Reducing the spread of infection

One key to reversing the rising incidence of healthcare-associated infections (HAIs) is active surveillance of patients entering healthcare facilities, which requires a diagnostic test with the ability to screen broad patient populations for the presence of dangerous organisms and rapidly deliver reliable, actionable results. To respond to this need, BD offers molecular diagnostic tests for swift, accurate detection of MRSA (methicillin-resistant *Staphylococcus aureus*). This technology, which produces results in less than two hours, offers BD customers a valuable tool to help prevent the spread of these potentially deadly and costly HAIs. The customer base for the *BD GeneOhm* MRSA assay has grown to more than 250 hospitals in the U.S., Canada, Europe and Asia-Pacific. BD plans to expand its menu of HAI assays and anticipates launching a new automated diagnostic platform in 2008.

"UCLH has cut MRSA infections by more than half, making us a leader in the U.K.'s nationwide effort to reach the same goal in 2008. On average, 5 percent of surgical patients admitted here carry MRSA. Rapid molecular testing enables us to detect when MRSA is present and respond with appropriate treatment to prevent both the spread within the hospital and later surgical infection."

– Dr. Peter Wilson
University College London Hospitals

BD is collaborating with medical professional societies to build awareness and educate healthcare providers about the patient and economic benefits of using active surveillance to prevent the spread of HAIs. Many of the world's leading healthcare institutions and networks have taken note. The U.S. Veterans Health Administration now recommends rapid molecular testing for all incoming patients at its 153 hospitals, and both the U.K. and Germany have initiated national MRSA reduction programs.

In addition to helping healthcare facilities prevent the spread of HAIs, BD has been a pioneer and world leader since 1988 in developing safety-engineered needle devices designed to protect healthcare workers and patients from exposures to bloodborne pathogens. The Company prides itself on its ability to design products that reflect an intimate knowledge of clinical processes and a deep understanding of customers' needs. For example, the safety-engineered *BD Nexiva* Closed IV Catheter System with *BD Q-Syte* Luer Access Split-Septum Device is designed to help simplify the intravenous therapy process and reduce the potential for bloodstream infections that can be introduced through IV therapy.

While the U.S. healthcare system has largely transitioned to safety-engineered syringes, catheters and blood collection devices, the need to enhance healthcare worker safety still remains outside North America, as adoption of safety-engineered technologies is currently lower in Europe and other geographic regions. BD is well positioned to help address this need with its expertise and innovative product portfolio, including products tailored to the requirements of specific regional markets.

The innovative *BD Nexiva* Closed IV Catheter System, which includes the *BD Q-Syte* Luer Access Split-Septum Device, is designed to address catheter-related bloodstream infections, reduce blood exposure to the clinician and the patient, and provide protection against accidental needlestick injuries.

Infectious microorganisms lurk everywhere, even in the places people go to preserve or recover their health, such as hospitals, clinics and other healthcare facilities. Left undetected and uncontrolled, harmful bacteria – including drug-resistant "superbugs" such as MRSA (methicillin-resistant *Staphylococcus aureus*) – can be passed from patient to caregiver to another patient in an insidious chain. When patients become infected, particularly those with weakened resistance and immunity, the consequences can be deadly. In fact, new data from the Centers for Disease Control and Prevention indicate that more than 94,000 Americans were infected with MRSA in 2005, and nearly 19,000 died. Overall, an estimated six million healthcare-associated infections (HAIs) occur each year in the U.S., Europe and Japan, killing approximately 99,000 people in the U.S. alone. HAIs not only take a human toll, they also cost an average of $27,000 per infected patient to treat in the U.S.

Delivering results in less than two hours, the *BD GeneOhm* MRSA assay is a rapid, qualitative *in vitro* diagnostic test for the direct detection of nasal colonization by MRSA to aid in the prevention and control of healthcare-associated infections.