***Chlamydia psittaci* strains from broiler chickens induce clinical disease, histopathology and mortality in specific pathogen free chickens**

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*Chlamydia psittaci* is an obligate, intracellular gram-negative bacteria causing respiratory disease in poultry. *C. psittaci* is classified into the well-characterized outer membrane protein A (*ompA*) genotypes A-F and E/B. All genotypes are associated with specific bird orders from which they are predominantly isolated. So, far genotypes B, C, F and E/B have been found in chickens.

Since applying NAAT’s, *C. psittaci* has been detected more often in chickens. Virulent *C. psittaci* strains were detected by NAAT’s and isolated from diseased chickens raised in Australia, France, China and Germany.

In the present study, sera of 30 Belgian and 10 Northern French chicken farms were tested by a *C. psittaci* MOMP-based ELISA. Ninety-six percent, 93% and 90% of the Belgian broilers, broiler breeders and layers were seropositive. Ninety-one percent of the French broilers were seropositive. In addition, tissues of 5 Belgian and 5 French broiler farms were examined at slaughter. All French farms ware culture positive while *C. psittaci* was cultured from the lungs of 80% of examined Belgian farms. *C. psittaci* infections are apparently emerging in chickens raised in Belgium and Northern France. We could proof Hill's-Evans’ postulates for chicken-derived *C. psittaci* genotype B and D strains. Chicken-processing plant employees should be considered a risk group for human psittacosis. There is a need for higher awareness and for efficient risk assessment and management of *C. psittaci* infection in chickens as chlamydiosis in broilers seems to be underdiagnosed and infections with highly virulent strains do occur.