



What's the "diff"? Syndromic surveillance and prompt implementation of additional precautions for diarrhea

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Objectives

- Describe our health care setting
- Project overview – educational initiative
- Discuss syndromic surveillance (SS)
- Overview of current best practices for *Clostridium difficile* infection (CDI)
- Review compliance rates for placing patients on additional precautions for diarrhea
- Provide tested strategies and tools to improve compliance rates






Sunnybrook Health Sciences Centre




- 671 bed acute care teaching hospital
- 535 bed Long-Term Care/Veterans
- 3 Campuses
- On site laboratory




Project overview

- Provide an algorithm for diarrhea that includes:
 - Initiation of contact precautions for diarrhea
 - Laboratory testing guidelines and materials
 - Criteria for the discontinuation of additional precautions
- Education session – September 2008
 - Case scenarios; algorithm; Bristol stool chart
- Pilot Group: 36 bed trauma unit
- Data collection – establish rates



What is Syndromic Surveillance (SS) at Sunnybrook?

- Daily assessment of all patients for new onset of febrile respiratory illness and nausea, vomiting or diarrhea.
- Prompt implementation of contact precautions for patients with new unexplained onset of diarrhea
- Appropriate sampling and timely submission of specimens
- Reassessment of contact precautions for diarrhea:
 - 48 hrs asymptomatic, or
 - Infectious cause has been ruled out




Daily Surveillance Tool for Acute Care Patient Units
(excluding Neonatal ICU & Newborns, and F2 Unit)


Date: _____ Patient Unit: _____
Page _____ of _____

Each shift is to update this form.

Any new onset of symptoms of fever, cough, and shortness of breath, vomiting, diarrhea and/or pneumonia in patients must be reported to the attending physician immediately and fax form to Infection Prevention & Control at: WCH: 416.3236505 at 8:30 a.m.
Please ensure the completeness of the form before faxing.


Name / HFN/	Room	Admission Date	Date of new Onset	Fever >38°C	Cough	SOB	Hypoxia (SpO2 <92%)	Vomiting	Diarrhea	droplet precautions (Yes or No)	ACTION/	Initials






Best Practices for the Management of *Clostridium difficile*


- **Single room with dedicated toilet**
- **Contact Precautions**
- Hand Hygiene
- Enhanced Environmental Cleaning






Compliance Rates for initiating contact precautions for *Clostridium difficile*: April 2008-March 2009


- Total acute care cases: 144
 - Isolated before specimen results known: 105 (72.9%)
 - Isolated after specimen results communicated: 39 (27.1%)
- Pilot group (Pre-training Period: April 2008 – September 2008):
 - Isolated before specimen results known: 1 (25%)
 - Isolated after specimen results communicated: 3 (75%)

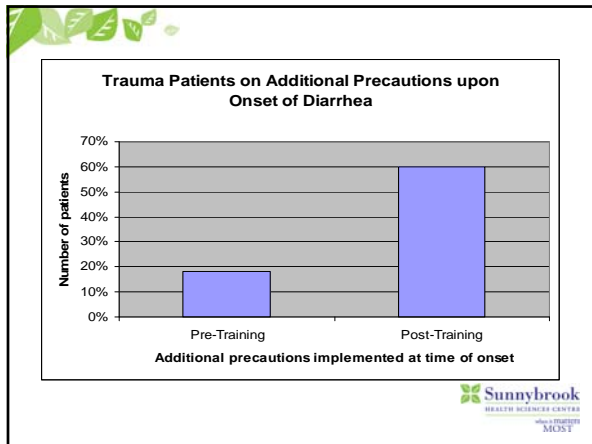


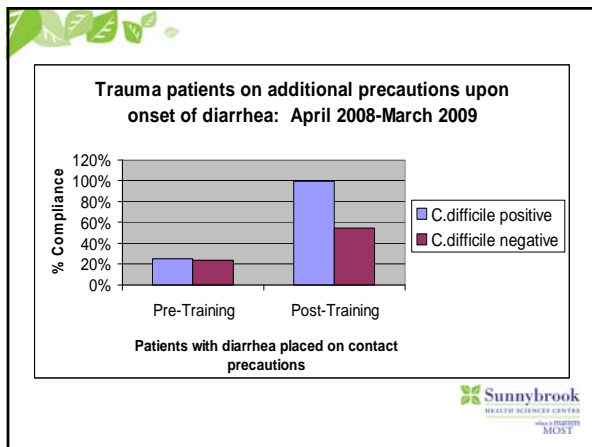


Why are Contact Precautions not initiated? – staff responses

- Waiting for lab results
- Unaware of what constitutes a suitable specimen
- Lack of appreciation for risk factors
 - E.g. "but the patient is receiving antibiotics"
- Doesn't "smell" like *C. difficile*









In Conclusion

- Post-training **all** patients that tested positive were appropriately placed on additional precautions upon symptom onset
- Post-training staff compliance with the implementation of additional precautions upon symptom onset for diarrhea increased from 18 to 60%
- Diarrhea flow chart assists the decision making process
- Staff enjoyed the interactive case scenarios


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Questions?




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Trauma Unit Compliance Rates:
April 2008-March 2009

- Additional precautions implemented for *C.difficile* positive patients:
 - Pre-training: 1 of 4 (25%)
 - Post-training: 3 of 3 (100%)
- Additional precautions implemented for patients with diarrhea testing negative:
 - Pre-training: 6 of 35 (24%)
 - Post-training: 15 of 27 (55%)



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