

# Educational Resources

## Fact Sheet

- Healthcare Associated Infections (HAIs) are a significant cause of patient mortality & morbidity.
- In 2002, at least 1.7 million patients in the US acquired a HAI & up to 99,000 of them died with this infection. (CDC data )
- Up to 70% of all reported HAIs are caused by organisms that are resistant to at least one antibiotic. (CDC data )
- Multidrug resistant organisms (MDROs) are becoming more prevalent worldwide.
- The most problematic MDRO's are Methicillin-resistant *Staphylococcus aureus* (MRSA), multidrug resistant gram negative rods (e.g. *E. coli*, *K. pneumonia*), organisms resistant to flouroquinolones ( e.g. *P. aeruginosa*, *E. coli*, *Enterobacter spp.*) and Vancomycin resistant enterococcus (VRE).
- Other epidemiologically significant organisms causing HAI's include *C. difficile*, influenza, respiratory syncytial virus, rotavirus, and norovirus.
- Patients who are elderly or very young, immunosuppressed, have indwelling catheters/devices, or undergoing invasive procedures are at highest risk for acquiring a HAI.
- Organisms causing HAIs can be transmitted to patients on healthcare workers hands, medical devices or equipment, or via contaminated environments.
- Improved hand hygiene have resulted in reductions in HAIs & MRSA/VRE/C. difficile transmission rates and respiratory and diarrheal disease.
- Pittet et al reported decreased HAI infection rates from 16.9% to 9.9% over a 4 yr period, and reduced MRSA acquisition and infection rates with improved hand hygiene & alcohol based rub use. Doebbeling et al. reported reducing HAIs by 28% with introducing new handwashing agents. Many other studies have shown the impact of improving hand hygiene on decreasing infection and transmission of pathogens.