 274 healthy horses from five regions, Iran, were screened for nasal *S. aureus* carriage. Twenty four of them were positive for *S. aureus* recovery (8.76%). All *S. aureus* isolates were trap typed using PCR-RFLP procedure involving cleavage of the trap gene by restriction endonuclease MseI. Four allelic variants of trap have thus far been described.

**Results:** A total of 13 out of 24 horse nasal isolates were of trap type 3, the other 11 being trap type 2. trap types 1 and 4 were not observed among the studied isolates.

**Conclusion:** The presence at a high prevalence of certain trap types in the nasal cavity of horses suggests that these types have unique characteristics which endow them with superior ability to colonize the equine nares.

**Keywords:** Trap Types; *Staphylococcus aureus*; Horses

