

## 01 OVERVIEW



<b>TITLE</b>	Director/Master Trainer
<b>EDUCATION</b>	M.Sc. (Occupational & Environmental Hygiene)
	B.Sc. (Microbiology & Immunology)
<b>DESIGNATIONS</b>	CRSP® (Canadian Registered Safety Professional)
	AHERA® (Asbestos Hazard Emergency Response Act) Certified Building Inspector
<b>YEARS</b>	19+

## 02 COMMITTEE MEMBERSHIP

- Former member of CSA Standard Z317.13-17 Section 8. (New Construction Projects) Working Group Committee.
- Participated in rewriting, revising, and adding standards regarding the 2017 version of the CSA Standard Z317.13-17 Infection Control during Construction, Renovation or Maintenance of Health Care Facilities.

## 03 STANDARDS, GUIDELINES, CRITERIA, PRACTICES

- Thorough knowledge of, experienced in, and/or familiarity with, various CSA Standards and other related standards, guidelines and criteria:
  - ANSI/IICRC S500 (2015) Standard and Reference Guide for Professional Water Damage Restoration, 4th edition.
  - ANSI/IICRC S520 (2015) Standard for Professional Mold Remediation, 3rd edition.
  - ASHRAE (American National Standards Institute/American Society of Heating, Refrigerating and Air- Conditioning Engineers) ANSI/ASHRAE 55-2010 Thermal Environmental Conditions for Human Occupancy.
  - CCA (Canadian Construction Association) 82-2004 Mould Guidelines for the Canadian Construction Industry.
  - CSA Standard Z317.13-17 Infection Control during Construction, Renovation or Maintenance of Health Care Facilities.
  - CSA Standard Z317.2-15 Special Requirements for Heating, Ventilation, and Air Conditioning (HVAC) Systems in Health Care Facilities.
  - CSA Standard Z8000-18 Canadian Health Care Facilities.
  - NADCA (National Air Duct Cleaners Association) General Specifications for the Cleaning and Restoration of Commercial Heating, Ventilating and Air Conditioning Systems, 2015.
  - New York City Department of Health and Mental Hygiene, Bureau of Environmental and Occupational Disease Epidemiology Guidelines on Assessment and Remediation of Fungi in Indoor Environments, 2008.
  - PIDAC (Provincial Infectious Diseases Advisory Committee, Province of Ontario) Best Practices for Environmental Cleaning for Prevention and Control of Infections – 2nd edition, May 2012.
  - SMACNA (Sheet Metal and Air Conditioning Contractors' National Association) Duct Cleanliness for New Construction Guidelines, 2000.

## 04 SUMMARY OF EXPERIENCE

### 04-1 Overview

- 19+ years in occupational health and safety, industrial hygiene, infection control, hazardous materials.
- Sectors: consulting, government (enforcement, investigation), private (construction).
- Infection prevention and control ("IPAC") expert, consultant and trainer.
- Developed, designed, implemented and provided practical, creative, cost effective and timely IPAC solutions for various clients and several health care facility ("HCF")-related projects (new construction, renovations, etc.).

### 04-2 Experience

- Participated in, and contributed technical knowledge, expertise and work/project experience to the Section 8. (New Construction Projects) Working Group Committee.
  - Responsibilities:
    - Contribution of technical knowledge and experience to Committee;
    - Amalgamating information, data, evidence, and technical information;
    - Verbiage, content, text development and copywriting; and
    - Standards revision, refinement and/or development.
  - Developed unique, industry-leading Infection Control Plan and plan structure that has been incorporated into Annex D (informative) *Sample table of contents for an infection control plan* of the 2017 version of the CSA Standard.
- Developed, designed and/or assisted with implementation of various IPAC-related systems, elements and documents as follows:
  - Risk management;
  - Quality assurance and quality control programs;
  - Infection Control Plans;
  - Infection Control Risk Assessments/Preventive Measures Analyses ("ICRA/PMA");
  - Infection Control Air Monitoring Plans (including strategies, approaches and methods);
  - Procedures and Method Statements;
  - Construction Work Plans;
  - Multi-disciplinary Team ("MDT") Terms of Reference and meeting agendas; and
  - Due diligence, monitoring-related inspection checklists, records, forms;
- Peer review/gap analysis of various stakeholder systems, processes, protocols, plans, programs, procedures, method statements, checklists, records, forms, reports etc.
  - Set up of MDT committees, including:
    - Identifying required participating stakeholders and related representatives;
    - Development of Terms of Reference;
    - Determining purpose, function and mandate of the MDT;
    - Defining roles, responsibilities and limitations; and
    - Development of meeting agendas/minutes.
- Participation in various stakeholder meetings such as:
  - MDT meetings;
  - User Group meetings;

- HCF stakeholder group meetings;
- Construction project meetings; and
- Design, planning and engineering meetings.
- Training-related:
  - Development of site IPAC orientation awareness training programs including training videos;
  - Provision of infection control training to various stakeholders;
  - Infection Control Training Group (Founding Partner: January 2017 to present):
    - Development of various stakeholder training programs/presentations:
      - Design/Planning of Healthcare Construction/Renovation Projects;
      - Constructing/Renovating Healthcare Facilities;
      - Facilities Maintenance/Working in Healthcare Facilities;
      - IPAC & Construction: What Infection Control Professionals Need to Know; and
      - Infection Control for Construction Trades.
    - Provision/delivery of various stakeholder training programs/presentations.
    - Provide training and education solutions to optimize operational performance in various healthcare environments and construction projects, with a particular focus on real-world application.
    - Provision of key support to healthcare facility staff and support contractors in applying IPAC principles and prevention measures to maintain successful infection control during daily operations and projects of various sizes.
    - Development of trainers to deliver quality, effective and dynamic ICTG training courses across Canada.
- Performance of:
  - General site IPAC hazard/risk inspections, audits and reviews;
  - Inspections of containment enclosures, isolation barrier systems etc.;
  - Specific cavity/space cleanliness inspections (walls, ceiling spaces, etc.);
  - Air monitoring for select containments (mould/fungi, particulate matter); and
  - Progress construction clean and final turnover clean inspections.
- Graphic design of select IPAC-related items: training orientation stickers, warning signage.
- Performed several, various OHS and industrial hygiene consulting and training services in numerous facilities across several hospital Authorities in BC:
  - Vancouver Coastal Health Authority;
  - Fraser Health Authority;
  - Interior Health Authority;
  - Vancouver Island Health Authority;
  - Providence Health Care; and
  - Provincial Health Services Authority.

Regarding SARS-CoV-2/COVID-19-related services:

- Management, oversight, technical review of several document types, as follows:
  - **Mechanical Contractors Association of Canada:**
    - National COVID-19 Guidelines for the Mechanical Contracting Sector
  - **Manitoba Construction Industry:**
    - SARS-CoV-2/COVID-19 Safety Guidance Document

- **Cleaning/Disinfecting Contractors:**
  - Exposure Control Plans
  - Risk Assessments
  - Safe Work Procedures
  - Cleaning/Disinfecting QA/QC Verification Checklists
- **Housing Corporations (in relation to vulnerable population groups):**
  - Exposure Control Plans
  - Risk Assessments
  - Safe Work Procedures
  - Cleaning/Disinfecting QA/QC Verification Checklists

### 04-3 HCF Projects

- Worked at and/or developed, designed and implemented various IPAC strategies, approaches, initiatives, methods, documents, measures and controls for several HCF construction and renovation projects in BC, AB, NT, and YK:
  - **BC Cancer Agency** renovation project, Vancouver, BC (2001/2002).
  - **Abbotsford Regional Hospital and Cancer Centre**, P3 Project, Abbotsford, BC (2005/2006).
  - **Fort Providence Health Centre**, Hay River, NT.
    - Existing Health Care Facility – Dental Suite Modifications/Renovations: Completed May 2017.
  - **Teck Acute Care Centre**, BC Children’s Hospital, Vancouver, BC.
    - Category 1 (New Location) Construction Project: Completed July 2017.
  - **Fort Resolution Health and Social Services Centre**, Fort Resolution, NT.
    - Category 1 (New Location) Construction Project: Completed August 2017.
  - **Woodland Manor Long Term Care Facility**, Hay River, NT.
    - Category 1 (New Location) Construction Project: Completed October 2017.
  - **Norman Wells Health and Social Services Centre**, Norman Wells, NT.
    - Category 1 (New Location) Construction Project: Completed November 2017.
  - **Hay River Regional Health Centre**, Hay River, NT.
    - Existing Health Care Facility – Warranty Work: Completed 2017.
  - **Grand Prairie Regional Hospital**, Grande Prairie, AB.
    - Category 1 (New Location) Construction Project: In Progress.
  - **Whistle Bend Care Facility**, Whitehorse, YT.
    - Category 1 (New Location) Construction Project: Completed September 2018.
  - **Stanton Territorial Hospital**, Yellowknife, NT.
    - Category 1 (New Location) Construction Project: In Progress (Estimated completion: December 2018).
  - **Royal Columbian Hospital – Redevelopment Project Phase 1**, New Westminster, BC.
    - Category 2 (Existing Detached Location)/Category 3 (Existing Connected Location) Construction Project: In Progress.
  - **Willow Square Continuing Care Centre**, Fort McMurray, AB.
    - Category 1 (New Location) Construction Project: In Progress.

## 05 TRAINING SUMMARY

- Undertaken and successfully completed CSA Standard Z317.13 courses:
  - Infection Control: Part 1 – Fundamentals During Construction, Renovation and Maintenance of Health Care Facilities; and
  - Infection Control: Part 2 – Effective Implementation and Practical Applications During Construction, Renovation and Maintenance of Health Care Facilities.
- Developed an Infection Prevention and Control Awareness orientation training program (course presentation and videos) customized and tailored to select client construction projects/sites.
- Delivered Infection Prevention and Control Awareness orientation training courses to several different client stakeholders (Superintendents, Construction/Project Managers, Foremen, Workers, Subcontractors etc.).
- Under the Infection Control Training Group:
  - Development and/or delivery of various stakeholder training programs/presentations:
    - Constructing/Renovating Healthcare Facilities;
    - Facilities Maintenance/Working in Healthcare Facilities;
    - Infection Control Principles: Protecting Yourself and Others From COVID-19 During Work;
    - IPAC & Construction: What Infection Control Professionals Need to Know; and
    - Infection Control for Construction Trades.

## 06 PROFESSIONAL MEMBERSHIPS

- Member of the following associations, committees:
  - CSA Standard Z317.13-17 Infection Control Section 8. (New Construction Projects) Working Group Committee.
  - Infection Prevention and Control (IPAC) Canada and BC Chapter.
  - IPAC Canada Interest Groups:
    - Healthcare Facility Design and Construction.
    - Environmental Hygiene.
  - Canadian Healthcare Engineering Society (CHES).
  - American Conference of Governmental Industrial Hygienists (ACGIH).
  - American Industrial Hygiene Association (AIHA) (Local & National).
  - Board of Canadian Registered Safety Professionals (BCRSP).
  - Canadian Society of Safety Engineering (CSSE).
  - BC Safety Charter (Safety Alliance BC).

## 07 SPEAKING ENGAGEMENTS

- **Red Deer, Alberta: 2019 Local CHES Conference**
  - Infection Control Principles: What is Considered Acceptably Clean?
- **Saskatoon, Saskatchewan: 2019 National CHES Conference**
  - The Importance of Building an IPAC Culture to Improve Patient Care and Outcomes