

# Molecular typing of avian metapneumovirus in broiler chickens in Isfahan province

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## Abstract

Bacterial metapneumovirus infection is a respiratory infection in turkeys and poultry flocks, which mainly affects the upper respiratory tract. For study of the common type of avian metapneumovirus (AMPV) in broiler chickens in Isfahan province, 35 broiler chicken flocks with high mortality were sampled. After RNA extraction and synthesis of cDNA, AMPV was investigated by one pair of specific primer. The AMPV positive samples were investigated for AMPV types (A, B, C and D) by type specific primers. Results showed 17 out of 35 (48.57%) of flocks were infected to AMPV. In this study, 56 out of 210 samples (26.66%) were positive for AMPV. The mean of morbidity to AMPV was 54.90% in sampled flocks. The typing of positive samples showed all of the positive samples belonged to B type. In conclusion, by considering to a high distribution of B type of AMPV in broiler chicken flocks, it is necessary to apply for a proper AMPV vaccination program with autogenic strains, after approval of pathogenicity of AMPV strains.

**Key words:** Avian Metapneumovirus, Broiler Chicken, PCR, Typing

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