# **Titre d’article**: *Serological Survey of Dominant Viral Diseases (Newcastle Disease (ND), Infectious Bronchitis (IB) and Infectious Bursal Disease (IBD)), in Broilers Flocks in Northern Algeria*

**Abstract :**

The present study was conducted to survey about sero-epidemiological status of Newcastle disease (ND), Infectious bronchitis (IB) and Infectious bursal disease (IBD) on Algerian broiler chicken (30 flocks/1200 sera) using ELISA method and to assess the influence of some risk factors related to each disease. Among all investigated flocks, ND was the most seroprevalent disease (63.33%); however, IB and IBD showed less serological positivity (40% and 16.66% respectively). For ND, Cobb 500 Flocks were significantly more seropositive by 78% (p = 0.025) than other strains. Nevertheless, flocks with good hygiene were significantly less seropositive to ND by 26% (p = 0.022). For IB, the risk of seropositivity was significantly lower in spring by 40% (p = 0.036). Although, flocks with higher density or with more than 30 days old were more seropositive respectively by 47% (p = 0.041) and 45% (p = 0.019). At last, when broiler chicken were not boosted by IBD vaccine, flocks appeared to be more seropositive by 48% (p = 0.047); especially in spring by 45% (p = 0.048); or in farms with poor hygiene by 65% (p = 0.004); however, more than flocks 30 days old flocks were less seropositive by 30% (p = 0.009).