

Stethoscopes Can Be More Contaminated Than Doctors' Hands

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[**Watch the Video: [Physicians' Stethoscopes More Contaminated Than Palms of Their Hands](#)]**

Healthcare workers hands are the main method of bacterial transmission in hospitals. They are not, however, the only means of transmission. According to a new study from the University of Geneva Hospitals, doctors' [stethoscopes](#) also play a role. The study, published in the *Mayo Clinic Proceedings*, assessed the level of bacterial contamination on doctors' hands and stethoscopes following a single physical examination.

“By considering that stethoscopes are used repeatedly over the course of a day, come directly into contact with patients' skin, and may harbor several thousands of bacteria (including [MRSA](#)) collected during a previous physical examination, we consider them as potentially significant vectors of transmission,” commented [Didier Pittet, MD](#), MS, Director of the Infection Control Program and WHO Collaborating Centre on Patient Safety, University of Geneva Hospitals. “From infection control and patient safety perspectives, the stethoscope should be regarded as an extension of the physician's hands and be disinfected after every patient contact.”

Physicians examined 71 patients using sterile gloves and a sterile stethoscope. Two areas of the stethoscope — the tube and diaphragm — and four parts of the doctor's hands — back fingertips, and thenar and hypothenar eminences — were measured for the amount of bacteria present after each exam.

The researchers found that the stethoscope's diaphragm was more contaminated than all areas of the doctor's hands, except the

fingertips. The findings also showed that the tube of the stethoscope was more heavily contaminated than the back of the physician's hand. When the contamination was due to methicillin-resistant *S. aureus* (MRSA), similar results were observed after the doctors' examinations.

The researchers say that their study is the first to directly compare the level of contamination between doctors' hands and stethoscopes. They caution that stethoscope contamination is not a trivial matter because the bacteria levels rival those of the fingertips — the hand region most often implicated in microbial cross-transmission — and that doctors should disinfect the stethoscope after each use.