

IPAC CANADA EDUCATION

IPAC Canada Philosophy on Education

IPAC Canada has developed, supports and promotes a Philosophy of Education. This philosophy is structured upon five fundamental principles intended to ensure that beginning practitioners become fluent in those fundamental facts and scientific methods essential to the practice of Infection Prevention and Control and that they remain well qualified and conversant in these facts and methods throughout their careers as findings and processes change and grow over time.

The Five Principles that form the backbone of IPAC Canada's Philosophy of Education reflect not only the vast nature of practice sites in Canada, where traditional forms of education may or may not be readily available, but also the important principles of adult education, which need to be followed when ensuring that adult professionals are to be educated effectively and with respect.

The five philosophical principles are:

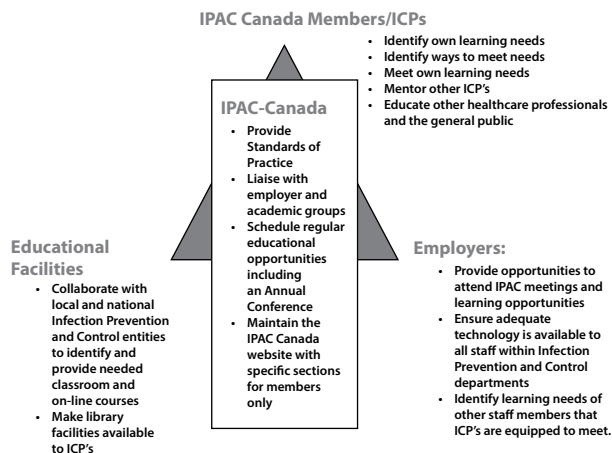
1. The need for learning is life-long;
2. Geographic location should not be a barrier to learning;
3. Life experience is a wonderful teacher and we need to build on and use the experience and expertise of IPAC Canada members;
4. Life experience alone is insufficient for development of expertise without, at minimum, reflection; and
5. Individuals have a responsibility for identifying [both their own and their colleague's] learning needs and learning options.

Through IPAC Canada, educational opportunities will be made available to all Infection Prevention and Control Professionals (ICPs), regardless of their geographic setting, level of experience, desire for academic credit or ability to attend National and International Conferences. Conferences and academic opportunities may be readily available to ICPs who work and reside in centres where local infrastructure supports large conferences, universities offer academic credit and/or employers have the resources to send these employees to conferences relevant to infection prevention and control (IPAC). While some may choose to finance such opportunities on their own, careers often do not promote/support such study or travel. As a result, many educational opportunities are provided through virtual offerings such as webinars. An online Essentials in Infection Prevention and Control Course for novice ICPs provides training to over 70 students per session. The Regular Course is an eight month, 360 hour course accredited by la Société de formation et d'éducation continue (SOFEDUC). In 2021, a 5-month Accelerated Course was also introduced. See Table 2 for more information.

STANDARDS & RESOURCES

IPAC Canada guides a three way partnership assisting others to meet learning needs. IPAC Canada's Professional and Practice Standards found on the IPAC Canada Website (www.ipac-canada.org) and on the following pages of this Resource Guide, outline beginning educational requirements and ongoing professional development responsibilities including certification with the Certification Board of Infection Control and Epidemiology. IPAC Canada and individual chapters continue to facilitate and, where possible, provide opportunities to meet learning needs through courses, presentations and opportunities to interact with one another both in person and virtually. Universities, colleges and health care departments that focus on IPAC topics are encouraged to continue to provide these opportunities and to grow their profiles in on-line education to the greatest extent possible. Employers, too, are encouraged to continue to play a role in supporting technological advances through availability of telehealth, communication applications and up to date computers compatible with the necessary technologies. First and foremost, ICPs take professional responsibility for meeting educational practice standards.

They will take whatever action is necessary in order to acquire those tools, including computer and communication skills necessary to meet their own and their colleagues' learning needs and the educational needs of other staff and the general public. Ideally, this three way partnership, guided by IPAC Canada, is intended to ensure viable IPAC education now and for the future.



IPAC Canada Assists with the Educational Process for IPAC Canada Members

Through a 2013 survey conducted by the Education Core Committee (ECC) and the mega survey of 2018, results noted not all Infection Prevention and Control Professionals are naturally skilled in assessing, planning, participating in and evaluating the outcome of planned learning sessions to meet learning needs – either their own or others whom they are required to teach. One key finding was the desire and need of members to become more skilled in the development and provision of education for colleagues and others.

Since that time, IPAC Canada has supported the ECC with webinars and national conference sessions dedicated to the education process and fundamentals of teaching and learning. The ECC has also produced a regular newsletter aimed at providing members with education on teaching and learning methodologies.

The content of webinars highlighted the importance of a four-step educational process:

1. Identifying Learning Needs

ICPs are adult learners and, as such, will be motivated when asked to learn items they already perceive the need to know. Individuals newly assigned to IPAC come with different knowledge, skills, experiences, learning styles, learning needs and learning opportunities. Novice ICPs need a basic set of knowledge, skills and attitudes that complement their initial attributes and will contribute to their professional roles. Other requirements will depend on individual practice and settings. For example, all ICPs begin as novice professionals who require a broad-based education covering all practice standards but, at times, may lack depth. Later in their careers, once a solid basic foundation has been developed, ICPs may work with many other individuals in teams and specialize in certain content areas or functions

such as data management, surveillance, engineering and construction or cleaning, disinfection and sterilization. In all cases, practice standards and the identified key criteria for each standard are useful in identifying those knowledge and skill sets to be developed to meet individual and team goals. To facilitate this process, individual ICP's and their teams review professional and practice standards in order to effectively and efficiently identify knowledge and skill sets to be developed. Without such a descriptive and functional needs assessment, the following steps may take a wrong direction and be less than useful in following subsequent steps in the learning process.

IPAC Canada has developed a set of 157 competency statements, in 14 competency areas, that indicate the minimum knowledge, skills and attitudes required to practice safely and ethically as an ICP. This document is currently under review and will be republished in 2022.

The IPAC Canada Program-Wide Standard has been designed to inform senior leaders engaged with IPAC programs in health care organizations and IPAC program staff, of the minimum requirements for IPAC programs, across the continuum of health care in Canada. The Program-Wide Standard references the core competencies and education needs (<https://ipac-canada.org/ipac-canada-publications.php>).

2. Setting Learning Goals

Once learning needs are identified, they are expressed as learning goals that will provide an overall direction for learning. Effective learning goals are written as specific statements of what is expected to be achieved by the learner. This may include target dates for achieving something identified in the goal (e.g. "... by the end of this month..." or "within the first week of the course..."), or success indicators that specify the evidence that learning objectives have been met and they have completed the required learning (e.g. "...list all six steps in the Chain of Infection...")

In brief, goals should be concrete enough to guide behavior/knowledge changes and may be either short-term or long-term in nature (or both). If possible, goals should be written in SMART format- specific, measurable, attainable, relevant and time-based.

3. Developing a Learning Plan

As noted in the discussion of IPAC Canada's Philosophy of Education, no single program will meet every learning need of every unique IPAC Canada member. A variety of learning options are available. ICPs can select from these to meet their individual needs and interests. There are a broad range of learning styles that match a range of different individual personalities and abilities. Learning can be informal or formal, short or lengthy, and use a range of teaching and learning techniques. ICPs who provide education sessions are encouraged to become familiar with the rich range of teaching methods that complement differing learning styles and how these teaching methods can be facilitated in various settings.

One excellent learning resource for IPAC Canada members is the IPAC Canada National Education Conference which offers a number of keynote speeches and choices of individual sessions on a wide variety of topics. One valuable outcome of such a conference is the networking of professionals with similar interests and skills from across the country and internationally. Details of each IPAC Canada National Education Conference can be found on the IPAC Canada website.

IPAC Canada's Routine Practices E-Learning Tool outlines the risk assessment and safety precautions to be taken by ICPs and other healthcare providers to reduce the risk of spreading infectious organisms in all settings and with all individuals. In addition, IPAC Canada encourages members to study peer reviewed journals, including the Canadian Journal of Infection Control and apply technological advances to meet learning needs.

The Hand Hygiene e-Learning Module is a proven educational resource for healthcare workers and has been utilized by over 5,000 healthcare workers annually.

IPAC Canada also continues to evaluate its own resources, educational offerings, and learning needs for its members. As a result, other resources will continue to be developed.

When choosing a learning option, whether a short session, a course or a full program, individuals need to know what learning options they are looking for. Decisions can be made based on answers to the following questions:

- Does the item provide the knowledge and skills required or expected?
- What time is required? Is it reasonable given work and family commitments?
- How will learning be evaluated?
- Will the session or course or its evaluation contribute, at least in part, to the learner's work requirements? (For example, a course could be designed to solve a particular problem faced by the learner in the workplace.)
- Can the course or session be accessed easily?
- Is the item affordable?
- If a course offers university credit, will this contribute to a desired and useful (to the learner and the workplace) degree or certificate program?

4. Evaluating Learning Goals

Progress toward meeting learning goals should be evaluated on a regular basis. The learning plan, target dates and/or success indicators may need to be refined. The learners' involvement in this process is essential to ensure continued motivation and investment in progress towards meeting their learning goals.

Responsibility for Education at IPAC Canada

The following individuals and groups hold key responsibilities for ensuring that appropriate education is available to IPAC members as needed:

- The Board of Directors bears overall responsibility for all aspects of the organization, including education.
 - The Director (Education) is the liaison between the various education committees and the Board of IPAC Canada. The Director acts as an ex-officio member of all education committees: Education Core Committee, Distance Education Advisory Committee, Endorsement Review Committee, the Scientific Program Committee of National Conference.
- The Education Core Committee¹ identifies the educational needs of the membership and oversees the implementation of IPAC Canada educational offerings. A newsletter provides the membership with a record of the activities of the committee, interesting and relevant articles and courses and other activities to be offered in the future.
- The Scientific Program Committee is a nationally appointed committee comprised of representatives from various facilities and community-based health care sectors. Committee members are responsible for the planning of the annual conference educational programs and long-term strategies for professional education through the annual conference.
- The Course Coordinators and Associate Course Coordinators are responsible for managing delivery of the IPAC Canada's online Essentials in Infection Prevention and Control Course. This course is being offered in 2022 in two intakes - a new Accelerated program (condensed 5 month course) starting in April 2022 and the Regular program (Sept 2022 - June 2023). The IPAC Canada Essentials in Infection Prevention and Control Course Advisory Committee (AC) will act as a consultation group to course faculty members and serve, if required, as an appeals board for students. The AC provides guidance to the online course through review and recommendation of revisions of curriculum, objectives and methods of assessment.
- The Endorsement Review Committee (ERC) is charged with ensuring Canadian IPAC education programs conform to the program criteria of the ERC. In review of learning objectives, instruction hours, program outlines, faculty and program evaluations, the ERC determine that an endorsed program provides a standardized program of study

for novice ICPs. A three-year endorsement is provided to distance education programs who demonstrate compliance with the criteria. The ERC also provides endorsement of practicum-based courses and acknowledgement of IPAC-related courses.

- A Task Force is responsible for reviewing and revising the Routine Practices E-Learning Tool and the Hand Hygiene e-Learning Module.
- The IPAC Canada Mentor Program is an initiative to support new ICPs and new chapter leaders with networking and advice on resources, including education.
- Beginning January 2022, the Queen's University Master of Public Health (MPH) program is launching a new IPAC track. MPH-IPAC track students complete 3 specialized courses taught by experts in IPAC, health quality and medical microbiology. Students also complete a 400-hour IPAC-specific practicum with a host organization. This is the first of its kind in Canada and was initiated through collaboration with IPAC Canada.

- IPAC Canada's quarterly scientific journal, the Canadian Journal of Infection Control, provides peer-reviewed evidence-based literature that also acts as an education tool. The biannual publication, Industry Innovations, provides white papers from industry partners to add to the education experience. Abstracts accepted for presentation at national conferences are a source of data and practice that are helpful to ICPs.
- IPAC Canada's 19 chapters are mandated to enhance the educational offerings of IPAC Canada through their own networking, educational offerings, and support of their members.

Most important are IPAC Canada members. They share responsibility for identifying their own learning needs, finding opportunities to meet those learning needs, and helping each other by sharing questions, knowledge and experience. Together, we will continue to strengthen infection prevention and control through education, networking, and current clinical practice.

1 Terms of Reference for the Education Core Committee and other education-related groups within IPAC Canada are available from the IPAC Canada website.

2 Core Competencies for Infection Prevention and Control Professionals (2022) can be found at <https://ipac-canada.org/ipac-canada-publications>.

Table 1: Example of a Professional Development Plan

Goal: By the end of 8 weeks, I will enhance my knowledge of basis statistics (p values, confidence intervals, risk stratification, comparing rates by group and over time) and apply it to my own data.

Success Indicators: 1) able to apply with my own data without looking it up, 2) mentor agrees with my analysis and conclusions, and 3) able to explain my infection results to the director of the program.

Learning Activities and due dates	Activity and Date done	Evaluation	Material to support accomplishment
Week 1: Ask XX to mentor me and set plan.	Done by end of week 1.	She agreed and we set a plan with some appointments.	Plan and timeline, key points of who does what.
Weeks 2-4: Get basic stats book and read key chapters.	Read half of chapters by week 3, rest by week 4.	Met with mentor twice to discuss concepts. Found practice problems in text helpful. Concepts are clear now, ready to try with my own data.	Notes taken, have key points written as a summary to help me remember.
Week 5: Practice calculating rates by group and month, with CI, on one database and check with mentor.	Had to learn how to do this with my database – needed to reorganize it a bit so needed an extra week. By end of week 6, had rates and interpretation ok.	Met with mentor to figure out commands for the analysis. Needed practice with phrasing and how to explain but had the numbers and ideas correct. We discussed how to report it.	Key points written as a summary to help me remember how to do it.
Weeks 6-7: Develop report and discuss with program director.	Report given to director at end of week 7. We then met a few days later to discuss it.	She had only a few questions that I was able to answer; I will revise the report so the points raised are clearer.	Initial report and feedback from director; final report.
Week 8: Repeat with a second database.	Done.	It was much easier; now have a model to use for future analysis/reports.	Second report.

Table 2: Basic Infection Control Courses available in Canada which have been sponsored† or endorsed* by IPAC Canada

Program/Location	Where to get more information	Route Offered
† IPAC Canada Online Essentials in Infection Prevention and Control Course	Contact IPAC Canada's Distance Education Coordinator(s) for information. basicde@ipac-canada.org . See the IPAC Canada website: https://ipac-canada.org/ipac-canadas-novice-online-ipac-course.php	Online with two course intakes available in 2021: Regular course (Sept-June) 360 hours/10 months plus 12 hour practicum. Accelerated course (April-Aug)
*Centennial College, Toronto	http://www.centennialcollege.ca	Online or in 10 day classroom
*Queen's University, Kingston	http://meds.queensu.ca/cpd/che/online_courses/infection_control	90 hours online
*University of British Columbia	http://www.pathology.ubc.ca/education/certificate_programs/Infection_Prevention_and_Control_Certificate.htm	Online – 20 weeks
*Bay River College, Infection Prevention and Control Program (new endorsement for 2021)	https://bayrivercollege.ca/infection-prevention-and-control/	Online – 16 weeks – 100 hours

Note: IPAC Canada Sponsored †Courses are developed and facilitated by IPAC Canada education experts. Endorsement refers to the official approval of IPAC Canada that the course has met the criteria specified in the Endorsement Policy and Procedure document, specifically related to content, length, instructors, evaluation and delivery. See the IPAC Canada website for a list of available courses, including sponsored and endorsed courses.