

# Reducing Medical Tape Cross-Contamination and Healthcare Acquired Infections (HAIs)

The ongoing risks of healthcare-acquired infections (HAIs) are a significant patient safety concern prompting hospitals to seek new and innovative ways to reduce the risks of cross-contamination. HAI's cost US. hospitals \$96-\$147 billion annually in direct and indirect costs, with central-line associated bloodstream infections adding the most cost at \$45,814 per case.

Incorporating MedLite ID in your IV administrations can provide an important opportunity to decrease cross-contamination, improve clinician efficiency and positively impact the standard of patient care.

## MedLite ID Tested Medical Tape: This Is What We Found

MedLite ID acquired six rolls of medical tape from a healthcare facility in order to conduct tests on the tape to understand the prevalence of pathogenic bacterial on medical tape commonly used to identify the primary / emergency medication infusion line. Five of the rolls were in use by nurses and the sixth roll was fresh out of the package.

### Testing Method

All rolls were first inoculated to Mueller Hinton agar plates in a sterile manner, after which were submerged in separate sterile beakers filled with BHI broth and cultured for 24-hours before being plated to Mueller Hinton agar.

### Results

**Of the identified bacteria, one, *Acinetobacter\_ursingii*, was identified by the World Health Organization as critical and the second, *Enterococcus faecium*, was listed as serious.** Roll B showed *Staphylococcus epidermis*, a microorganism of the skin flor that can be very dangerous when it enters the bloodstream and cause potentially fatal complications.

**80% of the used rolls tested positive for pathogens and 16 of the 36 bacteria and fugus found were pathogenic.** Four of the five used rolls tested positive for a variety of pathogenic bacteria and the unused roll of tape produced non-pathogenic bacilli.

- Roll A cultured *Bacillus hisashii*, a non-pathogenic bacillus
- Roll B produced a Sulfa-Trimeth resistant *Staphylococcus epidermidis*, a known infector
- Roll C cultured *Clostridium tertium*, a known pathogen
- Roll D produced three bacterium including *Clostridium tertium* and *Paenibacillus aceti*- both members of a class of bacteria known to be pathogenic in the immunocompromised
- Roll E cultured *Enterococcus faecium*, a dangerous pathogen
- Roll F, the new roll, handled in sterile conditions produced two non-pathogenic bacilli



Most hospital tape starts out clean...  
but it doesn't stay that way.



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