

## Case – Control Study of Some Factors Affecting Brucellosis Infection in Dairy Cows

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### Abstract

Brucellosis is one of the most important diseases common to humans and animals worldwide, both economically and publicly. Cattle brucellosis is usually caused by *Brucella abortus* and is one of the most important diseases in many countries of the world because of its economic importance. Generally, risk factors for brucellosis can be divided into four groups of management factors (herd size, etc.), animal factors (age, sex, etc.), factors divided by rancher (rancher age, etc.) and geographical area (such as weather conditions, etc.). Therefore, this study investigated the relationship between some risk factors of brucellosis at the animal level. This case-control study was performed on 843 cows including 281 seropositive (case) and 562 seronegative (control). Data were analyzed using Stata 14 software and conditional logistic regression. Being pregnant (OR= 0.44), lactating (OR= 0.43) and having a good vaccination history (OR= 0.09) reduced the risk of infection and being born in another farm (coming from another farm) (OR= 2.04) and having a history of abortion (OR= 3.77) increased the risk of brucellosis infection in dairy cows. Appropriate vaccination and no displacement of livestock is recommended.

**Key words:** Case-control study, Brucellosis, Dairy cow

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