NICU Infection Prevention Guideline Update

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Health Care Infection Control Practices Advisory Committee Meeting
Atlanta, Georgia
July 14-15, 2016
Overview

• History
• Contributors and partner organizations
• Topics
• Key questions
• Updated literature search and appraisal
• Next steps
• Questions for HICPAC
History of Guideline

- 2013 draft ready for Federal Register (public comment)
- Public comment delayed to add post-2011 reports
- Update paused due to
  - DHQP staff transitions
  - Public health emergencies (e.g., Ebola)
Contributors to Guideline Update

Core writing group invitees
National experts
• Alexis Elward (leader)
• Michael Brady
• Kristina Bryant
• Charles Huskins
• Aaron Milstone

CDC
• Martha Iwamoto
• Kathleen Irwin
• Amanda Overholt
• Mahnaz Dasti
• Kristin Roberts

Expert reviewers
• Co-authors and reviewers of last draft
• HICPAC members
• HICPAC liaison representatives
• Other experts
Partner Organizations

- American Academy of Pediatrics
- Society for Healthcare Epidemiology of America
- Association for Professionals in Infection Control
- Vermont Oxford Network
- National Association of Neonatal Nurses
Topics

• Central Line Associated Bloodstream Infections (CLABSI)
• Respiratory Infections (e.g., RSV, Pertussis, Varicella)
• Methicillin Resistant *Staphylococcus aureus* (MRSA)
• *Clostridium difficile*
Key Question: Central Line Associated Bloodstream Infections (CLABSI)

• What are the most effective strategies to prevent CLABSI in the NICU?
Key Questions: Respiratory Infections

• What are the most effective methods of prevention and control of respiratory illnesses in the NICU, including RSV, pertussis and VZV?

• Should transmission-based precautions be modified for patients in isolettes?

• What is the most effective diagnostic approach to identifying respiratory pathogen outbreaks in the NICU?
Key Questions: Methicillin Resistant Staphylococcus aureus (MRSA)

- What are the risk factors for MRSA colonization and infection in NICU patients?
- What are the most effective strategies to screen for MRSA colonization in NICU patients?
- What are the most effective measures to prevent hospital-acquired infection or colonization with MRSA?
Key Questions: *Clostridium difficile*

- What are the most effective strategies for *C difficile* testing in NICU patients?
- When should testing for *C difficile* be performed in NICU patients?
- What is the significance of a positive *C difficile* test in a NICU patient?
Databases and Sources

- MEDLINE
- Excerpta Medica (EMBASE)
- Health Literature (CINAHL)
- Cochrane Library
- National Guideline Clearinghouse
- National Institute for Health and Care Excellence Guidelines (UK)
- Scottish Intercollegiate Guidelines Network
- Infection Prevention Websites: CDC, SHEA, IDSA, APIC, AAP
Preliminary Search Yield: Studies, Reviews, and Guidelines Published 1/12-6/16

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<tr>
<th>Topic</th>
<th>Studies and reviews</th>
<th>Guidelines (not yet restricted to neonates)</th>
<th>Report review underway</th>
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<td>CLABSI</td>
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<td>Respiratory Infections (e.g., Pertussis and Varicella)</td>
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<td>MRSA</td>
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<td>C difficile</td>
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<tr>
<td>Total</td>
<td>1438</td>
<td>318</td>
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Next Steps

July - September 2016
- Collect declarations of interest from core writing group
- Search post-2011 literature search and apply same inclusion criteria
- Compile and appraise evidence using GRADE method

October - December 2016
- Determine if new evidence warrants revising recommendations
- Revise draft with updated information
- Seek HICPAC input and start CDC clearance

Winter/Spring 2017
- Complete CDC clearance
- Seek public comment and revise

Summer 2017
- Revise and publish on CDC website
Questions for HICPAC

• Questions about update process?

• Aware of relevant studies or guidelines that are
  – very recently published (not yet indexed in databases)
  – in the pipeline?
Thank you!

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The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention.