Attempting to Find Clarity in Chaos: A Collaborative Development of the Enteric Outbreak Binder

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Abstract

Issue: Gastroenteritis can be caused by a wide variety of bacteria and viruses. Outbreaks can impose considerable disruptions to activities and often result in ward closures. Gastroenteritis typically requires a low infectious dose and for this reason often affects both patients and staff. This causes staffing shortages on units thus incuring higher workload volumes due to outbreak measures put in place. The management of outbreaks can change daily often leaving overburdened staff confused and frustrated.

Project: Infection Prevention and Control, Public Health, Environmental Services, Volunteer Services, Risk Management, and Nursing staff collaborated to develop an Enteric Outbreak Binder to clarify interventions for suspected and confirmed outbreaks in the hospital setting. Results: The Enteric Outbreak Binder includes nine sections that outline steps to follow during suspected and confirmed outbreaks.

Results: The guideline consists of nine sections which are outlined below.

Section 1: Introduction included content regarding causative organisms, modes of transmission and a summary table for a quick reference.

Table 1: Agents Associated with Gastroenteritis Outbreaks

Section 2 included information regarding Routine Practices and Additional Precautions. Algorithms were included to help healthcare workers perform a risk assessment on their patient and type of care they were required.

Results

Section 3 included outbreak definitions for both suspected and confirmed outbreaks.

Example 1: Definitions from Section 3 of the Enteric Outbreak Binder

Suspected Gastroenteritis Outbreak Definition

A possible outbreak may exist whenever there are two cases with similar signs and symptoms in the same geographical location within a 48-hour period, with no evidence of a non-infectious cause.

Gastroenteritis Outbreak Definition

Three or more cases of infectious gastroenteritis in the same geographical location within 4 days OR 3 or more units having a case with in 46 hours.

In addition, outbreak control measures for each definition were included in this sections.

Table 2: Confirmed Outbreak Measures

Section 4 described members of the outbreak management team, duties of those members and meeting frequency during suspected and confirmed outbreaks.

In addition, sample memo to staff, signage for the unit and meeting templates were included.

Section 5 included information for patients and visitors. Such as an expectation for visiting hours and under what circumstances would units be considered “closed to visitors.”

Guidelines for patient transport within the hospital and to outside facilities was included.

Section 6 outlined Environmental Services guidelines. This included appropriate product use, a checklist for both daily and discharge cleanings and a table that outlined enhanced cleaning procedures.

Section 7 provided educational pamphlets on various causative organisms for patients and visitors.

Section 8 provided criteria and a checklist to declaring an outbreak over.

Section 9 included the resources used to develop the guideline which included:
- Ontario Public Health Laboratories, 2008
- A Guide to the control of Gastroenteritis Outbreaks in Long Term Care and Retirement Home Settings, 2008
- Various appendices from Provincial Infection Diseases Advisory Committee:
  - Best Practices for Hand Hygiene in All Health Care Settings, 2008
  - Best Practices for Environmental Cleaning for Prevention and Control of Infections, 2010
  - Best Practices For Hand Hygiene, 2009

Since the acceptance of this abstract, an additional norovirus outbreak occurred on the Complex Continuing Care Unit. The Enteric Outbreak Binder improved the communication and implementation of outbreak control measures.

Lessons Learned

1. Involvement of multiple services improved collaboration of outbreak management initiatives.
2. Development of the Enteric Outbreak Binder provided all stakeholders with a guide for implementing outbreak control measures.
3. Clear communication strengthened relationships between Infection control, various leadership teams and frontline staff.