German Biosecurity Programme on a Global Scale: Activities of the Bundeswehr Institute of Microbiology

Improving biosecurity has in recent years been identified as one priority of the G7 initiative entitled “Global Partnership against the Spread of Weapons and Materials of Mass Destruction”, that was launched at the G7 Summit 2002 in Kananaskis, Canada. In 2013, the Foreign Office launched the “German Partnership Programme for Excellence in Biological and Health Security” for an initial period of three years. It is designed to mitigate biological security hazards and to establish and improve necessary biosecurity capacities all over the world.

Under this programme, the Bundeswehr Institute of Microbiology in cooperation with the Deutsche Gesellschaft für Internationale Zusammenarbeit GmbH (GIZ, German Association for International Cooperation) carries out international projects in Georgia, Kazakhstan, and Ukraine.

The Enable and Enhance Initiative of the Federal Government launched in 2011 is meant to strengthen security structures abroad and help prevent emerging crises. Partner states are to be enabled to respond more effectively to crises.

Under the Enable and Enhance Initiative, the Bundeswehr Institute of Microbiology is currently active together with the Deutsche Gesellschaft für Internationale Zusammenarbeit GmbH in the Sahel region (Mali, Mauritania, Burkina Faso, Niger, Chad) and in Tunisia.
OUR MISSION

The Bundeswehr Institute of Microbiology is a departmental research facility that specialises in biological medical defence. Its mission is to develop procedures and measures to protect Bundeswehr personnel from disease caused by biological agents and to restore their health in the event of illness. Therefore, the scientific focus of the Institute is on a variety of pathogens and biological toxins that could potentially be used as biological warfare agents.

Diagnostic results from mobile biological reconnaissance must be verified by stationary procedures. Our Central Diagnostic Unit is fully accredited in accordance with DIN EN ISO 15189 and provides a stationary diagnostic capability, reflecting the claimed level of confidence.

The Bundeswehr Institute of Microbiology has been commissioned to perform the functions of three national consultant laboratories, namely for tick-borne encephalitis (TBE), Brucella and Yersinia pestis. Their range of services is also available to all civilian health care facilities.

OUR RESEARCH

Research conducted at the Institute is translational in nature. The aim is to develop specific products that are made available to users or to provide science-based services by the Institute itself. The focus is on products related to medical biological reconnaissance, i.e. diagnostic methods to be used in the field as well as novel methods for attribution investigation in the field of microbial forensics. Moreover, projects concerning prophylaxis and therapy as well as surveillance and risk assessment are carried out.

OUR DIAGNOSTICS

We provide our expertise and scientific capabilities on a global scale and make them directly available for deployed Bundeswehr personnel. The aim is to rapidly detect, under field conditions, human or animal diseases caused by potential biological agents, to identify treatment options, and to recommend adequate protective measures.