

# Hazards of Bacteria on Health Care Providers' Computer Keyboards FactSheet

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The increase in computer usage in health care facilities may be a boon for health care technology, but it also can be a bust for infection prevention. Computer keyboards and keyboard covers have the potential to harbor potentially harmful bacteria for prolonged periods of time. The problem is especially dangerous in hospitals and other health care environments where patients are at risk of contracting bacterial infections from health care providers and other workers who use computers.

Researchers have found that three bacteria commonly found in a hospital environment, including two bacteria that are resistant to antibiotics can survive on keyboards and keyboard covers: vancomycin-resistant *Enterococcus faecium* (VRE), which can cause complicated abdominal, skin, urinary tract and bloodstream infections in people with compromised immune systems; methicillin-resistant *Staphylococcus aureus* (MRSA), or staph infections, which can cause a skin rash, boils, blisters or other skin afflictions; and *Pseudomonas aeruginosa* (PSAE), a frequent cause of pneumonia, urinary tract and bloodstream infections. It has been determined, that VRE and MRSA bacteria can survive for at least 24 hour on computer equipment after contamination. The PSAE bacteria can last for up to an hour on the keyboard and five minutes on the keyboard cover.

More significant, however, was that research has revealed that the transmission of the bacteria from the keyboard to a person's hands increased with use, up to 92

Hand print on plate before and after alcohol-based hand rub cleansing

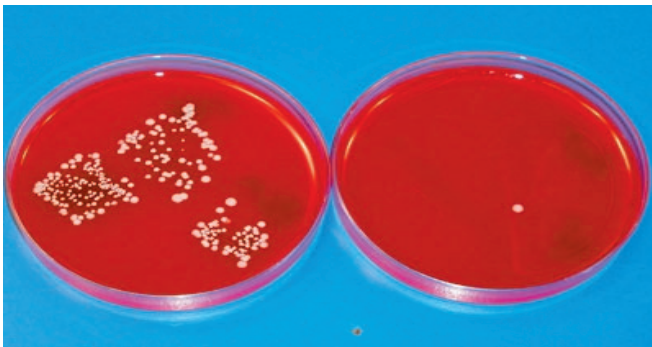


Photo courtesy Hand Hygiene Resource Center/Saint Raphael Healthcare System

The Texas Department of Insurance,  
Division of Workers' Compensation (TDI/DWC)  
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Photo courtesy CDC/James Gathany

percent for MRSA, 50 percent for VRE and 19 percent for PSAE. Once the bacteria are present on the hands of a health care provider, they can easily be transmitted from provider to patient.

To prevent the transmission of bacteria from the computer keyboard and keyboard cover to health care providers to patients, health care providers must practice proper hand hygiene both before and after using a computer. It is also important for disease prevention that health care providers wash their hands after patient contact.

Health care facilities should develop standard operating procedures to disinfect computer equipment on a regular basis, to help reduce the potential for bacteria transmission.

For more information on hand hygiene the Texas Department of Insurance, Division of Workers' Compensation has the following publication available at [www.tdi.state.tx.us](http://www.tdi.state.tx.us) under "Safety Resources":

- Hand Hygiene (English and Spanish) Fact Sheet

This fact sheet was published with information from AMN Healthcare and the Texas Department of Insurance, Division of Workers' Compensation and is considered factual at development.

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