VOL. 2 ISSUE 2 · MAY 2023

GREY BRUCE IPAC HUB

Official Newsletter of the Grey Bruce IPAC Hub

Grey Bruce Public Health

What is the Grey Bruce IPAC Hub?

The Grey Bruce IPAC Hub has secured funding for the 2023-24 fiscal year; this will allow the hub to continue our partnerships with community based congregate living settings across Grey and Bruce counties, including:

- Long-term care homes (Public and Private)
- Retirement homes
- Residential settings funded by the Ministry of Health (MOH)
- Residential settings for adults and children funded by Ministry of Children, Community and Social Services (MCCSS)
- Shelters
- Supportive housing

Who is here to support you?

The hub is comprised of two infection control professionals Adel Coulter, RPN,CIC and Krista Witzke, RN BScN and our Public Health Physician Consultant, Dr. Rim Zayed.

What Services Do We Proivde?

The role of the IPAC Hubs is to provide ongoing support, guidance and IPAC expertise to congregate living settings.

- Provide education and training
- Support the development of IPAC programs, policy and procedures
- Support assessments and audits of IPAC programs and practice
- Provide recommendations to strengthen IPAC programs and practices
- Provide mentoring of IPAC service delivery within homes
- Development of outbreak management plans
- Support implementation of IPAC recommendations
- On-site proactive IPAC assessments
- Support or develop community/ies of practice to support information sharing, learning and networking among IPAC leaders within congregate living settings

This issue:

Website: www.greybruceipachub.ca

Contact: 519-376-9420

Email: ipachub@publichealthgreybruce.on.ca

Monthly Networking, and Education Meetings

The purpose of these monthly meetings is to provide an opportunity for staff working in the role of Infection Prevention and Control (IPAC) in a congregate living organisation to come together with their peers to build linkages, develop relationships and build trust between each other to facilitate the timely flow of knowledge, resources and expertise, in collaboration with the Grey Bruce IPAC Hub and Grey Bruce Public Health Infectious Disease Team.

- Long Term Care IPAC Leads - (2nd Wednesday of every month at 0900am)
- Retirement Home IPAC Meeting - (2nd Wednesday of every month at 1030am)
- Congregate Living - (1st Tuesday of every month at 1000am)
- Partner Drop-in Hour - (2nd Tuesday of every month at 0930am)

Contact ipachub@publichealthgreybruce.on.ca for further details or to be added to the meeting.

Extended-spectrum beta-lactamases (ESBLs).

Enterobacterales are a large order of different types of bacteria (germs) that commonly cause infections both in healthcare settings and in communities. Examples incldue: E.Coli and Klebsiella. pneumoniae.
To survive the effects of antibiotics, germs are constantly finding new defense strategies, called “resistance mechanisms.” For example, some Enterobacterales can produce enzymes called extended-spectrum beta-lactamases (ESBLs). ESBL enzymes break down and destroy some commonly used antibiotics, including penicillins and cephalosporins, and make these drugs ineffective for treating infections.
Risk Factors:
These infections most commonly occur in people with exposure to healthcare, including those in hospitals and nursing homes. However, unlike many other resistant germs, ESBL-producing Enterobacterales can also cause infections in otherwise healthy people who have not been recently been in healthcare settings. In healthy people, this often means urinary tract infections.
Transmission:
they can be spread from one person to another in healthcare settings through contaminated hands and surfaces. Outside the United States, they can be spread to people through contaminated food or water. The role of food and water in the spread of these germs in the United States is not clear.
Treatment:
Infections caused by ESBL-producing germs are treated with antibiotics, but because they are resistant to many commonly prescribed antibiotics, treatment options might be limited. People with these infections sometimes need to be hospitalized for treatment with IV antibiotics. Carbapenem antibiotics, which are typically reserved for highly resistant infections, are often used to treat serious ESBL-producing Enterobacterales infections.

CDC
ESBL-producing Enterobacterales | HAI
cdc.gov

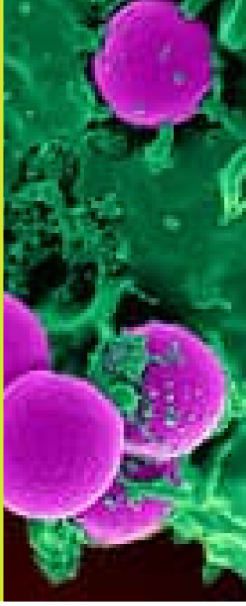
Antibiotic Resistant Organisms (AROs)

Antimicrobial resistance happens when germs like bacteria and fungi develop the ability to defeat the drugs designed to kill them. That means the germs are not killed and continue to grow. Resistant infections can be difficult, and sometimes impossible, to treat.

Early interventions that focus on preventing cross-transmission have been shown to have a greater relative impact in controlling ARO's and preventing endemicity in a facility than other control measures.

Program includes:

- Education
- Surveillance (early identification)
- Routine Practices and control measures.
- Antibiotic Stewardship Programs
- Hand Hygiene Program
- Auditing



Public Health Ontario Interventions for the Prevention and Control of AROs

NOTE: Interventions listed in this table are in addition to Routine Practices

Element	MRSA	VRE	CPE	ESBL[55, 173]
Patient Risk Factors	▪ 12 hours in any health care facility in past 12 months ▪ Health care in another country		▪ Previously colonized or infected with CPE ▪ Receipt of care in a hospital on the U.S. eastern seaboard region (e.g., New York City) in the past 12 months ▪ Receipt of care in a hospital in Greece, Israel or the Indian subcontinent in the past 12 months ▪ Receipt of care in any hospital that has reported transmission of CPE ▪ Contact of a known case of CPE	▪ Previously colonized or infected with ESBL ▪ Antibiotic treatment, especially β-lactams or fluoroquinolones ▪ ICU stay/prolonged hospital stay ▪ Indwelling catheters ▪ Increased severity of illness (e.g., TPN recipient, neutopenia, neonate) ▪ Transplant recipient ▪ Patients exposed to a facility with an ESBL outbreak ▪ Household contact of patient with ESBL
	▪ Previously colonized or infected with MRSA ▪ Exposure to a unit/area with an MRSA outbreak ▪ Indwelling device present ▪ ICU, burn or transplant unit ▪ Communal setting ▪ Injection drug use ▪ Immunocompromised ▪ Household contact of patient with MRSA ▪ CA-MRSA risk (e.g., sports team)	▪ Previously colonized or infected with VRE ▪ Exposure to a unit/area with a VRE outbreak ▪ Recent exposure to 2nd - or third -generation cephalosporins		
Discontinuation of Contact Precautions	▪ 3 negative cultures taken at least one week apart if decolonization has been successful ▪ **In LTC**, 3 negative cultures taken at least one week apart	▪ Minimum 3 successive negative cultures with at least one culture taken three months after the last positive culture	▪ Contact Precautions for duration of acute care hospitalization ▪ Only discontinue after consultation with infection prevention and control ▪ Discontinue Contact Precautions for patients with risk factors or contacts when screening is complete; if not feasible, discontinue precautions if negative at least 7 days after last exposure, but continue screening until complete.	▪ If Contact Precautions are initiated based on facility's ESBL program, continue precautions for duration of acute care hospitalization ▪ For non-acute care settings, negative results from all colonized/infected body sites (e.g., 3 consecutive negative cultures taken at least one week apart) in the absence of antibiotic therapy[165, 173]

References: aros-screening-testing-surveillance.pdf (publichealthontario.ca)

Antibiotic Stewardship

Stewardship is defined as "the careful and responsible management of something entrusted to one's care". The effort to measure and improve how antibiotics are prescribed by clinicians and used by patients / residents. Antibiotic stewardship programs have been developed to address the increasing rates of antibiotic resistance.

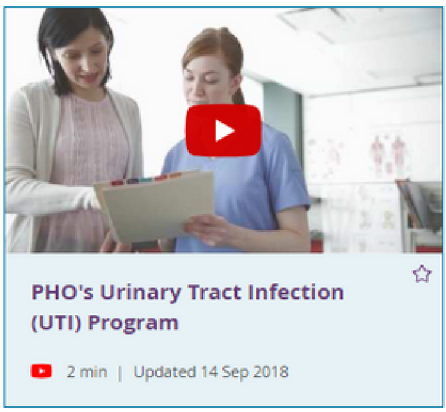
The elements of a successful antibiotic stewardship program include:

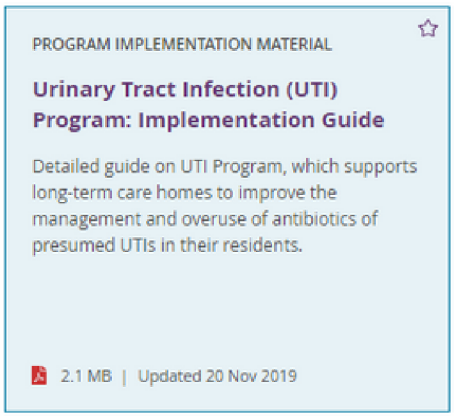
- prospective audit of antimicrobial use with direct interaction and feedback to the prescriber, performed by either an infectious diseases physician or a clinical pharmacist with infectious diseases training
- formulary restriction and preauthorization requirements
- education aimed at influencing prescribing behavior
- multidisciplinary development of evidence-based practice guidelines incorporating local microbiology and resistance patterns
- use of antimicrobial order forms
- streamlining or de-escalation of empirical antimicrobial therapy on the basis of culture results and the elimination of redundant combination therapy
- optimization of antimicrobial dosing based on individual patient characteristics, causative microorganism, site of infection and pharmacokinetic and pharmacodynamic characteristics of the drug
- a systematic plan for parenteral to oral conversion of antimicrobials with excellent bioavailability, when the patient's condition allows, based on clinical criteria and guidelines
- availability of health care information in the form of electronic medical records and clinical decision support
- computer-based surveillance that tracks antimicrobial resistance patterns, identification of nosocomial infections and adverse drug events
- provision of patient-specific culture and susceptibility data by the microbiology laboratory
- monitoring of process and outcome measures.

Refer to Public Health Ontario's website for information on developing an ASP program in your facility: http://www.oahpp.ca/services/antimicrobial-stewardship-program.html.

Urinary Tract Infection (UTI) Program

Public Health Ontario | Santé publique Ontario





Public Health Ontario has many great resources to assist homes in the development of UTI and antibiotic stewardship programs.

Visit PHO at: Urinary Tract Infection Program | Public Health Ontario

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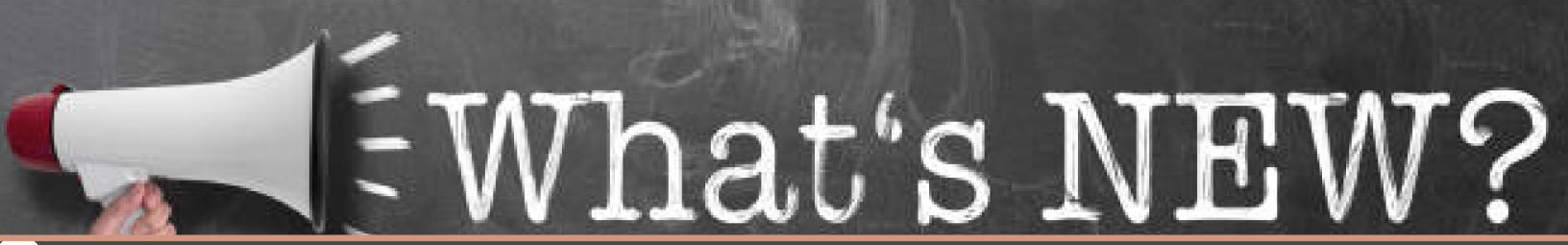

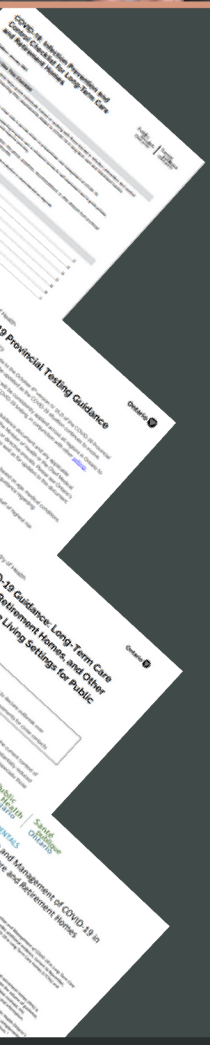

New / Updated Documents

Updates to current guidance and development of new documents continues across our Ministries and Public Health Ontario. Keep update by visiting their websites frequently.

- COVID-19 Guidance: Long-Term Care Homes, Retirement Homes, and Other Congregate Living Settings for Public Health Units.
  https://www.health.gov.on.ca/en/pro/programs/publichealth/coronavirus/docs/LTCH_RH_guidance_PHU.pdf

- Ministry for Seniors and Accessibility COVID-19 Guidance Document for Retirement Homes in Ontario
  https://www.rhra.ca/wp-content/uploads/2023/03/MSAA-COVID-19-Guidance-for-RH-V3-March-2023-FINAL-1.pdf

- COVID-19 Guidance Document for Long Term Care Homes in Ontario
  https://www.health.gov.on.ca/en/pro/programs/publichealth/coronavirus/docs/contact_mngmt/management_cases_contacts.pdf

- Management of Cases and Contacts of COVID-19 in Ontario
  www.health.gov.on.ca/en/pro/programs/publichealth/coronavirus/docs/LTCH_RH_guidance_PHU.pdf

Ontario Respiratory Pathogen Bulletin

Public Health Ontario (PHO) monitors and analyzes the spread and intensity of respiratory pathogen activity and influenza in Ontario to support local, provincial, federal and global surveillance efforts.
A weekly summary is posted here: www.publichealthontario.ca/en/data-and-analysis/infectious-disease/respiratory-pathogens-weekly
Click Here!

Public Health Ontario | Santé publique Ontario

Upcoming Events and Newsletters

IPAC Canada National Conference May 28-31, 2023 (Live in Vancouver or Virtual)

Save Lives Clean Your Hands Day May 5 2023

IPAC SWO - Education Day June 22, 2023 at Boler Mountain, London ON (registration to follow)

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