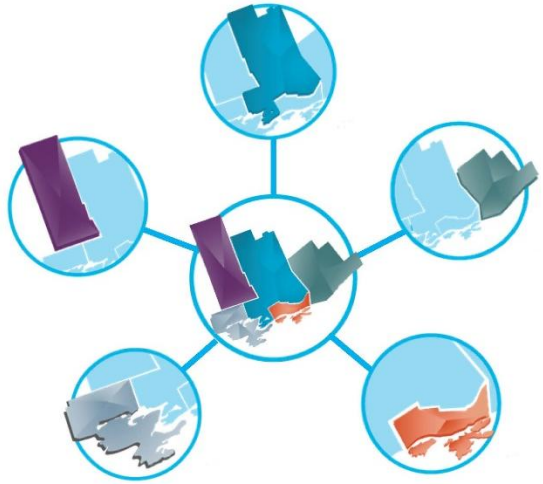
South East IPAC HUB & SPOKE



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Practice into Action:
Organisms of Significance
Virtual Workshop

SOUTH EAST IPAC HUB
NOVEMBER 6, 2025
1:30PM TO 3:00PM

Meet the SE IPAC Hub Team!

Dana Finnegan-Yee

Emily Moslinger Cancian

Alison Carvalho

Aneka Nithianandan

Agenda

Time	Topic
1:30	Introduction and Session Overview
1:40	Organisms of Significance Review
2:00	Interactive Activity
2:15	Complete Handout + Short Break
2:20	Answers/Debrief
2:45	Key Takeaways
2:50	CPE Framework
3:00	Wrap up and Session Evaluation
3:05	End of Session

Goals

- Understand common organisms of significance that are a concern
- Identify key differences and commonalities associated with organisms of significance
  - Apply risk mitigation strategies to prevent transmission

Handouts

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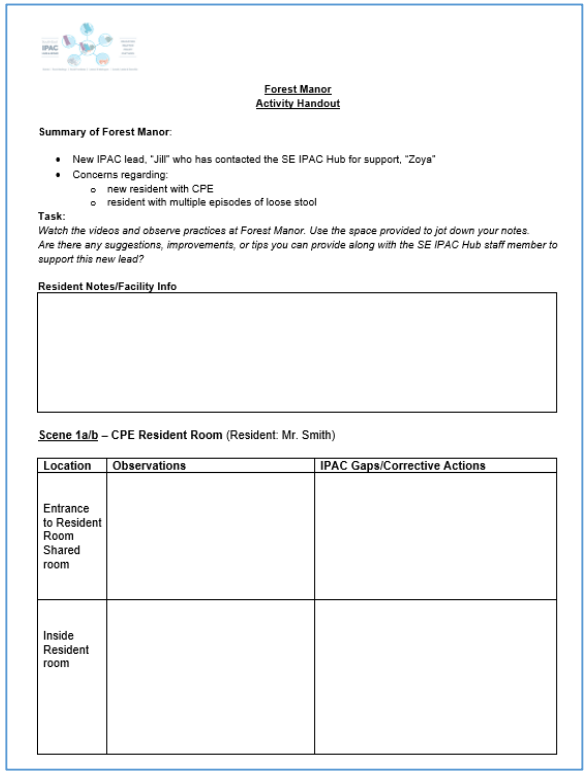
Forest Manor Activity Handout



Forest Manor
Activity Handout

Summary of Forest Manor:

- New IPAC lead, "Jill" who has contacted the SE IPAC Hub for support, "Zoya"
- Concerns regarding:
  - new resident with CPE
  - resident with multiple episodes of loose stool

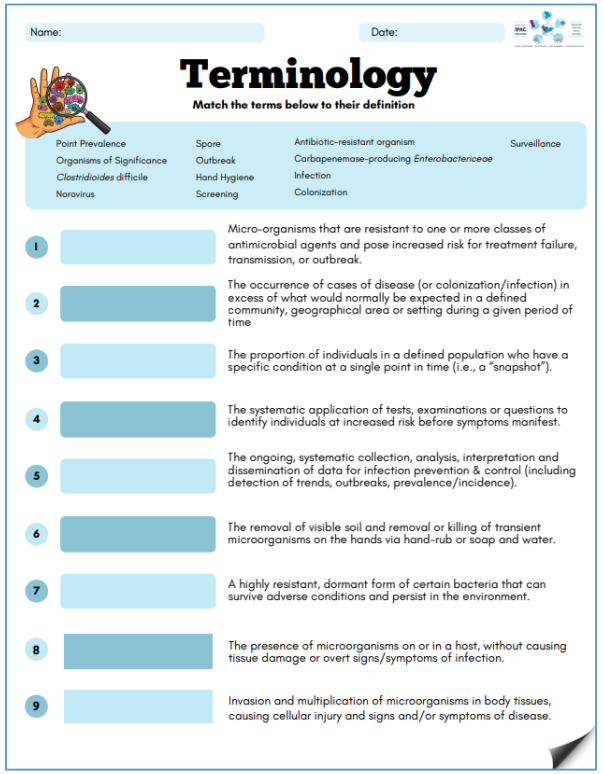
Task:
Watch the videos and observe practices at Forest Manor. Use the space provided to jot down your notes. Are there any suggestions, improvements, or tips you can provide along with the SE IPAC Hub staff member to support this new lead?

Resident Notes/Facility Info

Scene 1a/b – CPE Resident Room (Resident: Mr. Smith)

Location	Observations	IPAC Gaps/Corrective Actions
Entrance to Resident Room Shared room		
Inside Resident room		

Terminology



Name: Date:

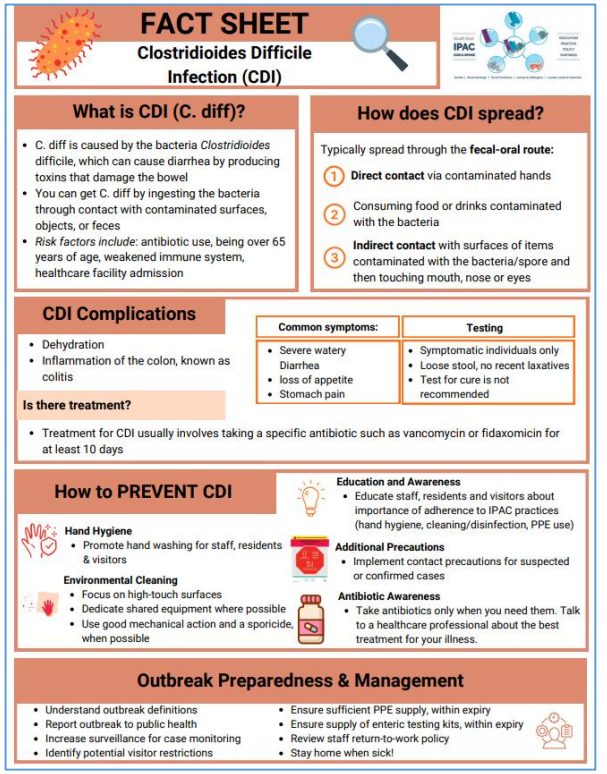
Terminology

Match the terms below to their definition

Point Prevalence | Spore | Antibiotic-resistant organism | Surveillance
Organisms of Significance | Outbreak | Carbapenemase-producing *Enterobactericeae*
Clostridioides difficile | Hand Hygiene | Infection
Norovirus | Screening | Colonization

1. Micro-organisms that are resistant to one or more classes of antimicrobial agents and pose increased risk for treatment failure, transmission, or outbreak.
2. The occurrence of cases of disease (or colonization/infection) in excess of what would normally be expected in a defined community, geographical area or setting during a given period of time
3. The proportion of individuals in a defined population who have a specific condition at a single point in time (i.e., a "snapshot").
4. The systematic application of tests, examinations or questions to identify individuals at increased risk before symptoms manifest.
5. The ongoing, systematic collection, analysis, interpretation and dissemination of data for infection prevention & control (including detection of trends, outbreaks, prevalence/incidence).
6. The removal of visible soil and removal or killing of transient microorganisms on the hands via hand-rub or soap and water.
7. A highly resistant, dormant form of certain bacteria that can survive adverse conditions and persist in the environment.
8. The presence of microorganisms on or in a host, without causing tissue damage or overt signs/symptoms of infection.
9. Invasion and multiplication of microorganisms in body tissues, causing cellular injury and signs and/or symptoms of disease.

Fact Sheets (CDI, Norovirus, MRSA, CPE)



FACT SHEET
Clostridioides Difficile Infection (CDI)

What is CDI (C. diff)?

- C. diff is caused by the bacteria *Clostridioides* difficile, which can cause diarrhea by producing toxins that damage the bowel
- You can get C. diff by ingesting the bacteria through contact with contaminated surfaces, objects, or feces
- *Risk factors include:* antibiotic use, being over 65 years of age, weakened immune system, healthcare facility admission

How does CDI spread?

Typically spread through the **fecal-oral route:**

1. **Direct contact** via contaminated hands
2. Consuming food or drinks contaminated with the bacteria
3. **Indirect contact** with surfaces of items contaminated with the bacteria/spore and then touching mouth, nose or eyes

CDI Complications

- Dehydration
- Inflammation of the colon, known as colitis

Common symptoms:	Testing
• Severe watery Diarrhea • loss of appetite • Stomach pain	• Symptomatic individuals only • Loose stool, no recent laxatives • Test for cure is not recommended

Is there treatment?

- Treatment for CDI usually involves taking a specific antibiotic such as vancomycin or fidaxomicin for at least 10 days

How to PREVENT CDI

Hand Hygiene
- Promote hand washing for staff, residents & visitors

Environmental Cleaning
- Focus on high-touch surfaces
- Dedicate shared equipment where possible
- Use good mechanical action and a sporicide, when possible

Education and Awareness
- Educate staff, residents and visitors about importance of adherence to IPAC practices (hand hygiene, cleaning/disinfection, PPE use)

Additional Precautions
- Implement contact precautions for suspected or confirmed cases

Antibiotic Awareness
- Take antibiotics only when you need them. Talk to a healthcare professional about the best treatment for your illness.

Outbreak Preparedness & Management

- Understand outbreak definitions
- Report outbreak to public health
- Increase surveillance for case monitoring
- Identify potential visitor restrictions
- Ensure sufficient PPE supply, within expiry
- Ensure supply of enteric testing kits, within expiry
- Review staff return-to-work policy
- Stay home when sick!

Terminology

Match the terms below to their definition:

Hand Hygiene Surveillance Screening

The systematic application of tests, examinations or questions to identify individuals at increased risk before symptoms manifest.

The removal of visible soil and removal or killing of transient microorganisms on the hands via hand-rub or soap and water.

The ongoing, systematic collection, analysis, interpretation and dissemination of data for infection prevention & control (including detection of trends, outbreaks, prevalence/incidence).

Terminology

Match the terms below to their definition:

Screening

Hand Hygiene

Surveillance

The systematic application of tests, examinations or questions to identify individuals at increased risk before symptoms manifest.

The removal of visible soil and removal or killing of transient microorganisms on the hands via hand-rub or soap and water.

The ongoing, systematic collection, analysis, interpretation and dissemination of data for IPAC (including detection of trends, outbreaks, prevalence/incidence).

Organisms of Significance

Micro-organisms that are of particular importance in terms of IPAC (e.g., because they are easily transmitted, cause serious disease, or are resistant).

WHAT ORGANISMS ARE SIGNIFICANT?

- Good versus Bad
- Bacteria
- Fungi
- Viruses

WHY DO THEY MATTER?

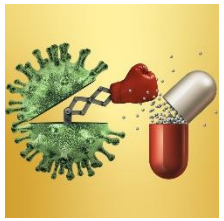
- ↑ Staff workload
- ↑ Healthcare-associated infections (HAIs)
- ↑ Outbreaks

The occurrence of cases of disease (or colonization/infection) in excess of what would normally be expected in a defined community, geographical area or setting during a given period of time

- ↑ Hospitalizations/Deaths

Word Cloud: Can you name an organism of healthcare significance?

Antibiotic-Resistant Organisms



Micro-organisms that are resistant to one or more classes of antimicrobial agents and pose increased risk for treatment failure, transmission, or outbreak.

COLONIZATION

- ✓ Bacteria present
- X **NO** signs or symptoms present

The presence of microorganisms on or in a host, without causing tissue damage or overt signs/symptoms of infection.

INFECTION

- ✓ Bacteria present
- ✓ Signs or symptoms present

Invasion and multiplication of microorganisms in body tissues, causing cellular injury and signs and/or symptoms of disease.

Methicillin-resistant *Staphylococcus aureus* (MRSA)

MRSA is a type of bacteria that is resistant to several antibiotics (including methicillin/oxacillin)

Colonization has no symptoms and individuals do not require treatment

Promote hand hygiene for staff, residents and visitors

FACT SHEET

Methicillin-Resistant Staphylococcus Aureus (MRSA)

What is MRSA?

- MRSA is a type of bacteria that is resistant to several antibiotics (including methicillin/oxacillin)
- People may be colonized (bacteria present without symptoms) or infected (bacteria present causing signs/symptoms)
- In LTC and retirement homes, MRSA most commonly causes skin and soft tissue infections (e.g., boils, abscesses, wound infections) but can also cause pneumonia or blood stream infections

How is MRSA spread?

Contact transmission is the primary route:

1. Direct contact (e.g., care activities involving the resident's skin/wounds/secretions)
2. Indirect contact via contaminated hands, shared equipment or high touch surfaces

MRSA can persist on environmental surfaces and equipment; consistent cleaning/disinfection and hand hygiene are critical

Common Signs & Symptoms

Depends on infection site:

- Skin/soft tissue: redness, warmth, swelling, tenderness, purulent drainage
- Lungs: cough, fever, shortness of breath
- Bloodstream: fever/chills, low blood pressure, systemic illness

Colonization has no symptoms. Colonized residents do **NOT** require treatment unless clinically indicated

Risk Factors

- Recent or recurrent antibiotic exposure
- Breaks in skin integrity (wounds/ulcers, invasive devices)
- Rooming in shared spaces; high care needs
- Recent hospitalization or transfer from another facility

How to Prevent Transmission

Hand Hygiene

- Promote hand washing for staff, residents & visitors

Environmental Cleaning

- daily and at discharge/transfer; ensure product has a MRSA claim and required contact time is met
- Focus on high touch surfaces and the resident care environment

Education and Awareness

- Educate staff, residents and visitors about importance of adherence to IPAC practices

Additional Precautions

- Contact Precautions for residents with MRSA infection or draining wounds that cannot be contained
- Private room preferred; otherwise, cohort with residents with the same organism/risk profile when feasible
- Dedicated or disinfect between uses for non-critical equipment

Preparedness & Management

- Early recognition of transmission (e.g., clustering of MRSA infections/colonizations)
- Antimicrobial Stewardship: use antibiotics only when clinically indicated; select narrow spectrum and shortest effective duration as per prescriber guidance
- Consider cohorting staff and residents if transmission occurs
- Review cleaning/disinfection program, PPE supplies, and specimen collection process

Contact precautions required for MRSA infections, including draining wounds that cannot be contained

Carbapenemase-Producing *Enterobacteriaceae (CPE)*

Enterobacteriaceae that produce an enzyme (carbapenemase) conferring resistance to carbapenem antibiotics; colonization or infection counts as a case.

FACT SHEET

Carbapenemase Producing Enterobacteriaceae (CPE)

What is CPE?

- Carbapenems are a class of antibiotics that are used to treat severe bacterial infections
- Carbapenamases are enzymes that inactivate carbapenems (e.g., KPC, NDM, OXA, VIM)
- Enterobacteriaceae are a group of gram-negative bacteria found primarily in the lower gastrointestinal tract, such as E.coli and Klebsiella species, which can acquire the ability to produce carbapenemases.

Why is CPE a concern?

- Individuals can be colonized with CPE for months to years, without showing symptoms, which makes it easier to spread
- CPE can transfer its resistance to other bacteria and spread outside of the GI tract causing serious infections
- CPE are difficult to treat due to their ability to inactivate many antibiotics
- Mortality in individuals with CPE infections is upwards of 50%

How does CPE spread?

Direct or **Indirect**

contact transmission through:

- Poor hand hygiene and compliance
- Inadequate cleaning of shared equipment
- Fecal-oral route (bathrooms are an area of concern)

Colonization vs Infection

How does CPE Present?

Colonization

- bacteria present
- no signs or symptoms

Infection

- bacteria present
- signs or symptoms present

NOTE: Colonized patients contribute to transmission, even without symptoms present.

Preventing CPE Transmission

Routine Practices

- Perform 4 moments of hand hygiene
- Use PPE based on risk assessment

Screening & Signage

- Implement contact precautions for confirmed or suspected cases, dedicate private room when possible
- Screen residents per policy
- Document colonization status in care plan

Environmental Cleaning

- Clean/disinfect shared equipment between every use
- Dedicate washroom/commode and reusable equipment when possible
- Do not discard bodily fluids down the sink
- Perform enhanced sink and drain cleaning routinely to disrupt biofilms
- Use products with appropriate kill claim, required contact time, and proper method for application

Reporting & IPAC Measures

CPE is reportable to your Public Health Unit.

- Reinforce hand hygiene, cleaning protocols, and ensure sufficient PPE supply available
- Consider cohorting staff and residents as directed

CPE can transfer its resistance to other bacteria and spread outside of the GI tract causing serious infections

Dedicate private room, when possible

- Dedicate washroom/commode, when possible
- Do **not** discard body fluids down the sink
- Perform enhanced sink and drain cleaning routinely to disrupt biofilms

Point Prevalence

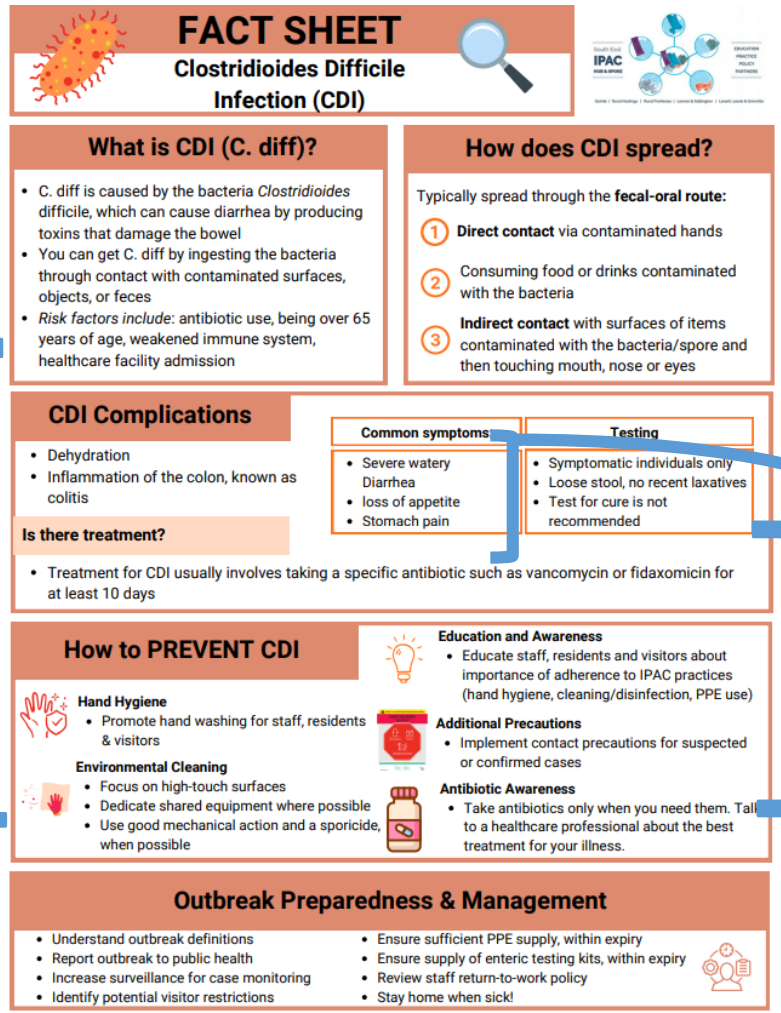
The proportion of individuals in a defined population who have a specific condition at a single point in time (i.e., a “snapshot”).

- Identifies asymptomatic carriers and support early containment of transmission
- Helps evaluate effectiveness of current IPAC measures
- Conducted under Public Health guidance when CPE is identified within a facility
- Involves coordinated screening (e.g., rectal swabs) of population

Clostridiodes difficile (CDI)

A spore-forming bacterium that causes antibiotic-associated diarrhea and colitis; capable of surviving in the environment via spores.

Risk factors include: antibiotic use, being 65+ years of age, weakened immune system, healthcare facility admission



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- You can get C. diff by ingesting the bacteria through contact with contaminated surfaces, objects, or feces
- *Risk factors include*: antibiotic use, being over 65 years of age, weakened immune system, healthcare facility admission

How does CDI spread?

Typically spread through the **fecal-oral route:**

1. **Direct contact** via contaminated hands
2. Consuming food or drinks contaminated with the bacteria
3. **Indirect contact** with surfaces of items contaminated with the bacteria/spore and then touching mouth, nose or eyes

CDI Complications

- Dehydration
- Inflammation of the colon, known as colitis

Common symptoms	Testing
• Severe watery Diarrhea • loss of appetite • Stomach pain	• Symptomatic individuals only • Loose stool, no recent laxatives • Test for cure is not recommended

Is there treatment?

- Treatment for CDI usually involves taking a specific antibiotic such as vancomycin or fidaxomicin for at least 10 days

How to PREVENT CDI

Hand Hygiene
- Promote hand washing for staff, residents & visitors

Environmental Cleaning
- Focus on high-touch surfaces
- Dedicate shared equipment where possible
- Use good mechanical action and a sporicide, when possible

Education and Awareness
- Educate staff, residents and visitors about importance of adherence to IPAC practices (hand hygiene, cleaning/disinfection, PPE use)

Additional Precautions
- Implement contact precautions for suspected or confirmed cases

Antibiotic Awareness
- Take antibiotics only when you need them. Talk to a healthcare professional about the best treatment for your illness.

Outbreak Preparedness & Management

- Understand outbreak definitions
- Report outbreak to public health
- Increase surveillance for case monitoring
- Identify potential visitor restrictions
- Ensure sufficient PPE supply, within expiry
- Ensure supply of enteric testing kits, within expiry
- Review staff return-to-work policy
- Stay home when sick!

Common symptoms: severe watery diarrhea, loss of appetite, stomach pain

- Only test symptomatic individuals
- Test for cure not recommended

Use good mechanical action and a sporicide, if possible

Take antibiotics only when you need them

Spores

A highly resistant, dormant form of certain bacteria that can survive adverse conditions and persist in the environment.

- Dormant, resistant forms of certain bacteria (e.g., C.diff)
- Can persist on surfaces for months
- Allow survival in harsh environments (e.g., heat, disinfectants, drying)
- Difficult to eliminate with routine cleaning products
  - Use a sporicidal disinfectant, if possible, and always good mechanical action

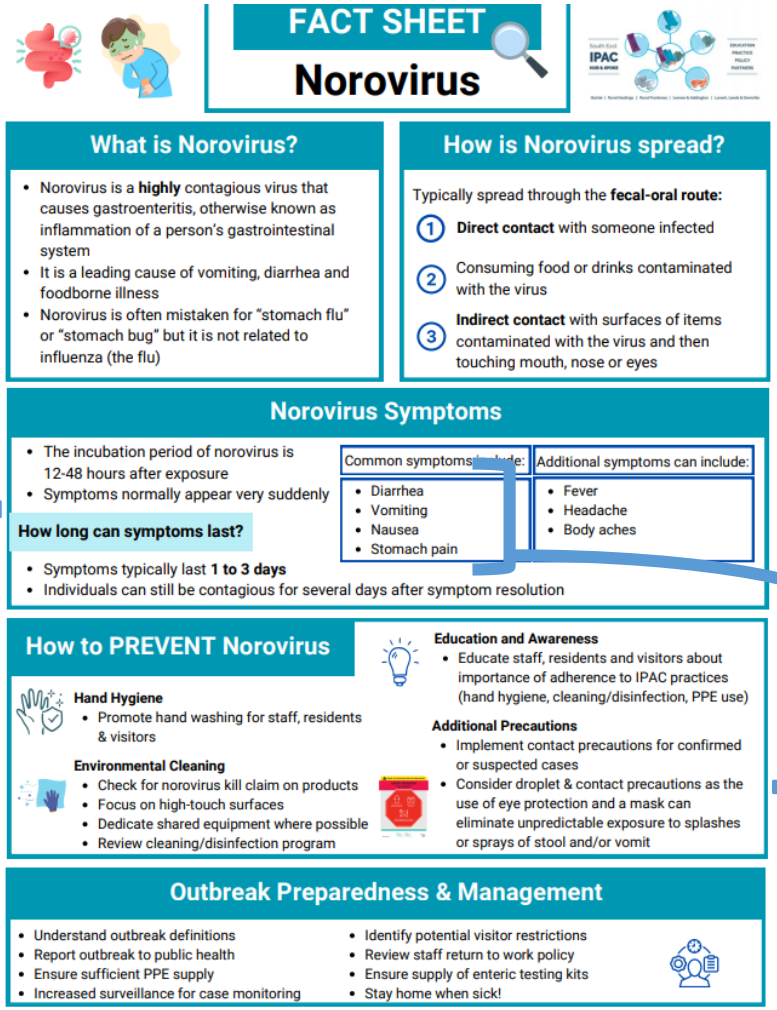
Norovirus

A highly contagious virus causing acute gastroenteritis, often in institutional settings with rapid spread via person-to-person, food, environmental contamination.

Highly contagious, inflammation of gastrointestinal system

Symptoms normally appear very suddenly

Check for ‘norovirus’ kill claim
Focus on high touch surfaces
Dedicate equipment, when possible



FACT SHEET

Norovirus

What is Norovirus?

- Norovirus is a **highly** contagious virus that causes gastroenteritis, otherwise known as inflammation of a person’s gastrointestinal system
- It is a leading cause of vomiting, diarrhea and foodborne illness
- Norovirus is often mistaken for “stomach flu” or “stomach bug” but it is not related to influenza (the flu)

How is Norovirus spread?

Typically spread through the **fecal-oral route:**

1. **Direct contact** with someone infected
2. Consuming food or drinks contaminated with the virus
3. **Indirect contact** with surfaces of items contaminated with the virus and then touching mouth, nose or eyes

Norovirus Symptoms

- The incubation period of norovirus is 12-48 hours after exposure
- Symptoms normally appear very suddenly

Common symptoms include:	Additional symptoms can include:
• Diarrhea • Vomiting • Nausea • Stomach pain	• Fever • Headache • Body aches

How long can symptoms last?

- Symptoms typically last **1 to 3 days**
- Individuals can still be contagious for several days after symptom resolution

How to PREVENT Norovirus

Hand Hygiene
- Promote hand washing for staff, residents & visitors

Environmental Cleaning
- Check for norovirus kill claim on products
- Focus on high-touch surfaces
- Dedicate shared equipment where possible
- Review cleaning/disinfection program

Education and Awareness
- Educate staff, residents and visitors about importance of adherence to IPAC practices (hand hygiene, cleaning/disinfection, PPE use)

Additional Precautions
- Implement contact precautions for confirmed or suspected cases
- Consider droplet & contact precautions as the use of eye protection and a mask can eliminate unpredictable exposure to splashes or sprays of stool and/or vomit

Outbreak Preparedness & Management

- Understand outbreak definitions
- Report outbreak to public health
- Ensure sufficient PPE supply
- Increased surveillance for case monitoring
- Identify potential visitor restrictions
- Review staff return to work policy
- Ensure supply of enteric testing kits
- Stay home when sick!

Common symptoms: diarrhea, vomiting, nausea, stomach pain

Consider droplet & contact precautions as the use of eye protection and a mask can eliminate unpredictable exposure to splashes or sprays of stool and/or vomit

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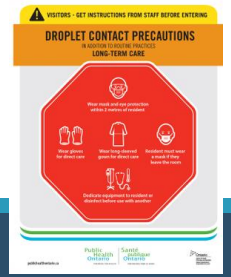
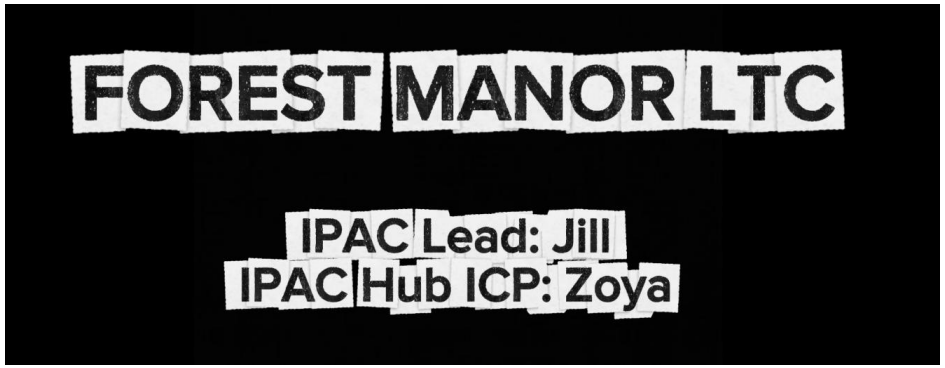


Activity:
Listen, Record & Observe, Determine



Forest Manor Activity Handout

- **Listen** to video scenarios at Forest Manor
- **Record** resident history and **Observe** key details
- **Determine** corrective actions/IPAC gaps and suggest corrective actions

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Complete Handout & Short Break

Forest Manor Review

ACTIVITY SHEET ANSWER KEY

Scene 1 – Mr. Smith (CPE)

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1a

1b

1c

Mr. Smith's Room (1a)

Location	Observations	IPAC Gaps/Corrective Actions
Entrance to Resident Room Shared room	*ABHR was empty on entrance *Lid on disinfectant wipes was open *Disinfectant wipes date was expired *don/doff signage missing *Sign for droplet precautions was posted	GAP 1 – ABHR needs attention – ensure expiry is routinely checked and restocked as needed – **NOT** refilled (as lead stated) GAP 2 – Disinfectant wipes – expiry dates need to be routinely checked and lids must remain closed so wipes do not dry out and can meet proper contact time GAP 3 – Very important to have instructions for donning and doffing PPE signage – no instructional signage was posted GAP 4 – Droplet precautions was posted for the CPE positive resident. CPE requires contact precautions. Ensure route of transmission is understood and wear appropriate PPE that is recommended. Overuse of PPE can lead to fatigue and misuse.

Mr. Smith's Room (1b)

Location	Observations	IPAC Gaps/Corrective Actions
Inside Resident room	*how do staff/visitors know which resident/bed is on additional precautions *Resident beds are very close together *bedside table very cluttered *Zorbie bag with contamination present (urine/feces) near food and cups on table *Incontinence brief contaminated on bed *who cleans up spills/briefs/contamination in room – how frequent	GAP 1 – CPE positive resident in a shared room is less than ideal especially with a very small room and bed space – Consideration should be given to finding a private room for the CPE resident or ensuring more separation is provided to prevent transmission GAP 2 – The additional precautions sign (should be contact precautions) needs to be placed in order to ensure staff/visitors know which resident is on precautions so PPE can be used accordingly – consider different side of door or label as resident A and B, etc. GAP 3 – Ensure clutter is reduced to facilitate proper cleaning and disinfection GAP 4 – Ensure no contamination – briefs, Zorbie bags, etc. – are left unattended or not disposed of properly – ensure roles are clearly understood on responsibilities of cleaning and disinfection practices. Additional cleaning/disinfection of high touch surfaces should be considered

Mr. Smith's Washroom (1c)

Location	Observations	IPAC Gaps/Corrective Actions
Inside Resident Shared washroom	*shared washroom – commode in washroom – both residents use the toilet and commode *commode is emptied into the toilet and sink *both resident use the sink for hand hygiene, for brushing teeth *cleaning frequency is once per week	GAP 1 – Shared washroom is problematic and will foster potential transmission – if the residents must share a washroom there must be a strategy put in place to dedicate the toilet and commode and prevent the positive resident from sharing with the roommate GAP 2 – Commode management – the commode pot must not be dumped into the toilet or sink in the washroom – this is hazardous and can promote transmission of many organisms – use of a washer/disinfector or line the commode pot with Zorbie bags or take the commode pot to an area with a proper SOP for cleaning and disinfection GAP 3 – Sharing a contaminated sink can be a source of transmission – Consider alternatives to prevent sharing or ensure additional cleaning disinfection takes place and ensure no commode pots or other contamination is dumped into the sink GAP 4 – Additional cleaning and disinfection is required – attention to sinks and drains is very important for CPE positive resident rooms – Ensure an SOP is developed for EVS staff to adhere to for CPE resident washrooms

Let’s take a quick pause

Scene 2 – Mr. Adams (loose stool)

2a

2b

2b

Mr. Adam's Room (2a)

Location	Observations	IPAC Gaps/Corrective Actions
Inside Resident Private Room	*Resident having multiple loose stools *Resident complaints of ABD Pain *Resident has chronic UTIs *Resident has multiple antibiotic bottles on bed side table *Resident had a hospital admission last week for 5 days and was treated for pneumonia	GAP 1 – Resident is high risk for CDI – due to recent hospital admission and multiple antibiotic treatment for UTIs and pneumonia – ENSURE a stool specimen is collected and sent for testing GAP 2 – Consider consulting pharmacist to review Antibiotic use in the facility – if residents are on multiple antibiotics or switched without proper protocol can lead to issues – Consider ASP for facility

Mr. Adam's Washroom (2b)

Location	Observations	IPAC Gaps/Corrective Actions
Inside Resident Private washroom	*Glove box on sink counter *Gloves on counter *clutter in washroom *staff use resident washroom sink for HH *Disinfectant is a Quat *No sporicide *Quat is expired *Disinfectant bottle is refilled *trigger spray in use *Microfibre cloths in use *Microfibre cloths re-used *Microfibre cloths stored in washroom *cleaning frequency low – once per week *Fecal matter on toilet seat *Contaminated brush/plunger	GAP 1 – Glove box and gloves in washroom on counter are contaminated – Consider glove box holder and proper storage GAP 2 – washroom is cluttered – ensure clutter is removed to support good cleaning and disinfection practices GAP 3 – Staff should not use the resident sink for hand hygiene, If gloves need to be changed then ABHR should be used after glove removal/prior to donning new gloves, Staff hand hygiene should only be performed in a dedicated hand hygiene sink GAP 4 – Disinfectant product has a few issues – trigger spray in use – Ensure trigger nozzle is removed and replaced with a pour top cap GAP 5 – Disinfectant is expired – Ensure all product expiry dates are checked and replaced if product is expiring GAP 6 – Disinfectant is a QUAT – Quats have a few issues – long contact times – typically 10 minutes – Quats are not compatible with microfiber (or cotton etc) as the chemical will bind with the cloth and no disinfectant will be applied to the surface for proper disinfection – this is known as QUAT binding

Mr. Adam's Washroom (2b)

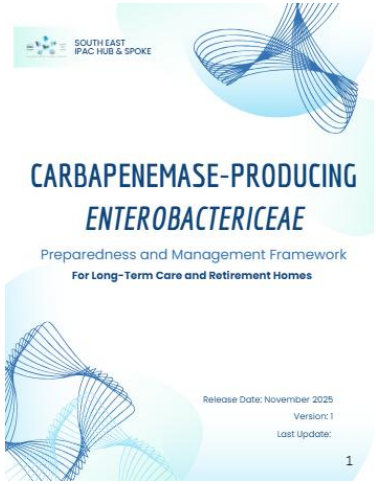
Location	Observations	IPAC Gaps/Corrective Actions
Inside Resident Private washroom	*Glove box on sink counter *Gloves on counter *clutter in washroom *staff use resident washroom sink for HH *Disinfectant is a Quat *No sporicide *Quat is expired *Disinfectant bottle is refilled *trigger spray in use *Microfibre cloths in use *Microfibre cloths re-used *Microfibre cloths stored in washroom *cleaning frequency low – once per week *Fecal matter on toilet seat *Contaminated brush/plunger	GAP 7 – Disinfectant is not sporicidal – Consider sporicidal products for CDI issues – if a sporicidal product is not available then additional education on spores and cleaning/disinfection should take place – Remind staff of the importance of mechanical action to remove the spores from the environment and then follow up with a proper disinfectant GAP 8 – Microfibre cloths stored in the washroom and reused – Ensure clean items are not stored in contaminated locations – do not reuse contaminated cloths for cleaning and disinfection purposes GAP 9 – Double bag briefs for odor control and to minimize transmission and use garbage can (consider hands-free option) GAP 10 – For CDI increased cleaning frequency is recommended – Fecal matter is present on the toilet seat – high levels of contamination are present - Consider additional cleaning/disinfection of this space GAP 11 – Items such as plungers/toilet brushes can contribute to additional contamination and hinder cleaning/disinfection practices – consider single use items or have proper disinfection protocols in place

Additional Findings

Key Takeaways

Theme	MRSA	Norovirus	C. difficile (CDI)	CPE	Commonality
Precautions		 			Routine practices + additional precautions
Hand Hygiene					Consistent hand hygiene, especially healthcare worker hands Encourage and support residents with hand hygiene
Environmental Persistence	Days to weeks	Days to weeks	Months	Weeks to months	All pathogens can survive on surfaces → adherence to appropriate cleaning/disinfection
Environmental Cleaning	Healthcare-grade disinfectant with MRSA claim	Virucidal product with norovirus claim	Sporicidal preferred	Product with appropriate kill claim	All need daily high touch cleaning; product must match pathogen type and use good mechanical action

CPE Framework



PREVENT, DETECT, PROTECT

Mitigating Carbapenemase-Producing *Enterobactericeae* Risk in Congregate Living Settings

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Background

Carbapenemase-Producing *Enterobacteracieae* (CPE) are a type of antibiotic-resistant organism (ARO) that have become endemic in Ontario. CPE pose a significant public health concern due to their antibiotic resistance patterns, high transmissibility and their versatility to cause a number of different infection types (UTI, pneumonia, BSI, SSI etc.). CPE is associated with increased mortality, longer hospital stays, and higher healthcare costs, particularly in congregate living settings (CLSs).

With the prevalence of CPE increasing in Ontario, it is important for Infection Prevention and Control (IPAC) Leads in these settings to effectively prepare to manage cases to mitigate transmission through application of best practice management strategies.

Objectives

- Identify the need for CPE-related support within long-term care (LTC) and retirement homes (RH) in the South East (SE) region
- Produce a supportive framework document for implementing best practice recommendations for **CPE Preparedness and Management**

Methodology

- Conduct a survey amongst IPAC Leads in LTC and RH settings to identify CPE preparedness and management needs
- Develop **CPE Preparedness and Management Framework** *[Figure 5]*
- Create a CPE Working Group, including members from acute care, LTC, RH and Public Health, to refine the **CPE Preparedness and Management Framework**

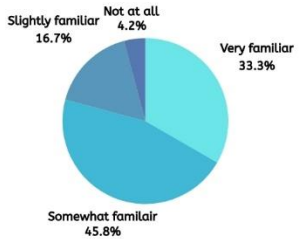

Figure 1. IPAC Lead Awareness of CPE.

Figure 3. Percentage of Facilities with a CPE Screening Policy or Procedure.

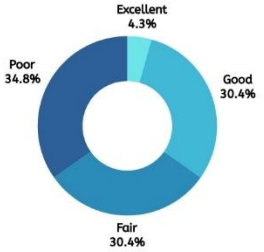

Figure 2. Rating of Facility Preparedness.

Figure 4. Identified Areas of Need for Improved CPE Management and Preparedness.

Results

- IPAC Leads were somewhat or very familiar (**79.1%**) with CPE *[Figure 1]*
- Front-line staff overall awareness of CPE transmission, risk and management was rated fair to good (**60.8%**) *[Figure 2]*, but **35%** chose poor awareness
- CPE screening policies were absent from **57%** of facilities *[Figure 3]*
- Identified areas of need for improvement for CPE management and preparedness included additional staff training and education (**39%**), development of clearer policies and procedures (**27%**), risk-assessment tools (**15%**), and additional support from external agencies (**10%**) to support consistent CPE management *[Figure 4]*

CPE Preparedness and Management Framework

- Conduct an organizational risk assessment
- Establish Leadership and Secure Resources
- Develop Policies and Procedures
- Initiative Additional Precautions / Outbreak Management
- Implement Surveillance and Monitoring
- Review Hand Hygiene Program
- Review Enviromental Cleaning & Disinfection Procedures
- Identify Key Communications
- Provide Education

Figure 5. CPE Preparedness and Management Framework.
Ten sections were developed based on survey results and input from the CPE Working Group.

Discussion

As hospitals become more diligent with CPE screening, CLSs should align supportive practices for early detection and management to mitigate further transmission within high-risk settings. More often than not, LTCs and RHs did not have an established CPE program and were unprepared to manage positive CPE-cases from acute care settings.

The proposed framework was reviewed by the CPE Working Group consisting of IPAC Leads within LTC and RH, public health professionals, and acute care IPAC practitioners and a final product was developed. Throughout the results, needs for clear CPE-related policies, standardized risk assessment tools and enhanced staff education were identified. The proposed document includes CPE Working Group feedback and will guide IPAC Leads and their multidisciplinary teams (MDTs) through its implementation by facilitating CPE preparedness and management and provide tailored practices to fit facility-specific needs.

Introduction or review of existing antimicrobial stewardship program was proposed as a part of the framework but with CPE Working Group feedback, it was noted that antimicrobial stewardship requires a developed foundation to support new quality initiatives and therefore was included as an optional section of the framework.

Conclusion

The South East IPAC Hub collaboratively developed and refined a **CPE Preparedness and Management Framework** for CLSs, providing a structured, regionally tailored approach to enhance readiness and response capacity. This framework improves alignment across facilities, consolidates references and establishes a foundation for consistent prevention, detection, and management of CPE across the South East region.

Next steps include promotion through virtual events, one-on-ones with IPAC Leads and through printed advertising, followed by a post-implementation survey with potential to be scaled across Ontario.

Acknowledgements

The resource is the product of a collaborative effort led by the dedicated members of our ***CPE Working Group***, whose clinical expertise and strategic insight were instrumental in shaping its content and refining the **CPE Preparedness and Management Framework.**

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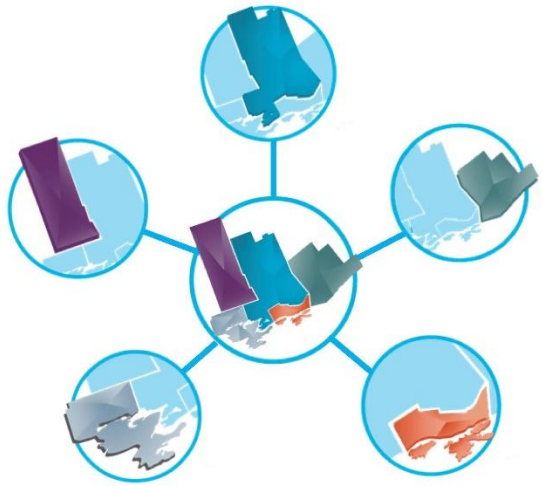

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Thank you!

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