

## Evaluating the burden of brucellosis in hospitalized patients in Armenia, 2016

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### Objective

To understand the disease burden, we studied the epidemiological and clinical characteristics and associated costs for brucellosis patients hospitalized in Nork hospital in 2016.

### Introduction

Brucellosis, endemic in Armenia, is recognized as a significant public health challenge with a major economic burden. To address the regional threat of brucellosis for both animal health and public health, the “One Health Surveillance of Brucellosis in Armenia” was initiated in December 2016. The project aims to develop scientifically sound strategies and policies for sustainable control of the disease.

### Methods

In 2016, 265 patients diagnosed with brucellosis were hospitalized at “Nork” hospital, of whom 16 were 0-14 years old and 94% were males. Diagnosis was confirmed using agglutination test and ELISA. The SPSS program was used to analyze the data.

### Results

Distribution of the disease by marz revealed that the most cases came from Ararat (53), followed by Kotayk (49), Armavir (38), Aragatsotn (36), Yerevan (28), Gegharkunik (26), Vayots Dzor (24), Syunik (8), and Lori (3). Clinical data indicated that 71% of patients had acute brucellosis with fever, arthralgia and night sweating while 29% suffered chronic brucellosis with damage of organ systems. The primary complaints included arthralgia (80%), sweating (60%) and fever (40%). Joint pain was mainly located in knee, elbow, and sacroiliac regions. Average grade of fever was  $37,9\pm 0,95^{\circ}\text{C}$ . Total days spent in hospital were 1798, economic losses for the hospital were estimated at AMD 36 million per year.

### Conclusions

Those at the highest risk for brucellosis were males living in Ararat and Kotayk marzes who work with livestock.

### Keywords

brucellosis; Armenia; epidemiology

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