

COVID-19 existing resource response #14

(Last updated: 6 February 2022)

Question

How has the COVID-19 pandemic (e.g., public-health measures, such as lockdowns) affected risk factors for chronic disease (e.g., substance use, nutrition, physical activity and/or tobacco use)?

What we found

We searched the COVID-END global and domestic [inventories of best evidence syntheses](#) on 2 February 2022 to identify evidence documents focused on clinical management of pandemic-related impacts, management considerations for chronic and other existing health conditions (e.g., chronic conditions, cancer, and other conditions), and health promotion more generally. The search terms used were: (“substance” OR “nutrition” OR “eating behaviour” OR “physical activity” OR “exercise OR “tobacco” OR “smoking”) AND (“COVID” OR “COVID-19” OR “SARS-CoV-2” or “pandemic”).

We identified 44 evidence documents that provide insights about the question (listed in Table 1 based on the risk factors), which include:

- 14 full systematic reviews;
- 12 rapid reviews; and
- 18 protocols for systematic reviews.

Box 1: Our approach

COVID-END in Canada responds to requests for evidence syntheses about topics related to COVID-19 that are likely to be explicitly considered by high-level decision-makers in multiple Canadian jurisdictions. This includes conducting rapid evidence profiles, living evidence profiles, rapid syntheses and living evidence syntheses. Examples of these evidence products can be viewed [here](#).

Sometimes requests are submitted about questions that have already been addressed by one or more recently updated, high-quality evidence syntheses, or will be addressed soon by work underway (e.g., through a rapid synthesis underway with or being planned by a Canadian team, registered synthesis protocol or CIHR funding to conduct a synthesis). Other times all the requestor needs is a list of available evidence syntheses undertaken by COVID-END in Canada partners or COVID-END global partners. In these situations, we prepare a response that profiles these existing resources. These responses are typically prepared by a combination of: 1) searching both the COVID-END domestic inventory and the COVID-END global inventory; and 2) contacting 40+ Canada evidence-synthesis teams to identify any additional resources or work underway that is relevant to the question posed in a request. Such an existing resource response is equivalent to a rapid evidence profile prepared with the same turnaround time.

We followed this approach to prepare this existing resource response, which was prepared in one business day (and hence the equivalent to a two-days rapid evidence profile) to inform next steps in evidence synthesis, guideline development and/or decision-making related to the question that was posed.

Table 1: Hyperlinked titles to evidence documents with insights about the impacts of the COVID-19 pandemic on risk factors for chronic disease

Evidence type	Evidence documents identified
Guidelines	<ul style="list-style-type: none"> • None identified
Living reviews	<ul style="list-style-type: none"> • None identified
Full systematic reviews	<p><i>Substance use</i></p> <ul style="list-style-type: none"> • None identified <p><i>Nutrition</i></p> <ul style="list-style-type: none"> • Eating behaviour changes during the COVID-19 pandemic: A systematic review of longitudinal studies (no AMSTAR rating available; literature last searched July 2021) • Challenges in feeding children posed by the COVID-19 pandemic: A systematic review of changes in dietary intake combined with a dietitian's perspective (AMSTAR rating 5/9; literature last searched 10 February 2021) • The impact of COVID-19 on diet quality, food security and nutrition in low- and middle-income countries: A systematic review of the evidence (no AMSTAR rating available; literature last searched January 2021) • Consequences of the COVID-19 syndemic for nutritional health: A systematic review (AMSTAR rating 8/10; literature last searched July 2020) • The impact of COVID-19 lockdown on snacking habits, fast-food and alcohol consumption: A systematic review of the evidence (AMSTAR rating 6/9; literature last searched 28 November 2020) <p><i>Physical activity</i></p> <ul style="list-style-type: none"> • Impact of the SARS-CoV-2 coronavirus pandemic on physical activity, mental health and quality of life in professional athletes - A systematic review (no AMSTAR rating available; literature last searched 12 July 2021) • Physical activity and daily exercise-related social-distance policy during Covid-19 pandemic: A systematic literature review (no AMSTAR rating available; literature last searched January 2021) • Impact of COVID-19 induced lockdown on physical activity and sedentary behaviour among university students: A systematic review (no AMSTAR rating available; literature last searched January 2021) • Effects of the COVID-19 pandemic on physical activity in chronic diseases: A systematic review and meta-analysis (no AMSTAR rating available; literature last searched January 2021) • Physical activity during COVID-19 lockdown in Italy: A systematic review (no AMSTAR rating available; literature last searched 31 December 2020) • Impact of the first COVID-19 lockdown on body weight: A combined systematic review and a meta-analysis (AMSTAR rating 6/11; literature last searched 21 December 2020) • Impact of COVID-19 pandemic on university students' physical-activity levels: An early systematic review (no AMSTAR rating available; literature last searched 20 October 2020) • Changes in physical activity and sedentary behaviours from before to during the COVID-19 pandemic lockdown: A systematic review (AMSTAR rating 8/9; literature last searched 1 October 2020) <p><i>Tobacco use</i></p> <ul style="list-style-type: none"> • Tobacco cessation is a challenge during COVID-19 pandemic: Is it a good time to quit?: A systematic review (AMSTAR rating 5/9; literature last searched 1 June 2020)
Rapid reviews	<p><i>Substance use</i></p> <ul style="list-style-type: none"> • Substance use (SU) among women in the context of the corollary pandemics of COVID-19 and intimate partner violence (IPV) (no AMSTAR rating available; literature last searched October 2020)

Evidence type	Evidence documents identified
	<ul style="list-style-type: none"> • Rapid review update 1: What is the effect of the COVID-19 pandemic on opioid and substance use and related harms? (AMSTAR rating 8/10; literature last searched 10 September 2020) • Rapid review: What is the effect of the COVID-19 pandemic on alcohol use and alcohol-related harms? (AMSTAR rating 8/10; literature last searched 16 June 2020) • Substance use-related harms and risk factors during periods of disruption (no AMSTAR rating available; literature last searched 27 May 2020) • Impacts of COVID-19 mitigation on people with pre-existing substance use and addictions issues (no AMSTAR rating available; literature last search date not available) <p><i>Nutrition</i></p> <ul style="list-style-type: none"> • Rapid review update 2: What is the prevalence of household food insecurity in North America as a result of COVID-19 and associated public-health measures? (AMSTAR rating 8/9; literature last searched 5 May 2021) <p><i>Physical activity</i></p> <ul style="list-style-type: none"> • Influence of social distancing during the COVID-19 pandemic on physical activity in children: A scoping review of the literature (no AMSTAR rating available; literature last searched 6 January 2021) • Mental health and physical activity among children and adolescents during the COVID-19 pandemic (no AMSTAR rating available; literature last searched November 2020) • Physical activity, sedentary behaviour and well-being of adults with physical disabilities and/or chronic diseases during the first wave of the COVID-19 pandemic: A rapid review (no AMSTAR rating available; literature last searched 30 September 2020) • Is physical activity associated with less depression and anxiety during the COVID-19 pandemic? A rapid systematic review (AMSTAR rating 7/10; literature last searched 25 September 2020) • Studies of physical activity and COVID-19 during the pandemic: A scoping review (no AMSTAR rating available; literature last searched 23 July 2020) <p><i>Tobacco use</i></p> <ul style="list-style-type: none"> • Rapid review: What is the effect of the COVID-19 pandemic on the use and cessation of tobacco and vaping products? (no AMSTAR rating available; literature last searched 26 October 2020)
<p>Protocols for reviews*</p>	<p><i>Cross-cutting</i></p> <ul style="list-style-type: none"> • Living systematic review on the effects of the COVID-19 pandemic on the general populations' mental health, alcohol/substance abuse and violence (anticipated completion date: 1 October 2022) • Lifestyle factors and COVID-19: A rapid and living systematic review and meta-analysis (anticipated completion date: 1 June 2021) <p><i>Substance use/misuse</i></p> <ul style="list-style-type: none"> • Substance-use disorder treatment transformations due to the COVID-19 pandemic: Impact on Indigenous patients and communities (anticipated completion date: 31 March 2022) • Substance use and substance-use disorder, in relation to COVID-19: Protocol for a scoping review (anticipated completion date not stated) • Investigating and addressing the immediate and long-term consequences of the COVID-19 pandemic on patients with substance-use disorders: a scoping review and evidence map protocol (anticipated completion date not stated) <p><i>Nutrition</i></p> <ul style="list-style-type: none"> • Adherence to the Mediterranean diet during the COVID-19 era: A systematic review of observational studies (anticipated completion date: 17 May 2021)

Evidence type	Evidence documents identified
	<ul style="list-style-type: none"> • Changes in eating habits and weight gain during the COVID-19 quarantine: a systematic review (anticipated completion date: 25 March 2021) <p><i>Physical activity</i></p> <ul style="list-style-type: none"> • Changes of physical activity during the COVID-19 pandemic: A systematic review and meta-analysis based on data collected using validated global physical-activity measures (anticipated completion date: 27 August 2021) • A systematic review regarding the impacts of the COVID-19 pandemic on physical-activities involvement and exercise habit of people with and without chronic disease (anticipated completion date: 30 June 2021) • Physical activity during lockdowns associated with the COVID-19 pandemic (anticipated completion date: 30 April 2021) • The consequences of the COVID-19 related lockdowns on children's physical activity: A systematic review focusing on the impact of parents and with special considerations of vulnerable children (anticipated completion date: 16 April 2021) • The impact of COVID-19 pandemic on physical-activity levels, and screen time of children: A systematic review and meta-analysis (anticipated completion date: 15 April 2021) • Changes in physical activity patterns due to enforced COVID-19 related movement restrictions (anticipated completion date: 10 February 2021) • A systematic review and meta-analysis of observational studies examining the impact of COVID-19 safety measures on physical activity patterns in adults (anticipated completion date: 3 February 2021) • Changes in physical activity, dietary and sleeping patterns among the general population in COVID-19 (anticipated completion date: 22 January 2021) • The impact of COVID-19 on college students' physical activity: A protocol for systematic review and meta-analysis (anticipated completion date not stated) • The effects of the measures against COVID-19 pandemic on physical activity among school-aged children and adolescents (6-17 years) in 2020: A protocol for systematic review (anticipated completion date not stated) <p><i>Tobacco use</i></p> <ul style="list-style-type: none"> • Is the COVID-19 pandemic associated with changes in tobacco-smoking behaviour? A systematic review (anticipated completion date: 31 August 2021)
Titles/questions for reviews that are being planned	<ul style="list-style-type: none"> • None identified
Single studies	<ul style="list-style-type: none"> • None identified
Other types of documents	<ul style="list-style-type: none"> • None identified

Al-Khateeb S, Bain T, Mansilla C, Lavis JN, Wilson MG. COVID-END in Canada existing resource response #14: How has the COVID-19 pandemic (e.g., public-health measures, such as lockdowns) affected risk factors for chronic disease? Hamilton: McMaster Health Forum, COVID-END in Canada, 6 February 2022.

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