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Prevalence of hepatitis E virus antibodies in workers occupationally exposed to swine in Portugal.

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The concept of zoonotic hepatitis E in industrialized countries has emerged with

the discovery of swine strains of hepatitis E virus (HEV) genotype 3, closely related to human HEV. Different routes of zoonotic HEV transmission have been recognized, including contact with infected pigs. Workers occupationally exposed

to swine (WOES) have been considered a risk group for HEV infection, but contradictory results have been reported. In the present study, we searched for anti-HEV IgG in WOES (butchers, slaughterhouse workers, veterinarians and pig farmers; n = 114) and in the general population (n = 804) in order to investigate

the potential occupational risk of zoonotic HEV infection in this work group. A significantly higher (p = 0.008) anti-HEV IgG seroprevalence was found in WOES (30.7 %) when compared with the general population (19.9 %). Multivariate analysis showed that having professions with exposure to pigs for more than 16.5 years was a risk factor for being positive for anti-HEV IgG (aOR of 5.4, 95 % CI 1.9-15.6, p = 0.002). To our knowledge, this is the first study on the prevalence of anti-HEV IgG in WOES in Portugal, also showing increased probability for infection in this group.

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