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More information about the COVID-19 Interpersonal Coping Study and access to other reports based on the study can be found at: www.drkarenblair.com/covid

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Mask Wearing During COVID-19: Nova Scotian and Canadian Perspectives

Research Overview

The current report provides summary information about mask wearing from the COVID-19 Interpersonal Coping Study intake survey. This report summarizes data collected between May 14 and July 5, 2020 from 2426 Canadian respondents in response to the following two questions:

Frequency of Mask Wearing: "Over the past 7 days, how often have you worn a face mask while out in public?"

Mandatory Mask Wearing: "Please rate your agreement with the following statement: Until the COVID-19 pandemic is over, it should be mandatory to wear a mask while out in public"

Participants also had the opportunity to answer the following open-ended question:

Subjective Influencing Factors: "At this time, what is influencing your decision to wear or not wear a mask when you go out in public?"

It is important to note that rhetoric and regulations regarding the use of masks during the COVID-19 pandemic has varied across time, and across Canadian jurisdictions. For example, in Nova Scotia the provincial government did not initially recommend that people wear masks and did not implement a mandatory mask regulation until July 31, 2020 – after data reported here were collected. Therefore, it is crucial to consider the timeframe of the data collection when viewing the results, as it is possible that mask wearing practices and attitudes may have shifted as communication and regulations have evolved.

Mask Wearing During COVID-19: Nova Scotian and Canadian Perspectives

Research Objectives

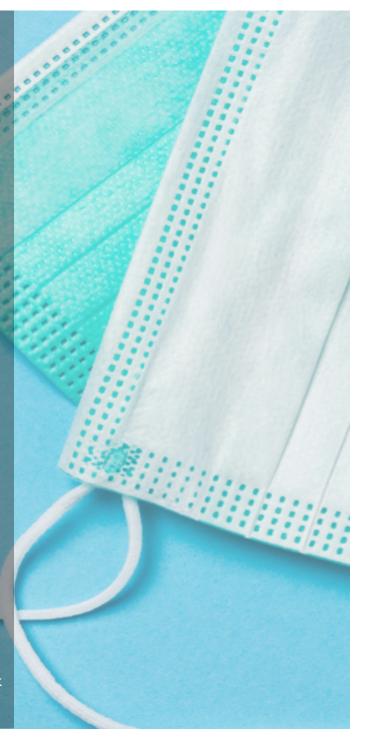
- To examine the frequency with which people living in Canada, particularly in Nova Scotia, reported wearing masks during the COVID-19 Pandemic
- To examine attitudes toward mandatory mask wearing among people living in Canada, and particularly in Nova Scotia, during the COVID-19 Pandemic
- To compare the responses of those living in Nova Scotia to those living in the rest of Canada
- To examine trends in mask wearing frequency and attitudes over time
- To identify statistically significant predictors of mask wearing among people living in Canada
- To explore factors influencing mask wearing from the participants' perspectives

Summary of Findings

The findings of the current report suggest that during the period of May 14 to July 5, there was much variability in Canadian participants' reported frequency of mask use. As the study progressed, however, participants were more likely to report frequent mask use and more likely to endorse mandatory mask wearing. Generally, frequent mask wearing tended to be more common in densely populated areas with a higher number of COVID-19 cases.

The trends across Nova Scotia were comparable to the trends across Canada; however, on average, people in Nova Scotia reported less frequent mask wearing than people in the rest of Canada. Likewise, people in Nova Scotia were less likely to endorse mandatory mask wearing than people living elsewhere in Canada.

Participants' responses to a variety of items enabled statistical analyses of factors that predict mask wearing. Generally, the factors that predicted frequent mask wearing included age, gender, sexuality, disability status, health factors, personality factors, and political views. Participants also had the opportunity to describe what influenced their mask wearing decisions. An analysis of these responses revealed that there were a variety of subjective factors that either promoted or prevented mask wearing, or that made it seem unnecessary.



Demographics

Age

Participants in the sample ranged from age 16 to 88 and the average age was 42.

Gender

The majority of the sample consisted of cisgender women (75.5%) and also included cisgender men (15%), and non-binary (5.5%), genderqueer (2.5%), and agender (0.5%) people; 1% of the sample listed another gender.

Race

The sample was predominantly White (89.5%) and also included Mixed Race (4.5%), Asian (2.5%), Indigenous (1.5%), Hispanic/Latino (0.5%), Middle Eastern (0.5%), and Black (0.5%) people. Additionally, 0.5% of participants indicated an ethnicity that did not fit within the specified categories.

Sexual Orientation

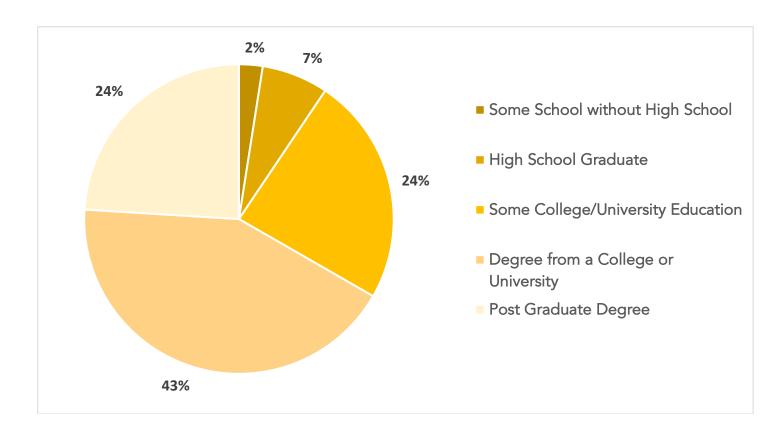
34% of the sample reported a sexual identity under the 2SLGBTQ+ umbrella, while the remainder (66%) did not report having a 2SLGBTQ+ identity.

Disability Status

34% of the sample reported having some form of disability or impairment, while the remainder (66%) did not report having any form of disability.

Demographics: Education

The sample was highly educated; most participants had completed at least some college or university education.



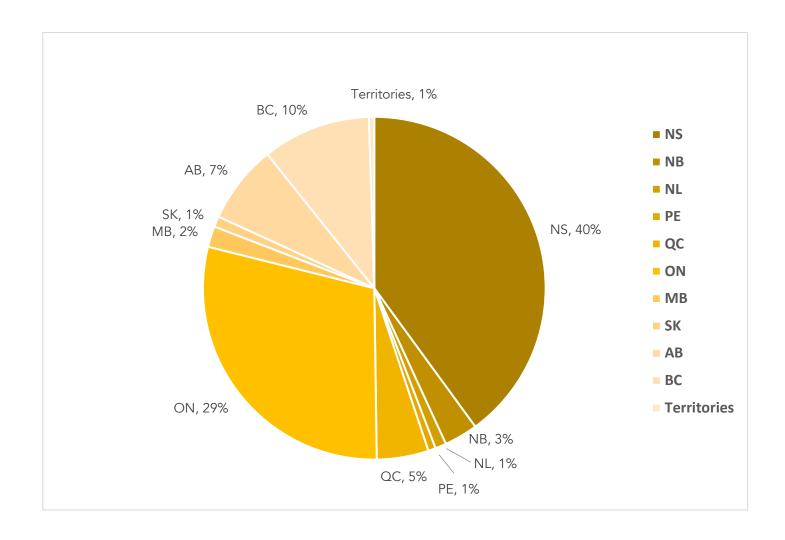
Demographics: Income

Participants were asked to indicate their income level in relation to their basic everyday needs. The sample ranged from people whose basic everyday needs were not met, to those who expect that their basic everyday needs will be met for the rest of their lives without any additional income.

Basic everyday needs are not met	10%
Basic everyday needs are met, but not more	21%
Basic everyday needs are met, with a little bit of money left over	32%
Basic everyday needs are met, with a moderate amount of money left over	26%
Basic everyday needs are met, with a lot of money left over	
Basic everyday needs are met for the rest of expected life, even without any additional income in the future	7%

Provincial Breakdown: Canada

The majority of participants were located in Nova Scotia or Ontario; however, there was representation of people from all Canadian provinces and territories.

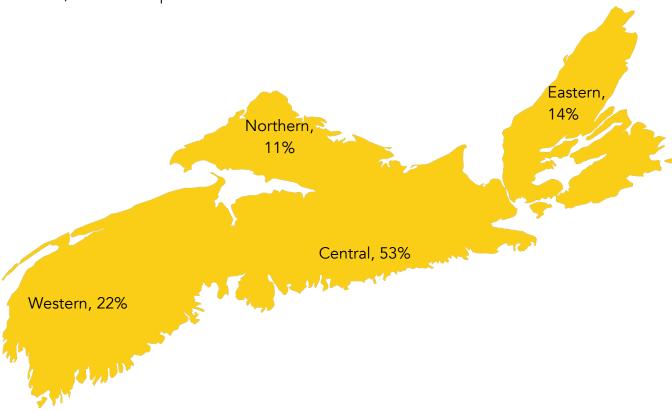


Regional Breakdown: Nova Scotia

The Nova Scotia Health Authority consists of four geographic management zones:

- Central Zone (Halifax area, Eastern Shore and West Hants)
- Eastern Zone (Cape Breton, Guysborough and Antigonish areas)
- Northern Zone (Colchester-East Hants, Cumberland and Pictou areas)
- Western Zone (Annapolis Valley, South Shore and South West areas)

Among participants residing in Nova Scotia, the majority were located in the Central Zone. However, there was representation across all four zones.

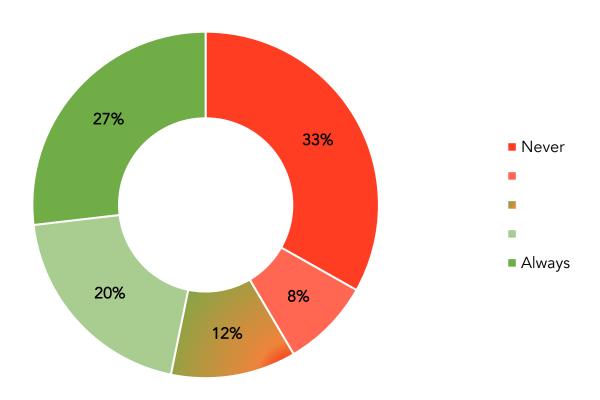


Frequency of Mask Wearing in Canada

Across Canada, participants' reported frequency of mask wearing varied, with 47% reporting that they wore a mask always or often while in public and 41% reporting that they rarely or never wore a mask while in public.

Participants living in Canada responded to the following question:

"Over the past 7 days, how often have you worn a face mask while out in public?"



Frequency of Mask Wearing in Canada: Trends Over Time

As the data collection period progressed from May to July 2020, Canadians were significantly more likely to report higher frequency of mask wearing.

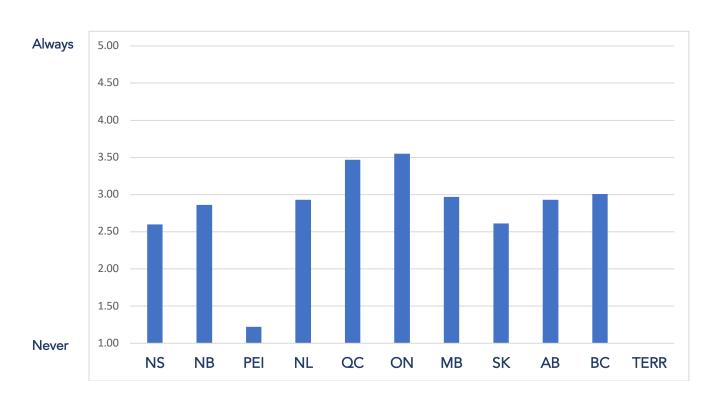
Throughout the first 30 days of recruitment (May 14 to June 12, 2020), there was a general upward trend in which the average frequency of mask usage across Canada increased. However, there was also much variability in participant responses.



Note. Data collected after June 12 were not included in this model as the responses were too sparse.

Frequency of Mask Wearing in Canada: Provincial Breakdown

People residing in Ontario tended to report the most frequent mask use, whereas people residing in Prince Edward Island, and the Territories (i.e., Nunavut, Northwest Territories, and Yukon) reported the least frequent mask use.

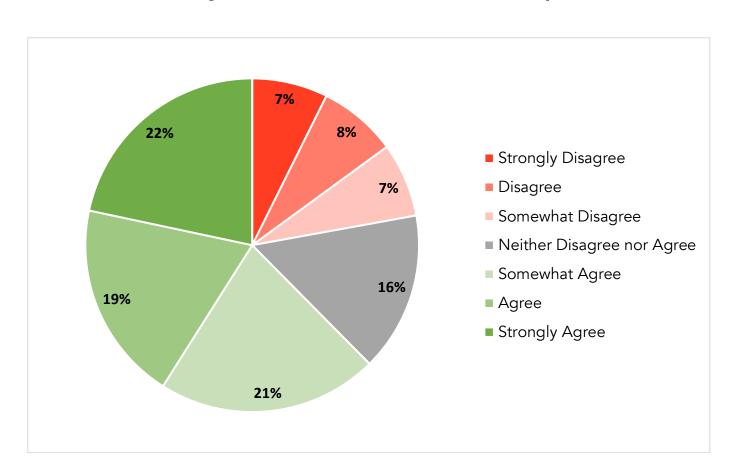


Endorsement of Mandatory Mask Wearing in Canada

Across Canada, the majority of participants (62%) endorsed mandatory mask wearing, while 22% opposed it.

Participants living in Canada responded to the following question:

"Until the COVID-19 pandemic is over, it should be mandatory to wear a mask while out in public"



Endorsement of Mandatory Mask Wearing in Canada

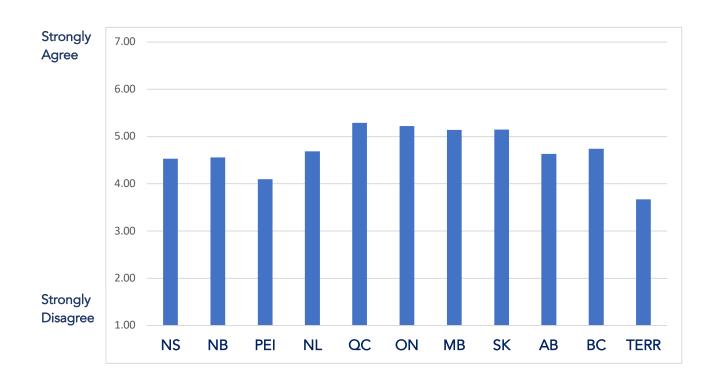
As data collection progressed from May to July 2020, participants became significantly more likely to endorse mandatory mask wearing in public; however, there was much variability in the responses.



Note. Data collected after June 12 were not included in this model as the responses were too sparse.

Endorsement of Mandatory Mask Wearing in Canada: Provincial Breakdown

People residing in Quebec tended to report the highest endorsement of mandatory mask use; people residing in Prince Edward Island and the Territories (i.e., Nunavut, Northwest Territories, and Yukon) reported the lowest endorsement of mandatory mask use.

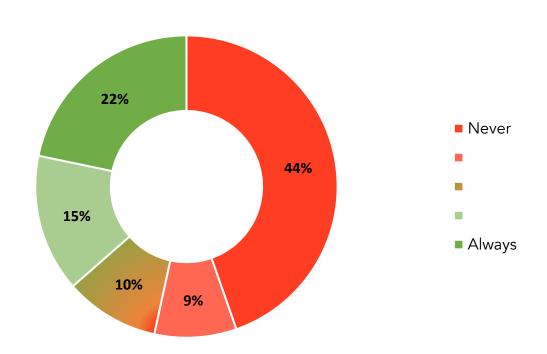


Frequency of Mask Wearing in Nova Scotia

Across Nova Scotia, participants' reported frequency of mask wearing varied; specifically, 37% reported that they wore a mask always or often while in public and 53% reported that they rarely or never wore a mask while in public.

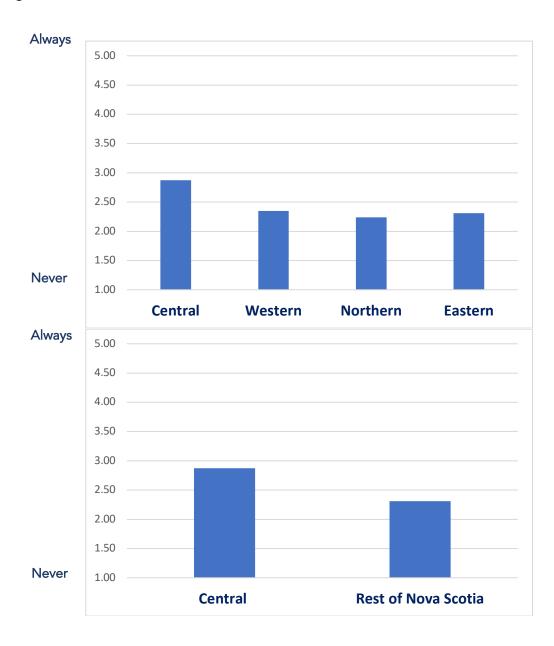
Participants living in Nova Scotia responded to the following question:

"Over the past 7 days, how often have you worn a face mask while out in public?"



Frequency of Mask Wearing in Nova Scotia: Regional Breakdown

Mask wearing was significantly more common in the Central region, as compared to other regions of Nova Scotia.

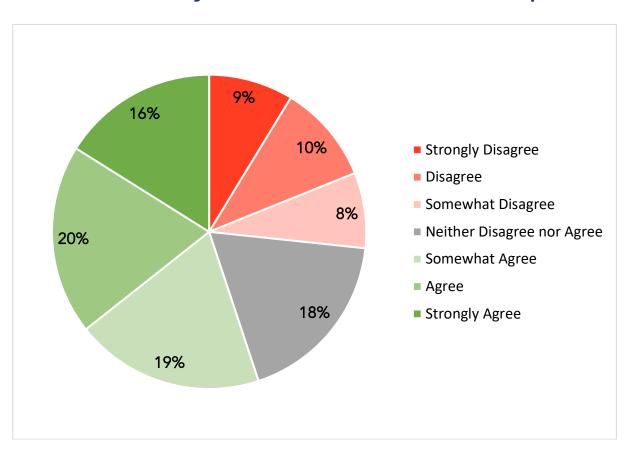


Endorsement of Mandatory Mask Wearing in Nova Scotia

Across Nova Scotia, the majority of participants (55%) endorsed mandatory mask wearing, while 27% opposed it.

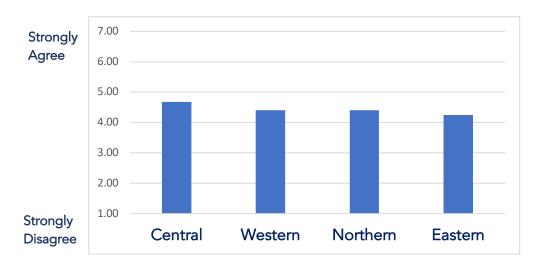
Participants living in Nova Scotia responded to the following question:

"Until the COVID-19 pandemic is over, it should be mandatory to wear a mask while out in public"

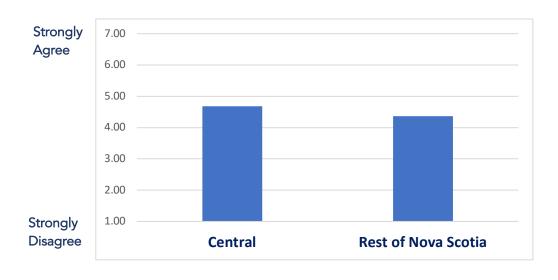


Endorsement of Mandatory Mask Wearing in Nova Scotia

There were no statistically significant differences across Nova Scotia regions in terms of average levels of endorsement of mandatory mask requirements.

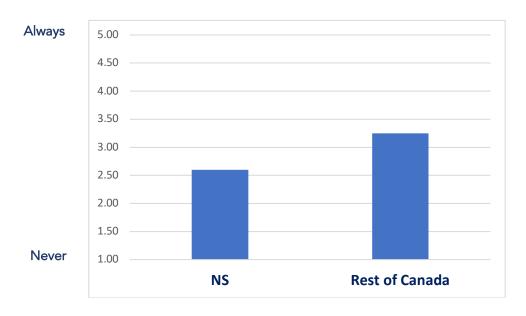


However, when pooled together, there was a small but statistically significant difference between the average responses of participants located in the Central Region and the average responses of those located within the remaining three regions, with participants in the Central region being more supportive of mandatory mask wearing.

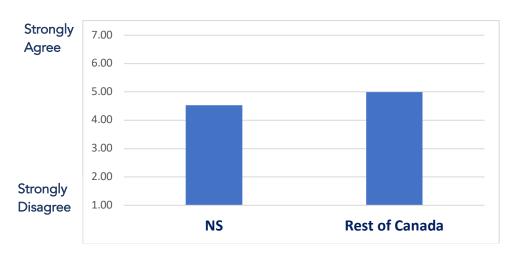


A Comparison of Nova Scotia to the Rest of Canada

On average, participants in Nova Scotia reported a significantly lower frequency of mask use, compared to those in the rest of Canada.



On average, participants in Nova Scotia were significantly less likely to endorse mandatory mask use, than participants in the rest of Canada.



Predictors of Mask Wearing

We examined a number of factors to determine whether they statistically predicted participants' reported frequency of mask wearing.

Significant Predictors:

The following factors were identified as statistically significant predictors of people's reported frequency of mask wearing:

Demographic Predictors

◆ Age	Older people reported a higher frequency of mask wearing than younger people
◆ Gender	Transgender people reported a higher frequency of mask wearing than cisgender individuals
◆ Sexuality	People who identified as 2SLGBTQ+ reported a higher frequency of mask wearing than those who did not
DisabilityStatus	People who reported having some form of disability or impairment reported a higher frequency of mask wearing than those who did not

Health and Safety-Related Predictors

◆ Safety	People who reported feeling safe where they were living reported a lower frequency of mask wearing than those who did not
Health Conditions	People who reported pre-existing health conditions that put them at a higher risk for COVID-19 (e.g., diabetes, heart condition, compromised immune system) reported a higher frequency of mask wearing than those who did not
◆ Symptoms	People who reported having one or more COVID-19 symptom (e.g., coughing, fever, aches and pains, or shortness of breath) reported a higher frequency of mask wearing than those who reported having no symptoms

Predictors of Mask Wearing

Health-Related Predictors (Continued)

TestingStatus	People who reported that they had been tested for COVID-19 reported a higher frequency of mask wearing than those who did not
◆ Suspected COVID-19	People who suspected that they currently had COVID-19 reported a higher frequency of mask wearing than those who did not
Living with Vulnerable Person	People who lived with someone over the age of 70 or with pre-existing health conditions reported a higher frequency of mask wearing than those who did not
◆ Anxiety	People who experienced higher levels of anxiety reported a higher frequency of mask wearing than those who experienced lower anxiety levels

Personality and Attitude Predictors

Approach Coping	An approach coping strategy is any response for managing a stressful event/situation in which a person actively focuses on the problematic event/situation. People who reported a higher tendency to use approach coping strategies reported a higher frequency of mask wearing than people who reported a lower tendency to use such strategies
Psychological Reactance	Psychological reactance is an emotional and/or resistant response to a perceived threat to one's personal freedom. People who reported higher psychological reactance reported a lower frequency of mask wearing than those who did not
♦ Narcissism	People who self-identified as a narcissist (i.e., egotistical, self-focused, or vain) reported a lower frequency of mask wearing than those who did not
◆ Preparedness	People who reported taking action to prepare for COVID-19 (e.g., stocking up on extra supplies) reported a higher frequency of mask wearing than those who did not
Motivation to Comply	People who expressed a higher motivation to comply with health authorities reported a higher frequency of mask wearing than those who did not
PoliticalViews	People with liberal political views reported a higher frequency of mask wearing than people with conservative political views

Factors Unrelated to Mask Wearing

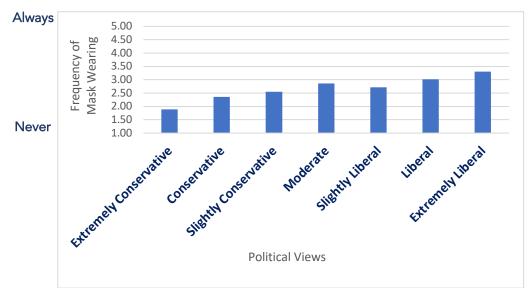
Non-Significant Factors:

There was no difference in reported frequency of mask wearing between people who varied on the following factors:

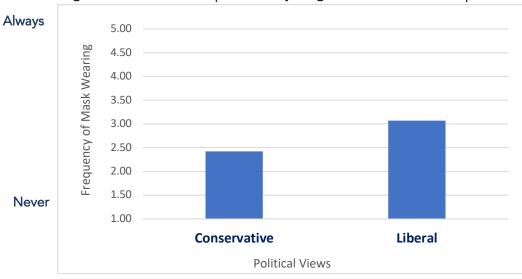
◆ Race	Self-identified as Black Indigenous and People of Colour (BIPOC) or White
♦ Job Type	Self-identified as working a job classified as "essential" or not
♦ Birth Control	Self-identified as using or not using any form of birth control
◆ Political	The extent to which people reported trust in the government and the
Alienation	belief that their interests are represented
◆ Pandemic	The extent to which people reported taking the pandemic seriously and
Attitudes	the extent to which they believed the government was also taking the pandemic seriously
♦ Stress &	The extent to which people reported symptoms related to stress, such as
Depression	over-reacting to situations, and depression, such as feeling down-hearted or blue
♦ Intolerance of	The extent to which people expressed views that uncertainty about the
Uncertainty	future is unacceptable, stressful or upsetting, should be avoided, and leads to an inability to take action
♦ Avoidant Coping	The extent to which people reported a tendency to manage stressful
	situations by trying to avoid dealing with the stressor directly (for example, making jokes about the situation)
Social Distancing	The extent to which people reported engaging in social/physical distancing behaviours

A Spotlight on Political Views & Mask Wearing: Frequency

Generally, the more liberal people's political views, the more likely they were to report frequent mask wearing.

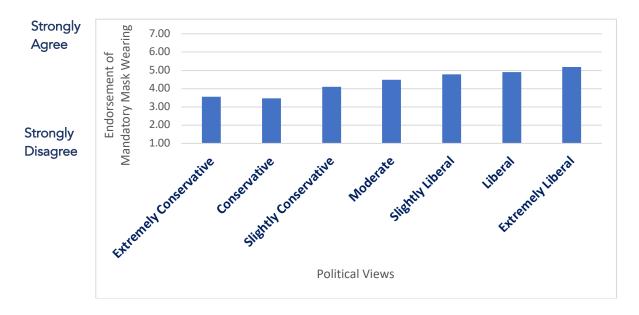


When collapsing across varying degrees of conservatism and liberalism, individuals who reported any degree of liberal political views were significantly more likely to report frequent mask wearing than those who reported any degree of conservative political views.

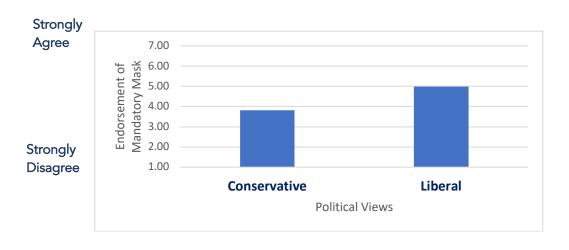


A Spotlight on Political Views & Mask Wearing: Endorsement

Generally, the more liberal people's political views, the more likely they were to support mandatory mask wearing until the pandemic is over.



When collapsing across varying degrees of conservatism and liberalism, individuals who reported any degree of liberal political views were significantly more likely to support mandatory mask wearing in public than those who reported any degree of conservative political views.



Mask Wearing: In the Words of Participants

Participants were asked about their subjective decisions related to wearing masks in public:

"At this time, what is influencing your decision to wear or not wear a mask when you go out in public?"

Participant responses were coded into 3 broad categories indicated below. Each category contains various sub-categories that were cited by participants as a factor influencing their decision to wear or not wear a mask in public. Examples from each of the broad categories are given below and the most common sub-categories are noted on pages 27-29.

Factors Promoting Mask Use in Public

"The fact that it makes sense. We need to think about how our actions affect others and not just think about ourselves."

Factors Preventing Mask Use in Public

"Wearing a mask all day every day could possibly cause other respiratory illnesses."

Factors Making Mask Use Unnecessary

"At this time, in the health zone I live in there are no active cases. I am in reasonably good health and stay away from others."

Factors Promoting Mask Use in Public

The top 10 reasons reported for choosing to wear masks were:

- Preventing COVID-19 Transmission to Others
- 2 Lowering COVID-19 Infection Risk for Self
- 3 Inability to Social Distance
- 4 Visiting Indoor Spaces
- 5 Positive Social Pressures
- 6 Public Health Recommendations
- 7 Asymptomatic Spread
- **8** Belief in Efficacy of Mask Wearing
- Workplace Environment

"I just want to protect people and decrease the spread of COVID-19 while science catches up/works towards a vaccine and better treatment options."

"Modelling the behaviour to contribute to making it the norm and hopefully aid in convincing others to do the same."

"I work in a COVID positive workplace. I wear a mask to keep my germs to myself.

Personal safety and prevention of transmission is important."

Factors Preventing Mask Use in Public

The top 10 reasons reported for choosing not to wear masks were:

- Limited Access to Masks
- Belief in Inefficacy of Masks
- **3** General Discomfort
- Difficulty Breathing
- 5 Low COVID-19 Case Count
- **6** Negative Social Pressures
- 7 Anxiety/Claustrophobia
- 8 Difficulties While Using Eyewear
- Medical Conditions/Illnesses
- 10 Forgetting Mask

"Allergies. Dust on a reusable mask will trigger my allergies."

"Primarily, it is the availability of face masks. Not easy to find proper masks and I find I have to create something that will suffice."

"The Yukon has 0 cases and closed borders. At this point, I do not feel the need to wear a mask though that may change."

"People fear you when they see you in a mask or gloves as if you are MORE likely to be infected than others"

Factors Making Mask Use Unnecessary

The top 5 reasons why participants reported believing that mask wearing is unnecessary were:

Ability to Social Distance

"If I can stay 6 feet away from others then I don't see the requirement of wearing a mask."

Being Outdoors

"I haven't gone out"

Avoiding Public Places

Engaging in Other Precautions

"I feel that respecting the 2meter distance, washing hands and other hygiene methods and also avoiding going out if symptoms are present is enough to protect others."

Not Sick/No Symptoms

"I have no symptoms, I know no-one with symptoms or COVID, I have very limited contact with others."

Conclusions

The current report's findings suggest that during the period of May 14 to July 5, 2020, there was much variability in Canadian participants' reported frequency of mask usage. This variability is likely explained by several regional, demographic, health-related, personality, and political factors. Participant descriptions of the factors influencing mask wearing were also quite varied. Interestingly, many of the factors that were found to be statistically significant predictors of mask use were not commonly cited as subjective reasons for or against mask wearing. This suggests that there may be other factors (e.g. political views) influencing mask wearing decisions that were outside of people's awareness.

Generally, people who were themselves more vulnerable to COVID-19 or who lived with vulnerable people were more likely to report wearing masks than those who were less vulnerable, suggesting self-protective motivations. However, the most commonly cited reason for wearing masks was to prevent potential transmission to others, suggesting altruistic motivations. Thus, a dual emphasis on the benefits to self and society will likely be effective when communicating a rationale for wearing masks.

Given the finding that frequency of mask wearing and endorsement of mandatory mask wearing varies across political lines, there may be a role for political leaders to emphasize the scientific and societal rationale for this practice and to debunk any rhetoric suggesting that the decision to wear a mask is a partisan one.

While the majority of participants endorse mandatory mask wearing, the main barrier that participants referenced as a factor preventing mask use was limited accessibility. Therefore, efforts to enhance frequency of mask wearing in public and/or compliance with mask regulations would best be supported by initiatives and communication regarding the availability and accessibility of masks.

Participant comments regarding asymptomatic spread reveal that while some people are aware that COVID-19 may be transmitted with or without symptoms, others lack this understanding; thus, public health information related to asymptomatic spread may also be useful for encouraging more frequent mask use. While positive social pressure promotes mask use for some people, negative social pressure prevents mask use for others; thus, the tone of messaging is also important to consider.