Houseflies could spread disease between humans, scientists warn

Researchers have warned the public to avoid eating food that has been sitting out.

Houseflies carry hundreds of different species of harmful bacteria and may help to spread disease between humans, an international team of researchers has found.

The researchers warned the public to avoid eating food that has been sitting out at picnics and to avoid taking picnics to busy urban environments.

The study, launched at Penn State Eberly College of Science in the United States, examined microbiomes on 116 houseflies and blowflies from three different continents.

The results, published in the journal Scientific Reports, support a long-suspected view that flies contribute to the rapid spread of pathogens during the outbreak of a disease among humans.
"We believe that this may show a mechanism for pathogen transmission that has been overlooked by public health officials," said Donald Bryant, Ernest C Pollard Professor of Biotechnology at Penn State University.

Researchers also investigated the microbes on individual fly body parts including legs and wings, according to Stephan Schuster, research director at Nanyang Technological University, Singapore.

A fly’s legs appear to transfer the most microbial content from one surface to another, he said.

Flies probably pick up the bacteria from faeces and decaying organic matter which they use to nurture their young, the study indicated.

Scientists found 15 instances of the human pathogen Helicobacter pylori – which causes ulcers in the human gut – on Brazilian blowflies.

"It will really make you think twice about eating that potato salad that’s been sitting out at your next picnic," Bryant said.
“It might be better to have that picnic in the woods, far away from urban environments, not a central park.”

The study did suggest, however, that flies could help human society by serving as living “drones” or acting as early warning systems for disease.