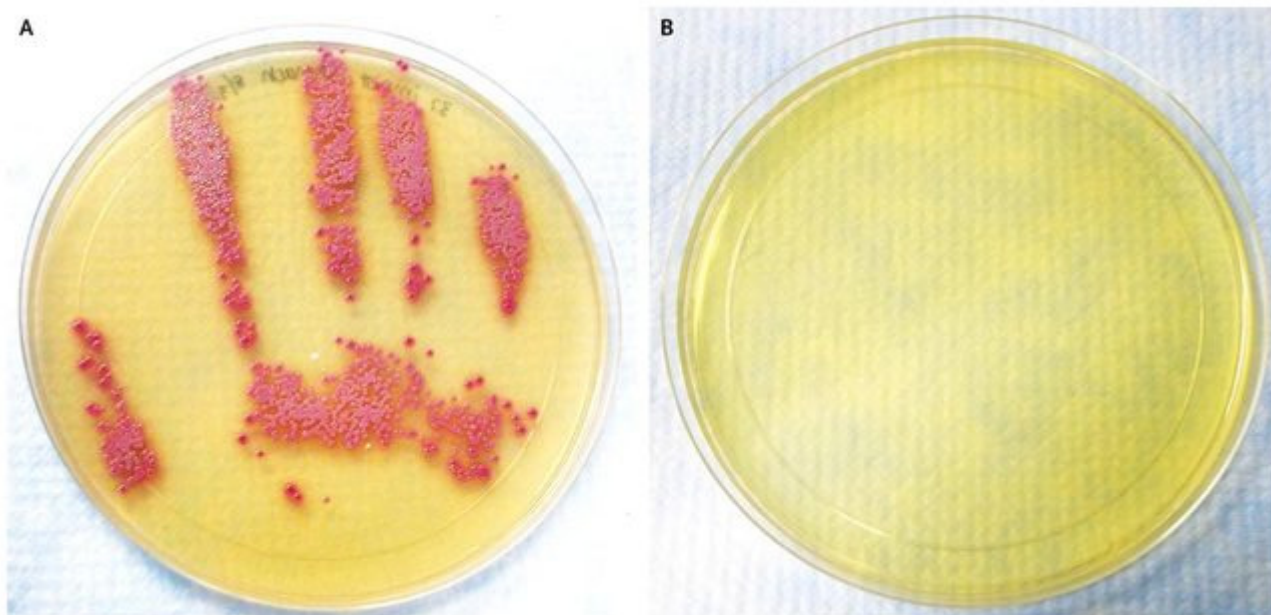

GRAPHIC ENCOURAGEMENT TO WASH YOUR HANDS

BY AARON ROWE - JANUARY 21, 2009 | GO TO WIRED BLOG TO SEE THIS STORY AND OTHERS



A simple petri dish test revealed that by overlooking basic hygiene, a medical student infected a quadriplegic Iraq war veteran with MRSA, an antibiotic-resistant bacteria that plagues hospitals.

The Cleveland VA medical center has an aggressive program to protect its patients from germs, and part of that effort includes regularly swabbing their noses to check for staph. In this case, the quadriplegic man had never tested positive before, so clearly something had gone wrong.

"All patients admitted to VA hospitals are screened to determine if they carry MRSA," says Curtis Donskey, the doctor in charge of infection control. "When carriers are identified, extra precautions are taken to decrease the likelihood that MRSA will be spread to other patients."

Donskey figured out who had been in contact with the patient. He asked the suspect to touch an agar plate, use some hand sanitizer, and then make another imprint on an identical dish.

Each batch of agar contained a little bit of cefoxitin, an antibiotic that should prevent any ordinary bacteria from growing on the plates.

After a little bit of incubation, the first plate (left) was covered in bright red colonies. It provided damning evidence that the suspect was guilty of poor hygiene.

The second plate (right) was completely free of bacteria. It showed that disaster can be averted very easily. By taking just a minute to lather up, anyone who works with patients can fight the spread of antibiotic-resistant bugs.

"Healthcare workers usually clean their hands with alcohol because it is very effective at killing most of the bacteria that cause hospital infections," says Donskey. "The exception is *Clostridium difficile* which is not killed by alcohol; for patients with *C. difficile* infection it is recommended that healthcare workers wear gloves and wash their hands with soap and water.

Donskey submitted a photograph of each plate to the *New England Journal of Medicine*.

Image: Courtesy of the New England Journal of Medicine