NOROVIRUS: Infection Control Strategies in a Cruise Ship Environment

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Gastrointestinal Reporting

- Vessel Sanitation Program (VSP)
  - Cooperative program of the CDC and the cruise industry
    - Inspections food safety and environmental sanitation
    - Surveillance – Communicable Disease Prevention

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Surveillance :

- VSP Reportable Case Definition
  - Diarrhea (3 or more episodes of loose stools in a 24 hour period or what is above normal for the individual
  - Vomiting and one additional symptom including one or more episodes of loose stools in a 24 hour period, or abdominal cramps, or headache, or muscle aches or fever (temp of >or = 100.4F)
  - Special Reporting Requirements

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Infection Control: Rethinking and Reevaluating Strategy

- Administrative Controls
  - Policy and Procedural Changes
    - Preventative versus Reactive
    - Evaluation of interventions
    - Evidence based and efficacious interventions
    - Adopting Best Practices
    - Increasing Crew Awareness and Responsibility
    - Increasing Guest Awareness and Responsibility

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Infection Control: A Comprehensive Approach

- Handwashing and Hand Sanitizers
  - Guest Education Video
  - Purell Ultra Development
  - Handwash Stations, Hand Sanitizer Stations
- Environmental Issues:
  - Enhanced Ventilation Systems
  - Evaluating Sanitizing Chemicals
  - Enhanced Cleaning and Sanitizing Manpower

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HANDWASHING AND HAND SANITIZER VIDEO

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Ventilation Systems: Advanced Oxidation Cell Technology

- Proprietary Broad Spectrum UV lamp
- Quad-Metallic Hydrophilic Cell Coating
- UV light activates the Hydrated Quad-Metallic Catalyst Target creating Advanced Oxidation Products (AOP's)

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Ongoing Challenges

- Side by side comparison of surface sanitizer efficacy
- Norovirus Strain evolution
- Epidemiologic Methodology
- Guest behavior:
  - Self treatment for GI symptoms
  - Not reporting illness
  - Not washing hands

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Thank You!

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