Centre for International Health Protection

Head: Prof. Dr. Johanna Hanefeld

- Coordinating international projects within the Global Health Protection Programme of the Federal Ministry of Health and the German Biosecurity Programme of the Federal Foreign Office
- ▶ Information Centre for International Health Protection: monitoring global health risks
- Generating and making better use of evidence for international health protection
- ▶ Risk management and support for international deployments, incl. preparatory trainings and logistical support on site
- Setting up laboratory capacities and conducting trainings for laboratory staff abroad
- Networking of global public health actors in Germany and with National Public Health Institutes
- WHO Collaborating Centre for the Global Outbreak Alert and Response Network (GOARN) and National Focal Point for WHO Emergency Medical Teams
- Cooperation with the WHO Hub for Pandemic and Epidemic Intelligence in Berlin

Centre for Artificial Intelligence in Public Health Research Head: N.N; Deputy: Dr. Katharina Ladewig

- Further development and strategic support of RKI's public health research by using state-of-the-art AI-based methods and technologies
- Establishment and coordination of a cross-institutional cooperation in the field of artificial intelligence by new research projects
- Development of new data sources for public health-related
- Cooperation with national and international institutions in the field of Artificial Intelligence

Project Groups and Junior Research Groups

- ▶ Risk communication
- Acinetobacter baumannii
- ► Epidemiological modelling of infectious diseases
- Systems-medicine of infectious disease
- Metabolism of microbial pathogens (Junior Research Group)

WHO Reference Laboratories and Collaborating Centres

- ▶ Regional WHO Reference Laboratory for Poliomyelitis
- Regional WHO Reference Laboratory for Measles and Rubella
- WHO Collaborating Centre for Emerging Infections and **Biological Threats**
- WHO Collaborating Centre for the Global Outbreak Alert and Response Network (GOARN)
- ▶ WHO Collaborating Centre for Viral Hepatitis and HIV
- WHO Collaborating Centre for Antimicrobial resistance

National Reference Centres and Consultant Laboratories at RKI

Bacillus anthracis · Cryptococcosis and Rare Systemic Mycoses · Electron Microscopic Diagnostics in Infectious Diseases · Gonococci · Influenza · Listeria · Measles, Mumps, Rubella · Neurotoxin-producing Clostridia · Noroviruses Poxviruses · Poliomyelitis and Enteroviruses · Respiratory Syncitial Viruses, Parainfluenza, Metapneumoviruses Rotaviruses · Salmonellosis and Other Enteric Pathogens Staphylococci and Enterococci · Tularaemia

Scientific Committees

Currently, 17 scientific committees that draw up recommendations are based at RKI. They include the Standing Committee on Vaccination (STIKO) and the Commission for Hospital Hygiene and Infection Prevention (KRINKO). The committees are composed of external experts in various disciplines.

The Public Health Institute for Germany

The Robert Koch Institute's aim is to protect the population against disease and improve its state of health. To this end, 1,500 individuals from 50 nations and 90 different occupational fields work together at RKI every day; around 700 of them are scientists. They investigate the manifold impacts on health and disease, draw up and verify evidence-based recommendations and develop new methods of health protection.

Directorate

- Prof. Dr. Lars Schaade, president (acting)
- Prof. Dr. Johanna Hanefeld and Dr. Anke Engelbert, vice presidents (acting)

Locations

- Nordufer 20, 13353 Berlin-Wedding (main site)
- ▶ Seestraße 10, 13353 Berlin-Wedding
- ▶ General-Pape-Straße 62–66, 12101 Berlin-Tempelhof
- ▶ Burgstraße 37, 38855 Wernigerode
- Ludwig-Witthöft-Straße 14, 15745 Wildau

Selected Publications

- ▶ Epidemiological Bulletin
- ▶ Journal of Health Monitoring
- ► Epidemiological Yearbook of Notifiable Infectious Diseases
- RKI fact sheets
- Bundesgesundheitsblatt (co-editor)
- ▶ Publications in peer-reviewed scientific journals

www.rki.de/en | zentrale@rki.de

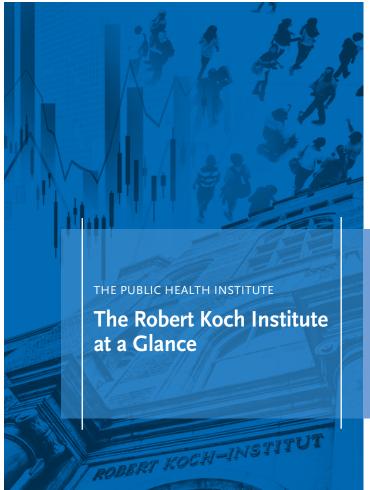








The Robert Koch Institute is a Federal Institute vithin the portfolio of the German Federal Ministry of Health





Main Areas of Activity

Department of Infectious Diseases

Head: Prof. Dr. Martin Mielke

Public health microbiology

- Molecular epidemiology of pathogens, incl. resistance to anti-infectives
- ▶ Reference diagnostic (National Reference Centres and Consultant Laboratories)

Healthcare-associated infections and hospital hygiene

 Prevention of healthcare-associated infections and inactivation of infectious agents

Bacterial and viral infections

- Salmonella and other enteric pathogens (EHEC, Listeria, Campylobacter); Legionella
- ▶ Healthcare-associated infections and antimicrobial resistance
- Gonococcus, Chlamydia and other sexually transmitted bacterial pathogens; HIV
- ▶ Influenza, SARS-CoV-2, RSV and other respiratory viruses
- ▶ Measles, mumps, rubella
- Herpesviruses
- Poliovirus and other enteroviruses
- ► Gut-associated viruses (norovirus, rotavirus); hepatitis viruses (HEV)

Fungal, parasitic and mycotic infections

- ▶ toxoplasmosis, lamblia, scabies, non-tuberculous mycobacteria
- Diagnosis of invasive mycotic infections

Pathogen-host interaction

Department of Epidemiology and Health Monitoring

Head: N.N.; Deputy: Dr. Thomas Ziese

Health surveys

- Representative health surveys
- ▶ Implementation of a Health Panel
- ► European Health Interview Surveys
- ▶ health data on selected subgroups of the population

Federal Health Reporting

- ► Journal of Health Monitoring
- National Burden of Disease study
- Digital dashboard on health in Germany

Surveillance of non-communicable diseases

- ▶ Diabetes/NCD surveillance
- Mental health surveillance
- ▶ Health and care of vulnerable groups
- ▶ Behavioural and social determinants
- ▶ Health and climate change

German Centre for Cancer Registry Data

- ▶ Pooling and quality control of data from regional cancer registries, publication of an overall dataset
- ▶ Harmonisation of cancer registration, supporting interoperability
- ▶ Reporting on cancer in Germany, e.g. analyses of cancer incidence and survival

Network of public health players in Germany

Department of Infectious Disease Epidemiology

Head: Dr. Osamah Hamouda

National surveillance of infectious diseases

- reporting on notifiable infectious diseases
- ▶ Continued development of surveillance systems, e.g. the German electronic reporting and information system for infection protection (DEMIS) and sentinels

Infectious disease control

- Prevention concepts and public health recommendations
- ▶ Point of contact for the Public Health Service in Germany
- On-call service for infectious disease epidemiology, crisis management, pandemic planning
- Point of contact for ECDC

Epidemiological research and outbreak management

- Vaccine-preventable diseases, vaccination rates
- Sexually transmittable or bloodborne diseases
- Foodborne diseases
- Zoonoses; tropical and vector-borne diseases
- Respiratory illnesses
- Antibiotic resistance and consumption

Postgraduate Training for Applied Epidemiology (PAE)

Methods Development, Research Infrastructure and **Information Technology**

Head: PD Dr. Linus Grabenhenrich Deputy: Dr. Andrea Thürmer, Dr. Michael Goltz

Bioinformatics and genome sequencing

- ▶ Data analysis for genomics, transcriptomics, proteomics
- Prevalence, spread and characteristics of pathogens
- Central sequencing service

Central laboratory animal husbandry

- service facility involving laboratory animals and animal-based experimental techniques; animal welfare officer
- Developing alternative and supplementary methods (3R)

Information and research data management

- data management services
- library
- Providing data for external use, Open Data

Development of information technology

- Service management, IT governance and compliance
- Basic and specialist IT (SaaS, PaaS)
- Network infrastructure, data centres and server virtualisation

Systems development

- Databases and applications for automated processing of health data
- Requirements management and management of complex digitalisation projects

Centre for Biological Threats and Special Pathogens

Head: Prof. Dr. Lars Schaade

- ▶ Health threats caused by highly pathogenic and relevant bioterrorist biological agents (microbes and toxins): identification, assessment, management support
- research on diagnostics, epidemiology, pathogenesis and countermeasures

Diagnostics

- Viruses: (monkey) pox viruses, SARS-CoV-2, vector-borne viruses, Ebola virus and others
- ▶ Bacteria: pathogens causing anthrax, tularaemia, the plague and others
- ► Toxins: ricin, botulinum neurotoxin and others
- ▶ Use of proteomics, spectroscopy, special light and electron microscopy
- ► Biosafety level 4 laboratory (BSL-4)

Crisis management

- Advising and supporting health agencies, the police and fire
- Concepts for managing bioterrorist events and case of illness caused by highly pathogenic agents
- Managing health crises on an international level
- Cooperation with national and international partners in the field of bioterrorism defense

