

Understanding MRSA

A hospital in Birmingham in which a young British squaddie wounded in Iraq was infected with MRSA has been chosen for a clinical trial into whether transmission of the superbug can be reduced by using fittings made of copper

Although its anti-microbial qualities have long been known - the ancient Egyptians, Greeks and Romans all used copper to treat wounds - the metal and its most common alloy, brass, have all but disappeared from modern hospitals in favour of spick and span stainless steel, even though germs can remain active on steel for days.

The 18-month trial is to be held at Selly Oak Hospital, part of the University Hospital Birmingham NHS Trust, which came bottom of a league table in 2005 for infection rates of the MRSA superbug. The hospital has already started replacing stainless steel fittings with copper in readiness for next month's launch.

Those running the trial, which is backed by the copper industry, say that about 80 per cent of MRSA transmission is through contact with surfaces and laboratory tests at Southampton University have shown that copper's natural properties can greatly reduce the presence of MRSA. Studies have also shown that even tarnished brass doorknobs harbour less bacteria than those made of steel.

Changes

The changes at Selly Oak involve using copper for key surface contacts such as door handles, push-plates, bath taps, toilet flush handles and grab rails. Even the pens used by the staff will be copper alloy. If the trial is successful, a wholesale switch to copper surfaces and fittings in thousands of hospitals across Europe is on the cards to help cut the death rate from MRSA.

Results

The Southampton tests showed the MRSA bacteria on stainless steel remained fully active for days. But on brass - an alloy of copper and zinc - they died in less than five hours. **On pure copper the superbugs were eliminated in 90 minutes.**

The tests showed copper can also tackle the resistant bug Clostridium Difficile and could even act as a defence against bird flu.



YES : It will tarnish unless cleaned

YES : Not as clean and shiny looking as stainless steel

YES : It may be hard to match with the rest of your decor

YES : IT COULD ALSO SAVE LIVES