

Your questions answered:

## What is One Health?

**There's an old piece of wisdom behind the One Health approach: the health of humans, animals and the environment is closely linked together in many different aspects. Global challenges in the health sector, such as the spread of antimicrobial resistance, add fresh impetus to this realisation. In practice, specialists in human and veterinary medicine work closely with environmental scientists.**

The One Health approach plays an important role in the field of food safety. Aside from healthy microflora microorganisms such as bacteria, viruses or parasites can be contaminants in foods of animal and plant origin and can lead to severe health impairments in humans. "To ensure that meat, milk and eggs are safe, the whole food chain has to be observed – from the field to the shed all the way through to processing", says Professor Karsten Nöckler, head of the Biological Safety department at the BfR. "The prerequisite for this is close cooperation between agriculture, veterinary and health authorities, as well as good kitchen hygiene by consumers."

For this reason, the BfR works closely with other institutions on a national level. A good example is the fight against antimicrobial resistance. Whereas the Friedrich-Loeffler-Institute (FLI) conducts research into the spread of animal diseases and zoonotic pathogens in livestock, the BfR assesses the health risk for humans from disease pathogens and resistant bacteria which can be transmitted above all via foods of animal origin. The Federal Office of Consumer Protection and Food Safety examines antimicrobial resistance in

pathogens in animals, while the Robert Koch Institute (RKI) researches the disease-causing mechanisms of the pathogens in humans. Together with veterinary and health authorities and universities, a better understanding of occurrence and spread of such diseases in humans and animals is achieved.

Also at an international level, the BfR cooperates closely with players in the health sector. The third party-funded project *European Joint Programme One Health* started in January 2018 with 41 reference laboratories from 19 countries. One organisation responsible for public health and one for food or veterinary medicine usually participate from each country, with the goal of advancing research into pathogens that can be transmitted between humans and animals, setting up a network of specialists and expanding cooperation. The German authorities involved in addition to the BfR are the FLI and RKI. ■

**More information:**  
[www.bfr.bund.de/en](http://www.bfr.bund.de/en) > A-Z-Index: One Health  
[www.bfr.bund.de/en](http://www.bfr.bund.de/en) > Research > Third party projects of the BfR > Human, animal and environmental health (One Health)