

# ***Copper - Brass - Bronze***



*Handles*

*Knobs*

*Lever*s

*Push Plates*

*Grab Bars*

*Railings*

*Switch Plates*

*Taps*

*Sinks*

*Work Surfaces*

*Naturally Antimicrobial Alloys for Touch Surfaces*

# Eighty percent of infectious illnesses are transmitted by TOUCH



Public concern over the threat of disease and infection posed by bacteria living on everyday objects such as doorknobs, taps and work surfaces is on the rise. Apprehension is growing over E.coli, streptococcus and staphylococcus bacteria in hospitals, offices, gyms, restaurants and homes, resulting in increased sales of antibacterial coatings, wipes, soaps and lotions - all of which eventually wear away and lose their effectiveness.

## REAL CONCERNS

Eighty percent of infectious illnesses are transmitted by touch. Disease-causing bacteria are spread when contaminated individuals touch a surface, leaving behind germs to be picked up by the next person who touches that surface.

The presence and spread of bacterial pathogens in hospitals is a growing problem in the UK, Europe and the world over. According to the House of Commons' Committee on Public Accounts there are an estimated 300,000 cases of hospital-acquired infections annually in the UK, leading to an estimated 5,000 deaths and costing the National Health Service more than £1 billion.

The Committee suggests that a wide range of actions could be put in place to reduce the incidence of these infections.

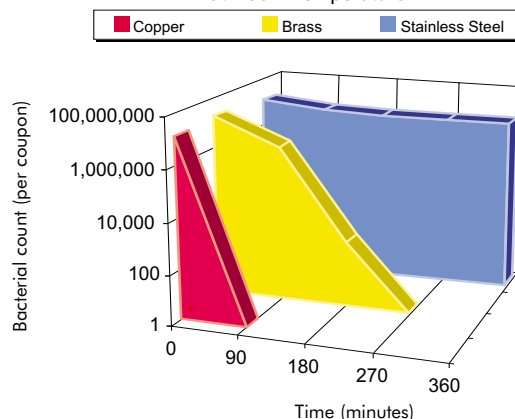


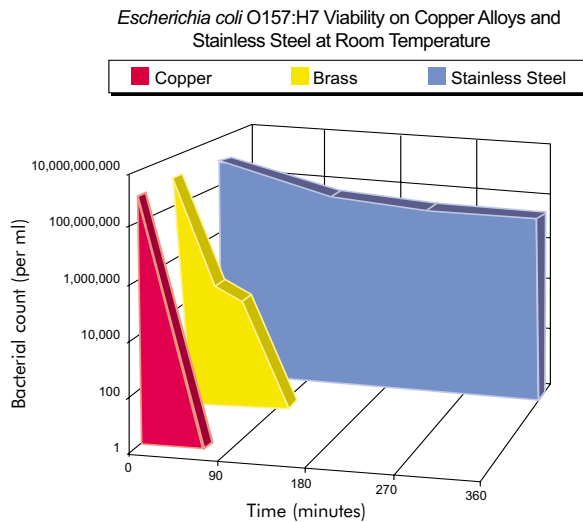
## ONE SOLUTION

The International Copper Association has sponsored research into the antimicrobial properties of copper and copper alloys, such as brass and bronze. Laboratory studies confirm that copper surfaces inactivate common disease-causing bacteria, such as E.coli, streptococcus and staphylococcus. Copper alloy surfaces have even proven to be effective against one of the more virulent strains of antibiotic-resistant bacteria associated with hospitals, Methicillin-resistant Staphylococcus aureus, or MRSA.

- ◆ In laboratory studies, MRSA was eliminated on brass surfaces in 4.5 hours, and on pure copper in just 90 minutes.
- ◆ E.coli O157:H7 was inactivated on brass in less than 2 hours.
- ◆ The higher the copper content of the alloy, the more quickly bacteria die.

MRSA Viability on Copper Alloys and Stainless Steel at Room Temperature





Stainless steel, aluminum and plastic surfaces do virtually nothing to eliminate bacteria that cause foul odours and unhealthy environments. On the other hand, copper alloys can begin to stop the growth of microbes on contact and can swiftly and effectively eliminate them. Using copper alloy touch surfaces can contribute to a more hygienic environment.

## USING UNCOATED COPPER ALLOY HARDWARE

Throughout history and around the world, copper has been used as a hygienic material. Today, a few low-cost and easy-to-implement improvements in facilities design could reduce the viability of microbes on the most frequently touched surfaces. Architects, building owners, facilities managers and construction specifiers can now help reduce the risk of disease transmission by considering the germ-fighting capabilities of the materials they use. Uncoated copper, brass and bronze are naturally antimicrobial and begin eradicating bacteria on contact. Think about the potential benefits of uncoated copper metals in helping to eliminate bacteria on touch surfaces in both private and public spaces:

KNOBS, HANDLES AND LEVERS

PUSH PLATES

TAPS AND SINKS

COUNTER TOPS AND WORK SURFACES

FURNITURE HANDLES AND PULLS

GRAB BARS AND RAILINGS

PATIENT CARE EQUIPMENT

SWITCH PLATES

**Years of research show that copper alloys can begin to stop the growth of microbes on contact and can swiftly and effectively eliminate them.**



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