Laboratory and field trials of killed *Brucella suis* type 4 vaccine in reindeer

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*Abstract:* Reindeer vaccinated with killed *Brucella suis* type 4 vaccine in adjuvant and non-vaccinated seronegative controls were challenge-exposed in separate experiments with live *B. suis* type 4 organisms at 2, 14, 26 and 43 months post-vaccination. Vaccination induced protection against infection in all laboratory trials. A portion of reindeer in two herds and the majority of reindeer in a third herd were vaccinated with killed *B. suis* type 4 vaccine in adjuvant. Serologic titers were monitored in vaccinated and non-vaccinated animals. Post-vaccination titers were detected in 100% of the animals as long as 24 months in the first herd; in 72% of vaccinated animals as long as 48 months in the second herd; and in 30% of animals vaccinated as adults in the third herd. A difference in natural exposure rates may have affected the duration of serotiters in the three herds.

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