



Protecting Albertans. Preventing infections. Together.

2024/2025 Alberta Health Services
Infection Prevention and Control
Annual Report to Alberta Health

The 2024/2025 Alberta Health Services Infection Prevention and Control Annual Report to Alberta Health is prepared and submitted in accordance with the requirements set out in the Alberta Health [Standards for Infection Prevention and Control – Accountability and Reporting \(2011\)](#).

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Executive Summary

The Alberta Health [Standards for Infection Prevention and Control – Accountability and Reporting \(2011\)](#) requires the Alberta Health Services (AHS) Infection Prevention and Control (IPC) program and its partners submit an annual report on its outcomes and activities. The term “AHS IPC” used in this report includes Covenant Health IPC unless specifically stated otherwise.

This report reflects AHS IPC commitment to prevent and control healthcare-associated infections across care settings including acute care, addiction and mental health, ambulatory care, cancer care, community care, continuing care, correctional care and emergency medical care. AHS IPC works to reduce infection related delays and interruptions across the care continuum.

This report focuses on various activities and initiatives completed in the 2024/2025 fiscal year.



IPC Practice in Clinical Settings

This fiscal year marked the ten-year anniversary of the AHS IPC Hand Hygiene Program and a decade of working together to promote hand hygiene. In 2024/2025, AHS hand hygiene compliance was 88.2 per cent and Covenant Health hand hygiene compliance was 94.1 per cent. In 2024/2025 there were a total of 431,093 hand hygiene observations - a 12.8 per cent increase since 2023/2024.

In 2024/2025, the AHS Provincial Personal Protective Equipment Safety Coach Program converted from requiring an in-person competency check to a fully self-directed model resulting in more efficient training for safety coaches.

In response to increased measles activity globally and locally within Alberta, AHS IPC developed several resources to support staff with the identification and management of suspect and confirmed measles patients and revised its Connect Care communicable disease screening tool to support frontline practice. AHS Emergency Medical Services and AHS IPC continued to work together on initiatives to reduce emergency services response times. For example, together these two programs worked to align pre-hospital measles screening practices with those in Connect Care.

Outbreaks due to viral respiratory illness continue to be dominant drivers of workload in both acute care and continuing care with 354 and 1,107 outbreaks, respectively, in 2024/2025. In continuing care and congregate living, AHS IPC conducted 425 initial outbreaks and 175 additional in-person reviews. In 2024/2025, 169 designates graduated from the IPC Designate Education Program.

Since the launch of the program 208 designates from continuing care have graduated with one or more designates in 180 facilities across all zones.

AHS IPC continues to support safe surgical care through its IPC Alberta Surgical Initiative Team.

The AHS IPC Laboratory continued to support the evaluation of environmental aspects of healthcare-associated infections and the Centre for Antimicrobial Resistance continued to support the evaluation of antimicrobial-resistant organisms through several projects.



Accountability and Monitoring

Cycle 5 medical device reprocessing reviews commenced in July 2024 as part of a scheduled review cycle for sites reprocessing reusable critical and semi-critical medical devices. Reviews evaluate compliance with the Alberta Health [*Reusable & Single-use Medical Devices Standards: Standards for the reprocessing of reusable medical devices and for the use of single-use medical devices in all health care facilities and settings \(2019\)*](#).

In 2024/2025, 12 joint reviews of chartered surgical facilities with the College of Dental Surgeons of Alberta and the College of Physicians and Surgeons of Alberta were completed with a noted 94.6 per cent compliance.

The Accreditation Canada Spring and Fall 2024 Survey Visits focused on the assessment of compliance with clinical and foundational standards. Noted themes for areas of improvement included hand hygiene compliance, availability of hand hygiene sinks and signage, environmental and equipment cleaning, clutter in rooms and hallways and sharing surveillance data findings. If required organizational practices are unmet, the site or program develops an action plan to address the unmet items.



Province Wide Surveillance

Elevated central line-associated bloodstream infection rates were reported in AHS tertiary intensive care units and seen across the country. Actions to address this included participation in a Public Health Agency of Canada national review, engaging the Critical Care Strategic Clinical Network and developing a provincial *Central Line-Associated Blood Stream Infections Safety Bundle* to decrease the risk of infection. In 2024/2025, the bundle was built into Connect Care and incorporated into the IPC sections of the provincial *Vascular Access Device Infusion Therapy: Adult & Pediatric - All Locations* and *Vascular Access Device Infusion Therapy: Neonatal - All Locations* resources as an implementation priority. Plans are underway for additional staff education about the bundle and continued monitoring of infection rates.

Human Resource Capacity

AHS IPC develops resources, reviewed at least once every three years, to support evidence-informed practice and provide direction to AHS staff and physicians. In 2024/2025 the *Required Organization Learning: Infection Prevention and Control Module* was updated making it more efficient for staff to complete. Content is tailored to staff clinical and non-clinical roles. The Communicable Disease Emergency Response Plan Working Group updated the *IPC Functional Plan* transitioning to an all-hazards approach in a simplified and condensed format.

Physical Environment and Infrastructure

Since 2018, the Government of Alberta capital budgets, up to and including Budget 2025 have included approximately \$456 million in funding for medical device reprocessing area capital improvements identified through AHS IPC medical device reprocessing reviews. The approved projects are in various stages, one project has been completed, two projects are under construction, seven projects are in the design or construction document phase and six projects are in the early planning stages.

Public Awareness and Education

In 2024/2025, a new provincial [Antimicrobial Stewardship Program](#) launched that will focus on integrating and optimizing antimicrobial stewardship practices in AHS acute care sites across the province. This program also aligns with the Government of Alberta's [One Health Antimicrobial Resistance Framework for Action \(2024\)](#).

Senior Medical Leadership Message

We are pleased to provide the *2024/2025 AHS IPC Annual Report to Alberta Health*, which highlights the incredible work and achievements across the continuum of care in Alberta. AHS IPC is dedicated and committed to mitigating the risk of harm from healthcare-associated infections.

As you will see in this report, AHS IPC staff and physicians continued to support the organization in providing safe, high-quality, patient-focused healthcare that is accessible and sustainable for all Albertans. The work encapsulated in this report continued to focus on AHS' current priorities, which are reducing Emergency Department wait times, improving Emergency Medical Services response times, increasing access to surgeries and improving patient flow.

In 2024/2025, in addition to routine work, AHS IPC focused on several IPC-related initiatives that aligned with government and organizational priorities. For example, improving hand hygiene compliance, increasing the uptake of the AHS IPC eLearning modules, support for IPC-related emerging issues such as viral hemorrhagic fever and measles. Lastly, 2024/2025 saw the launch of a new provincial Antimicrobial Stewardship Program that will focus on integrating and optimizing antimicrobial stewardship practices in AHS acute care sites across the province. This program also aligns with the Government of Alberta's [*One Health Antimicrobial Resistance Framework for Action \(2024\)*](#).

The full report includes quotes from AHS Patient and Family Advisors and sidebar stories that showcase AHS IPC work at the local, zone and provincial levels. This highlights the commitment of AHS IPC to prevent and control healthcare-associated infections across care settings including acute care, addiction and mental health, ambulatory care, cancer care, community care, continuing care, correctional care and emergency medical care.

We would like to thank all AHS IPC staff and physicians who contributed to this report and recognize the important work they all do daily to protect the health and well-being of Albertans.

Dr. Oscar Larios
Senior Medical Director
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AHS IPC Program

The AHS IPC program provides services across the continuum of care in collaboration with other organizations and programs providing health services in Alberta. The term “AHS IPC” used in this report includes Covenant Health IPC unless specifically stated otherwise.

The structure and services provided by AHS IPC are mandated by Alberta Health provincial standards and legislation. Alberta Health established the [IPC Strategy \(2015\)](#) and released a series of standards requiring AHS to maintain:

- An accountability framework including relevant AHS IPC committees and the appointment of an AHS IPC Executive
- Defined reporting relationships including, but are not limited to, communication with the AHS IPC Executive, the Senior Medical Officer of Health and Medical Officers of Health
- Organizational policies and practices aligning with the [Reusable & Single-use Medical Devices Standards: Standards for the reprocessing of reusable medical devices and for the use of single-use medical devices in all health care facilities and settings \(2019\)](#).

This report aligns with the Alberta Health [IPC Strategy \(2015\)](#)

- Province Wide Surveillance
- Human Resource Capacity
- Physical Environment and Infrastructure, and
- Public Awareness and Education.

The Accreditation Canada Infection Prevention and Control Standard provides a framework to plan, implement and evaluate an effective IPC program based on evidence and best practices in the field. The AHS IPC program demonstrates conformity to required organizational practices, high and normal priority criteria through attestation and on-site reviews.

AHS IPC goals fit within the AHS [2024-2027 Health Plan](#) long-range goal for Quality and Safety, confirming systems, capacity and tools are used to improve outcomes in addition to strengthening health promotion through focus on disease prevention. AHS IPC communication strategies and engagement aims to: 1) strengthen connections and build flexibility while fostering cooperation, support, and response to internal and external organizations and 2) optimize virtual and onsite IPC visibility as integrated members of healthcare delivery. AHS IPC focuses on diversity, equity and inclusion and is dedicated to communicating diversity and inclusion messaging and learning opportunities across the provincial IPC program.

Hyperlinks are included for resources posted on the [Government of Alberta](#) or [AHS](#) websites. Quotes from AHS Patient and Family Advisors and sidebar stories are incorporated throughout the report to demonstrate the impact of the program.

IPC Practice in Clinical Settings

AHS IPC plays a vital role in promoting patient safety and supporting quality care delivery in acute care, continuing care, addiction and mental health and primary care settings. AHS IPC contributes directly to the prevention and management of infections through the promotion of evidence-informed practices such as routine practices, additional precautions, disease screening and outbreak response. By minimizing the risk of healthcare-associated infections and supporting safe care environments, AHS IPC enhances patient flow and helps reduce system pressures.

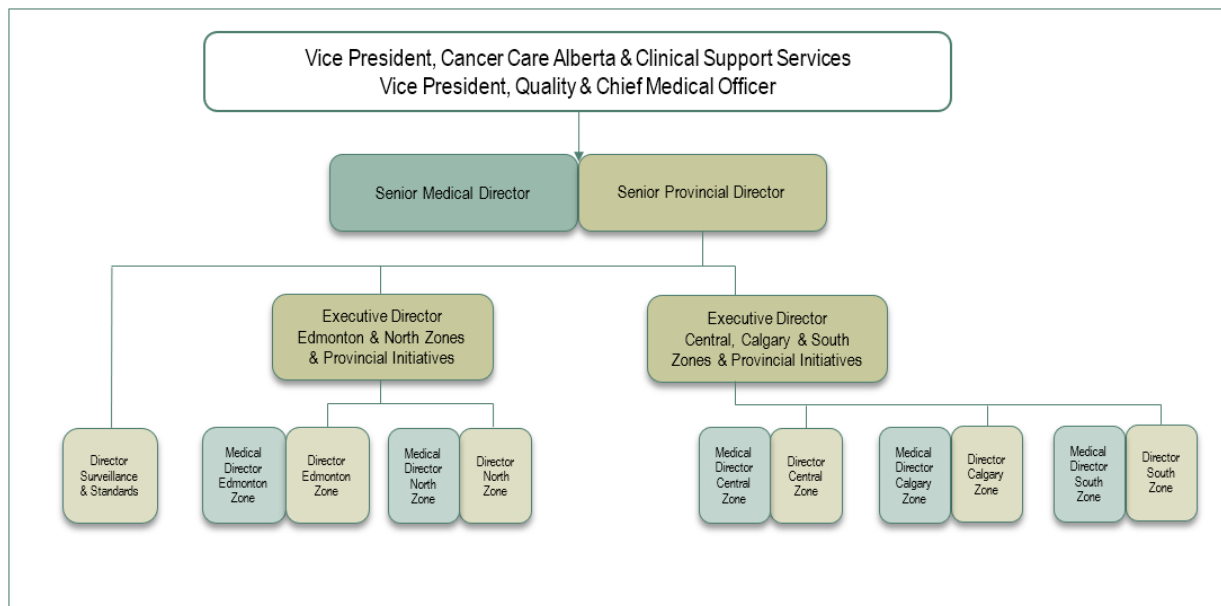
My mom was isolated for a respiratory infection. My mom remained on isolation due to her long-standing cough. This negatively affected her recovery. My mom has [chronic obstructive pulmonary disease], she has been coughing for over 20 years and her cough will last until the end of her life. [IPC] was able to work with the unit to find a good solution for my mom and she was able to come off isolation.

– Family member of an AHS patient

AHS IPC staff and physicians

The AHS IPC organizational structure reflects the needs of the provincial program (refer to Figure 1). This structure supports operational efficiency, communication and response capabilities across the healthcare system while maintaining AHS standards for patient safety. There are five zone teams and one provincial team.

Figure 1: AHS IPC organizational structure



AHS IPC employs 185.65 full-time equivalent positions and Covenant Health IPC employs 19.0 full-time equivalent positions. Most staff are frontline infection control professionals supporting care teams and working collaboratively to uphold standards that protect patients and healthcare providers. These staff are supported by epidemiologists, analysts, senior consultants, project managers, coordinators and administrative staff. AHS IPC provides provincial after-hours on-call service for urgent issues. Physician support includes 15 physicians at AHS and two physicians at Covenant Health. Additional support is provided by the IPC research scientist and staff at the IPC Laboratory and Centre for Antimicrobial Resistance..

Boosting IPC Practices in Remote Rural Alberta Healthcare Facilities

In the North Zone, an infection control professional addressed gaps in IPC education, hand hygiene compliance, and staff engagement in remote communities such as High Level, Fort Vermilion, and La Crete. Contributing factors were staff turnover, missed education opportunities, physical distance between sites and distrust from the community towards healthcare staff. Improvements were achieved through relationship-building, leadership engagement and targeted education. Hand hygiene compliance improved by listening to staff input about challenges and providing staff feedback after increasing the number of hand hygiene reviewers and observations..

Routine practices

IPC routine practices such as hand hygiene, patient screening and placement, IPC risk assessment, personal protective equipment use and environmental cleaning help prevent infection transmission and protect patients and staff..

Patient Access to Indigenous Spiritual Ceremonies

In collaboration with IPC, AHS developed the [Patient Access to Indigenous Spiritual Ceremony Policy \(2023\)](#). The policy addresses infection control considerations, such as including use of alcohol-based hand rub and personal protective equipment. In 2024/2025, infection control professionals in Central Zone helped patients access ceremonies such as smudging by increasing awareness of the policy and answering IPC-related questions.

The IPC Routine Practices Working Group empowers staff to apply routine practices in clinical environments. The working group combines the strengths of the Provincial IPC Hand Hygiene Program and Provincial Personal Protective Equipment Safety Coach Program. The following subsections on hand hygiene and personal protective equipment describe these priority patient safety activities to reduce infection risk

Hand hygiene

Hand hygiene is a general term referring to practices that remove microorganisms from the hands. Hand hygiene may be performed using alcohol-based hand rub or handwashing using soap and water. When performed correctly, hand hygiene remains the single most effective measure to reduce microorganism transmission in healthcare and maintaining hand hygiene compliance is essential. Ongoing work within AHS and Covenant Health strengthens hand hygiene practices in healthcare.

AHS IPC Hand Hygiene Program

In 2024/2025, AHS reported a hand hygiene compliance of 88.2 per cent. Hand hygiene reviews are performed across the province and throughout the continuum of care on an ongoing basis, with quarterly reporting. In 2024/2025, reviews were performed at 325 AHS acute care and non-acute care sites and in 1,306 areas or clinics across the province.

The AHS IPC Hand Hygiene Program is a partnership between AHS IPC and healthcare providers and involves clinical and non-clinical departments.

One aspect of this partnership is recruiting and training healthcare providers to be site-based reviewers performing hand hygiene reviews. These reviewers are critical to both the success and sustainability of the AHS IPC Hand Hygiene Program. They perform hand hygiene reviews and identify barriers or challenges to performing hand hygiene at the local level, such as required education and training needs. Another aspect of this partnership is the alignment of provincial-level activities. The AHS IPC Hand Hygiene Program coordinates these activities with direct engagement at the local level through zone IPC committees.

This fiscal year marked the ten-year anniversary of the AHS IPC Hand Hygiene Program and a decade of working together to promote hand hygiene through the organization. Over the

past decade, great strides in reducing infections through handwashing and alcohol-based hand rub have been made.

Highlights from the last ten years include 4,178 AHS hand hygiene reviewers trained, and 3,125,960 hand hygiene observations uploaded to the Clean Hands System.

This success is thanks to the dedication of staff, physicians, volunteers and hand hygiene reviewers. To celebrate, an online event titled “A Decade of Clean Hands – Honouring the Past, Inspiring the Future” was held to reflect on past achievement and look ahead to the future.

The AHS [Hand Hygiene Policy \(2025\)](#) and [Hand Hygiene Procedure \(2025\)](#) guide hand hygiene practices. In late 2024/2025, minor revisions were made as part of the three-year review cycle to align with current AHS definitions and to improve readability.

Monitoring hand hygiene compliance and offering direct feedback to healthcare providers are essential elements of hand hygiene improvement initiatives. The AHS IPC Hand Hygiene Program uses a vendor-supported platform – Clean Hands. The platform supports immediate feedback as users of the system access real-time information on hand hygiene compliance.

***Your Health is in Your Hands:
A Refresh for Hand Hygiene
an AHS Priority***

In 2024/2025, AHS IPC partnered with AHS Community Engagement and Communications to refresh the hand hygiene campaign to promote cohesive, professional messaging resonating with healthcare professionals and the public to increase accountability and ownership of hand hygiene. Public, staff, volunteers, physicians and Patient and Family Advisory councils contributed to a new, simple, powerful hand hygiene campaign slogan: “Your Health is in Your Hands” and related themes such as “Their Health is in Your Hands” and “Our Health is in Our Hands”. Starting in spring 2025, newly designed materials, including cleanable and durable vinyl decals, new icons and fresh colours will be used to communicate the new messaging.

Increasing accountability and ownership

The AHS IPC Hand Hygiene Program increases accountability and ownership of hand hygiene practices by using site-based reviewers – frontline staff who complete provincially, standardized training. This fosters a local, grassroots approach that builds confidence, trust and accountability.

AHS IPC supports zones, sites and units by providing numerous hand hygiene compliance reports on an ongoing basis. These reports identify areas of excellence and opportunities for improvement and the information is encouraged to be shared with staff, patients, families and visitors.

Recruiting and supporting reviewers

The AHS IPC Hand Hygiene Program supports zone-based reviewers by identifying those who may be deviating from standardized provincial collection methodology or are having challenges collecting hand hygiene observations. A provincial standard operating procedure was developed so IPC zone coordinators provide the same guidance and recommendations. This process helps enhance data quality and consistency in data collection as well as supporting site-based hand hygiene reviewers.

Increasing awareness

The AHS IPC Hand Hygiene Program promotes activities to increase awareness of hand hygiene, accountability and ownership of hand hygiene practices. The IPC Events Working Group coordinates events such as Clean Your Hands Day in May, Global Handwashing Day and National Infection Prevention and Control Week in October to connect staff and patients in a positive way relating to hand hygiene and IPC, have fun and inspire conversation. AHS IPC program organized staff activities including a hand hygiene scavenger hunt with prizes and a virtual escape room to evaluate hand hygiene knowledge.

Covenant Health IPC Hand Hygiene Program

In 2024/2025, Covenant Health reported a hand hygiene compliance of 94.1 per cent. Hand hygiene compliance is monitored in all Covenant Health acute care and continuing care sites at minimum twice a year between April 01 – May 31 and October 01 – November 30. AHS and Covenant Health data are not directly comparable because of key differences between the data collection methods and the systems used to perform hand hygiene reviews.

The Covenant Health IPC Hand Hygiene Program is a partnership between Covenant Health IPC and healthcare providers. Hand hygiene compliance is monitored in all Covenant Health acute care and continuing care sites as well as ambulatory and outpatient care settings where hand hygiene can be observed during patient care. Hand hygiene improvement initiatives include performing hand hygiene reviews and providing education. Standardized education for auditors includes new auditor training as well as continued competency sessions provided by infection control professionals to auditors every review period.

Specific hand hygiene practices and trends identified during reviews are reported to unit managers for appropriate follow-up and tailored hand hygiene education. Immediate feedback and identification of trends at the unit level are essential elements of hand hygiene improvement initiatives.

Each program, site or unit creates a targeted action plan with specific interventions to increase hand hygiene compliance when hand hygiene compliance rates are less than 95.0 per cent.

In 2024/2025, leaders were educated on the Covenant Health IPC Hand Hygiene Program to increase awareness, knowledge and empower leaders to implement safe and effective hand hygiene practices. Covenant Health IPC engaged with leadership to create site-specific educational sessions for leaders and frontline staff, including a site-wide “Fun Day” with hand hygiene content and other educational activities.

In Covenant Health, the Covenant Health *Hand Hygiene Policy (2024)* and *Hand Hygiene Procedure (2024)* guide hand hygiene practices. Both were updated in mid-2024/2025.

The Covenant Health IPC Hand Hygiene Program uses a vendor-supported platform – HandyAudit. Data are entered into the HandyAudit portal using an AHS or Covenant Health issued iPad. The HandyAudit system, like the Clean Hands System, has the capacity to provide real-time compliance results.

Improving Compliance with the Four Moments of Hand Hygiene

Villa Caritas’ hand hygiene compliance was over 95 per cent for six successive auditing periods (Fall 2020-Spring 2023). During the Fall 2023 audit, compliance decreased to 80 per cent. When the compliance dropped again in the Spring 2024 audit, site leaders developed an action plan: creating a site hand hygiene working group; engaging with the local Covenant Health team; developing program-specific hand hygiene resources and training session for site leaders; and giving staff feedback on compliance outside auditing periods. Following this, Villa Caritas’ hand hygiene compliance in the Fall 2024 audit was 90.4 per cent.

Personal protective equipment

Personal protective equipment including eye protection, face shields, gloves, gowns, medical masks and N95 respirators are worn to help prevent exposure to infectious disease. When appropriately selected, based on an individual AHS IPC risk assessment and donned and doffed correctly, personal protective equipment is an effective measure to reduce microorganism transmission in healthcare. Ongoing work within AHS strengthens personal protective equipment practices.

AHS Provincial Personal Protective Equipment Safety Coach Program

The improper use of personal protective equipment was identified as a major factor in microorganism transmission and a common theme during outbreaks in acute care and continuing care settings. Staff needed support in the appropriate selection and use of this equipment and to address fatigue associated with its use.

In 2020/2021, AHS IPC launched a Provincial Personal Protective Equipment Safety Coach Program for all zones and sites which complements existing initiatives and is endorsed by AHS Workplace Health and Safety.

The goal of the program was to create a system of peer safety coaching with just-in-time support and mentorship to frontline healthcare providers, so they become more comfortable selecting and using personal protective equipment to prevent transmission of infectious diseases within healthcare. This program was expanded to AHS subsidiaries and contracted partners in continuing care using a modified designate and train-the-trainer process.

In 2024/2025, the program focused its efforts to convert the current training model, which required an in-person competency check into a fully self-directed model allowing frontline staff to complete all the required training more efficiently.

"I notice staff are more diligent about washing their hands and changing their gloves between patients now. The new community dialysis centre has walls between each patient. It used to be a more social environment. But then again, I'd rather be safe than be social."

– AHS Patient and Family Advisor

Alberta Children's Hospital Volunteers for Infection Prevention (VIP) Program

Trained volunteers teach patients and their families IPC principles at the Alberta Children's Hospital to help prevent the spread of infections. Before volunteers teach, they observe infection control professionals, do supervised teaching and receive a training package with reference material. "Sometimes your impact might feel small, but programs like this can really make a huge ripple effect across these units," said volunteer Manreet Dhillon. "We go into the patient's room and meet with the family to discuss the importance of why we do hand hygiene and how germs can spread. Then we do a visual demonstration with the children and the family members to enforce those messages." Volunteers show them how to wear personal protective equipment and give information on isolation and safe visitation protocols.

Communicable disease prevention

The AHS Prevention and Control of Communicable Diseases in Healthcare Settings Advisory Committee advises on communicable disease [diseases that can spread from one person to another] prevention and control in healthcare settings and to maintain overall health system integrity. AHS IPC is a contributing member of this committee.

In 2024/2025, key activities of the committee aligned with AHS IPC priorities including work that continued to standardize management of viral respiratory illnesses based on published evidence.

Emerging issues

In early 2024/2025, AHS convened a Provincial Measles Task Force to respond to increased global measles activity following the presentation of cases at the Alberta Children's Hospital and Stollery Children's Hospital. The task force was comprised of clinical operations, Provincial Population and Public Health and key partners including IPC, Workplace Health and Safety, Laboratory Services, Indigenous Health.

In late 2024/2025, as cases and outbreaks of measles increased in Canada, including Alberta, AHS actively monitored the situation to prevent additional outbreaks. In preparation for potential cases in the province, AHS IPC reviewed and updated its resources and reminded staff about resources specific to measles on the external [AHS IPC](#) website.

IPC resources support staff with the early identification and management of suspect and confirmed measles patients to prevent spread within healthcare settings. The resources include:

[IPC Recommendations for Measles](#), [Creation of Temporary Airborne Isolation Rooms](#), and [Management of Patients Requiring Airborne Precautions for Suspect or Confirmed Measles](#).

Managing the increased measles cases and outbreaks in relation to pregnant women presents unique challenges due to increased risks of severe illness, complications, and potential impact on the developing fetus. To address these unique challenges as it relates to IPC, in 2024/2025, AHS IPC developed two perinatal resources to support the management of measles in pregnancy: [Perinatal IPC Recommendations for Measles](#) and [Perinatal Measles IPC Management and Additional Precautions](#).

Outbreak management

AHS Provincial Population and Public Health resources provide current, evidence-informed guidelines for outbreak control and management of gastrointestinal illness and viral respiratory infections at sites throughout Alberta and include the [Guide for Outbreak Prevention & Control in Acute Care Sites](#) and [Guide for Outbreak Prevention & Control in Supportive Living Accommodations](#). AHS IPC provides input into these resources and supports outbreak management.

In 2024/2025, respiratory outbreaks were a dominant driver of workload with more than 354 outbreaks in acute care settings and 1,107 outbreaks in continuing care and congregate living settings (refer to Table 1).

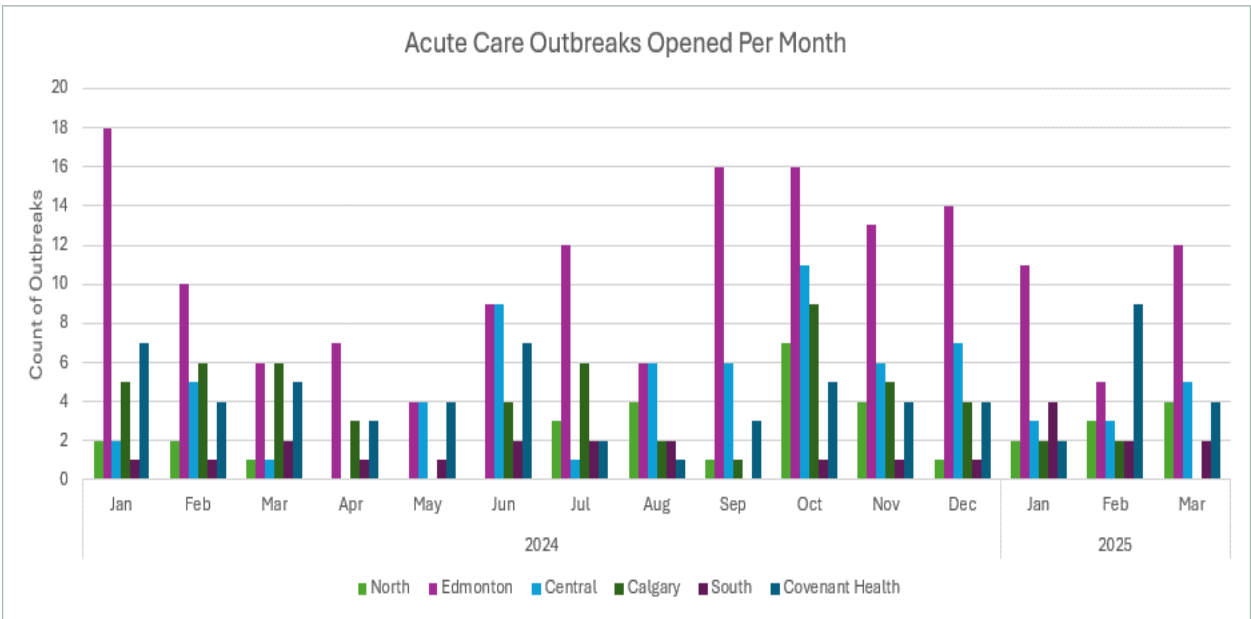
Table 1: Number of respiratory outbreaks by fiscal year and location type*

Fiscal year	Acute care	Continuing care & congregate living	Total respiratory outbreaks
2019/2020	26	391	417
2020/2021	219	945	1,164
2021/2022	389	1,210	1,599
2022/2023	408	1,327	1,735
2023/2024	354	1,107	1,461
2024/2025	295	1,044	1,339

*Data includes all Exposure Investigation (EI) where the Resolution Status was “Outbreaks” and were categorized as “Respiratory”.

In Canada, the viral respiratory season typically starts in October to November and finishes in April to May, with most cases occurring in December through March. In 2024/2025, a surge in these infections in acute care settings resulted in outbreaks at sites across the province (refer to Figure 2). Although the infections appeared to be not as severe in 2024/2025, outbreaks at a site can impact capacity and other sites. To support patient flow and continuity of care, AHS IPC worked collaboratively with zone operations and physicians to address challenges.

Figure 2: Acute care viral respiratory outbreaks opened per month



IPC Outbreak Feedback Program in a South Zone Continuing Care Facility

In 2024/2025, IPC professionals introduced a new Outbreak Feedback Program to strengthen communication and engagement with residents during outbreaks. Through town hall meetings and surveys, residents shared their ideas for balancing safety with daily routines. Suggestions included adding disinfectant wipes, hand sanitizer, and signage to support safe use of the self-serve coffee machine, revising dining operations, and encouraging safer community activities.

These resident-driven ideas were adopted, and educational handouts on safe practices were developed. The process not only enhanced safety during the outbreak but also fostered a stronger sense of partnership between residents and care teams.

The success of this program shows how resident feedback can lead to practical, meaningful improvements and provides a model that may benefit other continuing care facilities across the province.

Clinical setting highlights

Acute care

The AHS [2024-2027 Health Plan](#) is organized according to three long-range goals: System, Sustainability, Access and Quality and Safety with 10 corresponding objectives. In 2024/2025, AHS IPC undertook several initiatives that directly support the following acute care operational priorities: improved patient flow and reduced surgical wait times.

Improved patient flow

In 2024/2025, AHS IPC introduced measures to optimize identification and management of patients with suspect or confirmed communicable diseases to help prevent significant exposure events and outbreaks which impact operational capacity. The AHS Measles Task Force requested the Connect Care communicable disease screening tool be updated to identify measles cases in the early stages of infection before a visible rash. Measles cases at the Stollery Children's Hospital and Alberta Children's Hospital highlighted this gap. The tool improved identification of measles cases in the Emergency Department and reduced the risk of additional patient exposures requiring specialized management.

Patient Flow Improved in Covenant Health

Covenant Health IPC supports the Integrated Operations Centre to direct Emergency Medical Services crews on the ground to the most appropriate care facility for each specific patient based on patient need and site capacity.

Patients on additional precautions are reviewed on a regular basis and these are removed when indicated. *"When precautions are required, infection control professionals further assist with cohorting patients [putting patients with similar symptoms [or] illness together] safely on units. This practice improves patient flow from emergency to acute care."*

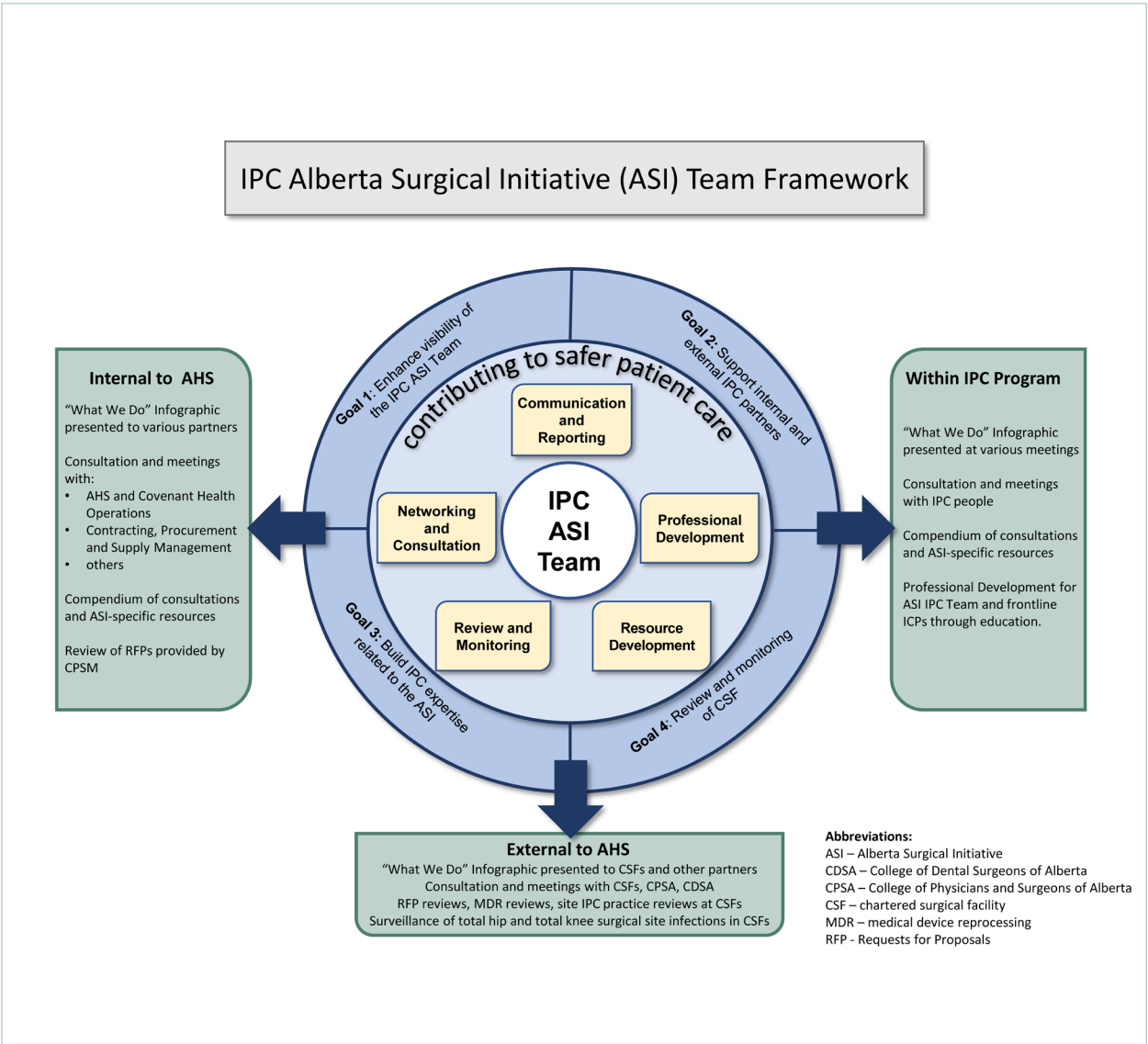
– Kimberly Miller, IPC Director,
South Zone, AHS

Reduced surgical wait times

The [Alberta Surgical Initiative](#), developed in partnership with Alberta Health, “strives to ensure that all Albertans receive their scheduled surgeries within clinically appropriate targets. We are focusing on improving the patient’s surgical journey, from the time patients seek advice from their family doctor, to when they are referred to a specialist, to their surgery and rehabilitation.” (AHS, 2024).

AHS IPC plays an essential role in helping to provide safe surgical care as the initiative moves forward, through the creation of the IPC Alberta Surgical Initiative Team. The team’s goals and scope of work can be seen in the framework below (refer to Figure 3).

Figure 3: IPC Alberta Surgical Initiative Team Framework



Cancer care

AHS IPC in cancer care works with staff, volunteers, students and visitors to reduce the risk of healthcare-associated infections. AHS IPC consults on key priorities such as:

- Reducing surgery wait times, e.g., by performing some procedures in high dose radiation rooms instead of the operating room.
- Improving patient flow and continuity of care, e.g., creation of more operating room spaces, radiation vaults and chemotherapy treatment chairs. AHS IPC assists with the Early Supported Discharge Program so patients can be discharged and come in for a cancer care related visit for follow-up without going through the Emergency Department where they could be exposed to symptomatic patients.

Continuing care and congregate living

In continuing care, AHS IPC provides expertise and direction for IPC best practice implementation, outbreak management, and on-site IPC outbreak reviews for AHS owned and operated facilities and contracted facilities. AHS IPC offers a coordinated approach in continuing care and congregate living settings in collaboration with both internal AHS and external partners to provide an integral model [whole-system approach]. AHS IPC, AHS Communicable Disease Control and AHS Safe Healthy Environments continue to work together to prevent and manage outbreaks in continuing care homes.

Arthur J.E. Child Comprehensive Cancer Centre

AHS IPC was involved from design, construction and operational readiness of the Arthur J.E. Child Comprehensive Cancer Centre which opened in Calgary Fall 2024. Engineered rooms help protect immunocompromised patients at greater risk of infections due to a weakened immune system, and reduce the risk of disease transmission:

- 1. Protective Environment Room** prevent germs from flowing into the patient room, protecting patients.
- 2. Airborne Isolation Room** prevent germs from flowing out of the patient room, protecting other patients and staff.
- 3. Combination Airborne Isolation and Protective Environment Room;** prevents germs from flowing out of the patient room and prevents germs in the air from entering the patient room. This is the only healthcare facility in Alberta equipped with these rooms.

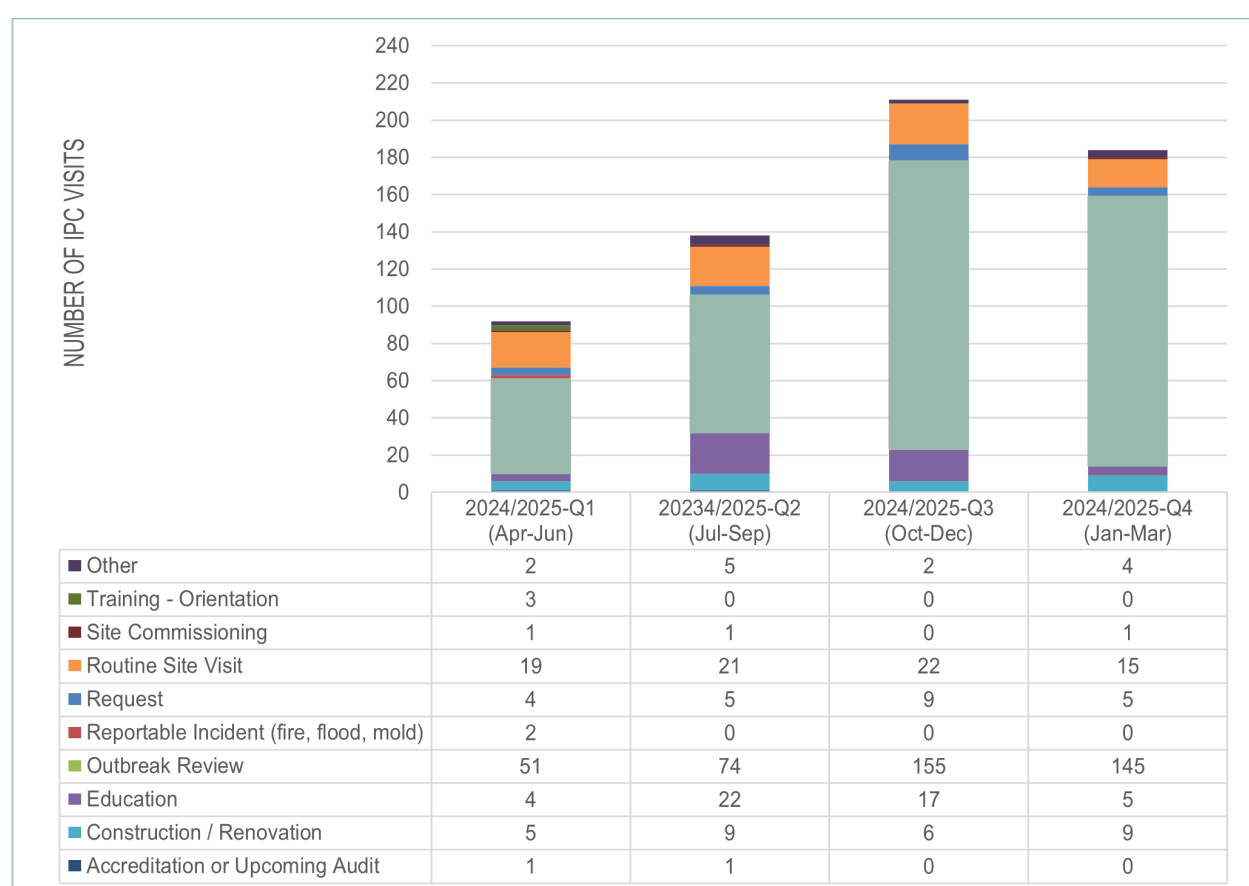
Early recognition and rapid response are essential for effective outbreak prevention and management and have the greatest impact on resident safety. AHS IPC provides direct onsite support for both AHS and contracted continuing care homes.

In-person and virtual visits

In 2024/2025, AHS IPC continued in-person practice reviews and just-in-time teaching, as introduced in 2020/2021, during visits to congregate living and continuing care settings. AHS IPC may be consulted to provide expertise in continuing care homes for a variety of reasons including outbreak response, response to emerging pathogens and other emergencies with IPC implications such as large-scale water release, renovations and upgrades to heating, ventilation and air conditioning.

Standardized items included in reviews are hand hygiene, additional precautions and isolation, cleaning and disinfection, other outbreak control strategies and operational considerations. AHS IPC reports and shares review findings with site management and more broadly with internal and external partners through the Continuing Care Communicable Disease Management Advisory Committee. In 2024/2025, AHS IPC conducted 425 initial outbreak reviews and 175 additional in-person reviews for various other reasons (refer to Figure 4).

Figure 4: Number of, and reason for AHS IPC visits to continuing care and congregate living sites in 2024/2025



IPC Designate Education Program

AHS IPC offers a virtual IPC Designate Education Program for staff in Continuing Care Homes Type A, Type B or Type C in all five zones to meet Alberta Government recommendations for the continuing care sector. The program increases foundational IPC knowledge at the site and boosts the competence and skill level of staff in IPC practices. This program is provided at no cost to Continuing Care Homes. IPC designates meet infection control professionals, review the program and complete six required modules. Connecting sessions allow learners to talk about their learning experience, ask questions and help shape future program delivery. The IPC designates access one-to-one support from AHS IPC and receive a certificate following completion.

Participants said they gained confidence in taking preventative actions early; learning to identify infection risks; preventing spread of infection through appropriate cleaning and disinfection of equipment; and safe placement of residents. They also felt more comfortable educating staff, residents and families on IPC topics.

“The program really equipped me as an IPC designate. I designed IPC related in-services. ... I knew where I could find the resources I needed.” “I feel more comfortable and confident educating others.”

*– IPC Designate Education Program
Participants*

In 2024/2025, 169 designates graduated from the IPC Designate Education Program. Since the launch of the program 208 designates have graduated with one or more designates in 180 facilities across all zones.

IPC designates perform a crucial role in early identification of outbreaks and implementing IPC preventative measures such as routine practices, hand hygiene, IPC risk assessment, and the correct selection and use of personal protective equipment in their facility. Increased knowledge of outbreak management and IPC practices reduces the risk of disease transmission.

IPC designates help staff, residents and families implement IPC practices by providing education, guidance and reminders with support and oversight from AHS IPC. This reduces the risk of spreading infections and helps keep residents in their homes. Residents who go to hospital may return home earlier, freeing up hospital beds. Increased IPC knowledge promotes improved resident, staff and visitor safety.

Addictions, Mental Health and Correctional Care

In 2024/2025, AHS IPC continued to support addictions, mental health, and correctional facilities at Recovery Alberta in collaboration with Medical Officers of Health, AHS Provincial Population and Public Health, correctional healthcare management and AHS Workplace Health and Safety. Guidance and best practice recommendations were provided to prevent and control respiratory illness, gastrointestinal illness, outbreaks and exposure events.

In correctional facilities, AHS IPC expanded in scope to provide some coverage via Connect Care, in addition to onsite and virtual consultation, for broader provincial coverage.

Emergency medical care

In 2024/2025, AHS IPC continued to work closely with AHS Emergency Medical Services on initiatives to reduce emergency services response times including recruit orientation to Ambulance Readiness Attendance staff on IPC measures such as hand hygiene and environment and equipment cleaning. AHS IPC provides ongoing consultation including updated measles-related documents to prevent and manage staff exposures supporting timely return of clean and stocked ambulances back to the community. AHS IPC helped with contact tracing after numerous emergency staff were exposed to a confirmed measles patient ensuring potential contacts were followed up in a timely manner to prevent additional exposures.

AHS IPC supports hand hygiene reviewer training of staff in these settings including Provincial Air Ambulance and Mobile Integrated Health. Hand hygiene compliance is reported back to staff and shared through quarterly reports.

AHS IPC promoted patient safety by participating in:

- Joint Workplace Health and Safety Committees advocating for improved hand hygiene and personal protective equipment practices.
- AHS Emergency Medical Services Measles Taskforce to align pre-hospital measles screening practices with those in Connect Care by adding an additional precautions box to the “Emergency Medical Services Emergent Handover Note before Emergency Medical Services Offload” form.
- Orientation classes teaching IPC concepts to Dispatch Emergency Communications Officers. Officers are encouraged to document and communicate relevant IPC findings to attending paramedics.
- Annual and recruit training for the Incident Response Team for viral hemorrhagic fever.

Improving IPC in Ambulance Bays

The AHS IPC “Improving Configuration of Ambulance Bays Project” was supported by Infection Prevention and Control Canada and a scholarship funding award from Sani-Marc Canada to improve ambulance bay design related to patient safety. Paramedics may provide patient care in ambulance bays until a bed is available in the Emergency Department.

An audit tool was developed to evaluate AHS ambulance bay design for IPC practices such as storage of medications, linens and clean supplies. The project found most ambulance bays met audit requirements; however, assigned responsibility for cleaning and maintenance varied.

Recommendations included regular ongoing audits of ambulance bays by infection control professionals during routine visits. Audit frequency may be adjusted based on results of past audits, location and operational need. The audit tool was broadened to include medical device reprocessing and implemented provincially. Next steps are developing recommendations for management, cleaning and storage in ambulance bays including a provincial policy and procedure for cleaning and disinfection.

Connect Care

Connect Care is an electronic clinical information system implemented in AHS and Covenant Health facilities allowing healthcare providers access to patient information, clinical standards and best practices. The IPC-related benefits to patient care from Connect Care are in three main areas:

- Communicable disease and antibiotic-resistant organism screening
- Patient management and
- Surveillance activities.

Communicable disease and antimicrobial-resistant organisms screening

AHS IPC developed tools in Connect Care to improve communication and continuity of care for patients with infectious diseases and related conditions. These tools standardize antimicrobial-resistant organism screening and management of patients preventing exposure to infectious diseases. This makes it easier to update recommendations and monitor usage over time.

An Antimicrobial-Resistant Organism Admission Screen Report was added to the pediatric Antimicrobial-Resistant Organism Admission Screening Tool to improve and standardize all users' access to view screening data and hygiene compliance reports on an ongoing basis. Similar changes were made to the Communicable Disease Screening Tool.

In 2023/2024, Dr. Jenine Leal, Research Scientist, AHS IPC, received an operating grant from the Canadian Institutes for Health Research to study current practices of antimicrobial-resistant organism screening practices and improve patient safety.

In 2024/2025 this work was completed and reported to clinical operations. Compliance with admission screening for antimicrobial-resistant organism was 71.0 per cent (186,295/262,225) with methicillin-resistant *Staphylococcus aureus* at 66.2 per cent (31,679/47,855) and carbapenemase-producing organism at 43.3 per cent (290/670). Compliance barriers and interventions were identified.

Patient management

Connect Care allows for real-time electronic alerts and notations when the patient has confirmed or suspected infectious disease so appropriate room placement and additional precautions are put in place. In 2024/2025, IPC Alerts for high-transmission-risk organisms were expanded to help clinicians identify susceptible communicable disease contacts and support isolation decisions. For example, there are IPC Alerts for patients with measles not on airborne precautions, and patients with risk factors for carbapenemase-producing organisms not on contact precautions. When there is a mismatch if required additional precautions are not in place, these IPC Alerts appear in a Storyboard that provides an overview of essential elements of a patient's story. Emergency Department users can now easily view mismatched information.

Surveillance activities

In 2024/2025, an optimization survey for the Infection Prevention Dashboard and various clinical and surveillance supporting reports were completed. Changes identified as priorities will be made in 2025/2026. New reports were added to enable infection control professionals to view microorganism trends at their facilities.

AHS IPC Laboratory and Centre for Antimicrobial Resistance

Laboratory support is provided to AHS IPC and clinical settings by the AHS IPC Laboratory and the Centre for Antimicrobial Resistance.

IPC Laboratory

The AHS IPC Laboratory provides dedicated support to the AHS IPC program to evaluate environmental aspects of healthcare-associated infection by testing for organisms of epidemiologic interest. The scope of work is complementary to and distinct from that of Alberta Precision Laboratories.

In 2024/2025, the AHS IPC Laboratory:

- Supported a Foothills Medical Centre neonatal intensive care unit outbreak investigation by testing environmental surfaces to determine if they were a factor in the outbreak.
- Boosted existing laboratory Legionella testing capacity during the Legionella investigation at the Arthur J.E. Child Comprehensive Cancer Centre to ensure safe water supply when the new facility opened. To date, continuous monitoring has revealed no clinical cases.
- Continued to monitor and test hemodialysis water for Alberta Children's Hospital new reverse osmosis system to follow-up on a 2023 investigation of a patient with a fungal positive blood culture.
- Participated in the ongoing Arthur J.E. Child Comprehensive Cancer Centre microbiome project studying the evolution of microbes colonizing the environment over time by testing a broad range of environmental samples from high touch surfaces, water and air. The opening of a new facility provided an opportunity to understand how the microbiome develops and correlates with patient infections.
- Expanded fecal microbiota transplantation [stool transplant, a procedure that involves transferring stool from a healthy donor to a patient with a compromised gut microbiome] to treat infections in patients with antibiotic-resistant organisms.

Centre for Antimicrobial Resistance

The Centre for Antimicrobial Resistance is a laboratory partnership between AHS, Alberta Precision Laboratory and the University of Calgary, collaborating with AHS IPC to detect, prevent and control of the spread of antibiotic-resistant organisms. Scientific support includes developing new diagnostic methods of tracking and detection and providing molecular characterization to determine links between patient organisms and patterns of disease transmission as required, e.g., during outbreaks.

In 2024/2025, the Centre for Antimicrobial Resistance:

- Supported patient care, e.g., performing specific antimicrobial organism testing for a patient with a difficult to treat infection caused by a unique strain of resistant bacteria to facilitate prescribing the most effective antibiotic.
- Worked on a novel infection model for screening antimicrobial compounds for activity versus both gram-negative and gram-positive bacteria relevant to hospital-acquired infections.
- Studied antimicrobial resistance to commonly used skin antiseptics such as chlorhexidine or mupirocin to find out if resistance is increasing in Alberta patients who have post-surgical site infections following hip and knee replacement. The study recommended ongoing monitoring given resistance development was uncommon in the setting described.
- Studied the impact of antimicrobial-resistant organisms such as methicillin-resistant *Staphylococcus aureus* and methicillin-resistant coagulase-negative staphylococci on healthcare-associated infections.
- Participated in planning exercises of innovative technologies to reduce contamination on environmental healthcare surfaces, e.g., evaluating the effectiveness of an antibacterial paint or coatings on hospital surfaces.
- Developed new testing methods to identify new emerging mechanisms of resistance of *S. aureus* which is a major cause of post-operative infections.

Local App Adopted Globally

The Centre for Antimicrobial Resistance participated in a randomized clinical control trial that assessed if the use of a smartphone antibiotic stewardship app (Firstline.org) increased appropriate antibiotic therapy in hospitals. App use frequency was associated with a small but significant improvement in appropriate antibiotic use.

The app, first developed and launched in Alberta over 10 years ago, was adopted by the World Health Organization for inclusion as a delivery vehicle for the WHO AWaRe Antibiotic Book and chosen by the Public Health Agency of Canada for core national prescribing guidelines being developed by the Association of Medical Microbiology and Infectious Disease Canada.

Accountability and Monitoring

The Alberta Health [IPC Strategy \(2015\)](#) provides a framework outlining the roles and responsibilities of each entity in Alberta, including Alberta Health, AHS and Health Profession Regulatory Colleges. These organizations collaborate to uphold IPC standards.

Two Alberta Health IPC standards set out accountability and monitoring requirements for IPC practices in healthcare settings – Alberta Health [Standards for Infection Prevention and Control – Accountability and Reporting \(2011\)](#) and Alberta Health [Reusable & Single-use Medical Devices Standards: Standards for the reprocessing of reusable medical devices and for the use of single-use medical devices in all health care facilities and settings \(2019\)](#). Compliance with these requirements reduces surgical wait times, helps continuity of care and improves patient flow by reducing the risk of healthcare-associated infection.

IPC accountability and reporting standard

The Alberta Health [Standards for Infection Prevention and Control – Accountability and Reporting \(2011\)](#) outlines the roles and responsibilities of key positions in AHS for managing IPC concerns; implementing IPC standards; provincial and zone committees and reporting structure; monitoring compliance with these standards; and responding to incidents of noncompliance. These actions are essential for patient, healthcare provider and public safety.

Managing IPC concerns

In accordance with the Alberta Health [Standards for Infection Prevention and Control – Accountability and Reporting \(2011\)](#), infection control concerns are to be reported to the IPC Executive, the Senior Medical Officer of Health and through to the Alberta Health Chief Medical Officer of Health.

An infection control concern is defined in the standards as: “a condition or circumstance involving IPC that is or might become injurious or dangerous to the public health or that might hinder in any manner the prevention or suppression of disease”. This may include, but is not restricted to, an instance where the condition of a healthcare facility or setting, a healthcare practice, an infectious disease or an inadequate infection control measure pose a risk to public health.

In 2024/2025, there were 33 IPC concerns reported to the IPC Executive. Twelve of these were potential communicable disease exposures, e.g., five patient exposures to blood and body fluids of another patient through accidental reuse of single-use medical devices such as insulin pens, five patient exposures to diseases such as measles, chickenpox and pertussis; and two related to specific organisms of concern.

Ten of these were medical device reprocessing breaches either identified during Cycle 5 Medical Device Reviews or reported by staff. Eleven of these were facility infrastructure issues such as water releases, or failure of air-handling units across all zones and Covenant Health. Upon receiving report of an IPC concern, the IPC Executive or, in the case of an IPC concern requiring action under the *Province of Alberta (RSA 2023) Public Health Act*, the Senior Medical Officer of Health (AHS), fully investigates the report; conducts a risk assessment in a timely manner and in accordance with any protocol established by the Chief Medical Officer of Health (Alberta Health); promptly reports a description of the concern, findings of the risk assessment, actions taken and next steps to the Chief Medical Officer of Health, as required; and takes all reasonable steps to address the incident and protect patients, healthcare providers and the public. Steps may include contact tracing, laboratory testing, informing patient and giving appropriate treatment, staff education, surveillance for further cases, changes to processes and other corrective measures. When indicated, reported IPC concerns are evaluated by a risk assessment panel.

Risk assessment panel

The AHS and Covenant Health Risk Assessment Panel assesses public health and IPC concerns related to significant breaches in healthcare facilities or the community with a potential impact on patient safety. Specifically, the panel aids in evaluating the risk of transmission of pathogens and provides recommendations regarding public notification or the need for a focused look-back. Exposed patients are notified and advised to seek testing or further evaluation. Findings and outcomes are communicated using the IPC concerns process. Dr. Alexander Doroshenko, Medical Officer of Health and Dr. Oscar Larios, Senior Medical Director, IPC, co-chair the panel, which reports to the Quality, Safety and Outcomes Improvement Executive Committee of the AHS Executive Leadership Team. In 2024/2025, no IPC concerns required public notification or a focused look-back.

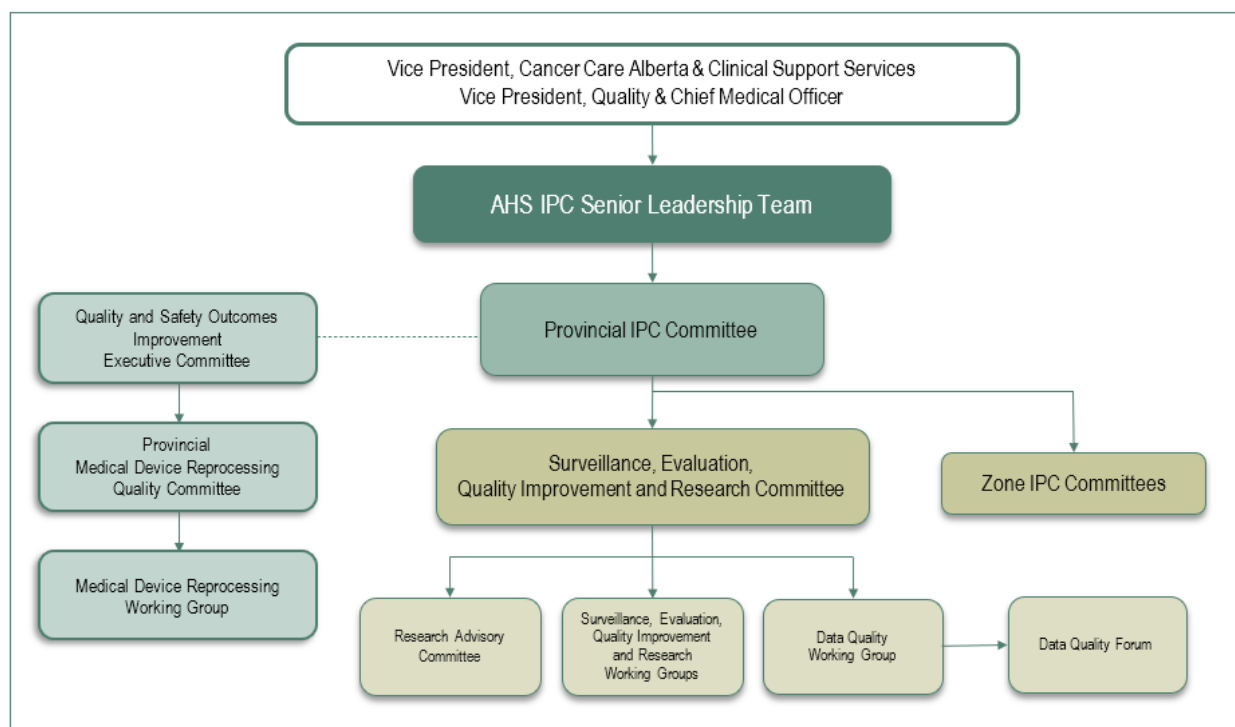
Decisions regarding disclosure are informed by the findings of the risk assessment and are guided by the AHS [Disclosure of Harm Procedure \(2022\)](#).

Provincial and zone IPC committees and governance structure

AHS provincial and zone IPC committees and governance structure are outlined in Figure 5. The Provincial Infection Prevention and Control Committee leads activities to prevent and control infections in all AHS facilities and settings, including contracted agencies and services, and serves an important communication and accountability function. The committee reports to the Quality, Safety and Outcomes Improvement Executive Committee of the AHS Executive Leadership Team. Membership includes senior leadership from several AHS departments and programs and Covenant Health.

The Provincial Infection Prevention and Control Committee collaborates with each of the five zone IPC committees, the Surveillance, Evaluation, Quality Improvement and Research Committee and the Covenant Health Infection Prevention and Control Committee. These committees: support strategies for prevention and control of healthcare-associated infections; meet regularly to receive, review and distribute IPC reports on provincial-level surveillance activities and discuss actions and trends; and analyze outbreaks, consider actions taken and suggest improvements to limit transmission of infections.

Figure 5: AHS provincial and zone IPC committees and governance structure

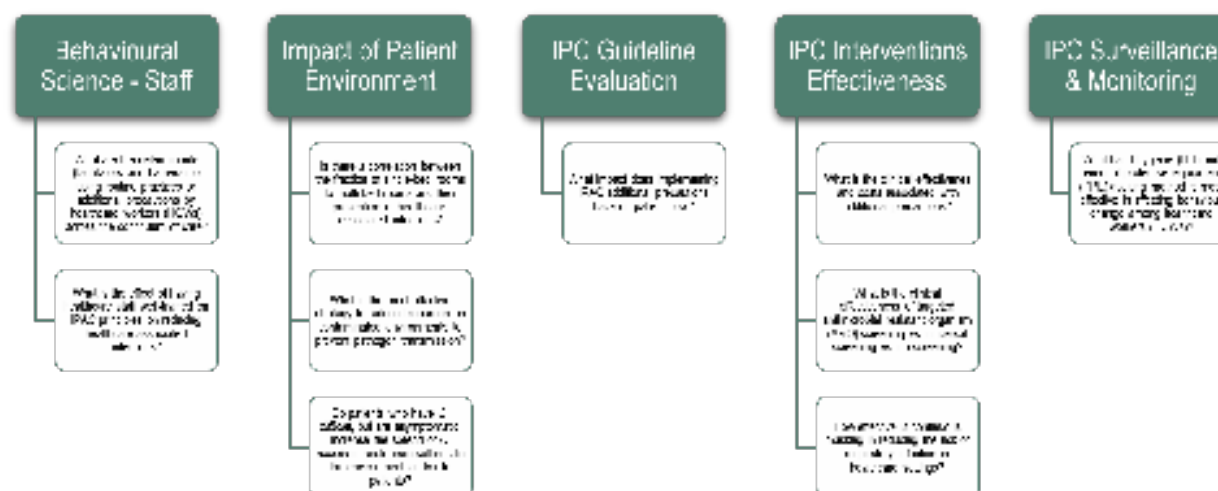


AHS Patient and Family Advisors serve on the IPC committees: Provincial Infection Prevention and Control Committee; Provincial Medical Device Reprocessing Quality Committee; Surveillance, Evaluation, Quality Improvement and Research Committee; and Research Advisory Committee. These advisors help these IPC committees to understand the patient and family perspective as outlined in our AHS [Patient First Strategy](#). Each advisor is assigned an IPC liaison from the committee to make them feel comfortable and answer questions. AHS Patient and Family Advisors help promote patient and family-centred care and remain mindful of the patient experience throughout IPC and within AHS. These advisors also provide feedback on IPC policies and procedures. Feedback is used to help guide content, address concerns and put patients and families at the forefront of all healthcare activities.

Provincial IPC research priorities

Through the Research Advisory Committee, AHS IPC staff and physicians, healthcare providers, researchers, and patients identified 10 top research questions (refer to Figure 6).

Figure 6: AHS IPC top 10 research questions



In 2023/2024, to address these research questions in a coordinated manner, the committee developed an action plan for the next one to five years using the six domains of the *Canadian Academy of Health Sciences Impact Framework*. The six domains are: 1) advance knowledge in IPC; 2) build capacity and capability in IPC research; 3) inform decision and policies in IPC; 4) improve health outcomes; 5) support positive socioeconomic outcomes; and 6) embed equity, diversity and inclusion in the entire research process including patient engagement.

In 2024/2025, the committee started initiatives in three domains:

1. Advancing knowledge in IPC by initiating four literature reviews on research priorities supported by students from the University of Calgary.
2. Building capacity and capability in IPC research by peer reviewing conference abstracts and posters submitted to IPC education conferences; co-writing and peer reviewing publications by infection control professionals on AHS IPC projects; providing training on conducting systematic reviews and risk of bias assessments; and reviewing IPC project proposals.
3. Supporting positive socioeconomic outcomes by exploring the cost and impact of enhanced masking policies on vancomycin-resistant enterococcus infections rates, outbreaks, and healthcare provider and system outcomes. The University of Calgary, IPC Research Scientist with the support of IPC staff, physicians, and Research Advisory Committee, secured over \$300,000 in external funding to address the research priorities.

The Research Advisory Committee works closely with AHS Engagement and Patient Experience to integrate the patient voice to support patient care and patient safety.

IPC reusable and single-use medical devices standard

The Alberta Health [Reusable & Single-use Medical Devices Standards: Standards for the reprocessing of reusable medical devices and for the use of single-use medical devices in all health care facilities and settings \(2019\)](#) are based on the CAN/CSA Z314:23 Canadian Medical Device Reprocessing standards and establish minimum requirements for the use of single-use medical devices and the cleaning, disinfection and sterilization of reusable medical devices between client uses. The standard aims to prevent the transmission of microorganisms to clients, personnel, the public and the environment; minimize the risk of harm to clients and personnel; promote the safe use of single-use medical devices; and support health professional regulatory colleges, healthcare professionals and other personnel who use or reprocess medical devices.

The AHS [Critical and Semi-critical Single-Use Medical Devices Policy \(2022\)](#) and the AHS [Management of Loaned, Reusable Critical and Semi-Critical Medical Devices Policy \(2022\)](#) align and comply with the Alberta Health standards.

The Covenant Health *Single-Use Medical Devices Policy (2023)* and *Standards for Single-use Medical Devices (2023)* also align and comply with the Alberta Health standards.

Reusable medical devices

This section provides details about accountability structures for meeting the Alberta Health [Reusable & Single-use Medical Devices Standards: Standards for the reprocessing of reusable medical devices and for the use of single-use medical devices in all health care facilities and settings \(2019\)](#) including ongoing medical device reprocessing reviews. These activities support AHS priority focus for improving patient flow, continuity of care, patient safety and information from the reviews is used for ongoing improvement.

Medical device reprocessing accountability structures

The Provincial Medical Device Reprocessing Quality Committee oversees and supports standardized quality medical device reprocessing practices across AHS and its contracted service providers. This committee reports to the Quality, Safety and Outcomes Improvement Executive Committee. Membership includes representatives from: Alberta Health; AHS provincially managed programs such as Accreditation, Capital Management; Contracting, Procurement and Supply Management; IPC and Patient Safety; zone operations; Covenant Health; and a public member representative for patients and families.

The committee collaborates on quality improvement outcomes and processes for reprocessing of reusable medical devices including preparation and responding to reviews of the Accreditation Canada Qmentum Global Foundational Standard for Reprocessing of Reusable Medical Devices.

The committee continues to help implement changes based on the updated CAN/CSA Z314:23 *Canadian Medical Device Reprocessing in all Health Care Settings* standards such as new equipment requirements, development of provincial education and policies to help put this equipment in place.

Partnerships with AHS Capital Management remain strong as medical device reprocessing infrastructure priorities related to the Alberta Surgical Initiative and other capital projects require regular review.

The Provincial Medical Device Reprocessing Working Group engages zone and site-level medical device reprocessing department leaders to improve consistency and quality of services across the province. This working group reports to the Provincial Medical Device Reprocessing Quality Committee. The working group includes frontline medical device reprocessing managers from AHS and Covenant Health and representatives from AHS: Accreditation; Contracting, Procurement and Supply Management; Diagnostic Imaging; Human Factors; and IPC.

Medical device reprocessing reviews

AHS medical device reprocessing reviews focus on continuous quality improvement. These reviews increase staff learning, improve IPC-related medical device reprocessing practices and monitor compliance with standards. Ultimately, this contributes to patient safety and positive surgical outcomes by confirming surgical instruments are reprocessed correctly, reducing the risk of post-surgical complications such as surgical site infections. Sites reprocessing reusable critical and semi-critical medical devices are reviewed on a scheduled cycle.

To date, there have been four review cycles: Cycle 1 (June 2010 to March 2013); Cycle 2 (June 2013 to April 2015); Cycle 3 (November 2016 to June 2017); and Cycle 4 (July 2020 to August 2022).

Cycle 5 commenced in mid-2024/2025. Results from these reviews are reported at the site, zone and provincial levels and deficiencies and corrective actions are followed up. Ahead of the start of Cycle 5 the [Medical Device Reprocessing of Reusable Critical and Semi-critical Medical Devices: Review Criteria and Supporting Standards](#) was updated. These review criteria and supporting standards align with the Alberta Health [Reusable & Single-use Medical Devices Standards: Standards for the reprocessing of reusable medical devices and for the use of single-use medical devices in all health care facilities and settings \(2019\)](#).

Success Story During Cycle 5 MDR Reviews

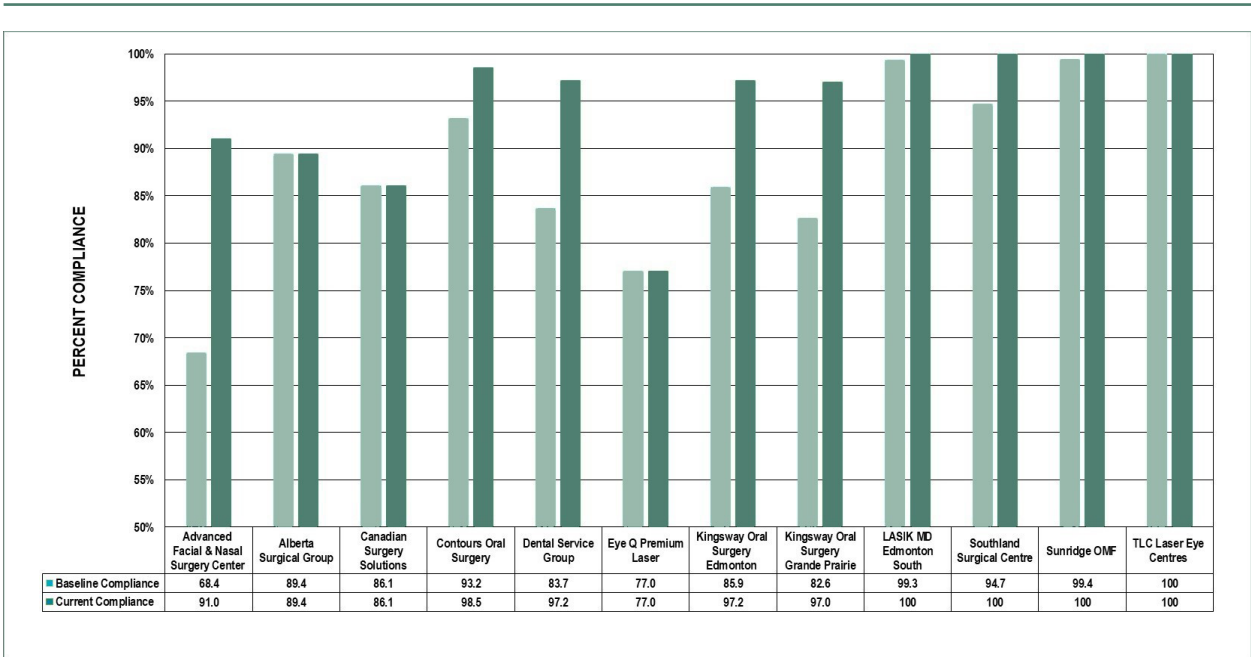
An Edmonton Zone diagnostic imaging department had concerns with the location and set-up of their probe reprocessing area. After consulting AHS IPC and the probe manufacturer, reprocessing was moved to a better location in adherence to review criteria resulting in improved workflow for staff.

Medical device reprocessing reviews in chartered surgical facilities

AHS performs joint reviews of chartered surgical facilities with the College of Dental Surgeons of Alberta and the College of Physicians and Surgeons of Alberta. AHS reviews the medical device reprocessing area while the respective colleges perform broader operational assessments. Successful collaboration of all three organizations during the review process has led to an increase in efficiencies and stronger working relationships.

Currently there are 36 chartered surgical facilities with AHS contracts and a medical device reprocessing area. In 2024/2025, 12 joint reviews were completed. Compliance continues to improve as corrective actions are completed and increased from 88.2 per cent to 94.6 per cent (refer to Figure 7). Chartered surgical facilities are largely independent of each other though several facilities have merged to form larger corporations. Reporting combined results provides general information about how well medical device reprocessing practices are followed and may be used to identify commonalities or trends in deficiencies. Four reports have been produced to date.

Figure 7: Medical device reprocessing reviews compliance for chartered surgical facilities



Single-use medical devices

Reusing single-use medical devices poses serious safety risks to patients. Devices may only be considered for reuse if reprocessed by a commercial reprocessor that operates in accordance with Health Canada’s requirements or if an exception process is followed as per the Ministerial Directive D4-2019. Exceptions permitting the reuse of specified single-use medical devices are evaluated using a multi-level approach. The approved exceptions are listed in the [Single-use Medical Device List of Approved Exceptions](#) on the external [AHS IPC](#) website.

Accreditation Canada

AHS participates in the accreditation of health services to help deliver safe quality healthcare. Accreditation Canada compares health services with national standards to identify areas for improvement. Several criteria are required organizational practices necessary for patient safety. Survey visits are unannounced. AHS strives to be accreditation-ready throughout the cycle.

Structures to support the accreditation cycle

The AHS IPC Accreditation Service Excellence Team and IPC Accreditation All Standards Working Group support AHS IPC staff by developing resources such as a compendium cross-referencing IPC to the relevant Accreditation Canada criteria. AHS IPC also participates in the AHS Medical Device Reprocessing Accreditation Service Excellence Teams. Similarly, Covenant Health IPC supports the Covenant Health Accreditation Service Excellence Team.

Results from the 2023-2027 accreditation cycle

All sites and programs assessed in the Accreditation Canada Spring and Fall 2024 Survey Visits had a compliance of 89.5 per cent or higher for the Accreditation Canada Infection Prevention and Control standard and 94.2 per cent or higher for the Accreditation Canada Reprocessing of Reusable Medical Devices standard. All sites surveyed met the required organizational practices for both standards.

Where found, gaps in compliance with the Infection Prevention and Control Standard were hand hygiene compliance, availability of hand hygiene sinks and signage, environmental and equipment cleaning, clutter in rooms and hallways and sharing surveillance data findings. Facilities needing improvement were reminded to confirm policies, procedures, and legal requirements are followed when handling bio-hazardous materials and categorize areas in the physical environment based on the risk of infection to determine the necessary frequency of cleaning, the level of disinfection, and the number of environmental services team members required.

In the event required organizational practices are unmet, the site or program develops an action plan to address the unmet items. AHS IPC supports the site or program in this process when it relates to the Infection Prevention and Control standard and the Reprocessing of Reusable Medical Devices standard.

For more information, including previous reports, refer to the [Alberta Health Services Accreditation Status and Activities for Health Facilities and Programs: Submission to Alberta Health](#). Evidence submissions demonstrating compliance with unmet ratings from the Spring survey and Fall survey will be submitted to Accreditation Canada in May 2025 and November 2025, respectively.

Province Wide Surveillance

Surveillance for the identification of healthcare-associated infections is an essential component of AHS' response to the hazard these infections pose to Albertans. AHS IPC surveillance focuses on infections with a significant cost to the healthcare system or those causing significant patient illness or death. Surveillance data are used to monitor trends, identify increases or decreases of infection rates and are used to identify and support necessary actions to improve patient care. AHS IPC surveillance definitions and processes to determine the presence of an infection are different than the clinical assessment for patient diagnosis and treatment.

Provincial IPC surveillance program

AHS IPC has an integrated provincial surveillance program. There are 10 provincial AHS IPC surveillance protocols related to outcome measures (refer to Table 2).

Table 2: Provincial IPC surveillance protocols related to outcome measures

Category	Protocol
Antibiotic-resistant organisms	Laboratory-confirmed carbapenemase-producing organisms in acute care settings Laboratory-confirmed methicillin-resistant <i>S. aureus</i> colonizations and infections in acute care settings Laboratory-confirmed vancomycin-resistant enterococcus infections in acute care settings
Bloodstream infections	Laboratory-confirmed bloodstream infections with antibiotic-resistant organisms including carbapenemase-producing organisms, extended-spectrum beta-lactamase-producing organisms, methicillin-resistant <i>S. aureus</i> and vancomycin-resistant enterococcus in all admitted patients and central line-associated bloodstream infections in adult and pediatric intensive care units
<i>Clostridium difficile</i> infection (<i>C. difficile</i> infection)	Laboratory-confirmed with clinical signs and symptoms in an acute care setting Laboratory-confirmed in a continuing care setting
Surgical site infections	Eligible cardiovascular procedures including coronary artery bypass graft or cardiac procedures that involve valve replacement, septum repair and reconstruction procedures Eligible orthopedic procedures including total hip or total knee replacement Eligible vascular procedures including peripheral vascular bypass procedures
Viral respiratory infection	Laboratory-confirmed positive test with at least one viral respiratory infection pathogen in acute care settings

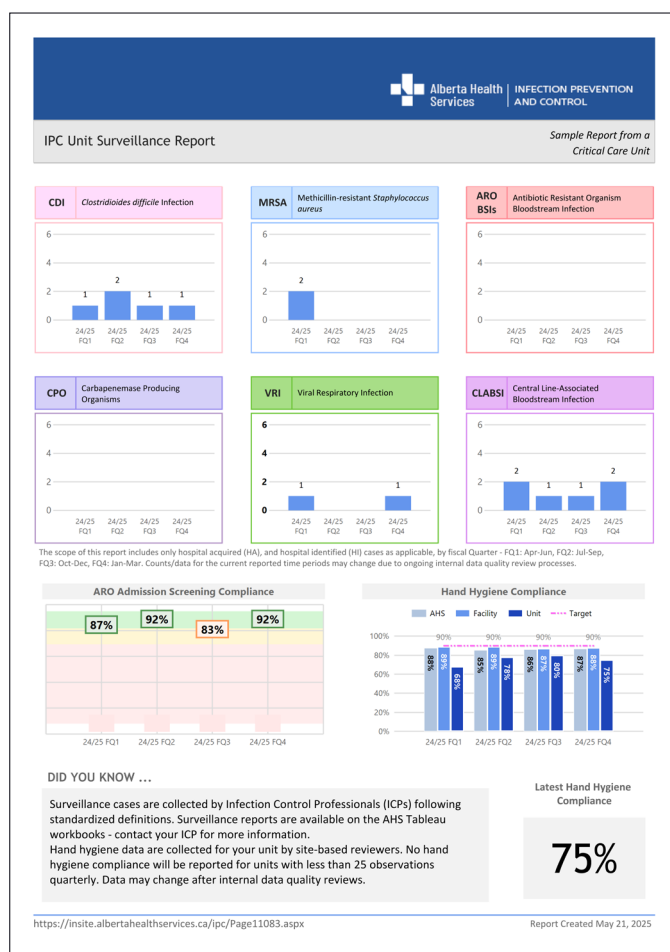
Surveillance protocols are posted on the [Surveillance & Reporting](#) webpage on the external [AHS IPC](#) website and on the internal Covenant Health IPC website. Protocols align with national and international surveillance protocols allowing comparison between Alberta and other jurisdictions in Canada.

The provincial IPC surveillance platform enables the collection and reporting of surveillance data for outcome measures. Vendor-supported platforms – AHS Clean Hands, Covenant Health HandyAudit, AHS Medical Device Reprocessing Reviews, – enable the collection and reporting of surveillance data for process measures. Education and training for staff are provided before platform access is granted to promote accuracy and validity of the data.

Local IPC surveillance programs

Local surveillance protocols are accommodated in the provincial surveillance platform and are based on needs identified at the local level. For example, sites can target a specific surgical procedure of local importance. In 2024/2025, AHS IPC created a Unit Surveillance Report (refer to Figure 8) to post on acute care units to share surveillance rates, increase awareness and meet Accreditation Canada requirements.

Figure 8: Sample IPC Unit Surveillance Report

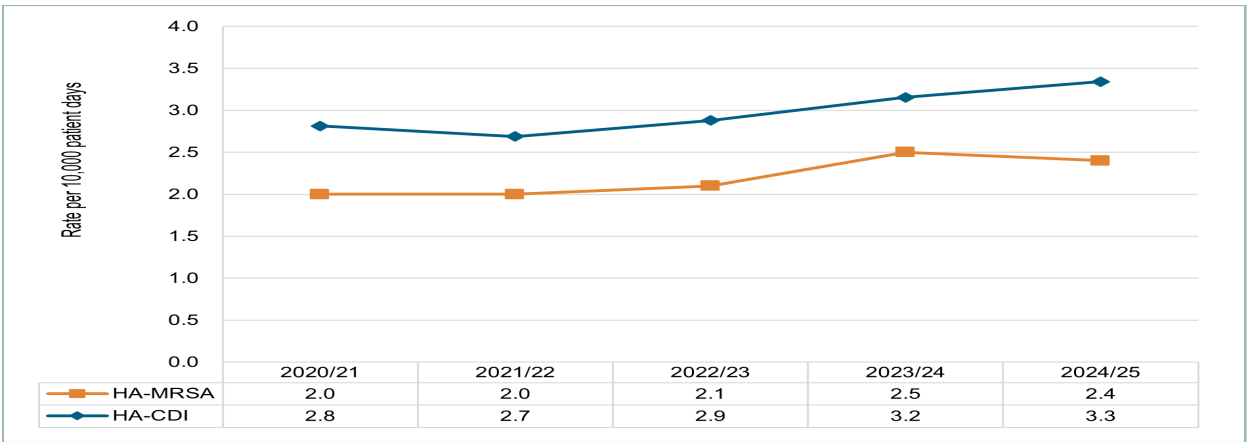


Review of surveillance trends for 2024/2025

C. difficile and methicillin-resistant S. aureus

In 2024/2025 hospital-acquired *C. difficile* infections increased (refer to Figure 9). This was reported to the Surveillance, Evaluation, Quality Improvement and Research Committee. Continued surveillance will help identify factors driving this increase incidence, such as overcapacity challenges or lack of adherence to IPC protocols, and identify where preventive measures could be targeted. In 2024/2025 hospital-acquired methicillin-resistant *S. aureus* colonization and infections decreased (refer to Figure 9.)

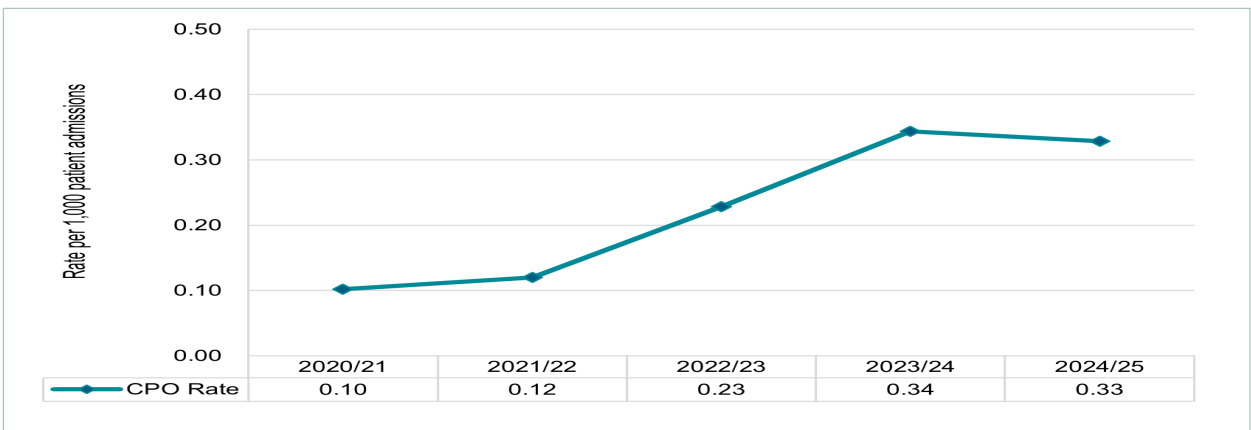
Figure 9: Provincial hospital-acquired rates for *C. difficile* infection and methicillin-resistant *S. aureus* colonization/infection, 2020/2021 to 2024/2025



Carbapenemase-producing organisms

The overall rate of colonizations and infections with a carbapenemase-producing organism remained stable in 2024/2025 (refer to Figure 10).

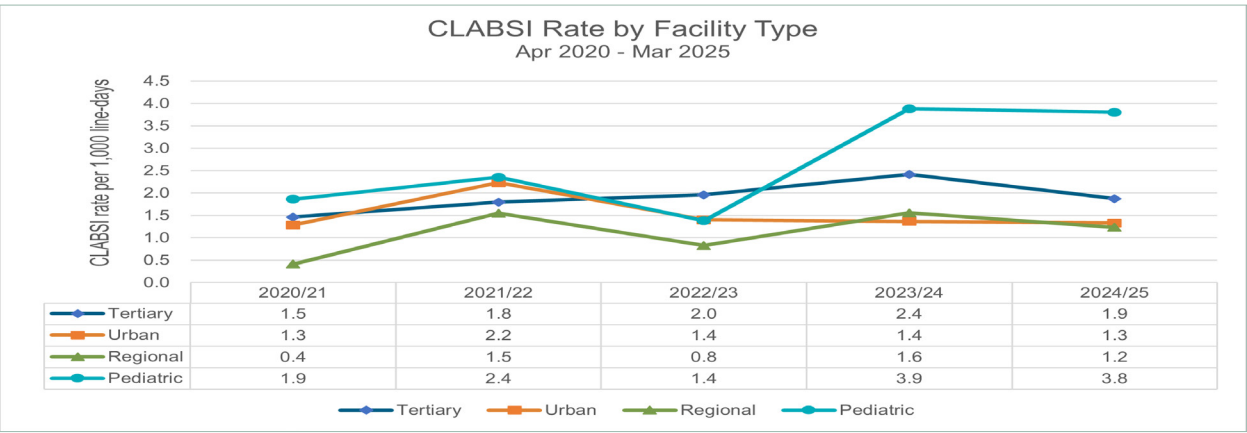
Figure 10: Provincial rate of carbapenemase-producing organisms, 2019/2020 to 2024/2025



Central line-associated bloodstream infections

Central line-associated bloodstream infections remain elevated in the pediatric intensive care units, with some recovery in the tertiary and regional intensive care units in 2024/25 (refer to Figure 11). AHS IPC participated in a national review of central line care practices through the Public Health Agency of Canada, as the national surveillance system endeavors to understand the increased central line-associated bloodstream infection rates seen across the country.

Figure 11: Central line-associated bloodstream infection rate by facility type, 2020/2021 to 2024/2025



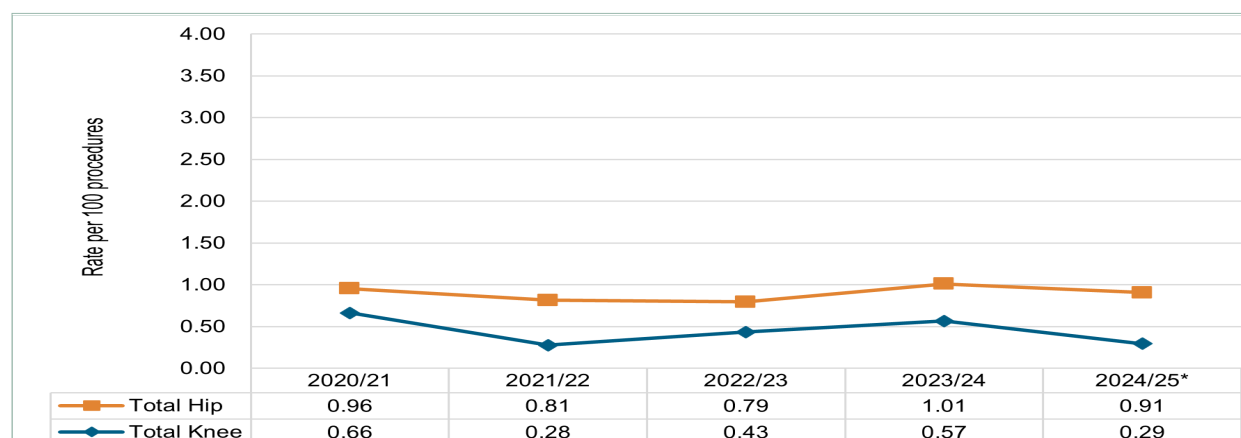
AHS IPC engaged the Critical Care Strategic Clinical Network regarding these trends and identified the need for a provincial approach after an environmental scan found variability in practices and process across the province. In 2023/2024, AHS IPC and this network developed an evidenced-informed Central Line-Associated Bloodstream Infections Safety Bundle – steps to take every time a central line is inserted – to decrease the risk of infection. The bundle includes appropriate hand hygiene and sterile central line insertion. Maintenance steps include scrubbing the hub [central line], skin antiseptics and daily review of the necessity of the line. In 2024/2025, the bundle was built into Connect Care so staff can record completed steps in the patient’s chart. Plans are underway for additional staff education about the bundle and continued monitoring of infection rates. In 2024/2025, the bundle was incorporated into the IPC sections of the provincial *Vascular Access Device Infusion Therapy: Adult & Pediatric - All Locations* and *Vascular Access Device Infusion Therapy: Neonatal - All Locations* resources as an implementation priority, followed for every insertion and line maintenance.

In early 2024/2025, AHS implemented a new model to advance quality, research and innovation. This involved transitioning the Strategic Clinical Networks and other existing groups, councils and committees into a single governance structure known as Program Improvement and Integration Networks.

Surveillance for surgical site infections

Provincial surveillance occurs for surgical site infections following selected cardiovascular, orthopedic and vascular procedures. Surveillance following orthopedic procedures are performed at facilities across the province. In 2024/25, surgical site infection rates following total hip and total knee replacement procedures decreased (refer to Figure 12).

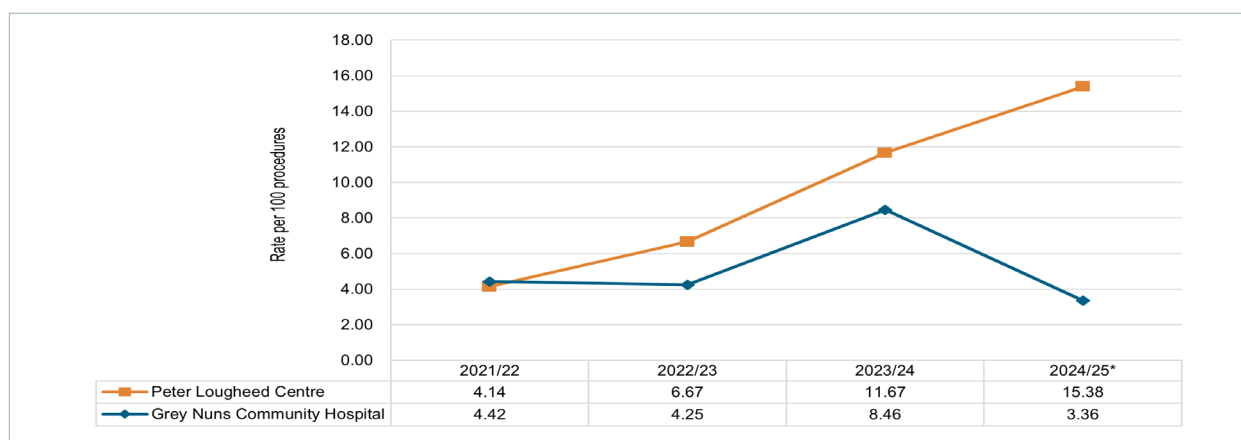
Figure 12: Complex surgical site infection rate following total hip replacement and total knee replacement, 2020/21 to 2024/2025*



* preliminary rate (April 2024 – December 2024)

Surveillance following peripheral vascular bypass procedures is performed at two facilities. In 2024/2025, these infections increased at the Peter Lougheed Centre and decreased at the Grey Nuns Community Hospital (refer to Figure 13). AHS IPC continues to work closely with the surgical and vascular divisions as well as unit management and staff at the Peter Lougheed Centre to determine what may be contributing to an increased rate.

Figure 13: Complex surgical site infection rate following peripheral vascular bypass procedures, 2021/2022 to 2024/2025*



* preliminary rate (April 2024 – December 2024)

New Nasal Decolonization Technology Decreases Surgical Site Infections

Nasal decolonization removes *Staphylococcus* germs from the patient's inner nose/nostrils before cardiac or orthopedic surgery to reduce the risk of surgical site infections which often lead to longer hospital stays, further surgeries, extended use of antibiotics and increased healthcare costs.

Nasal photo disinfection, completed just before surgery, offers a simple, effective alternative to the traditional nasal decolonization method. An audit of the Mazankowski Heart Institute cardiac surgery program found only 50 per cent compliance with applying antibacterial ointment to the inner nose/nostrils twice daily for five days, steps required for traditional nasal decolonization.

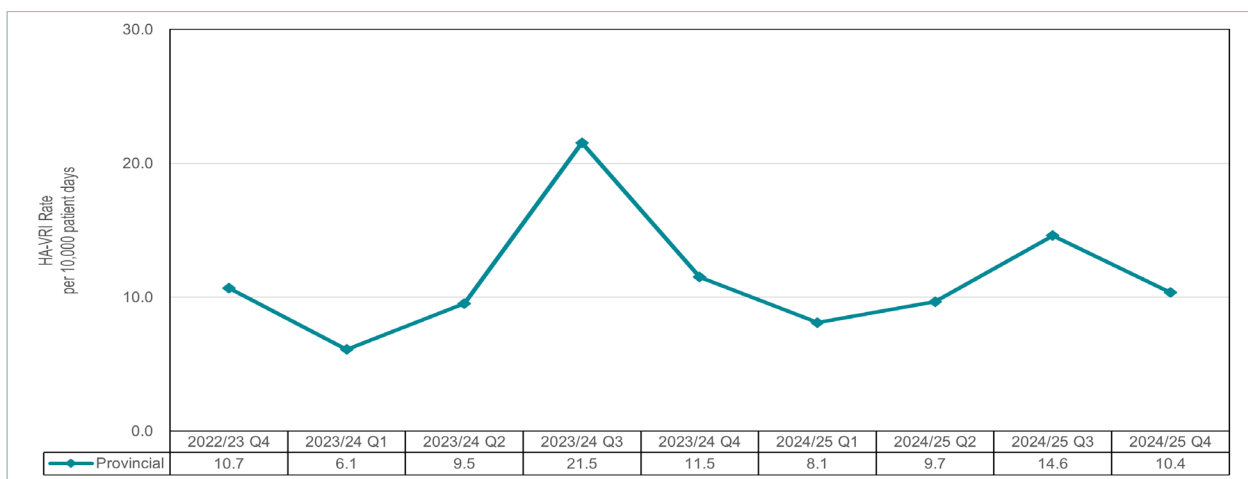
The Mazankowski Heart Institute adopted nasal photo disinfection for cardiac surgery. Just before surgery, staff apply antibacterial liquids and then a special light on the nose/nostrils for four minutes. Compliance was 98 per cent. To date, there has been a 27 per cent reduction in the most serious – deep and organ space – surgical site infections. This improves quality of patient care and provides cost savings.

Orthopedic surgery at the Royal Alexandra Hospital and many other hospitals across the country are now using nasal photo technology.

Viral respiratory infections

Viral respiratory infections may cause severe patient illness or death in both adult and pediatric healthcare settings. In 2024/2025, viral respiratory infection rates decreased in the spring but increased in the Fall and Winter (refer to Figure 14), however there were fewer hospital-acquired viral respiratory infections in 2024/2025 as compared to 2023/2024. For adults, most hospital-acquired viral respiratory infections were COVID-19 and for pediatrics, the majority were enterovirus or rhinovirus infections.

Figure 14: Provincial rate of hospital-acquired viral respiratory infections, January 2023 to March 2025



Human Resource Capacity

AHS IPC develops, implements and evaluates resources and tools that integrate IPC principles into clinical and non-clinical practice for all AHS staff and physicians. Collaboration with AHS Knowledge Resource Services contributes to improved access to evidence and information to support up-to-date IPC practices. AHS IPC also develops, implements and evaluates opportunities to support professional development for AHS IPC staff and physicians.

Enabling IPC capacity for AHS

Education and training

AHS IPC supports education and training for AHS employees, medical and midwifery staff, students, volunteers and those acting on behalf of AHS such as contracted service providers. The provision of AHS IPC education and training is both extensive and diverse and uses a variety of teaching and learning approaches.

The IPC Teaching and Learning Working Group oversees the implementation of the *AHS IPC Education and Learning Framework* for IPC education and training. Across all zones, face-to-face interaction and using just-in-time feedback is one of the most important ways infection control professionals connect with staff and physicians. Other methods such as online access through the external and internal AHS IPC websites, video conferencing, social media and simulations are also used.

IPC Education in Covenant Health

Unit and program-based education delivered by the Covenant Health IPC team in 2024/2025, include in-services with Emergency Department staff on the identification and management of patients presenting with rash; outbreak and personal protective equipment simulations in rural continuing care; IPC representation on the Covenant Health Clinical Nurse Educator forum with infection control professionals offering education sessions to site clinical nurse educators on IPC topics of interest; and attendance at Accreditation Service Excellence Teams for non-IPC services to share IPC resources.

Enabling IPC competency for infection control professionals

AHS IPC strives to align its human resources across the province to meet workload requirements and provide ongoing improvement in safe patient care. Professional development for infection control professionals is supported to advance competency and enhance staff satisfaction. Infection control professionals with at least two to three years of experience are encouraged to complete and maintain their Certification in Infection Control through the Certification Board of Infection Control and Epidemiology, Inc. Certification provides a meaningful indicator of a standard scope of knowledge and level of expertise. The work below aligns with the AHS IPC program's strategic goals to improve the experience and professional development of AHS IPC staff.

Orientation and ongoing educational opportunities to support AHS IPC staff

Standardized tools for the orientation process provided consistency for all AHS IPC staff. Resources to help staff understand and enhance their competencies were developed. Once staff determine their learning goals such as acquiring a new competency or advancing in an existing competency, conversations with their leader help them to identify the resources needed to succeed. In 2024/2025 the *IPC Compendium* was released to support reaching these goals. Each section is linked to one or more IPC competencies.

The *IPC Compendium* is a comprehensive resource to support all positions within the IPC program at early and advanced career stages. This resource is meant to be evergreen.

Partners helped update existing content, align the compendium with the organization's existing resources and prepare new content to close identified gaps.

Education and information sessions

The AHS IPC program encourages AHS IPC staff and physician participation in education opportunities to build and maintain competencies. Two examples are AHS IPC PLoS sessions and Special Education Sessions.

AHS IPC PLoS sessions are short talks allowing colleagues to share experiences and learn from others about highlighted work. Examples of 2024/2025 presentations included:

- Contaminated Sink Investigation linking faulty faucet and sink design and outbreaks of severe healthcare-associated infections.
- Investigation of an outbreak in a neo-natal intensive care unit. Presentation focused on investigative steps and priorities to improve IPC outcomes.
- Using an IPC quiz to engage staff, identify learning needs, build knowledge and develop relationships in Grande Prairie Regional Hospital.

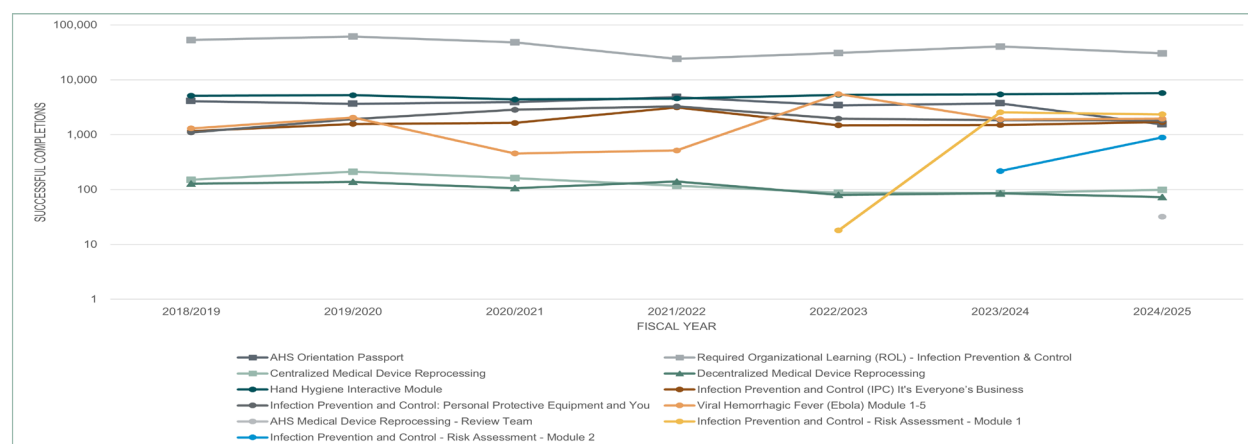
In 2024/2025, Special Education Sessions included AHS Branding 101, Writing More Effectively and Inclusive Language and Communication.

eLearning modules

Interactive eLearning modules allow for convenient and flexible education while promoting learner engagement. eLearning modules are available through the AHS learning management system – MyLearningLink – on AHS Insite. AHS staff including medical staff complete the modules through this system as it records modules completed and usage of these resources. All modules are also posted on the [Education & Training](#) webpage on the external [AHS IPC](#) website for contracted service providers and others without access to MyLearningLink.

In 2024/2025, in preparation for Cycle 5 medical device reprocessing reviews, AHS IPC developed a new interactive module for review team members. As a result there are 11 AHS IPC-related eLearning modules, including Required Organizational Learning: Infection Prevention and Control. In 2024/2025, AHS IPC updated the Required Organization Learning: Infection Prevention and Control Module to make it easier and quicker to complete while still providing all the essential information. The new module includes tailored content based on an individual's role: either clinical or non-clinical. In 2024/2025, there were 43,237 successful eLearning modules completions, representing a 6.0 per cent increase compared to 2021/2022 (refer to Figure 15). This increase may be explained by the change in frequency of the Required Organizational Learning: Infection Prevention and Control Module from annually to once every three years. This change was made in 2020/2021.

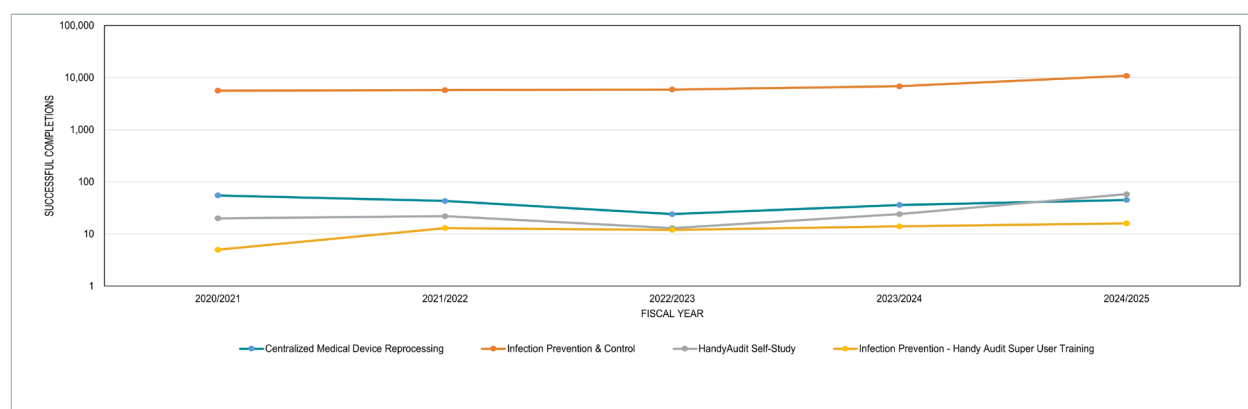
Figure 15: Number of AHS staff passing online eLearning modules



AHS IPC is increasing awareness among staff through discussion with clinical leadership teams as well as through AHS Community Engagement and Communications to promote all IPC educational opportunities, emphasizing the [IPC Competencies for Healthcare Providers](#), developed by Infection Prevention and Control Canada. This supports patient safety, staff well-being and quality care delivery.

Covenant Health has its own learning management system – Covenant Learning Connection, known as CLiC – including its own IPC-specific eLearning modules. Currently, there are four IPC-related eLearning modules on Covenant Learning Connection. Covenant Health staff are expected to complete the IPC Essential Education module annually and the other modules on-hire and then on a regular basis. In 2024/2025, there were 11,295 successful completions of these eLearning modules, which represents a 42.2 per cent increase compared to 2023/2024 (refer to Figure 16).

Figure 16: Number of Covenant Health staff passing online eLearning modules



AHS IPC resources for practice

AHS IPC develops resources to support evidence-informed practice and provide direction to AHS staff and physicians. These resources are created in collaboration with partners and are reviewed at least once every three years. IPC resources are created and updated to manage new infections and diseases emerging in healthcare settings requiring changes to standard IPC practices. Most resources are available on the external [AHS IPC](#) website so it is easy for healthcare partners and the public to find IPC information. Most Covenant Health IPC resources are available on the internal Covenant Health IPC website.

Resource manuals

AHS IPC develops provincial resource manuals supporting staff in acute care, addiction and mental health, community-based, or continuing care to manage the care and placement of patients with known or suspected diseases.

Disaster management resources

Healthcare services must remain accessible in the event of a disaster. The AHS Incident Management System structure – based on the Incident Command System – enables rapid integration and connectivity between sites, services, zones and external partners. AHS IPC is represented at each level when systems are activated in the event of an emergency or disaster.

In 2024/2025, the IPC Communicable Disease Emergency Response Plan Working Group updated the *IPC Functional Plan* which focuses on an all-hazards approach with a simplified and condensed format.

AHS IPC supports the commissioning of temporary healthcare service delivery areas and structures used during a post-disaster period and recommissioning of impacted healthcare facilities. Using lessons learned from the Slave Lake (2011) and Fort McMurray (2016) wildfires, AHS IPC staff used the [IPC Tools for Disaster Management](#) on the external [AHS IPC](#) website to inform decisions on disasters such as the Jasper (2024) wildfires.

AHS IPC Guides 2024 Jasper Wildfire Evacuation and Recommissioning

In 2024/2025, Jasper Alberta was evacuated due to wildfires. The Jasper Healthcare Centre building systems were shut down avoiding fire and smoke damage. AHS IPC collaborated with site Facilities Maintenance and Engineering, Environmental Public Health and Workplace Health and Safety and used AHS Guidelines for Reopening Healthcare Facilities after Evacuation and IPC Post Disaster Recommissioning of Healthcare Facilities Checklist to guide re-entry planning and recommissioning about a month later.

AHS IPC and Environmental Public Health advised on management of clean supplies, sterile instruments, linen, cleaning and disinfection, refrigerated and frozen items, air conditioning units and water system flushing/superheating/testing. Independent, battery-operated humidity and temperature monitors were used during power outages. Supplies in the patient environment were limited to those for immediate use or a specific procedure to minimize waste.

Best practice recommendations

AHS IPC working groups continue to consult on, develop or revise documents to help inform staff, physicians, patients and families and to support implementation of evidence-informed practice. AHS Patient and Family Advisors are consulted and provide feedback to help improve the documents. All best practice recommendations are posted on the [Best Practice Recommendations](#) webpage on the external [AHS IPC](#) website and on the internal Covenant Health IPC website.

Workplace health and safety

AHS IPC and AHS Workplace Health and Safety have a shared mandate to protect healthcare providers from acquiring or transmitting communicable diseases while at work. Healthcare providers are at increased risk of acquiring communicable diseases and potentially transmitting these diseases to others because of their close contact with others.

AHS IPC and AHS Workplace Health and Safety collaborate on communicable disease management in healthcare settings to help staff respond appropriately, especially in the face of emerging infectious organisms and emerging evidence.

The health and safety of our workforce is critical to allow for a patient-focused high quality healthcare system to continue to exist. AHS, including IPC and Workplace Health and Safety, participates in regular meetings with the Alberta Union of Provincial Employees, Health Sciences Association of Alberta and United Nurses of Alberta. AHS engagement is also improved through ongoing worker participation in all Joint Workplace Health and Safety Committees. These committees bring together managers and workers from AHS areas to promote health and safety and promote communication on important topics such as the [Aerosol-Generating Medical Procedure Guidance Tool](#). The committees provide input, recommendations and support to AHS leaders who are held accountable for creating and promoting a safe, healthy and inclusive workplace.

AHS Workplace Health and Safety works to improve the safety culture. This is accomplished through targeted initiatives to increase incident reporting, streamline and support incident investigations and to promote positive changes aiming to prevent and reduce hazards in patient care environments. Preventing and reducing the severity of physical and psychological injuries is necessary for creating and maintaining a healthy and fully staffed workforce. This leads to increased patient safety and contributes to more positive outcomes. In alignment with direction and guidance from Alberta's Chief Medical Officer of Health, the Public Health Agency of Canada, World Health Organization and others, all appropriate controls were in place in AHS and Covenant Health to support healthcare provider safety throughout the response to respiratory viral season and throughout the year.

In 2024/2025, the AHS Influenza Immunization Campaign was supported by 868 Flu Champions and casual staff, who provided influenza vaccinations on site and at AHS Workplace Health and Safety immunization clinics at sites across the province. During this campaign, the COVID-19 vaccine was also offered to AHS staff during the same appointment as their influenza vaccine. The AHS goal is to immunize as much of the workforce as possible against influenza annually. AHS Workplace Health and Safety tracks voluntary submissions on the number of AHS employees immunized for influenza through the Got My Flu Shot Form, to help in workforce planning in the event of an outbreak. AHS Workplace Health and Safety works to support ongoing strategic communication, including reminders of the importance and benefits of vaccination, to expand the network of Flu Champions and to continue active collaboration with AHS Public Health to make immunization accessible to all staff.

Physical Environment and Infrastructure

AHS IPC collaborates with partners such as AHS Capital Management and AHS Linen and Environmental Services to provide appropriate infrastructure, risk reduction strategies and clean care environments at site, zone and provincial levels.

Infrastructure and construction

AHS IPC supports new facility construction and ongoing renovations at existing facilities. Facility design is fundamental in the prevention of infection transmission. Current design requirements include, but are not limited to, the appropriate spacing between patients in multi-patient treatment spaces; the ability to prevent airborne infections using directional airflow; heating, ventilation and cooling in operating theatres; and selection and installation of hand hygiene sinks in clinical areas. AHS IPC collaborates closely with partners to optimize design in new and existing facilities. To provide guidance on IPC principles related to construction and design, AHS IPC staff and physicians are active participants of the multidisciplinary project teams.

Airborne isolation rooms

An inventory of airborne isolation rooms in AHS and Covenant Health acute care facilities is updated annually. The inventory is used by frontline staff when managing patients with suspected or confirmed communicable diseases requiring airborne precautions, such as measles, pulmonary tuberculosis and varicella. AHS IPC is participating in a Special Environments Working Group led by AHS Capital Management to standardize the process and the naming of airborne isolation and protective environment rooms.

Contributing to Improvement of Design Standards

AHS IPC provided feedback as part of the public review of the Canadian Standards Association Group's 2024 draft of the Z8000 Canadian Healthcare Facilities standard. Feedback included AHS quality improvement priorities such as ambulance bay design to include appropriate clean and soiled equipment storage, access to personal protective equipment and a hand hygiene sink. These features were incorporated into the new standard.

Design and construction of safe patient care environments

AHS IPC staff are members of multidisciplinary teams involved in the design and construction of new healthcare facilities including major renovations of existing spaces. Once the design stage is completed, AHS IPC staff actively collaborate with multidisciplinary project teams to develop an infection control plan. This infection control plan identifies and mitigates infection risks associated with the construction process and optimizes the cleanliness of newly built or renovated healthcare facilities.

Provincial capital funding review of medical device reprocessing areas

Provincial capital funding for medical device reprocessing areas requires a long-term commitment and is based on the Alberta Health [Reusable & Single-use Medical Devices Standards: Standards for the reprocessing of reusable medical devices and for the use of single-use medical devices in all health care facilities and settings \(2019\)](#).

Provincial review of AHS and Covenant Health medical device reprocessing areas began in 2010 to assess compliance with the standards and continues on a scheduled cycle. These reviews identify the equipment and infrastructure needed to maintain operations. Correcting equipment and infrastructure deficiencies decreases the risk of reprocessing failures, addresses patient and staff safety concerns and contributes to maintaining surgical service.

To support capital requests arising from the provincial reviews, two Major Capital Needs Assessments were completed in 2013 (Phase 1) and 2021 (Phase 2). These studies outline the background and scope of projects for priority sites and were followed up with cost estimates to inform the major capital funding request to the Government of Alberta.

Capital funding for medical device reprocessing area upgrades has been requested at various AHS and Covenant Health sites. Since 2018, the Government of Alberta capital budgets, up to and including Budget 2025 have included approximately \$456 million in funding for medical device reprocessing area capital improvements. The approved projects are in various stages, one project has been completed, two projects are under construction, seven projects are in the design/construction document phase and six projects are in early planning stages.

Additional medical device reprocessing upgrades are included as part of the Alberta Surgical Initiative approved projects. These projects are more focused on additional capacity or functionality to support surgical uplifts and changes in service rather than deficiencies to maintain essential operations.

Construction-related resources

Design and construction

The IPC Design and Construction Working Group is an initiative between AHS Capital Management and AHS IPC supporting compliance with IPC requirements during facility design, construction and maintenance activities.

In 2024/2025, this working group updated the [Hand Hygiene Sink Selection and Installation](#) and [Infection Control Risk Assessment and Preventive Measures Toolkit for Construction, Renovation and Maintenance](#) to reflect changes to standards from Canadian Standards Association and Facility Guidelines Institute.

The IPC Design and Construction Forum, with representatives from Alberta Infrastructure, meets monthly to share information and discuss topics in a multidisciplinary setting.

Linen and environmental services

AHS IPC and Linen and Environmental Services work together on the Linen and Environmental Services Practice Working Group to develop and update practices related to cleaning and disinfection to maintain clean and safe patient environments. In 2024/2025, this working group updated 15 AHS Linen and Environmental Services resources with IPC content. AHS IPC also provides representation supporting the Nutrition Food Services Safety Practice Working Group, responsible for developing and revising practices related to food safety. In 2024/2025, this working group updated seven Nutrition Food Services resources with IPC content. The partnership between AHS IPC and AHS Linen and Environmental Services remains strong. This important relationship enabled the creation of collaborative responses to emerging needs and the development of resources for frontline staff. Throughout 2024/2025, the programs were unified in their efforts to move away from COVID-19 specific processes and resources towards an approach encompassing all viral respiratory infections.

Auditing for excellence

The AHS Linen and Environmental Services Auditing for Excellence Program continued visual and ultraviolet cleanliness audits of the patient environment. Visual audits assess whether the physical environment and surfaces look clean compared to expected cleaning outcomes. Visual audits must score 85.0 per cent or more to pass. Ultraviolet or microbial audits use a luminescent, colorless material applied to high-touch surfaces prior to a room being cleaned. Once the area is cleaned, the auditor uses a hand-held ultraviolet flashlight to detect any remaining residue of ultraviolet marker on the surface. Each ultraviolet audit is comprised of up to 10 markers and must score 80.0 per cent or more to pass. Audit findings are entered into a web-based platform for real-time access to results informing AHS' response and improvement initiatives. As of late 2024/2025, more than 20,000 audits were completed across AHS sites. The provincial audit score averages were 90.1 per cent for visual audits and 80.1 per cent for ultraviolet audits. Highest rated items were window coverings, ceilings, cubicle curtains, light fixtures and waste containers. Lowest rated items were hard flooring, beds/stretchers/exam tables and interior windows/glass. With continued

staffing pressures and other challenges ongoing audits showed the importance of and commitment to the program.

Other Linen and Environmental Services and AHS IPC collaboration

In 2024/2025, Linen and Environmental Services representatives continued as ad hoc members on several AHS IPC working groups and committees including the Provincial Medical Device Reprocessing Working Group and the AHS IPC Document Working Group. Nutrition, Food, Linen and Environmental Services continue to be a standing member of the Provincial Infection Prevention and Control Committee. In late 2024/2025, AHS transitioned biomedical waste vendors. Environmental Services supports biomedical waste services at the site level. There was significant impact in the Calgary Zone because of their use of reusable sharps containers proprietary to vendor. Due to required infrastructure changes to support the move, Nutrition, Food, Linen and Environmental Services Provincial Operations Support worked closely with zone IPC to effectively plan for onsite work to be completed safely within all patient and resident affected areas. The partnership was vital for the success of the move and enabled a smooth transition.

Public Awareness and Education

AHS IPC collaborates with multidisciplinary partners to support public awareness and education. Antimicrobial stewardship is the wise use of antibiotics to preserve their value and effectiveness. It is an example where public awareness and education is important for both healthcare and public domains. AHS IPC physicians are leaders in the work directed to patient populations and healthcare providers. AHS IPC also collaborates with partners, such as Do Bugs Need Drugs?, a community program about the wise use of antibiotics and MyHealth.Alberta.ca who focus on providing information targeted to the public.

“As a senior citizen, and a retired [registered nurse], it is my strong opinion that each of us must work to our highest level to maintain our own health. It is absolutely the opposite of waiting for someone to do something for me. I maintain all my immunizations, I push my arthritic body to its physical maximum, and I exercise my brain cells by continuing with volunteer efforts for a great number of hours. When I am out and about I wear my mask and maintain appropriate distances.

I am the person responsible for myself and my level of wellness – that’s how to prevent infection.”

– AHS Patient and Family Advisor

Promoting antimicrobial stewardship awareness and education in the healthcare domain

Antimicrobial stewardship promotes optimal antimicrobial therapy including assessment of the need for antimicrobials, and if antimicrobials are needed, the appropriate selection, dosing, route and duration of antimicrobial therapy. It is a patient safety initiative meant to:

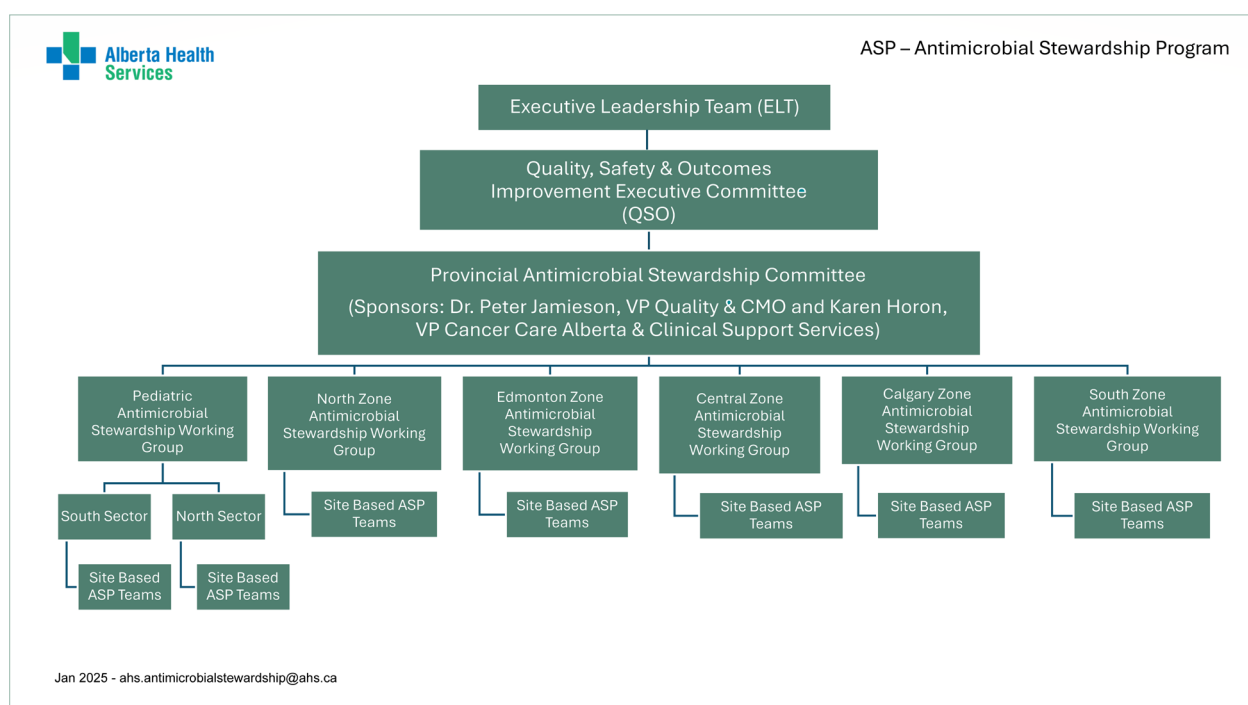
- Optimize patient clinical outcomes
- Minimize antimicrobial adverse effects/toxicity
- Reduce the selection of certain pathogenic organisms, such as *C. difficile*
- Reduce or stabilize antimicrobial resistance.

Work continues to increase healthcare providers’ knowledge about appropriate use of antimicrobials. The AHS Provincial Drug Formulary is the list of medications, including antimicrobials, available within AHS and Covenant Health and uses restrictions to guide their use. Additionally, there are several evidence-informed, measurable and targeted antimicrobial stewardship interventions promoting appropriate antibiotic use.

AHS Antimicrobial Stewardship Program

The newly revitalized AHS Antimicrobial Stewardship Program, reporting to Quality, Safety and Outcomes Improvement Executive Committee, officially launched in early 2024/2025. By integrating activities under one provincial program for all AHS acute care sites, this new framework enhances monitoring of antimicrobial use across the province, supports effective design and implementation of initiatives and confirms that optimal antimicrobial use becomes the standard of care. The provincial and zonal antimicrobial stewardship committees (refer to Figure 17) are establishing and overseeing program implementation for AHS acute care sites in a phased roll out with a focus on prospective audit and feedback, one of the most effective tools. Prospective audit and feedback consist of program pharmacists and physicians providing feedback to prescribers on their antimicrobial prescriptions to confirm optimization of patient management in real time and has been expanded to 15 AHS acute care sites in the first year of launch. Further information on additional antimicrobial stewardship initiatives, educational newsletters, local guidelines and other resources are available on the [Antimicrobial Stewardship Program](#) webpage located on the external [AHS website](#).

Figure 17: AHS Antimicrobial Stewardship Program Reporting Structure



Alberta's One Health Antimicrobial Resistance Framework for Action

Recognizing antimicrobial resistance is a global health threat and after engagement with partners, the Alberta government released an antimicrobial resistance framework in late 2024/2025 to provide an evidence-informed approach to tackling antimicrobial resistance across the human, animal and environmental sectors. Alberta Health has committed to providing \$5 million over the next two years to support antimicrobial stewardship development across all sectors in a phased manner of which a portion of these funds are anticipated to support the development of the antimicrobial stewardship program in the acute care setting. This represents an exciting opportunity to accelerate the growth of the AHS Antimicrobial Stewardship Program and leverage the interdisciplinary expertise and supports outlined in the Antimicrobial Resistance Framework.

The Centre for Antimicrobial Resistance participated in the process leading to the [Alberta's One Health Antimicrobial Resistance Framework for Action](#).

Provincial antimicrobial stewardship program highlights

Optimizing the Management of *Staphylococcus aureus* Bacteremia (OPTIMUS-SAB)

S. aureus bacteremia is a bloodstream infection associated with high mortality rates of 30.0 per cent. Alberta has high rates of about 1,800 per year and local data suggest only 30.0 per cent of patients are managed optimally. The Optimizing the Management of *S. aureus* Bacteremia initiative was designed to confirm timely, equitable and evidence-informed care to all patients through automated notification of cases to a centralized care team, enabling recommendations to care providers to optimize care and timely Infectious Diseases consultation. This initiative first launched in the Edmonton Zone on May 1, 2024, followed by Central, South and North zones at three-month intervals thereafter, with plans to launch Calgary Zone on May 1, 2025. Since launch, the program has optimized the care for 580 *S. aureus* bacteremia patients. The impact of this initiative will be evaluated in April 2026 with subsequent sharing of results.

Local antimicrobial stewardship highlights

Antimicrobial stewardship activities in the North Zone

Development of the North Zone Antimicrobial Stewardship Program is underway. As part of this a project was undertaken in early 2024 which involved collating antimicrobial utilization data across all 33 acute care sites and shadow auditing prescriptions at eight representative North Zone acute care sites. These data are compiled into a report to inform the development of a North Zone Antimicrobial Stewardship Program designed to meet local needs. Preliminary data suggest a focus on sites with highest utilization, such as Grande Prairie Regional Hospital and Northern Lights Regional Hospital, and additional sites with disproportionately higher restricted antibiotic use such as Grande Cache Community Health Complex and High Prairie Health Complex. Target antimicrobials include meropenem, fluoroquinolones, clindamycin and piperacillin tazobactam.

Antimicrobial stewardship activities in the Edmonton Zone

The Edmonton Zone Antimicrobial Stewardship Committee has been reconstituted in November 2024 with representation from all Edmonton Zone acute care sites in anticipation of future Antimicrobial Stewardship Program expansion. In May 2024, an antimicrobial stewardship team was established at the Royal Alexandra Hospital, including a medical director and two Antimicrobial Stewardship Program pharmacists, who have successfully implemented a hospital-wide prospective audit and feedback program in July 2024. From July – December 2024, there have been 512 audits with 471 recommendations to optimize antimicrobial use and patient management. A six-month follow-up presentation at Royal Alexandra Hospital Medicine Grand Rounds shows the program has been well received, with a positive influence on antimicrobial prescribing.

The University of Alberta Hospital site continues to be a leader in Antimicrobial Stewardship Program productivity. The core initiative, prospective audit and feedback of restricted antibiotics, was applied to 1,734 prescriptions this fiscal year. Recommendations to optimize prescriptions were made in 40.7 per cent of prescriptions with an acceptance rate of 90.8 per cent. A prospective audit and feedback initiative targeting echinocandins [a class of antifungal drugs] was conducted in June 2024 where 22 micafungin [an antifungal drug] prescriptions were audited over the month. Overall, 77 per cent of prescriptions were assessed as appropriate, with recommendations made in six prescriptions, representing a potential opportunity for care optimization.

Antimicrobial stewardship activities in the Central Zone

The Central Zone Antimicrobial Stewardship Program implemented successful prospective audit and feedback of key restricted and broad-spectrum antimicrobials at Red Deer Regional Hospital in June 2024. Based on 410 charts audited from June – December 2024, 292 recommendations were made with a 92 per cent acceptance rate. The program has also successfully de-labeled numerous penicillin allergies in inpatients which will result in safer future antibiotic use.

Antimicrobial stewardship activities in the Calgary Zone

In 2024/2025, the Calgary Zone Antimicrobial Stewardship Program team continued to audit and optimize care for all patients with bacteremia [bloodstream infection] with *S. aureus*, Enterococcus and candidemia in the Calgary Zone. Additionally, prospective audit and feedback started in June 2024 at the Foothills Medical Center and Rockyview General Hospital for the entire hospital, including Critical Care units, with limited Antimicrobial Stewardship Program activity previously. From June 2024 – March 2025, there were 796 audits with 392 recommendations to optimize prescriptions.

Knowing that erroneous penicillin allergies contribute to the use of second line antimicrobial agents and suboptimal patient care, the Antimicrobial Stewardship Program piloted a de-labelling initiative at the Foothills Medical Centre in February 2024 using the Penicillin Allergy Decision Rule (PEN-FAST) score. Of the 103 patients meeting inclusion criteria: 11 were already de-labeled without being documented so medical records were updated accordingly, 40 additional patients were de-labelled based on their history, another three patients were de-labelled after an oral challenge [after they received and tolerated a test dose of a penicillin type antibiotic (amoxicillin)].

A similar initiative is planned by the Rockyview General Hospital Antimicrobial Stewardship Program team for outpatients in the Home Parenteral Therapy Program. Together these pilots pave the way for a provincial initiative confirming optimized penicillin allergy assessment and de-labeling.

Antimicrobial stewardship activities in the South Zone

The South Zone Antimicrobial Stewardship Program launched in June 2024. Based out of the Chinook Regional Hospital, the South Zone Antimicrobial Stewardship Program optimizes antimicrobial prescribing through prospective audit and feedback of restricted antimicrobials for Chinook Regional Hospital in addition to remote prospective audit and feedback (tele-stewardship) for the Pincher Creek, Crowsnest Pass, Cardston, Raymond and Taber hospitals. From September 1, 2024 – February 1, 2025, 152 prescriptions were reviewed with 132 recommendations made to optimize care. Future work will focus on catheter-associated urinary tract infections and minimizing unnecessary antimicrobial use for asymptomatic bacteriuria, knowing that bacterial colonization of catheters is common and does not warrant treatment.

Expansion of Pediatric Antimicrobial Stewardship in AHS Acute Care Sites

North sector (North of Red Deer)

In 2024/2025, handshake stewardship (in-person, rounding based feedback on antimicrobial use for prescribers) continued at the Stollery Children's Hospital. Stewardship interventions expanded to the Stollery David Schiff Neonatal Intensive Care Unit and the Stollery Philip C. Etches Neonatal Intensive Care Unit with the start of prospective audit and feedback for the restricted antibiotics, vancomycin, piperacillin-tazobactam and the third-generation cephalosporins – with plans to expand to Central Zone in spring 2025.

South sector (South of Red Deer)

Antimicrobial Stewardship at the Alberta Children's Hospital grew tremendously in 2024/2025 with transition to a handshake stewardship model performed routinely and expanded to include Alberta Children's Hospital pediatric and neonatal intensive care units, oncology/bone marrow transplant, complex care and hospital medicine teaching teams. A remote tele-stewardship initiative for hospitalized children at non-Alberta Children's Hospital centers in southern Alberta was also implemented.

Covenant Health Antimicrobial Stewardship Program

Antimicrobial stewardship includes optimizing antimicrobial therapy to achieve best patient outcomes, promote patient safety and reduce the risk of resistant organisms. Antimicrobial stewardship information, such as the Covenant Health Antimicrobial Stewardship e-Newsletter (CHASE), site-based antimicrobial usage reports, educational posters and tools for the management of key infectious diseases are located on the internal Covenant Health website. There are several antimicrobial stewardship initiatives using prospective audit and feedback, including three ongoing initiatives on restricted antimicrobials, inpatient fluoroquinolone prescriptions and inpatient piperacillin-tazobactam prescriptions. The Covenant Health Antimicrobial Stewardship Program has been supporting Covenant Health sites since 2013. The impact in the previous 5 years has been the completion of over 12,500 audits, resulting in over 2,100 interventions by the team.

Promoting awareness and education in the public domain

Do Bugs Need Drugs?

Do Bugs Need Drugs? is a program that works to limit the development of antibiotic resistance through public education and community health promotion. It has two main sets of materials that are intended to reduce the demand for antibiotics: those that support handwashing education (and by extension, prevent infections) and direct education on when antibiotics are appropriate and when they are unnecessary.

Versions of the [Guide to Wise Use of Antibiotics](#) are available online, including English, five Indigenous and 32 immigrant languages. This enables more Albertans to get healthcare information in their preferred language. The guide aims to improve antibiotic use by educating the public on how to manage infections, how to understand when an infection potentially needs antibiotics, when it likely does not and how to recognize serious symptoms. In 2024/2025, work focused on expanding the promotion of existing materials and using the Quick Response (QR) code approach to distribute the [Guide to Wise Use of Antibiotics](#). A seven-minute educational and promotional video was developed and used in an advertising campaign to increase awareness of the program. This video was translated into Plautdietsch (the language of the Low German Mennonite communities in Southern Alberta) and used to support the Plautdietsch version of the *Guide to Wise Use of Antibiotics*. This newly translated video was the most successful of the translated versions in 2024/2025, being accessed 318 times by 207 unique users. In addition *Guide to Wise Use of Antibiotics* online handwashing resources were accessed 967 times by 521 unique Alberta users and the *Guide to Wise Use of Antibiotics*, in all languages, was accessed 2,260 times by 1,287 unique Alberta users. Throughout 2024/2025 glo gel, handwashing kits, and QR code magnets were shipped to 54 different partners in public health, nursing education and the public school system.

These initiatives reflect the three key messages of Do Bugs Need Drugs?: hand hygiene is the best way to stop infection transmission; bacteria and viruses are different and antibiotics do not work for viral infections; and use antibiotics wisely to limit the development of antimicrobial resistance.

MyHealth.Alberta.ca

[MyHealth.Alberta.ca](https://myhealth.alberta.ca) is Alberta's online health resource for non-emergency health information. It offers valuable information on more than 8,700 health topics and tools to help Albertans make important decisions about their health. AHS IPC-related content includes 14 patient care handouts. Many of these handouts are translated into various languages. Albertans, Canadians and international citizens, primarily those from the United States of America, access AHS IPC-related content. The AHS IPC patient care handouts are also available on Connect Care so staff can print them for patients.

In 2024/2025, the most frequently visited patient handouts were:

- [Respiratory Illness: Wearing a mask to stop the spread](#)
- [Group A streptococcus infections in childbirth: Topic overview](#), and
- [Carbapenemase-producing organisms \(CPO\): Learning about CPO in the hospital.](#)

Appendix: AHS IPC-related Publications

BALANCE Investigators, for the Canadian Critical Care Trials Group, the Association of Medical Microbiology and Infectious Disease Canada Clinical Research Network, the Australian and New Zealand Intensive Care Society Clinical Trials Group, and the Australasian Society for Infectious Diseases Clinical Research Network (2025). Antibiotic Treatment for 7 versus 14 Days in Patients with Bloodstream Infections. *N Engl J Med*, 392(11), 1065-1078. <https://doi.org/10.1056/NEJMoa2404991>

Note: Conly, J.

Beall, R. F., Flores Anato, J. L., D'Souza, A. G., Velasquez Garcia, H. A., Ma, H., Yang, F., Baral, S. D., Cabaj, J., Cooper, E., Hollis, A., Janjua, N. Z., Katz, A., **Leal, J.**, Maheu-Giroux, M., May, E. R., Malikov, K., Mishra, S., Moloney, G., & Williamson, T. (2025). A Canadian multi-province study of COVID-19 vaccine coverage along area-level social determinants in 2021. *Public Health Pract (Oxf)*, 9, 100594. <https://doi.org/10.1016/j.puh.2025.100594>

Bertagnolio, S., Dobрева, Z., Centner, C. M., Olaru, I. D., Donà, D., Burzo, S., Huttner, B. D., Chaillon, A., Gebreselassie, N., Wi, T., Hasso-Agopsowicz, M., Allegranzi, B., Sati, H., Ivanovska, V., Kothari, K. U., Balkhy, H. H., Cassini, A., Hamers, R. L., Weezenbeek, K. V., & WHO Research Agenda for AMR in Human Health Collaborators (2024). WHO global research priorities for antimicrobial resistance in human health. *Lancet Microbe*, 5(11), 100902. [https://doi.org/10.1016/S2666-5247\(24\)00134-4](https://doi.org/10.1016/S2666-5247(24)00134-4)

Note: Conly, J.

Bowron, L. A., Acosta, N., Thornton, C. S., Carpentero, J., Waddell, B. M., Bharadwaj, L., Ebbert, K., Castaneda-Mogollon, D., **Conly, J. M.**, Rabin, H. R., Surette, M. G., & Parkins, M. D. (2024). The airway microbiome of persons with cystic fibrosis correlates with acquisition and microbiological outcomes of incident *Stenotrophomonas maltophilia* infection. *Front Microbiol*, 15, 1353145. <https://doi.org/10.3389/fmicb.2024.1353145>

Bush, K., Tsang, C., Chow, B., Tamuno, O., & Gagnon, H. (2025). Implementation of a Competency Framework in an Infection Prevention and Control Program: An Evaluation Using RE-AIM. *Can J Infect Control*, 40(1), 33-39.

Caddey, B., **Fisher, S.**, Barkema, H. W., & Nobrega, D. B. (2025). Companions in antimicrobial resistance: examining transmission of common antimicrobial-resistant organisms between people and their dogs, cats, and horses. *Clin Microbiol Rev*, e0014622. Advance online publication. <https://doi.org/10.1128/cmr.00146-22>

Cassini, A., Mo, Y., Simniceanu, A., Gon, G., Cowling, B. J., Allegranzi, B., & COVID-19 in Health Workers Collaborative Group (2025). Infection prevention and control risk factors for SARS-CoV-2 infection in health workers: a global, multi-centre, case-control study. *J Hosp Infect*, 155, 40-50. <https://doi.org/10.1016/j.jhin.2024.04.031>

Note: Conly, J.

Conly, J. M., & Johnston, B. L. (2024). Corrigendum to "Rare but Not so Rare? The Evolving Spectrum of Whipple's Disease". *Can J Infect Dis Med Microbiol*, 2024, 9809135. <https://doi.org/10.1155/2024/9809135>

Dinh, T., Ross, J., James, S., Klein, K., Chandran, A. U., **Larios, O.**, Strong, D., **Conly, J. M.**, & COVID-19 Hospitalization Working Group (2024). Misattribution Bias of COVID-19 Hospitalizations in Alberta Using an Admission Algorithm. *J Assoc Med Microbiol Infect Dis Can*, 9(4), 274-283. <https://doi.org/10.3138/jammi-2024-0011>

- Doucette, E. J., Fullerton, M. M., Pateman, M., Lip, A., Houle, S. K. D., Kellner, J. D., **Leal, J.**, MacDonald, S. E., McNeil, D., Tyerman, J., Luctkar-Flude, M., Davidson, S., & Constantinescu, C. (2024). Development and evaluation of virtual simulation games to increase the confidence and self-efficacy of healthcare learners in vaccine communication, advocacy, and promotion. *BMC Med Educ*, 24(1), 190. <https://doi.org/10.1186/s12909-024-05169-9>
- Doucette, E. J., Pateman, M., Fullerton, M. M., Lip, A., Houle, S. K. D., Kellner, J. D., **Leal, J.**, MacDonald, S. E., McNeil, D., Davidson, S., & Constantinescu, C. (2024). “You can push these conversations, but don’t push your patient away”: healthcare learner perspectives on virtual simulation games as an educational approach to address vaccine hesitancy. *Front Public Health*, 12, 1408871. <https://doi.org/10.3389/fpubh.2024.1408871>
- Doyle, D., Dalton, B., Zhang, Z., Sabuda, D., Rajakumar, I., Rennert-May, E., **Leal, J.**, & **Conly, J. M.** (2024). A quasi-experimental analysis comparing antimicrobial usage on COVID-19 and non-COVID-19 wards. *ASHE*, 4(1), e192. <https://doi.org/10.1017/ash.2024.417>
- Dunn, K., Hamilton Hurwitz, H., Toledo, J. P., Schwaber, M. J., Chu, M., Chou, R., Ford, N., Allegranzi, B., Baller, A., & WHO Health Emergencies Programme COVID-19 Infection Prevention and Control Guideline Development Group (2024). Summary of WHO infection prevention and control guideline for covid-19: striving for evidence based practice in infection prevention and control. *BMJ*, 385, q645. <https://doi.org/10.1136/bmj.q645>
- Note: Conly, J.**
- Farmer, G., Sikdar, K. C., Lo, T., **Conly, J.**, Slobodan, J., Ross, J., James, S., Usman, H., Kemp, K., Baker, K., Doucette, K., Nijssen-Jordan, C., Saxinger, L. M., & Joffe, A. M. (2024). Real-world evidence of sotrovimab effectiveness for preventing severe outcomes in patients with COVID-19: A quality improvement propensity-matched retrospective cohort study of a pan-provincial program in Alberta, Canada. *Int J Infect Dis*, 146, 107136. <https://doi.org/10.1016/j.ijid.2024.107136>
- Gagnon, H., Hearn, K., Tsang, C., Yip, E., Stuber, L., Ile, E., Bridger, L., Saulnier, G., Hanson, H. M., & **Leal, J.** (2024). “We could have used a lot more of this before...”: A qualitative study understanding barriers and facilitators to implementing a provincial PPE safety coach program during the COVID-19 pandemic. *Am J Infect Control*, 52(8), 947-957. <https://doi.org/10.1016/j.ajic.2024.03.008>
- Gagnon, H., Pokhrel, A., **Bush, K.**, **Cordoviz, M.**, Ewashko, T., Galetta, F., & **Leal, J.** (2024). Limited reduction in *Clostridioides difficile* and Methicillin-Resistant *Staphylococcus aureus* with the use of an aerosolized hydrogen peroxide disinfection system in tertiary health care facilities in Alberta, Canada. *Am J Infect Control*, 52(4), 410-418. <https://doi.org/10.1016/j.ajic.2023.09.019>
- Gandini, S., **Conly, J.**, Spencer, E. A., Evans, D., Rosca, E. C., Brassey, J., Maltoni, S., Onakpoya, I., Pluddemann, A., Jefferson, T., & Heneghan, C. (2024). Oro-faecal transmission of SARS-CoV-2: A systematic review of studies employing viral culture from gastrointestinal and other potential oro-faecal sources and evidence for transmission to humans. *Epidemiol Infect*, 152, e138. <https://doi.org/10.1017/S0950268824001481>

- Hammond, K. M., Kabbani, D., Doucette, K. E., **Smith, S. W.**, Lau, C., Bains, S., Fong, K., Stewart, J., & Chen, J. Z. (2024). How does the antimicrobial stewardship provider role affect prospective audit and feedback acceptance for restricted antibiotics in a Canadian tertiary-care center? *Infect Control Hosp Epidemiol*, 45(2), 234-236. <https://doi.org/10.1017/ice.2023.152>
- Helou, R. I., Catho, G., Faxen, L., Hulscher, M., Teerenstra, S., **Conly, J.**, Huttner, B. D., Tangden, T., & Verbon, A. (2025). Impact of a smartphone application for appropriate antibiotic prescribing at three tertiary hospitals: an international, multicentre stepped-wedge cluster randomized trial. *Clin Microbiol Infect*, 31(7), 1172-1179. <https://doi.org/10.1016/j.cmi.2025.02.026>
- Izydorczyk, C., Waddell, B. J., Thornton, C. S., **Conly, J. M.**, Aaron, S. D., Eckford, P. D. W., Church, D. L., Surette, M. G., Rabin, H. R., & Parkins, M. D. (2025). Genomic analysis of the liverpool epidemic strain of pseudomonas aeruginosa infecting persons with cystic fibrosis reveals likely Canadian origins. *J Cyst Fibros*. <https://doi.org/10.1016/j.jcf.2025.02.009>
- King, T., Chew, D. S., **Leal, J.**, **Cannon, K.**, Zhang, Z., & Rennert-May, E. (2024). Microbiology of cardiac implantable electronic device infections in Calgary, Canada. *ASHE*, 4(1), e9. <https://doi.org/10.1017/ash.2024.9>
- King, T. L., Rennert-May, E., Somayaji, R., **Leal, J.**, Black, J. E., **Conly, J. M.**, & Gregson, D. (2024). Evaluating the costs of Escherichia coli bloodstream infections: a population-based cohort study in a large metropolitan Canadian region. *JAC Antimicrob Resist*, 6(5), dlac157. <https://doi.org/10.1093/jacamr/dlae157>
- Leal, J.**, **Shen, Y.**, Faris, P., Dalton, B., Sabuda, D., Ocampo, W., Bresee, L., **Chow, B.**, Fletcher, J. R., Henderson, E., Kaufman, J., **Kim, J.**, Raman, M., Kraft, S., Lamont, N. C., **Larios, O.**, **Missaghi, B.**, Holroyd-Leduc, J., **Louie, T.**, & **Conly, J.** (2024). Effectiveness of Bio-K+ for the prevention of Clostridioides difficile infection: Stepped-wedge cluster-randomized controlled trial. *Infect Control Hosp Epidemiol*, 45(4), 443-451. <https://doi.org/10.1017/ice.2023.169>
- Lee, J., Xiang, K., Au, E., Sarabi, S., Acosta, N., Bhatnagar, S., Van Doorn, J., Bertazzon, S., **Conly, J. M.**, Rennert-May, E., Pitout, J. D. D., Lee, B. E., Pang, X., O'Grady, C., Frankowski, K., Hubert, C. R. J., & Parkins, M. D. (2025). Longitudinal monitoring of sewershed resistomes in socioeconomically diverse urban neighborhoods. *Commun Med (Lond)*, 5(1), 7. <https://doi.org/10.1038/s43856-024-00729-y>
- Liu, K., Rennert-May, E., Zhang, Z., D'Souza, A. G., Crocker, A., Williamson, T., Beall, R., & **Leal, J.** (2024). Evaluation of In-Hospital and Community-Based Healthcare Utilization and Costs During the Coronavirus 2019 (COVID-19) Pandemic in Alberta, Canada: A Population-Based Descriptive Study. *Health Serv Insights*, 17, 11786329241306390. <https://doi.org/10.1177/11786329241306390>
- Loeb, M., Mertz, D., Chagla, Z., & **Conly, J.** (2024). Why randomized controlled trials are necessary to address the effectiveness of non-pharmacological interventions during a public health emergency such as COVID-19. *J Assoc Med Microbiol Infect Dis Can*, 9(4), 197-199. <https://doi.org/10.3138/jammi-9-4-ed>
- McGill E, Cayen J, **Ellison J**, Lee D, Pelude L, Mitchell R,... , **Bush K** (2024). An assessment of the validity and reliability of SARS-CoV-2 infection surveillance data from the Canadian Nosocomial Surveillance Program. *Can J Infect Control*, 39 (2), 112-116.

- McMillan, J. M., Dalere, J., Naqvi, F., Ewa, V., Lang, R., Brar, R., Milaney, K., Bakal, J. A., Krentz, H. B., Quail, P. B., Shukalek, C. B., **Leal, J.**, Hill, N. E., Randall, M., & Gill, M. J. (2025). Perspectives on Continuing Care, From Home Care to Long-Term Care, for Older People Living With HIV: A Cross-Sectional Study. *Health Sci Rep*, 8(3), e70578. <https://doi.org/10.1002/hsr2.70578>
- Mponponsuo, K., **Leal, J.**, Puloski, S., Chew, D., Chavda, S., Ismail, A., Au, F., & Rennert-May, E. (2024). Burden of surgical management of prosthetic joint infections following hip and knee replacements in Alberta, Canada: an analysis and comparison of two major urban centres. *J Hosp Infect*, 150, 153-162. <https://doi.org/10.1016/j.jhin.2022.05.002>
- Qaddoura, A., Bartoszko, J., Mitchell, R., Frenette, C., Johnston, L., Mertz, D., Pelude, L., Thampi, N., & **Smith, S. W.** (2024). Extracorporeal membrane oxygenation for COVID-19-associated severe acute respiratory distress syndrome in Canada: Analysis of data from the Canadian Nosocomial Infection Surveillance Program. *J Assoc Med Microbiol Infect Dis Can*, 8(4), 272-282. <https://doi.org/10.3138/jammi-2023-0015>
- Rennert-May, E., **Leal, J.**, Zhang, Z., Rajakumar, I., **Smith, S.**, **Conly, J. M.**, Exner, D., Kuriachan, V., & Chew, D. (2024). Rates of post procedural prophylactic antibiotic use following cardiac implantable electronic device insertion and the impact on surgical site infections in Alberta, Canada. *Antimicrob Resist Infect Control*, 13(1), 147. <https://doi.org/10.1186/s13756-024-01512-3>
- Rodriguez-Arguello, J., Lienhard, K., De Grood, J., Geransar, R., Somayaji, R., Khan, D., **Conly, J.**, Ho, C., & Parsons, L. (2024). The Use of Silver Oxynitrate Wound Dressings in the Treatment of Chronic Wounds: A Feasibility Pilot Study. *Adv Skin Wound Care*, 37(4), 197-202. <https://doi.org/10.1097/ASW.0000000000000085>
- Saei, H. D., **McClure, J. A.**, Kashif, A., Chen, S., **Conly, J. M.**, & Zhang, K. (2024). The Role of Prophage varphiSa3 in the Adaption of Staphylococcus aureus ST398 Sublineages from Human to Animal Hosts. *Antibiotics (Basel)*, 13(2). <https://doi.org/10.3390/antibiotics13020112>
- Sligl, W. I., Yan, C., Round, J., Wang, X., Chen, J. Z., Boehm, C., Fong, K., Crick, K., Clua, M. G., Codan, C., Dingle, T. C., Prosser, C., Chen, G., Tse-Chang, A., Garros, D., Zygum, D., Opgenorth, D., **Conly, J. M.**, Doig, C. J., . . . Bagshaw, S. M. (2025). Health Economic Evaluation of Antimicrobial Stewardship, Procalcitonin Testing, and Rapid Blood Culture Identification in Sepsis Care: A 90-Day Model-Based, Cost-Utility Analysis. *Pharmacoecon Open*, 9(1), 15-25. <https://doi.org/10.1007/s41669-024-00538-y>
- Smith, S. W.**, Lau, C., Bains, S., Fong, K., Stewart, J., & Chen, J. Z. (2024). How does the antimicrobial stewardship provider role affect prospective audit and feedback acceptance for restricted antibiotics in a Canadian tertiary-care center? *Infect Control Hosp Epidemiol*, 45(2), 234-236. <https://doi.org/10.1017/ice.2023.152>
- Tsang, C. C.**, Holroyd-Leduc, J. M., Ewa, V., **Conly, J. M.**, Leslie, M. M., & **Leal, J. R.** (2025). Barriers and facilitators to the use of personal protective equipment in long-term care: a qualitative study. *J Hosp Infect*. <https://doi.org/10.1016/j.jhin.2025.02.008>
- Weatherald, J., Wen, C., Stickland, M. K., Damant, R., Smith, M. P., Soril, L. J., Zhang, Z., D'Souza, A. G., Rennert-May, E., **Leal, J.**, & Lam, G. Y. (2024). Sex Differences in Venous Thromboembolism after COVID-19 Infection: A Retrospective Population-based Matched Cohort Study. *Ann Am Thorac Soc*, 21(11), 1624-1628. <https://doi.org/10.1513/AnnalsATS.202401-070RL>

- Weyant, R. B., Waddell, B. J., Acosta, N., Izydorczyk, C., **Conly, J. M.**, Church, D. L., Surette, M. G., Rabin, H. R., Thornton, C. S., & Parkins, M. D. (2024). Clinical epidemiology and impact of *Haemophilus influenzae* airway infections in adults with cystic fibrosis. *BMC Infect Dis*, 24(1), 1209. <https://doi.org/10.1186/s12879-024-10050-7>
- Whelan, L., **Leal, J.**, Leslie, M., Barkema, H. W., Ocampo, W., & May, E. R. (2024). Patient compliance with the implementation of a decolonization strategy for *Staphylococcus aureus* in hip and knee replacements. *Am J Infect Control*, 52(2), 207-213. <https://doi.org/10.1016/j.ajic.2023.06.016>
- Widmer, A. F., **Conly, J.**, & Sommerstein, R. (2025). Proposal for an updated taxonomy for isolation precautions in healthcare facilities: the term 'dropisol'. *J Hosp Infect Control*, 155, 257-258. <https://doi.org/10.1016/j.jhin.2024.06.023>
- Zhou, Z. L., Silva, A., **Cannon, K.**, **Chow, B.**, Comeau, J. L., Ellis, C., Frenette, C., Hadzic, A., **Happe, J.**, Johnston, L., Katz, K. C., **Khan, J.**, Langley, J. M., **Lee, B. E.**, Lee, S., Lefebvre, M. A., Lybeck, C., McGeer, A., Neitzel, A., . . . Canadian Nosocomial Infection Surveillance, P. (2024). The adoption and compliance to central line-associated bloodstream infection insertion and maintenance bundle programs in intensive care unit settings across Canada. *Infect Control Hosp Epidemiol*, 46(2), 1-4. <https://doi.org/10.1017/ice.2024.189>

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