Seroprevalence of anti-SARS-CoV-2 IgG among adolescents at military fitness-for-duty evaluation

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The potential of SARS-CoV-2 to spread is limited by herd immunity, which provides an indirect protection to susceptible subjects. Although the seroprevalence against SARS-CoV-2 in the general population has been widely investigated, no data are available on military service. These subjects, who will spend together most of the military service, are at risk of infection outbreaks. We undertook a prospective cross-sectional study to investigate the prevalence of subjects with anti-SARS-CoV-2 IgG (and their history in the previous months) at military fitness-for-duty evaluation.

In Switzerland, male citizens 18–19 years of age undergo a medical screening and a status of fit or unfit for military service is assigned. Women willing to be part of the Army also undergo such a medical evaluation. We invited to participate in this study all adolescents undergoing this evaluation in Southern Switzerland from July to December 2020. After informed consent, subjects filled in a structured questionnaire about their history from February 2020. Finally, blood was collected to identify IgG against spike protein subunit 1 of SARS-CoV-2 (Euroimmun Medizinische Labordiagnostika, Lübeck, Germany). The cut-off value for positivity was >1.1. Data are presented as absolute number (and percentage). Fisher’s test was used to compare subjects with and without symptoms possibly associated with SARS-CoV-2 infection. We assumed as significant a p value <0.05.
REFERENCES