

Will copper keep us safe from the superbugs?

December 1 2009

Three papers scheduled for publication in the January issue of the *Journal of Hospital Infection*, published by Elsevier, suggest that copper might have a role in the fight against healthcare-associated infections.

In a busy Birmingham teaching [hospital](#), researchers swapped a conventional toilet seat, tap-handles and a ward door push-plate for similar items made from 70% copper. They compared the number of microbes on the copper surfaces against the number of bacteria on the same items from another ward and found that the copper surfaces had 90-100% fewer live bacteria than the non-copper surfaces.

Similar findings were reported from a primary healthcare facility in the Western Cape, South Africa. Researchers there found 71% fewer [microbes](#) on frequently touched surfaces overlaid with copper sheets (a desk, trolley, cupboard and window sill) compared with corresponding items made with conventional materials.

In addition to copper surfaces, cleaners have been using a copper-based [disinfectant](#) along with microfibre mops in Dumfries and Galloway, Scotland. Microfibre products are widely used in UK hospitals since they attract bacteria from surfaces and reach into places that other cleaning materials do not; however, they are difficult to disinfect. The copper-based disinfectant (CuWBO) cleaned the microfibre as well as the environment. Then, it appeared to continue killing germs for the rest of the day.

Prof Elliott, who led the research at University Hospital Birmingham,

has further commented: "The results of the first clinical trials in both Birmingham and South Africa suggest that the use of copper may assist in maintaining hospital surfaces free of bacteria and could augment cleaning programmes already introduced into health care settings. The findings related to the use of a copper biocide adds further evidence to the potential of this metal for fighting infection."

Whilst copper may indeed have a future role in the prevention of hospital-acquired infection, experts from the Hospital Infection Society were quick to point out that these innovative products will not reduce the need for effective and regular cleaning regimens, nor compliance with proper hand sanitation.

More information:

http://www.elsevier.com/wps/find/journaldescription.cws_home/623052/description#description

Source: Elsevier

Citation: Will copper keep us safe from the superbugs? (2009, December 1) retrieved 6 May 2024 from <https://medicalxpress.com/news/2009-12-copper-safe-superbugs.html>

<p>This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.</p>
--