

# Staphylococcus aureus & Stethoscopes

We undertook a study to assess the prevalence of *S. aureus* carriage on **stethoscopes** and hands of staff of the Canberra Hospital, and to measure the effectiveness of cleaning and hand washing in reducing colonisation.

A convenience sample of healthcare workers from various areas of the hospital was obtained over a period of 6 months. The diaphragm of each participant's **stethoscope** was directly impressed on to mannitol salt agar, before and after being cleaned with a 70% isopropyl alcohol wipe. The dominant hand of each participant was also tested before and after washing with triclosan (1%) antimicrobial handwash and water. *S. aureus* was identified by standard laboratory methods.

There were 134 participants: 69 doctors, 50 nurses, 10 medical and nursing students and five physiotherapists. Most doctors and physiotherapists used their own **stethoscopes**, whereas most nurses and students used ward stethoscopes. *S. aureus* was isolated from five **stethoscopes** before cleaning (4%), but from none after cleaning. The organism was also isolated from the hands of 11 people before hand washing (8%) and of one after hand washing (0.7%). Two people had *S. aureus* isolated from both sites. There was no statistically significant difference between the prevalence of *S. aureus* on hands and stethoscopes ( $P = 0.15$ , McNemar's test).

Hand washing is the best recognized means of preventing cross-contamination in hospitals. However, the simple intervention of cleaning stethoscopes with an alcohol wipe was highly effective, and we believe that this practice should be more widely promoted.