## 2025–2026 Dental Hygiene Research Agenda

Canadian Dental Hygienists Association (CDHA)

Month 2025 cdha.ca/research

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CDHA also thanks all those working in the dental hygiene research community, including research investigators, knowledge users, funders, students, policymakers, practitioners, and others, for their continued engagement and action in the research space.

#### About this edition

This edition, which is a continuous evolution from our <u>2022-2024 research agenda</u>, was developed through consultation that included dialogue with our Research Advisory Committee and engagement with the broader dental hygiene research community.

This update introduces a fourth domain ("health and safety"), and renames the domain previously known as "risk assessment and management" to "oral health frameworks". More on this is discussed on page X. While not a comprehensive overhaul, this update reflects meaningful refinements to each domain's subtopics to ensure continued relevance and accuracy within the context of emerging national issues and challenges. With these updates, this research agenda remains a resource for the profession, guiding research efforts and facilitating discussion and engagement in research developments among clinicians, scientists, and knowledge users with expertise in oral health.

To reinforce and contribute to this framework, CDHA links its work and activities to the dental hygiene research agenda by disseminating research on topics that fall under these three domains through professional development offerings to Canada's dental hygiene workforce, position papers and statements on critical and emerging issues related to oral health and dental hygiene, and the *Canadian Journal of Dental Hygiene*. Additionally, the Canadian Foundation for Dental Hygiene Research and Education (CFDHRE), also grants funding to enable and enhance Canadian dental hygiene research in these areas.

# Research themes and priorities for investigations, collaborations, and investments

Oral Health Frameworks

Access To Dental Hygiene Care and Unmet Needs Capacity Building of the Dental Hygiene Profession Health and Safety (Practitioners and Patients/Clients)

#### A quick note

The goal of this dental hygiene research agenda is to present a flexible, structured set of primary priorities within a broad thematic framework. It is not meant to be an exhaustive inventory of every possible topic or subtopic relevant to the field. Instead, the identification of more detailed or refined priorities and the connections between them is left to the user's discretion, allowing for adaptation or expansion depending on the scope and focus of any given effort (research, education, policy, other), objective or interest, or area of inquiry.

#### **Oral Health Frameworks**

This new domain title shifts from the prior "risk assessment and management" to assume a broader, more inclusive posture than one that is limited to identifying and mitigating risks. An oral health-centered approach emphasizes prevention and well-being frameworks to improve quality of life and reduce burdens, including risk reduction and management.

- Oral health-related quality of life
- Prevention of oral diseases and related systemic risks through protective factors and preventive dental hygiene services
- Head, neck, and oral health assessments/screenings (status, risks, quality of life, daily functions/activities)
- Intersection of oral and mental health such as xerostomia (dry mouth), bruxism, temporomandibular (TMJ) issues, oral pain-exacerbated mood disorders
- Personalized/precision care planning
- Risk management and treatment planning
- Dental hygiene care and adjunctive therapies
- Clinical dental hygiene (assessments, interventions, continuity of care)
- Oral conditions and diseases such as periodontal diseases, caries, oral-pharyngeal cancer, inflammation
  - o Prevention, diagnosis, and treatment
  - o Burden of disease
  - Oral biomarkers
  - o Identification of individuals and/or populations at risk
  - Common risk factors
- Oral microbiome
- Mouth injuries and trauma
- Oral hygiene instruction and education
- Professional behaviour change techniques such as counselling, motivational interviewing, and health coaching
- Oral health promotion
- Self-management including health-promoting behaviours and health-risk behaviours (tobacco, vaping, cannabis, sugar)
- Integration of oral health with systemic health (chronic diseases)
- Oral health throughout the life course, including the impacts of aging
- Population health and oral health
  - o Determinants of oral health and health
  - Oral epidemiology
  - Oral health surveillance
  - Dental public health
  - Public education campaigns
  - Community-based oral health interventions and innovations
- Use of artificial intelligence and machine learning in clinical practice (early detection of oral diseases, diagnostic tools, predictive analytics, identification of high-risk patients, at-home monitoring, patient-provider communication, patient education)
- Digital health tools and applications (smartphone cameras for self-examinations, toothbrush sensors, digital risk assessment tools)

#### **Access to Oral Health Care and Unmet Needs**

- Oral health inequities in Canada
- Oral health care delivery in Canada
- Vulnerable and marginalized population groups with unmet oral health needs, including but not limited to:
  - Low-income individuals, families, and communities
  - o People with disabilities and/or mobility challenges
  - o Older adults, seniors, frail elderly
  - o People living in rural and remote communities
  - o Indigenous peoples and communities
  - o Homeless and underhoused people
  - o Refugees
  - Other populations and cohorts
- Barriers to oral care
- Trauma-informed care
  - Publicly funded dental/oral health programs in Canada (community-based, provincial, territorial, federal) such as the Canadian Dental Care Plan and Canada Child Benefit
  - Awareness
  - Masking behaviours
  - o Eligibility, demand, and utilization
  - o Provider eligibility and participation
  - Services covered
  - Evaluation (impact on access, equity, outcomes)
- Integration of oral health into health home neighbourhood models and supportive care settings
  - Long-term care homes
  - Rehabilitative settings
  - Community-based supportive settings
  - Specialized residential settings
  - Access to a dental home
  - Shared health records and communication
- School-based dental clinics
- Telehealth and related technologies
- Cultural competency, diversity, and inclusion
- Health economics (economic evaluations, finance and insurance, health valuation, demand and utilization)
- Oral health program planning and oral health policy development
- Patient/client engagement and experience
- Healthy public policy
- Oral health policy
- Advocacy

#### **Capacity Building of the Dental Hygiene Profession**

- Dental hygiene education, knowledge and professional development
  - o Curriculum design
  - o Standardization in dental hygiene educational preparation
  - o Dental hygiene degree vs. diploma
  - o Graduate-level education and research training for dental hygienists
  - Interdisciplinary courses
  - Innovative teaching strategies
  - Mentoring
  - Continuing education
  - Micro-credentialing
- Practice standards, innovation, and sustainability
  - Scope of practice
  - National standards
  - o Evidence-informed dental hygiene practice
  - Quality improvement (practice-level) and evaluation
  - o Advancement of and innovation in therapies, instruments, and technologies
  - Sustainable dental hygiene practices (environmental impacts)
- Workplace experience and employer-employee relations
  - o Recruitment, retention, and turnover
  - Job satisfaction
  - o Performance and growth
  - Learning and development
  - o Workplace policies, culture, and communication
  - Employment legislation
- Dental hygiene practices
  - o Practice administration (digital billing, documentation aids)
- Oral health workforce
  - o Data (supply, demand, distribution, availability, retirement/attrition)
  - Capacity (skills, competencies, productivity, credentialing, licensing, continuing professional development, service delivery, resilience)
  - Planning, modelling, and forecasting
  - Labour market
  - Portability and mobility between jurisdictions
  - Digital health tools and support systems (telehealth platforms, electronic health records,
    Al-assisted assessments, simulation tools, collaboration tools)
  - Coordination and communication across providers
- Career pathways for dental hygienists
- Knowledge and expertise in biological sciences
- Professional identity
- Interprofessional collaboration
- Health systems, policy, and education
- Research, including education-oriented and system-level aspects, but not limited to:
  - Learning and literacy among dental hygiene students (competencies and skills development, integration in curricula)
  - Undergraduate and graduate research training programs

- Faculty and institutional research capacity (mentorship and supervision models, infrastructure and support systems, research activity)
- Interprofessional research collaboration (cross-disciplinary integration and knowledge exchange, student involvement in team-based research projects, integration of oral health into non-dental settings)
- o Equity, diversity, and inclusion in research participation and leadership
- o Research dissemination and knowledge mobilization
- Accessibility and utilization of research by practitioners
- Dental hygiene and oral health research journals, publications, and events (metaresearch, impact, dissemination effectiveness, dissemination strategies)
- o Metrics and evaluation of research impact
- o Canada's inaugural National Oral Health Research Strategy
- o Research capacity and leadership within the profession
- o Research methods and approaches
- Social responsibility

#### **Health and Safety (Practitioners and Patients/Clients)**

- Patient/client safety
- Practitioner/provider safety
- Ergonomics
- Occupational health
- Infection prevention and control
- Health and wellness of the dental hygiene practitioner/workforce
- Mental health of oral health professionals (stress and burnout, stigma, compassion fatigue, career transition stress, coping mechanisms, performance pressure)
- Pandemic preparedness, response, and resilience
- Workplace experience and employer-employee relations
  - Health and safety