# **Titre d’article**: Seroprevalence of Q fever among ewes and associated risk factors in Ain Defla region, North-central Algeria

**Abstract :**

Q fever is a zoonotic disease caused by Coxiella burnetii, which causes abortions in domestic ruminants. This study aims to assess the seroprevalence of Q fever among ewes and investigate the associated risk factors in the Ain Defla region (north-central Algeria). Blood samples from 184 ewes were randomly collected from 45 sheep flocks. Sera were tested for the presence of antibodies against C. burnetii using an ELISA test. Seroprevalence was 24.9% and 66.7% at the animal and flock levels respectively. Univariate analysis at the animal level indicated three factors significantly associated with C. burnetii seropositivity: presence of pigeons in farms (χ2 = 9.689; p = 0.008), abortion in ewes (χ2 = 11.209; p = 0.001), and abortion history in the flock (χ2 = 7.744; p = 0.005). Therefore, C. burnetii infection plays a major role in abortions in the sheep populations under study, and the presence of pigeons in farms plays a role in disease transmission.