

## Epidemiology of Animal Bites in Azarshahr town: A Cross-sectional Study of Key Determinants

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### Abstract

**Background and objectives:** Animal bites are among the most significant public health problems due to the risk of rabies. Because of high mortality rate and economic damages, rabies is of very importance. This study was conducted to investigate the epidemiology of animal bites in Azarshahr in 2010 and 2011.

**Material and Methods:** In this cross-sectional and descriptive-analytical study, all cases of animal bites in 2010 and 2011 that were recorded in rabies treatment centers of Azarshahr were included in the study using census method according to the existing data recorded in animal bites registry. Data were analyzed using descriptive statistics and Chi-square test using SPSS software.

**Results:** During 2010 and 2011, a total number of 630 animal bites cases occurred that 86.5% of the cases were male. In 51.7% of the cases, animal bites occurred in urban areas. The incidence rate of animal bites was calculated as 291.0 in 100000. The average age and the standard deviation of cases was 31.52±16.73. The main biting animal was domesticated dog (66.3%) and most of the bites happened during summer (28.4%). The most injured body organ was hand (47.6%). The association between animal type and injured organ was statistically significant ( $P<0.001$ ).

**Conclusion:** Due to the high costs of vaccination and immunoglobulin expenses, prevention strategies seem to be necessary. Since most of the bites were caused by domestic dogs, health education interventions with the aim of more controls on domestic animals could be a cost-effective approach.

**Key Words:** Epidemiology, Rabies, Animal bites, Domestic Animals

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