

## Local and systemic specific antibody response of different chicken lines after ocular vaccination against infectious bronchitis

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The specific lacrimal fluid IgA levels and the specific serum IgG levels of broiler chicks (meat type hybrids (MT)), brown-egg layer chicks (heavy layer (HL)), and white leghorn chicks (light layer (LL)) were compared after infectious bronchitis virus (IBV) ocular vaccination at 1 day of age. All birds were maintained as a mixed population throughout the experiment of 45 days. The class specific antibody levels were determined at regular intervals by enzyme-linked immunosorbent assays. All birds responded to the vaccination stimulus as shown by a significant increase of antibody levels in both serum and lacrimal fluid. When comparing the IgG response of the chicken lines tested, LL chicks showed higher serum IBV-IgG values at the time of maximal response at days 5 and 9 post-vaccination (pv). This bird group also showed a more homogeneous (lowest coefficient of variation of values) serum IgG response. On day 13 pv and until the last serum sampling day (day 41 pv) all three chicken type