Only 14% of the Bernese population have antibodies against coronavirus

In the canton of Bern, Switzerland, only 14% of the adult population were infected with the coronavirus and developed antibodies against SARS-CoV-2. These are the preliminary results of a seroprevalence study coordinated by the Swiss School of Public Health and carried out in Bern by the University of Bern in cooperation with the Inselspital, University Hospital of Bern.

In the canton of Bern, between December 2020 and the end of February 2021, a total of 400 participants will be tested for antibodies against the coronavirus in a random sample. 263 people have already been examined, which will give a representative estimate for the total population. The first results show that only 14% of the adult Bern population has been infected with the coronavirus and developed antibodies. The study was carried out by the Institute of Primary Health Care (BIHAM) in collaboration with the Institute for Social and Preventive Medicine (ISPM), the Institute for Infectious Diseases (IFIK) at the University of Bern and the Inselspital. It is part of the "Corona Immunitas" research program of the Swiss School of Public Health (SSPH +). This research program aims to understand the spread of Covid-19 at the national level. For this purpose, the Sars-CoV2 immunity in the Swiss population is determined using antibody tests; the antibody levels in the blood are measured in a random sample of the population. In this way, the percentage of people who have come into contact with the virus and the percentage of infected people without symptoms can be estimated.

"Corona Immunitas" in the canton of Bern
It is the first such measurement in the Bernese population. "Compared to other cantons, the seroprevalence - the frequency of antibodies in blood samples - is lower than that of the canton of Geneva with 22%, for example, which was measured there between November and December 2020," says Prof. Nicolas Rodondi from the University's Institute of Primary Health Care Bern. Comparisons should be carefully done, emphasizes Rodondi, since the measurements in other cantons were carried out at different times. "However, based on these preliminary findings, it can be concluded that vaccination appears to be a very important step in fighting this pandemic," says Rodondi. According to the researchers, the measures taken by the cantonal government are still decisive for containing the epidemic.

The participants in the study are a representative sample of people aged 20 and over living in all five regions of the canton of Bern. As part of the national "Corona Immunitas" program, this random
sample was generated by the Federal Statistical Office. In the canton of Bern, a total of 400 participants will be recruited by letter and telephone until the end of February 2021. Preliminary results are based on 263 adults included in the study who were recruited and consented between December 14, 2020 and January 20, 2021. Participants were either seen at the Inselspital, University Hospital Bern, or visited at home in remote areas by bus with a trained nurse and physician from the research team. The buses contain the necessary infrastructure for blood collection and for safe storage of the biological samples. All samples have been frozen and stored in the Inselspital biobank for future research projects.

The study will also provide a better understanding of whether the presence of antibodies protects against reinfection and whether this protection depends on the amount of antibodies produced. In addition, the results of the study will provide information on risk factors associated with infection, as well as on vaccination.

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