The aim of vaccination during an epidemic of foot and mouth disease (FMD) is not to induce clinical protection, but to reduce virus transmission. The ability of emergency (FMD) vaccine to protect cattle from challenge and the effect on virus excretion from the oropharynx were examined. An oil adjuvant bivalent FMD vaccine type "O1" and "A" protected cattle from clinical disease following challenge with tongue inoculation within 4, 7, 11 days post vaccination. Protection from clinical disease did not prevent localised sub-clinical infection at the oropharynx in animals of 4 days post vaccination. The findings show that even after an extremely severe challenge, use of an emergency vaccine will prevent or reduce local virus replication and thereby dramatically reduce the amount of virus released into the environment.

KEY WORDS: Cattle, Emergency, FMD, Oropharynx, Sub-clinical.