RESILIENCE 2026: An International Conference on Multiple Chemical Sensitivity (MCS)

EHAC · ASEC
Environmental Health Association of Canada
Association pour la santé environnementale du Canada

ASEQ – EHAQ
Association pour la santé environnementale du Québec
Environmental Health Association of Quebec

Advancing Science, Accessibility, and Policy for Healthy Indoor Environments

Day 1

May 7, 2026
9:00 AM – 5:00 PM EST

Simultaneous translation (English and French), ASL, LSQ, CART Captioning, and Zoom captioning are available in several languages

Location: Zoom (link provided upon registration)

AGENDA

Moderators:

Rohini Peris, **President & CEO**, the Environmental Health Association of Canada and the Environmental Health Association of Québec

Robert Lattanzio, LLB, Lawyer & Executive Director, ARCH Disability Law Center

9:05 AM – 9:30 AM

INTRODUCTION:

Welcome and housekeeping remarks, including accessibility accommodations such as simultaneous translation and live captioning, and introduction of conference materials available to the attendees.

***This opening segment establishes the scientific, institutional, and human rights foundations for the conference*.**

Rohini Peris, **President & CEO**, the Environmental Health Association of Canada and the Environmental Health Association of Québec

Michel Gaudet, **Executive Director** of the Environmental Health Association of Canada and the Environmental Health Association of Québec

Robert Lattanzio, LLB, Lawyer & Executive Director, ARCH Disability Law Center

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Sheridan Baker, PhD, publishing specialist with the International Journal of Environmental Research and Public Health (IJERPH), MDPI

Dr. Baker will provide brief remarks on the role of scholarly publishing in advancing environmental public health research, highlighting IJERPH's scope and opportunities for disseminating emerging work in indoor air quality and related fields.

Riina Bray, BASc, MSc, MD, FCFP, MHSc, Medical Director, Environmental Health Clinic, Women's College Hospital, Assistant Professor, Department of Family and Community Medicine , Dalla Lana School of Public Health, University of Toronto

Dr. Riina Bray, a representative of the Environmental Health Clinic at the Women's College Hospital expressing support for the conference and its objectives. The presentation highlights the role of clinical leadership in advancing awareness, care, and advocacy for individuals living with multiple chemical sensitivity (MCS).

Opening Remarks

9:30 AM – 9:35 AM

Leslie Church, Parliamentary Secretary to the Secretaries of State for Labour, for Seniors, and for Children and Youth, and to the Minister of Jobs and Families (Persons with Disabilities)

In this capacity, Leslie plays an important role in the federal government's employment, skills and social policy development.

Prior to her election, Leslie held top leadership roles in both the private sector and public service. She practiced law at Torys LLP in Toronto and has worked extensively in public policy, serving on not-for-profit boards and advising governments on topics including higher education and open government. She held a senior role at Google in Canada, where she worked to promote Canada's technology sector and the success of Canadian innovators. She is a graduate of the University of Alberta, the London School of Economics (MSc), and the University of Toronto Faculty of Law (JD).

9:35 AM – 9:45 AM

Charlotte-Anne Malischewski, Chief Commissioner, Canadian Human Rights Commission

Charlotte-Anne Malischewski has served as Chief Commissioner of the Canadian Human Rights Commission since December 2022. A lawyer with expertise in human rights, administrative, and constitutional law, she is committed to advancing equity and justice in Canada. Before joining the Commission, she practised civil litigation in Toronto and also worked in the non-profit sector and conducted human rights research. She holds degrees from Earlham College, the University of Oxford, and McGill University.

Foundations: Policy, Risk, and Scientific Evidence

9:45 AM – 10:15 AM

Chemicals Risk Assessment under the Canadian Environmental Protection Act (CEPA) and the Chemicals Management Plan (CMP)

Nazem El Husseini, PhD, Scientific Evaluator, Existing Substances Risk Assessment Bureau (ESRAB), Health Canada

Dr. El Husseini will present on the general process of chemicals risk assessment within the framework of the Canadian Environmental Protection Act (CEPA) and the Chemicals Management Plan (CMP). He will highlight some of the more recent changes to CEPA and will give an overview of the principles of risk assessment, including a focus on the basics of chemical exposure and hazard assessment. In addition, he will describe some examples of how Health Canada has assessed certain chemicals that were associated with respiratory sensitivity, and end with a discussion on possible means of improving the chemical risk assessment process.

10:15 AM – 11:00 AM

The Mechanisms of Multiple Chemical Sensitivity (MCS) and the Bradford Hill Criteria for Causation

John Molot, MD, former physician from the Environmental Health Clinic at Women's College Hospital and adjunct professor of Environmental Medicine at the University of Ottawa

This presentation examines the emerging scientific evidence on MCS, linking everyday low-level chemical exposures to biological mechanisms such as sensory receptor sensitization, oxidative stress, and nervous system dysregulation. Drawing on modern fields including mixture toxicology, systems biology, evolutionary medicine, and established causation frameworks, the session challenges outdated assumptions and offers a fresh evidence-based perspective on the scientific case for MCS. Attendees will gain insight into why MCS matters for medicine, public health, and indoor environmental policy, and why this issue is increasingly relevant in today's chemically complex world.

These findings have important implications for current risk assessment frameworks and regulatory approaches to chemical exposure.

Biological Mechanisms and Susceptibility

11:00 AM – 11:30 AM

TRPV1 Modulation and Genetic Variability in Cough Sensitivity and Autonomic Regulation

Filippo Liviero, MD, PhD Occupational Medicine Specialist and Researcher at the University of Padua, Italy

This presentation explores the role of TRPV1 receptor modulation and genetic variability in multiple chemical sensitivity, with implications for respiratory and autonomic responses to environmental exposures.

11:30 AM – 11:45 AM: HEALTH BREAK

11:45 AM – 12:15 PM

Genetic Susceptibility and Vitamin D Status in Multiple Chemical Sensitivity (MCS): Stratified Genome-wide Analyses Beyond Classical Alcohol-Metabolizing Variants

Kentaro Watai, **MD**, **PhD** Professor in the Department of Preventive Medicine at Kindai University, Japan.

Genome-wide and clinical investigations into MCS identify distinct genetic susceptibility signals associated with alcohol intolerance, suggesting broader neuroimmune sensitivity beyond classical metabolic pathways. Complementary case–control findings indicate that vitamin D deficiency is highly prevalent but not specific to MCS.

Clinical Reality and Patient Experience

12:15 PM – 12:45 PM

The Patient with multiple chemical sensitivity (MCS) in the Dentist's Office

Paolo Genangeli, DDS, Dentist specializing in homeopathy, homotoxicology, and naturopathy.

Overview of MCS as a chronic condition characterized by reactions to low-level chemical exposures, with implications for dental care. Emphasis on individualized management, including careful selection and compatibility testing of dental materials to minimize adverse responses.

12:45 PM – 1:15 PM

Clinical Reality, Systemic Barriers, and Pathways Forward in Multiple Chemical Sensitivity (MCS)

Domenica Tambasco, MD, FCFP, CCFP, Physician at the Environmental Health Clinic at Women's College Hospital in Toronto, Ontario and Assistant Professor (Clinical Adjunct) with the University of Toronto (DFCM, Pharmacology/Toxicology)

This presentation anchors the clinical reality of MCS, a condition characterized by debilitating multi-system symptoms triggered by low-level environmental exposures. It explores the prevalence of chemical intolerance in Canada, the biological pathways of sensitization, and the significant functional impairments that often lead to social and economic isolation. The session further analyzes the systemic education gaps and healthcare barriers that hinder diagnosis, while proposing policy solutions and clinical training to improve accessibility and support for those living with this disability, with implications for access to healthcare, employment, and housing.

1:15 PM – 2:00 PM: LUNCH BREAK

From Evidence to Practice, Population Impact, and Systems Change

2:00 PM – 2:30 PM

Interventions to Prevent, Manage, and Treat Multiple Chemical Sensitivity (MCS): Results of a Scoping Review of the Literature

Susanne Hempel, PhD, Professor in the Department of Population and Public Health Sciences at the University of Southern California (USC) and the Director of the Southern California Evidence Review Center

Overview of a scoping review examining interventions to prevent, manage, and treat MCS. Findings highlight a diverse but limited evidence base, with few high-quality studies, and identify key gaps to inform future research priorities.

2:30 PM – 3:00 PM

Genetic Susceptibility to Multiple Chemical Sensitivity: Building a Canadian Cohort and Collaborative Meta-Analysis

Audrey Grant, PhD, Assistant Professor at the Department of Anesthesia, and expert in Genetic Epidemiology at McGill University.

Dr. Grant will present a review of the scientific literature exploring possible genetic underpinnings of Multiple Chemical Sensitivity (MCS). Differences in proteins such as receptors and metabolizing enzymes, as well as single-nucleotide polymorphisms (SNPs), have been associated with increased sensitivity. She will also discuss ongoing research, in collaboration with ASEQ-EHAQ, aimed at identifying genetic and epigenetic factors that may contribute to an increased propensity to develop MCS. She will also outline plans for the upcoming recruitment of a Canadian cohort, including a call to volunteers interested in contributing biological samples, with the goal of building the dataset needed for a collaborative international meta-analysis.

3:00 PM – 3:30 PM

Population Trends and Environmental Drivers of Multiple Chemical Sensitivity (MCS): Insights from Prevalence and Indoor Air Quality Research

Rohini Peris, **President & CEO**, Environmental Health Association of Canada, and the Environmental Health Association of Québec.

This presentation examines the growing prevalence of multiple chemical sensitivity (MCS) in Canada, drawing on national population data from 2000 to 2020. It highlights key trends, including the significant increase in prevalence and the disproportionate impact on women.

Building on this population-level evidence, the presentation explores findings from recent indoor air quality (IAQ) research, demonstrating how everyday chemical exposures in the built environment contribute to symptom triggers and barriers to access. Results from comparative studies of fragrance-free and non-fragrance-free environments illustrate the effectiveness of source-control strategies in reducing harmful exposures.

Together, these findings underscore the need to reframe indoor air quality as an accessibility and public health issue, with clear implications for policy, prevention, and the creation of healthier, more inclusive spaces.

3:30 PM – 4:00 PM

Nursing Care With Those Who Have Multiple Chemical Sensitivity (MCS)

Claudia M. Smith, PhD, MPH, BSN, RN, Community and Public Health Nurse, Educator and Consultant.

Nursing awareness and response to MCS is essential. The presentation explores how nurses can support safer, more accessible healthcare environments through both interpersonal care and environmental modifications, while also addressing strategies to reduce exposure risks for patients and promote self-care practices that help protect healthcare providers from chemical sensitization.

4:00 PM – 4:30 PM

Closing Keynote

Evidence to Action: Reframing Chemical Exposure as an Accessibility and Human Rights Imperative

Paul-Claude Bérubé, LLB, Executive Director, COPHAN, Former president of Accessibility Standards Canada. Lawyer and popularizer, governance specialist, lecturer and professional trainer.

Closing Day 1, Paul-Claude Bérubé synthesizes the scientific, clinical, and policy insights presented throughout the conference to highlight a critical shift: the recognition of everyday chemical exposures as a significant accessibility and public health issue.

Drawing on findings from the INSPQ Québec report and broader national and international developments, this address examines the real-world impacts of multiple chemical sensitivity (MCS), including profound effects on health, participation, and quality of life. The presentation will situate these impacts within emerging accessibility and human rights frameworks, emphasizing the growing responsibility of institutions to respond.

Moving beyond awareness, this session will underscore the urgent need for systemic change, across policy, healthcare, and the built environment, and will challenge participants to translate evidence into concrete action. It will also address the ethical implications of inaction, including the increasing pressures faced by individuals living with MCS in the absence of adequate supports.

This closing address reframes MCS not as a marginal issue, but as a defining test of accessibility, equity, and public health in the 21st century.

4:30 PM – 4:45 PM

Recognition Ceremony

Paul-Claude Bérubé, LLB, Executive Director, COPHAN, Former president of Accessibility Standards Canada. Lawyer and popularizer, governance specialist, lecturer and professional trainer.

Riina Bray, BASc, MSc, MD, FCFP, MHSc, Medical Director of the Environmental Health Clinic at Women's College Hospital and Associate Professor in the Department of Family and Community Medicine

Recognition of two exceptional individuals whose leadership, dedication, and advocacy have had a lasting impact on the multiple chemical sensitivity (MCS) community. Honourees include Paul-Claude Bérubé for his commitment to advancing accessibility and inclusion, and Dr. Riina Bray for her longstanding contributions to environmental health, mentorship, and patient care.

Conclusion

4:45 PM – 5:00 PM

Reflections on Day 1 and invitation to Day 2

Robert Lattanzio, LLB, Lawyer & Executive Director, ARCH Disability Law Center

Michel Gaudet, **Executive Director**, Environmental Health Association of Canada and the Environmental Health Association of Québec

Rohini Peris, **President & CEO**, Environmental Health Association of Canada and the Environmental Health Association of Québec

— End of Day 1 —