

Danger in the pigsty: research project aims to restrict the spread of salmonella and hepatitis E viruses

BfR communication No 003/2021 dated 1 February 2021

Bacteria of the *Salmonella* genus and the hepatitis E virus (HEV) can infect humans and animals. In pigs, they often lead to asymptomatic (subclinical) infections. However, in humans and pigs they can also cause severe and potentially fatal infections. Farmers and veterinarians in particular have an increased risk of being infected with salmonellae and HEV due to their frequent and intensive contact with pigs. The European research project BIOPIGEE (“Biosecurity practices for pig farming across Europe”), coordinated by the German Federal Institute for Risk Assessment (BfR), now aims to find out more about how to reduce the occurrence of salmonellae and HEV on European pig farms. The aim of the project is to determine those methods that can best contain the pathogens.

BIOPIGEE will provide information on how to protect pig stocks from pathogen entry and spread using different research approaches. Faecal samples will be collected from pigs from different types of farms in participating countries and tested for salmonellae and HEV, and farmers will be interviewed about biosecurity measures at the farm. Collaboration with experts experienced in controlling these pathogens on pig farms, expert workshops and literature reviews will provide further insight into the best control methods. Laboratory tests will be carried out to determine the efficacy of common disinfectants against salmonellae and HEV. The data obtained will then be included in mathematical models. They can be used to determine which biosecurity measures are most effective against one or both pathogens.

The project is funded by the “One Health European Joint Programme” (OHEJP) (grant number 773830). It brings together European experts to study these two pathogens and provide useful information for pig farming. 13 countries and 16 research institutions with expertise in veterinary epidemiology, microbiology, veterinary and human medicine, agronomy, econometrics, bacteriology and virology are involved in the project. The knowledge gained through BIOPIGEE will be shared with interested parties in seminars, website content and a decision-making support tool.

More information on the BIOPIGEE project can be found on the One Health EJP homepage <https://onehealthjep.eu/jrp-biopigee/> or can be provided via BIOPIGEE-coord@bfr.bund.de.

About the BfR

The German Federal Institute for Risk Assessment (BfR) is a scientifically independent institution within the portfolio of the Federal Ministry of Food and Agriculture (BMEL) in Germany. It advises the German federal government and German federal states (“Laender”) on questions of food, chemical and product safety. The BfR conducts its own research on topics that are closely linked to its assessment tasks.

This text version is a translation of the original German text which is the only legally binding version.