

Policy Options for Safer, Healthier Digital Environments

CONTEXT:

Digital technologies have become embedded in the daily lives of Canadians. While digital media can support learning, communication, work, creativity and social connection, growing evidence suggests that the harms associated with excessive and poorly regulated digital engagement extend beyond screen time.

This has concerning health implications for all, but special attention on children and youth is warranted because of the outsized effect it can have on healthy child development, which influences longer-term health and well-being. Research increasingly points to concerns regarding platform design, algorithmic amplification, social media addiction, online exploitation, exposure to harmful content, invasive data collection practices, and artificial intelligence (AI) impacts on child development.

Historically, public policy responses have focused on educating parents and providing voluntary guidance on healthy screen use. However, guidance alone has not been sufficient to address growing rates of problematic digital engagement among children and youth. Digital environments are intentionally designed to increase user engagement through features such as infinite scrolling, autoplay, algorithmic recommendation systems, push notifications, and behavioural profiling. These features are intended to increase the amount of time users spend on a platform and encourage continued interaction with digital content. By continuously presenting new content, personalizing recommendations, and using behavioural cues to encourage repeated engagement, these design features can create compulsive patterns of use and are increasingly described as "addictive". Emerging policy responses in jurisdictions such as the European Union, the United Kingdom, Australia, and Washington State have identified engagement-driven platform design and recommendation systems as potential contributors to online harms experienced by children and youth.

Internationally, governments are increasingly shifting away from relying solely on parental responsibility and individual behaviour change towards regulating the design and operation of digital platforms. The consensus from emerging policy responses is that the problem is not simply screen time, but the design features of digital platforms. Therefore, legislation that regulates the design, operation, and governance of digital platforms is needed to address the root causes of digital harms and better protect children and youth online.

In June 2026, the Government of Canada introduced the Safe Social Media Act and broader Digital Safety Act framework.¹ The legislation proposes a Digital Safety Commission of Canada and would impose duties on social media platforms and AI chatbot services to protect children, mitigate risks created by platform design, and address harmful content. The legislation reflects a growing recognition that online harms are driven not only by user behaviour but also by the design and operation of digital services.

Child Development and Health Impacts

The health impacts of excessive digital media exposure begin in early childhood. Research increasingly suggests that screen exposure may affect multiple domains of child development, particularly when it displaces responsive caregiving, language-rich interactions, sleep, and play.²

Studies have linked higher screen exposure in early childhood, among infants and children under eight years of age including infants and children under eight, with delayed language acquisition, poorer cognitive development, reduced executive functioning, attention difficulties, and socio-emotional challenges.^{3,4} A Canadian study found that greater screen time was associated with increased vulnerability across developmental domains, including language and cognitive development.⁵ Similarly, a longitudinal study published in *JAMA Pediatrics* found that higher screen use at ages two and three was associated with poorer performance on developmental screening tests in later childhood.⁶ Additional research has found adverse associations between screen exposure and developmental, behavioural, and psychosocial outcomes among preschool-aged children.^{7,8}

Researchers have also raised concerns about the effects of technology use on parent-child interactions. A recent systematic review and meta-analysis found that parental technology use in the presence of children was associated with poorer health and developmental outcomes among children under five years of age.⁹ These findings are particularly concerning because early childhood development depends heavily on responsive interactions between caregivers and children. UNICEF states that “babies need humans, not screens,” emphasizing that language development, attachment formation, and social-emotional learning are built through direct human interaction rather than digital engagement.¹⁰

Emerging research has also identified risks surrounding the anthropomorphism of AI systems, where users attribute human-like qualities or emotions to technology. Sycophancy in AI is also apparent, and systems have been found to reinforce users' beliefs, preferences, or emotional states rather than provide unbiased feedback, in turn reducing opportunities for perspective-taking, constructive disagreement, and social learning.¹¹ An artificial intelligence study published in *Science* found that AI systems affirmed users' actions 49% more often than humans, including situations involving deception, harmful behaviour, or other unethical conduct.¹¹ AI-assisted learning has also contributed to cognitive offloading, where users rely on technology to perform tasks traditionally requiring

memory, reasoning, problem-solving, or critical analysis.¹² While AI may provide educational benefits, excessive reliance on AI could diminish the development of independent critical thinking and reasoning skills.

Social media also influences how young people develop their sense of self during a critical period of identity formation. Adolescents are drawn to social media because it allows them to "establish friends, discuss ideas, discover new interests, and try out new kinds of self-expression."¹³ At the same time, the features that make these platforms socially engaging also create opportunities for continuous social comparison and validation. As one review notes, social media "influences certain young individuals, leading them to begin making unfavorable comparisons between themselves and others, whether about their achievements, their abilities, or their appearance."¹³ Consistent with this, evidence shows that "social media use is associated with appearance comparisons and body image concerns, particularly among young women" and that higher levels of social comparison are correlated with depressive symptoms in adolescents.¹³ Together, these findings suggest that the impacts of social media extend beyond anxiety and depression to include broader effects on self-esteem, body image, identity development, and young people's sense of belonging.

Among school-aged children and adolescents, excessive screen use has been associated with reduced physical activity, sleep disruption, poorer academic outcomes, increased anxiety and depressive symptoms, body image concerns, cyberbullying, and social isolation. Statistics Canada recently reported that only 14% of Canadian youth consistently met national screen time recommendations between 2019 and 2023, while 37% consistently exceeded them.¹⁴ Youth who exceeded screen time recommendations were more likely to report poorer well-being outcomes and less likely to meet physical activity recommendations.¹⁴

In British Columbia, the McCreary Centre Society's *Beyond the Likes* report found that 18% of youth reported social media use had become problematic enough that they needed help.¹⁵ Youth aged 12-19 who used social media after bedtime were more likely to report unhealthy eating behaviours, poorer sleep patterns, and suicidal ideation compared to peers who did not engage with social media at night.¹⁵

A systematic review of 13 studies involving adolescents aged approximately 13-18 years found that greater time spent on social media, social media engagement, investment of effort and time on platforms, and social media addiction were associated with increased depression, anxiety, and psychological distress.¹⁶ These findings suggest that digital harms are not simply a function of how much time young people spend online, but also how digital products are designed to capture and retain attention.

Digital Harms and Platform Design

Increasing evidence suggests that many online harms arise not from technology itself but from business models that depend on maximizing user engagement and collecting personal data. The Electronic Frontier Foundation (EFF) argues that the collection and commercialization of personal data is a central driver of many online harms experienced by children.¹⁷ According to the organization, “the current accumulation of personal data—and the advertising industry that it fuels—is the starting point of a lot of online harm to children,” including privacy violations, predatory advertising, and discrimination based on personal characteristics.¹⁸

The organization further argues that behavioural advertising has fundamentally reshaped the digital environment: “Online behavioral targeting is almost single-handedly responsible for the worst privacy problems on the internet today.”¹⁷ According to the EFF, behavioural advertising has incentivized technologies that monitor users by default, creating systems that collect extensive personal information in order to profile and influence users.¹⁷

Similar concerns have been identified by Canada's Office of the Privacy Commissioner. In its review of online behavioural advertising practices, the report found significant concerns regarding transparency, consent, accountability, and children's privacy.¹⁹ The report noted that “the situation is especially challenging in the case of children – they are online at younger ages and unaware that they are being tracked, let alone being advertised to.”¹⁹

Canada's Office of the Privacy Commissioner further observed that obtaining meaningful consent from children for behavioural tracking and targeted advertising presents significant challenges under Canadian privacy law.¹⁹ These concerns are particularly relevant given the growing use of engagement-maximizing platform features such as infinite scrolling, autoplay, push notifications, personalized recommendation systems, and behavioural profiling. Such features are specifically designed to increase time spent on platforms and may contribute to problematic use patterns among children and youth.

International Policy Context

United Kingdom

The United Kingdom's [Online Safety Act](#) establishes legal obligations for online platforms to protect children from harmful content and harmful algorithms.²⁰ The legislation requires platforms to assess and mitigate risks to children, implement age-appropriate protections, and address the role of recommendation systems that expose users to harmful content. The Act represents a significant shift toward holding technology companies accountable for how their products function rather than relying solely on user education.

The Age-Appropriate Design Code, also referred to as the Children’s Code, sets out requirements for designing online services with children’s safety embedded in the design process itself, including data protection safeguards by default to ensure that digital environments are appropriate for children.²¹ Together, the Age-Appropriate Design Code and the Online Safety Act exemplify a safety-by-design approach to digital environments.

Australia

Australia is widely regarded as a leader in developing comprehensive screen time recommendations through its Australian 24-Hour Movement Guidelines for Children and Young People.²² These guidelines integrate physical activity, sedentary behaviour, sleep, and recreational screen use into a single framework, recognizing that children's health is shaped by how they spend their entire day rather than by screen time alone.

For children and adolescents aged 5 to 17 years, the Australian guidelines recommend limiting recreational screen time to no more than two hours per day and minimizing prolonged periods of sedentary behaviour. For younger children, the Australian 24-Hour Movement Guidelines for the Early Years (Birth to five Years) recommend no sedentary screen time for infants younger than two years and no more than one hour per day for children aged two to five years. The guidelines also emphasize adequate sleep and regular physical activity as essential components of healthy development.

In addition to guidelines aimed at protecting children in digital environments, Australia has introduced new measures to strengthen safeguards for young people online. The Australian Government has implemented world-first social media age restrictions requiring platforms to take reasonable steps to prevent users under 16 from creating or maintaining accounts, reflecting a broader effort to regulate youth exposure to digital media during critical stages of development.²³

Australia’s approach is notable because it treats screen use as part of a broader public health strategy rather than an isolated issue, integrating physical activity, sleep, sedentary behaviour, and digital media use into a single framework. This is further strengthened by the introduction of world-first social media age restrictions requiring platforms to take reasonable steps to prevent users under 16 from creating or maintaining accounts. However, the policy remains in its early stages, and evidence suggests enforcement challenges remain significant.²⁴ Polling found that approximately 70% of under-16 users retained access to social media platforms despite the implemented restrictions.²⁴ There is also the concern about the challenges of age-verification systems as stronger enforcement may require the collection of additional personal information and could create privacy, surveillance, and data security risks.²⁵

However, early implementation experiences from Australia demonstrate that age-based restrictions alone are unlikely to eliminate digital harms or replace the need for broader safety measures.²⁶ Research illustrates young people were finding ways around the restrictions with “more than 85% of participants aged under 16 years reported using social

media platforms subject to the Act at follow-up”.²⁶ This highlights the importance of effective enforcement mechanisms, privacy-preserving age assurance, and complementary supports for families and young people. A social media restriction may also create unintended consequences if it does not account for the important roles digital platforms play in young people’s social connection, identity development, access to support networks, and participation in online communities.

Canada can learn from both the opportunities and challenges emerging from Australia’s experience by pairing age-based protections with broader measures to support digital literacy, strengthen parent and caregiver capacity, engage youth in implementation, and ensure young people have safe alternatives for connection and community.

European Union

The European Union has established a comprehensive regulatory framework through the Digital Services Act and AI Act.^{27,28} The Digital Services Act requires platforms to protect minors, increases transparency around algorithms, and requires large platforms to assess and mitigate systemic risks created by recommender systems. The AI Act establishes safeguards against AI systems that exploit vulnerabilities related to age or developmental stage and imposes obligations on high-risk AI applications. The General Data Protection Regulation further limits behavioural advertising through strict consent requirements.²⁹

United States of America

Emerging policy initiatives in the United States also focus on platform design rather than content regulation. In Washington State, Senate Bill 5708 was introduced to regulate addictive platform features affecting minors.³⁰ The legislation would require users to choose the type of content displayed in their feeds rather than relying on engagement-driven recommendation algorithms and would restrict push notifications during school hours and overnight periods.

Canadian experts have similarly argued that regulatory attention should focus on product design. Taylor Owen, Founding Director of McGill University’s Centre for Media, Technology and Democracy, has noted that recent litigation against social media companies has focused not on content itself but on platform design features that contribute to harmful outcomes.³¹ Reflecting on comparisons with tobacco regulation, Owen argued that “the bigger lesson is that those litigations in the tobacco cases weren’t the things that got us all to stop smoking. It was the regulations that followed them.”³¹

Policy Gap

Current Canadian approaches remain heavily focused on promoting healthy screen habits and educating families. While education remains important, international evidence

suggests that guidance alone is insufficient to address digital harms that are structurally embedded within platform design.

Families cannot reasonably be expected to protect themselves from sophisticated engagement-maximizing technologies designed by some of the world's largest technology companies. Parents face increasing challenges supervising digital environments that operate through opaque algorithms and AI-driven recommendation systems. A modern child protection framework should therefore focus not only on how children use technology but also on how technology is designed.

Recent developments in British Columbia further highlight the growing need to examine accountability and responsibility in relation to emerging technologies. The Government of British Columbia has been exploring potential legal options related to the Tumbler Ridge tragedy involving OpenAI, reflecting broader questions about the responsibilities of technology companies when digital systems may contribute to harm affecting children and communities. These developments reinforce the need for a regulatory approach that establishes clear expectations for technology companies, including transparency, safety obligations, and accountability mechanisms.

BCAHL Recommended Policy Options

1. Establish Federal Digital Safe Design Legislation

The Government of Canada should strengthen and expand the proposed Digital Safety Act by establishing enforceable digitally safe design requirements for social media platforms, video-sharing services, gaming platforms, and AI systems used by children and youth.

Requirements for inclusion:

- Restrictions on infinite scrolling, autoplay, and other addictive engagement features for minors.
- Limits on algorithmic recommendation systems that amplify (i.e increase the visibility or prominence of) harmful, violent, hateful, or age-inappropriate content.
- Transparency requirements (i.e requiring platforms to disclose how systems rank and personalize content) regarding recommender systems and engagement algorithms.
- Restrictions on cross-platform data sharing and behavioural profiling used to personalize content and targeted advertising to children and youth.
- Requirements for age-appropriate default settings that limit algorithmic personalization and data collection for child and youth accounts.
- User controls that allow parents and caregivers to understand and reset recommendation pathways for children's accounts, while balancing youth privacy and evolving autonomy.

- Mandatory wellbeing features, including periodic screen-time reminders, prompts encouraging breaks, and other evidence-informed digital wellbeing notifications designed to reduce prolonged engagement.

2. Prohibit Behavioural Advertising to Children

Canada should prohibit behavioural advertising and profiling-based advertising directed at children and youth.

Behavioural advertising depends upon the collection, analysis, and commercialization of children's personal information.³² Restricting behavioural advertising would reduce incentives for excessive data collection and better align digital services with children's best interests. The prohibition should also restrict the sharing of children's personal information across applications and services for advertising, profiling, and algorithmic personalization. Reducing cross-platform data sharing would limit the ability of companies to build detailed behavioural profiles that drive targeted advertising and engagement-maximizing recommendation systems.

3. Regulate High-Risk AI Companion Toys for Children:

Canada should prohibit the sale and marketing of AI-enabled companion toys intended to simulate emotional relationships with children.³³ AI-powered toys should be treated as a high-risk technology category and prohibited until independent evidence demonstrates their safety.

Canada should establish specific safety requirements for AI-enabled companion toys marketed to children and ban toys designed to simulate emotional relationships or encourage prolonged emotional dependence. Canada's existing Toys Regulations establish mandatory requirements for children's toys, including protections against mechanical, electrical, auditory, thermal, flammability, and toxicological hazards.³⁴ However, the regulations do not specifically address the risks created by generative AI, such as emotional manipulation, psychological dependence, inappropriate responses, data collection, or designs that encourage children to form relationships with AI systems.

The sale prohibition should apply where an AI toy is designed or marketed to act as a friend, confidant, or emotionally responsive companion; encourages children to disclose personal or emotional information; uses personalization or other features to prolong interactions; discourages disengagement or prioritizes the AI relationship over human relationships; or provides advice or responses that could pose risks to a child's mental health, safety, or development. All AI toys should be subject to enhanced pre-market safety assessments, independent testing, limits on data collection and retention, and clear requirements for parental oversight. Where independent evidence demonstrates that a product cannot adequately mitigate these risks, Canada should have the authority to restrict or prohibit its sale to children.

These safeguards are warranted because evidence concerning AI companions points to potential risks of psychological dependence, displacement of human relationships, and unrealistic expectations about relationships.^{35,36} A 2026 review in *Child Development Perspectives* identifies psychological dependence, displacement of time spent with human relationships, and unrealistic relationship expectations as key concerns for adolescents using AI companions.³⁵ UNICEF similarly concludes that companion-like AI presents distinct and heightened risks for children and calls for preventive regulation rather than waiting for harms to emerge.³⁶

Evidence specifically concerning AI toys is still limited, which is itself a reason for precaution.³⁷ A 2026 review in the *Journal of Medical Internet Research* notes that millions of AI-enabled toys are being marketed as educational companions despite there being very little research on their effects on young children's development.³⁷ In addition, a 2026 Australian survey of 1,950 children aged 10-17 found that 20% of children who had used AI assistants or companions had experienced potentially inappropriate or harmful interactions, while 32% had shared personal or potentially sensitive information with these systems.³⁸

Accordingly, Canada should update its toy-safety framework so that AI-enabled toys are assessed not only for traditional physical hazards, but also for the psychological, relational, privacy, and developmental risks associated with interactive AI. This approach would allow lower-risk educational or entertainment applications to remain available while imposing stronger safeguards on products that are intentionally designed to cultivate emotional attachment or dependence.

4. Implement Age-Appropriate AI Literacy Through Phased Education and Teacher Training

Canada should work with provinces and territories to develop a national framework that promotes healthy digital learning environments for children and youth. This should include age-appropriate AI literacy throughout elementary and secondary education. Rather than restricting AI outright, students should progressively learn how AI systems work, their benefits, limitations, biases, privacy implications, and appropriate uses at different developmental stages. However, this requires teachers to have appropriate knowledge to use AI themselves and to develop an understanding of how AI should be taught in the classroom to support learning outcomes.

Provinces should be encouraged to develop age-appropriate digital and AI literacy curriculum for elementary and secondary education, with learning objectives adapted to students' developmental stages. To be effective, this digital literacy curriculum should be built on evidence-based teaching practices and rolled out incrementally with evaluated field testing until it is fully scaled out. Teachers should receive dedicated professional development to ensure AI supports learning rather than replacing critical thinking, creativity, problem-solving, and healthy social development.

Although most Canadian provinces and territories have policies aimed at reducing students' personal device use during the school day, opportunities remain to strengthen these efforts through broader guidance on creating healthier digital environments. This could include promoting hands-on and experiential learning, modelling balanced technology use at the school and school board levels, and minimizing reliance on online educational tools where suitable alternatives exist.

Successfully reducing students' reliance on personal smartphones will also require investment in school digital infrastructure. Many schools continue to depend on students bringing their own internet-enabled devices for legitimate educational activities. As a result, policies intended to limit smartphone or social media use during school hours may be difficult to implement unless schools have reliable Wi-Fi, sufficient school-owned laptops or tablets, and other digital resources to support teaching and learning.

A national strategy could also encourage schools and community organizations to ensure that essential information and services, including school communications, public transit updates, extracurricular activities, and sports team communications, remain accessible through alternatives to apps and smartphones. While education falls primarily under provincial and territorial jurisdiction, federal leadership could support the development of evidence-informed guidance and promote greater consistency across Canada.

5. Implement National Social Media Age Protections

Canada could establish age-based protections for social media access. This would put responsibility for compliance on platforms rather than parents or children. Canada would do well to study minimum age requirements in Australia to understand the implementation and enforcement challenges. Age-based protections should be paired with measures to strengthen digital literacy, support parents and caregivers, meaningfully engage youth in implementation, and ensure young people have access to safe alternatives for connection and community.

6. Develop Privacy-Preserving Digital Age Assurance Standards

Canada should work with provinces, technology companies, and privacy regulators to develop privacy-preserving approaches to age assurance that reduce reliance on self-declared age while minimizing unnecessary collection of personal information. Rather than relying solely on platform-level age verification, governments could encourage interoperable technical standards that support age-appropriate protections across devices and digital services while safeguarding children's privacy and personal information. To be effective, these approaches should be supported by clear implementation, oversight, and enforcement mechanisms. Given Canada's ongoing challenges in enforcing existing privacy and online safety legislation, any new age assurance framework should include well-defined regulatory responsibilities,

compliance requirements, and accountability measures to ensure consistent implementation across digital platforms.

Conclusion

The evidence increasingly suggests that digital harms are not solely the result of excessive screen time but are also driven by the design, business models, data collection practices, and governance of digital platforms. International jurisdictions are moving beyond voluntary guidance toward regulatory frameworks that require technology companies to prioritize child safety.

Canada now has an opportunity to adopt a modern digital protection framework that addresses the root causes of online harms by regulating platform design, limiting manipulative technologies, strengthening AI safeguards, and ensuring that children and youth's wellbeing is placed ahead of commercial interests.

Who We Are

Established in 2003, BCAHL represents the largest health promotion team in BC history. Our vision is 'healthy living for all British Columbians through every stage of life.' BCAHL promotes healthy living to prevent chronic disease by mobilizing leading health organizations to collaborate on health policy and programs throughout British Columbia.

BCAHL is made up of representatives from leading BC health organizations that determine strategic priorities and directions. The membership includes BC Healthy Communities Society, BC Lung Foundation, BC Recreation and Parks Association, Canadian Cancer Society, BC and Yukon Division; Canadian Mental Health Association, BC Division, Diabetes Canada; Heart and Stroke Foundation of Canada, BC and Yukon; Public Health Association of BC and YMCA BC. In addition, representatives from Doctors of BC, Health Officers' Council of BC, the regional and First Nations Health Authorities, the Ministry of Health and the Public Health Agency of Canada BC/Yukon Region are connected and contribute regularly through BCAHL quarterly meetings.

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