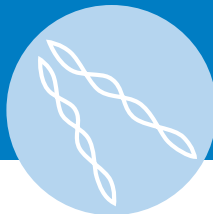
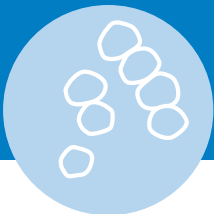


treating **HAI** seriously

Guidelines Comparison: Preventing Transmission of MRSA in Healthcare Settings



The majority of healthcare-associated infections (HAIs) are caused by multidrug-resistant organisms (MDROs) such as methicillin-resistant *Staphylococcus aureus* (MRSA) and vancomycin-resistant *Enterococcus* (VRE) and constitute an important and growing threat to public health. The Centers for Disease Control and Prevention, along with key professional and hospital quality organizations, acknowledges this serious threat and has issued evidenced-based guidelines for effective prevention of MRSA transmission and subsequent infections.



Essential Elements of MRSA Prevention

	IHI Institute for Healthcare Improvement	CDC Centers for Disease Control and Prevention	SHEA Society for Healthcare Epidemiologists of America	APIC Association for Professionals in Infection Control and Epidemiology
Guideline Title	<i>IHI 5 Million Lives Campaign: Reduce MRSA Infection How-to Guide</i> , December 2006 ¹	<i>Management of MDROs in Healthcare Settings</i> , November 2006 ²	<i>Guideline for Preventing Nosocomial Transmission of Multidrug-Resistant Strains of Staphylococcus aureus and Enterococcus</i> , 2003 ³	<i>Implementation Guide to Best Practices for Elimination of MRSA Transmission</i> , March 2007 ⁴
Overview	MRSA eradication is a key new intervention that IHI is challenging hospitals to adopt within its new "5 Million Lives Campaign." ⁵ A "bundle" of five Components of Care is detailed.	New CDC multifaceted guidelines to prevent spread of multidrug-resistant organisms that cause infections; developed in conjunction with the Healthcare Infection Control Practices Advisory Committee (HICPAC).	Guidance for inclusion of active surveillance tests in infection prevention programs which are essential for identifying reservoir of MRSA and VRE that can cause infections.	Multi-faceted approach including hand hygiene, contact isolation, antibiotic stewardship and active surveillance testing.
Active Surveillance Testing	Recommended by all for prevention and control of MRSA-associated infections			
- When to conduct	Routinely; on admission; periodic/weekly sweeps of high-risk areas and high-risk patients	<i>When MDRO incidence and prevalence are not decreasing</i> , then test routinely; on admission; periodic/weekly sweeps of high-risk areas and high-risk patients; otherwise, monitor for trends	Routinely; on admission; periodic/weekly sweeps of high-risk areas and high-risk patients	Routinely; on admission; periodic/weekly sweeps of high-risk areas and high-risk patients
- Which patients	High-risk patients upon admission and weekly – each hospital to determine risk factors, including: <ul style="list-style-type: none"> - prior history of MRSA - recent hospitalization (< one year) - history or transfer from long term care facility - admission to ICU - roommates of colonized or infected persons - skin wounds 			
- Which sites to culture for MRSA	Anterior nares will identify majority of colonized adults; adding wound cultures increases sensitivity Anterior nares and umbilicus for newborns	Anterior nares usually sufficient Obtain cultures from areas of skin breakdown and draining wounds	Anterior vestibule of the nose – always; throat cultures can enhance sensitivity; consider perirectal-perineal, but never as only culture site Areas of skin breakdown	Anterior nares Areas of skin breakdown and wounds
MRSA Decolonization	May be attempted, but broad use of mupirocin is discouraged	Consult with experts; if done, monitor mupirocin resistance; do not use mupirocin routinely as a component of MRSA control program	Consider as adjunctive measure in selected population; avoid wide-spread or prolonged use; incorporate routine susceptibility testing	Consult with experts; consider as an adjunctive measure, in select populations; monitor for mupirocin resistance.
Contact Precautions, including Hand Hygiene	Per CDC/HICPAC Guidelines ⁶ ; routinely for all patients known to be colonized or infected with MRSA. If single rooms are not available for patient isolation, MRSA colonized or infected patients can be cohorted together.			
Environmental measures including surface and equipment decontamination	Recommended by all.			
Antibiotic Stewardship	Recommended by all.			
Role of Invasive Devices	Aggressively implement Central Line and Ventilator Bundles ⁷	Guidelines for the Prevention of Intravascular Catheter-Related Infections, 2002 ⁸		

For more information, visit www.BD.com/HAIs

¹ <http://www.ihl.org/nr/rdonlyres/f4d9de7a-3952-4ae7-bbac-4e4222084a03/0/mrsahowtguide.doc>

² <http://www.cdc.gov/ncidod/dhqp/pdf/ar/mdroGuideline2006.pdf>

³ http://www.shea-online.org/Assets/files/position_papers/SHEA_MRSA_VRE.pdf

⁴ <http://www.apic.org>

⁵ <http://www.ihl.org/IHI/Programs/Campaign/Campaign.htm>

⁶ http://www.cdc.gov/ncidod/dhqp/gl_isolation.html

⁷ <http://www.ihl.org/IHI/Programs/Campaign/Campaign.htm?TabId=2#InterventionMaterials>

⁸ http://www.cdc.gov/ncidod/dhqp/gl_intravascular.html



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