

# Study finds copper proves effective against new *E. coli* strains

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As the World Health Organisation suggests the *E. coli* outbreak in Germany is a strain never before seen in an outbreak – O104:H4 – laboratory science conducted at the University of Southampton indicates a role for copper in preventing the spread of such infections.

Professor Bill Keevil, Head of the Microbiology Group and Director of the Environmental Healthcare Unit at the University of Southampton, explains: "A study looking at copper's efficacy against new strains of *E. coli* has just been completed. Although it did not specifically look at O104, all the strains investigated have died rapidly on [copper](#)."

On a dry copper surface, the study shows 10 million *E. coli* bacteria are eliminated within 10 minutes. On a wet copper surface, one could expect a total kill within around 45 minutes. This antimicrobial property is inherent to the metal, and shared with alloys such as brass and bronze.

In the wake of this outbreak, hand washing and careful food preparation have been highlighted as key concerns, as has cross-contamination. Any raw food placed on a work surface can contaminate other food, or have bacteria transferred onto it from previous items resting there. Deployed as a touch surface in food preparation areas, copper will continuously kill any pathogens that settle on it, reducing the risk of cross-contamination, and helping to prevent the spread of infection.

Provided by University of Southampton

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