## Standard Precautions Stats and Facts

## **FACTS**

- 1. Bloodborne pathogens are pathogenic microorganisms that are present in human blood and can cause disease in humans.
- 2. Some infections that can be transmitted through contact with blood and body fluids include:
  - •HIV, Hepatitis A, B, C, Staph and Strep infections, Gastroenteritis-salmonella, and shigella, Pneumonia, Syphilis, TB, Malaria, Measles, Chicken Pox, Herpes, Urinary tract infections, and Blood infections. The greatest risks are from HIV and Hepatitis B and C.
  - Alternative concepts in infection control are called Body Substance Isolation (BSI) and Standard Precautions. These methods define all body fluids and substances as infectious. These methods incorporate not only the fluids and materials covered by the Bloodborne Pathogens Standard but expands coverage to include all body fluids and substances.

## **STATS**

- The CDC estimates that about 385,000 sharps-related injuries occur annually among health care workers in hospitals—with nurses the most affected healthcare occupation. The average risk of bloodborne infection following one of these all-too-common injuries is approximately 1.8%. While the numbers are appalling, the most harrowing costs emerge in the stories of the individuals affected.
- From 2005 to 2014, the overall estimated incidence of invasive MRSA infections from normally sterile sites (i.e., blood, pleural fluid, etc.) in the United States declined by 40% and the estimated incidence of invasive hospital-onset MRSA infections declined by 65%. Interventions designed to

decrease risk of device and procedure-associated infections and interventions to reduce transmission, like Contact Precautions and hand hygiene, both likely contributed to these decreases.

- Compliance with hand hygiene was as follows: prior to donning gowns/gloves, 37.2%; gowning, 74.3%; gloving, 80.1%; doffing of gowns/gloves, 80.1%; after gown/glove removal, 61%. Compliance with all components was 28.9%. As the burden of isolation increased (20% or less to greater than 60%), a decrease in compliance with hand hygiene (43.6%-4.9%) and with all 5 components (31.5%-6.5%) was observed. Ιn multivariable analysis, there was an increase noncompliance with all 5 components of the contact isolation precautions bundle (odds ratio [OR], 6.6 [95% confidence interval and in noncompliance with hand hygiene prior to donning gowns and gloves (OR, 10.1 [95% CI, 1.84-55.54]; P = .008) associated with increasing burden of isolation.
- As the proportion of patients in contact isolation increases, compliance with contact isolation precautions decreases. Placing 40% of patients under contact precautions represents a tipping point for noncompliance with contact isolation precautions measures.