Brazil launched a new and ambitious nationwide programme to control and eradicate bovine brucellosis in 2001. Between 2001 and 2004, studies of prevalence and risk factors associated with this disease were carried out to characterize the epidemiological situation of 14 Brazilian states and 65 regions within them. The published results revealed important differences in prevalence of brucellosis among several regions. Data from 17100 herds were consolidated and statistically analyzed for the investigation of risk factors at the herd-level. After an exploratory analysis of variables by the chi-square test, all variables with a P≤0.20, were included in a multiple logistic regression model. The result revealed that the herd traits associated with the presence of brucellosis were the herd size, measured by the number of females, and the purchase of breeding cattle. The risk of infection, indirectly estimated by the odds ratio (OR), was 1.25 higher [95% CI: 1.12-1.40] at farms that purchase breeding cattle. Compared with the baseline category, i.e. herds with less than 30 females, the Odds Ratio for herd size was 1.94 [1.68-2.23] for herds with 31 to 100 females, 2.98 [2.55-3.49] for those with 101 to 400 females, and 5.56 [4.53-6.82] for herds with more than 400 females. These results show that open herds, as well as larger herds, which are mostly dedicated to extensive beef production, have higher probability of introduction and maintenance of bovine brucellosis. This is consistent with the geographical distribution observed in prevalence studies and is likely to account for the high herd prevalence found in the states of the Midwest and neighbouring regions.