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Press Release



Search for germs in Braunschweig residents' noses **Helmholtz Centre for Infection Research launches study of multiresistant bacteria**

In the next few days, two-thousand randomly selected citizens of Braunschweig will receive mail from the Helmholtz Centre for Infection Research (HZI). In this letter they will be invited to participate in a public health study. Scientists from the Department of Epidemiology of the HZI want to investigate how frequently the bacterium *Staphylococcus aureus* occurs in the population. Twenty to thirty percent of the people carry this germ on the skin, in the nose or in the throat. Usually this goes unnoticed, as the bacterium is not harmful under normal circumstances. However, if the bacterium enters an open wound or if the host's immune system is weakened, it can lead to dermatitis, pneumonia or even sepsis.

Why is this the case and why are only some people carriers of this pathogen? These are the questions the health researchers want to answer in the coming six months. "We are especially interested in staphylococci that are resistant to different antibiotics", explains physician and molecular biologist Dr. Frank Pessler, who is leading the study in collaboration with the epidemiologist Dr. Manas Akmatov and the biostatistician Jaishri Mehraj. So-called multiresistant germs, first and foremost the "methicillin-resistant *Staphylococcus aureus*" (MRSA), have become more prevalent in the past few years and pose a growing threat to healthcare. As only a few antibiotics are effective against them, their treatment is tedious and long.

Participating in the study takes little effort from the volunteers, is completely painless and can be performed at home. At the beginning of the study, participants fill out a questionnaire and take a nasal swab, both of which are returned to the HZI. Over a period of six months, they receive monthly packages containing fresh swabs.

Pessler is asking citizens to participate: "It is crucial that as many people as possible take part. Only then can we gain important insights that may help us fight multiresistant germs more efficiently in the future. In the long run, all citizens will profit from this." Besides the satisfaction of contributing personally to medical research, there is an additional benefit for participants: If *Staphylococcus aureus*

The Helmholtz Centre for Infection Research (HZI):

The Helmholtz Centre for Infection Research contributes to the achievement of the goals of the Helmholtz Association of German Research Centres and to the successful implementation of the research strategy of the German Federal Government. The goal is to meet the challenges in infection research and make a contribution to public health with new strategies for the prevention and therapy of infectious diseases.

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