

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 fungus 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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