

COVID-19 VARIANTS AND VACCINATION NETWORK

CIHR WAVE 4 KEY SURVEY FINDINGS

PRESENTED BY



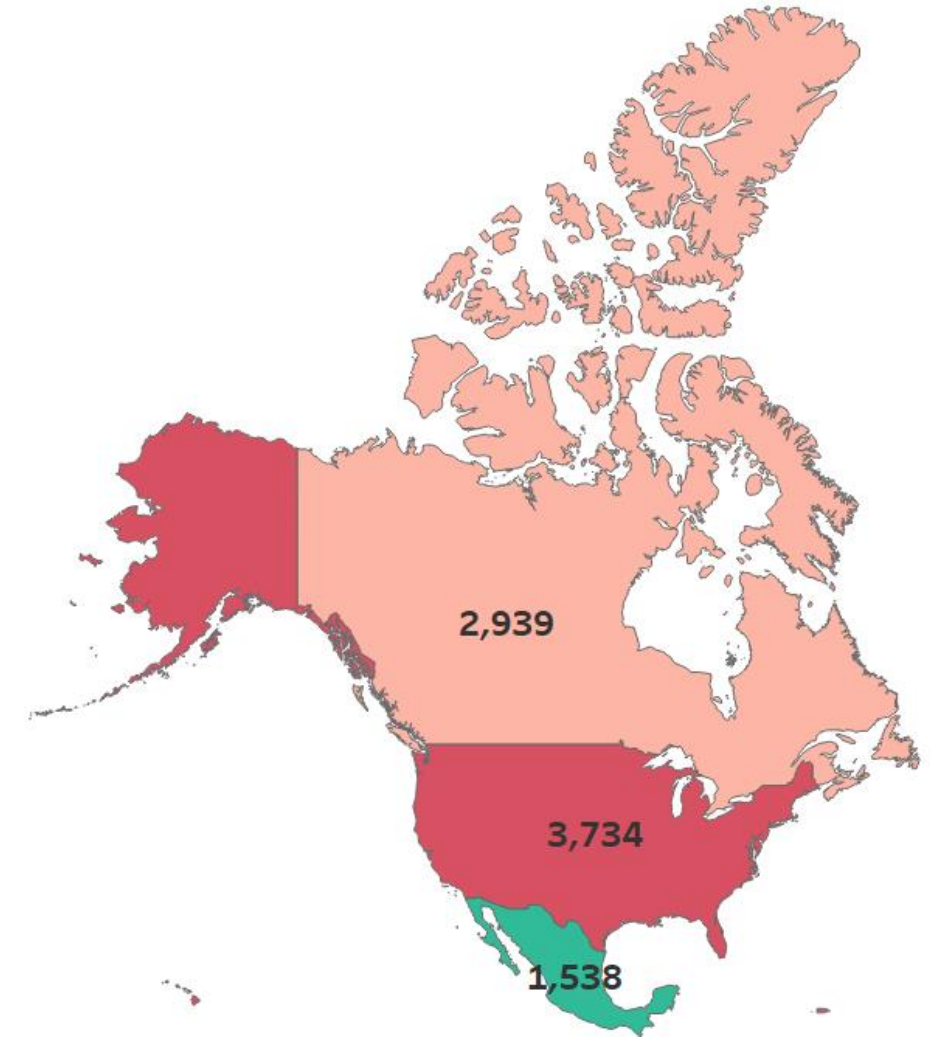
IN COLLABORATION WITH



April 5, 2022

CIHR Wave 4

- Over 8000 surveyed across North America
- February – March 2022
- Major themes over all waves: *Vaccination, Trust in institutions, Financial impacts, Fear and Worry trends, Intergroup relations, Attachment, Mental health and wellbeing*
- New themes added in wave 4 – *Booster vaccine, COVID-19 vaccine myths, Long COVID, Religion*



Sample Demographics

DEMOGRAPHICS		Canada	USA	Mexico
SEX	Male	45.8%	42.4%	44.8%
	Female	54.2%	57.6%	55.2%
AGE	18-24	11.1%	6.4%	14.3%
	25-34	8.4%	7.2%	19.7%
	35-44	10.3%	10.1%	19.7%
	45-54	20.0%	20.2%	27.0%
	55-64	19.8%	20.0%	12.5%
	65 and older	30.4%	36.1%	6.8%
IMM STATUS	Immigrant	28.6%	23.2%	2.0%
	Non-immigrant	71.0%	76.3%	98.0%
ETHNICITY	White	44.1%	45.6%	12.6%
	Indigenous/American Indian/Alaska Native	17.6%	16.8%	2.7%
	Black or African American	10.5%	15.7%	0.1%
	Asian or Asian American	19.0%	12.6%	0.4%
	Latin American	-	-	84.2%
	Other	8.9%	7.5%	-
Vaccinated (at least one dose) %		88.7%	74.7%	94.1%
Two doses		31.3%	36.2%	57.1%
Three doses		67.1%	53.9%	37.4%

Female majority sample

Half of the sample over 55 in Canada and USA, relatively younger sample in Mexico

Around a quarter of respondents in Canada and USA were immigrants

Mexico ahead in overall vaccinated but lagging behind in booster shots

Sample Demographics

DEMOGRAPHICS		Canada	USA	Mexico
EDUCATION	High school or less	23.4%	20.9%	3.8%
	Postsecondary schooling	32.6%	29.3%	16.3%
	University bachelors degree or higher	43.1%	49.4%	79.6%
EMPLOYMENT	Employed	54.2%	48.6%	70.7%
	Self-employed	5.7%	8.0%	12.9%
	Homemaker	5.9%	7.9%	5.6%
	Student	6.0%	2.8%	4.6%
	Retired	17.5%	19.6%	1.4%
	Unemployed	8.8%	10.5%	4.1%
	Other	1.9%	2.6%	0.7%
INCOME	<\$20k CA / <\$25k U.S. / <\$100k MX	12.4%	21.2%	22.3%
	\$20-\$40k / \$25-\$35k U.S. / \$100-\$299k MX	23.5%	12.2%	36.5%
	\$40-\$60k / \$35-\$50k U.S. / \$300-599k MX	23.2%	12.1%	22.1%
	\$60-\$80k / \$50-\$75k U.S. / \$600-900k MX	19.4%	18.8%	9.6%
	\$80k+ / \$75k+ U.S. / \$900k+ MX	21.5%	35.7%	9.4%

Higher proportion of college educated overall

Slightly higher proportion of unemployed and retired respondents in Canada and USA

Over 40-50% of respondents in Canada and USA in the higher income group

Themes covered in this presentation

- Long COVID
- COVID-19 vaccine myths
- Interaction of vaccinated people with unvaccinated
- Intergroup relations
- Trust in institutions

Fatigue, Breathlessness, Joint/Muscle Pain, 'Brain fog', and change in smell/taste were largely prevalent among people who had contracted COVID-19

Long COVID symptoms	Overall	Canada	USA	Mexico
Fatigue	56.9%	48.2%	59.8%	56.7%
Breathlessness	32.3%	25.0%	36.8%	28.0%
Chest pain	26.3%	17.7%	33.0%	26.1%
Joint or muscle pain	44.6%	32.4%	47.8%	48.3%
Heart palpitations	22.0%	14.5%	27.9%	23.2%
Brain fog (not able to think straight or focus)	33.1%	28.4%	37.6%	26.6%
Change to sense of smell or taste	43.1%	28.4%	48.3%	47.0%

- Slightly higher prevalence in USA

Long COVID is affecting all age groups more or less similarly; more so women than men

Major Long COVID Symptoms	Age						Sex	
	18-24	25-34	35-44	45-54	55-64	65+	Male	Female
Fatigue	54.9%	57.9%	61.2%	60.8%	58.6%	46.9%	51.8%	60.4%
Breathlessness	32.1%	28.6%	32.8%	32.9%	35.6%	31.6%	29.3%	34.4%
Joint or muscle pain	43.0%	48.1%	46.0%	49.0%	41.7%	38.9%	41.1%	47.2%
Brain fog (not able to think straight or focus)	32.5%	35.3%	36.1%	32.5%	36.5%	27.7%	29.9%	35.2%
Change to sense of smell or taste	40.5%	46.6%	47.8%	46.9%	44.0%	31.9%	41.4%	44.3%

Once known as chronic fatigue syndrome, myalgic encephalomyelitis (ME/CFS) has long been poorly understood, overlooked and often stigmatized.

Now, early research suggests, up to half of all COVID long-haulers could meet the criteria for an ME/CFS diagnosis. And as experts probe the link between the two illnesses — and COVID-19 cases continue to accumulate — ME/CFS patients new and old are urging people to recognize how debilitating and life-altering it can be.

It's estimated anywhere between 10 to as high as 50 per cent of all people who contract COVID-19 could develop long COVID. Of those, research suggests up to half could meet the diagnostic criteria for ME/CFS. In both cases, women are disproportionately affected.

Feith, Jesse. [The link between long COVID and a medical mystery](#). *Montreal Gazette*, April 3, 2022.

Respondents who reported 'bad' physical health seem more likely to have Long COVID symptoms (or the opposite cause & effect?)

Long COVID symptoms	Physical health rating			Have you had the vaccine?		No. of doses received		
	Excellent	Good	Bad	Yes	No	One dose	2 doses	3 doses
Fatigue	52.3%	55.7%	71.1%	57.7%	53.4%	81.5%	55.2%	53.5%
Breathlessness	30.6%	28.3%	46.2%	33.0%	29.3%	63.0%	28.2%	29.9%
Joint or muscle pain	41.5%	42.9%	55.7%	45.7%	39.6%	67.5%	44.3%	40.6%
Brain fog (not able to think straight/focus)	30.3%	29.4%	48.7%	33.3%	32.4%	57.0%	29.4%	31.1%
Change to sense of smell or taste	45.9%	40.1%	45.9%	44.0%	39.1%	68.5%	43.0%	37.3%

- Slightly fewer unvaccinated respondents reported having Long COVID symptoms
- Much higher % of respondents who only had one dose reported having Long COVID symptoms

COVID-19 Vaccine Myths

Myths/Unproven statements regarding COVID-19	TRUE			I Don't know		
	Canada	USA	Mexico	Canada	USA	Mexico
The COVID-19 vaccine can affect fertility	10.7%	19.9%	7.3%	39.1%	37.0%	20.5%
If I've already had COVID-19, I don't need a vaccine	14.9%	20.2%	4.2%	13.9%	15.8%	5.9%
Researchers rushed the development of the COVID-19 vaccine, so its effectiveness and safety cannot be trusted	22.8%	29.8%	24.8%	18.4%	22.8%	21.3%
Getting the COVID-19 vaccine means I can stop wearing my mask and taking coronavirus precautions	9.6%	16.0%	5.9%	8.0%	15.1%	4.1%
Getting the COVID-19 vaccine gives you COVID-19	7.7%	15.1%	10.3%	12.4%	17.7%	11.9%
The side effects of the COVID-19 vaccine are dangerous	20.4%	27.2%	15.5%	22.7%	24.1%	17.2%
The COVID-19 vaccine enters your cells and changes your DNA	9.4%	14.3%	9.9%	20.3%	25.4%	21.5%
The messenger RNA technology used to make the COVID-19 vaccine is brand new	17.5%	18.7%	24.9%	36.8%	42.4%	37.6%
The COVID-19 vaccine was developed with or contains controversial substances like aborted fetuses	7.8%	15.0%	5.2%	27.1%	30.1%	23.3%
Now that we have a vaccine for COVID-19, we can make vaccines for the common cold, HIV and other diseases	21.9%	23.2%	33.6%	44.4%	42.7%	36.9%
The COVID-19 vaccine contains a microchip that the government can use to track you	4.5%	10.6%	4.7%	11.9%	19.4%	10.4%

- Higher number of people in the US believing them to be true or unsure about them

COVID-19 Vaccine Myths

Myths/Unproven statements regarding COVID-19	% saying True					
	18-24	25-34	35-44	45-54	55-64	65+
The COVID-19 vaccine can affect fertility	17.2%	17.6%	19.5%	16.6%	15.7%	8.9%
If I've already had COVID-19, I don't need a vaccine	13.9%	17.0%	14.9%	16.5%	15.2%	13.0%
Researchers rushed the development of the COVID-19 vaccine, so its effectiveness and safety cannot be trusted	24.1%	28.3%	33.5%	30.1%	29.5%	22.4%
Getting the COVID-19 vaccine means I can stop wearing my mask and taking coronavirus precautions	12.5%	14.1%	15.7%	13.0%	9.6%	8.2%
Getting the COVID-19 vaccine gives you COVID-19	14.7%	17.4%	16.2%	13.4%	12.8%	6.4%
The side effects of the COVID-19 vaccine are dangerous	23.0%	24.8%	25.1%	25.7%	23.6%	19.4%
The COVID-19 vaccine enters your cells and changes your DNA	11.3%	14.0%	16.5%	14.3%	10.8%	9.1%
The messenger RNA technology used to make the COVID-19 vaccine is brand new	18.4%	18.9%	24.0%	21.6%	19.4%	17.3%
The COVID-19 vaccine was developed with or contains controversial substances like aborted fetuses	10.9%	12.3%	14.5%	12.4%	9.5%	8.3%
Now that we have a vaccine for COVID-19, we can make vaccines for the common cold, HIV and other diseases	26.8%	32.0%	32.3%	29.1%	24.1%	20.7%
The COVID-19 vaccine contains a microchip that the government can use to track you	9.9%	10.5%	10.8%	8.7%	7.6%	3.6%

- Older respondents (> 65) were mostly non-believers in these statements

Interaction of vaccinated people with the unvaccinated

Asking vaccinated people the following questions (% Yes)	Country			Political spectrum		
	Canada	USA	Mexico	Right	Center	Left
Do you personally know someone who is refusing to get vaccinated?	66.1%	62.3%	61.5%	66.0%	62.2%	66.2%
Are you arguing with them about their vaccination status?	17.9%	24.5%	44.7%	33.6%	25.6%	26.0%
Have you tried to persuade someone who is not vaccinated to get vaccinated?	41.5%	50.4%	64.2%	48.9%	50.9%	54.0%
Would you invite a family member or a friend into your home if you knew they were not vaccinated?	46.9%	53.4%	51.8%	64.1%	48.8%	37.0%
Would you accept a family member's or a friend's invitation to a party if you knew there would be unvaccinated people at the gathering?	39.0%	42.6%	36.0%	51.0%	38.3%	29.9%
Would you ask family members or friends invited to an event if they are vaccinated or to provide proof of vaccination?	51.2%	54.9%	56.7%	54.0%	54.4%	60.4%
Do you believe that people that refuse to get vaccinated are putting others at risk?	73.5%	73.3%	80.4%	65.0%	75.3%	86.1%
Do you believe that someone's vaccination status is a private matter?	44.9%	50.7%	53.6%	62.3%	48.8%	33.9%
Do you care if non-vaccinated people get COVID?	50.6%	62.5%	73.7%	61.0%	59.9%	60.4%

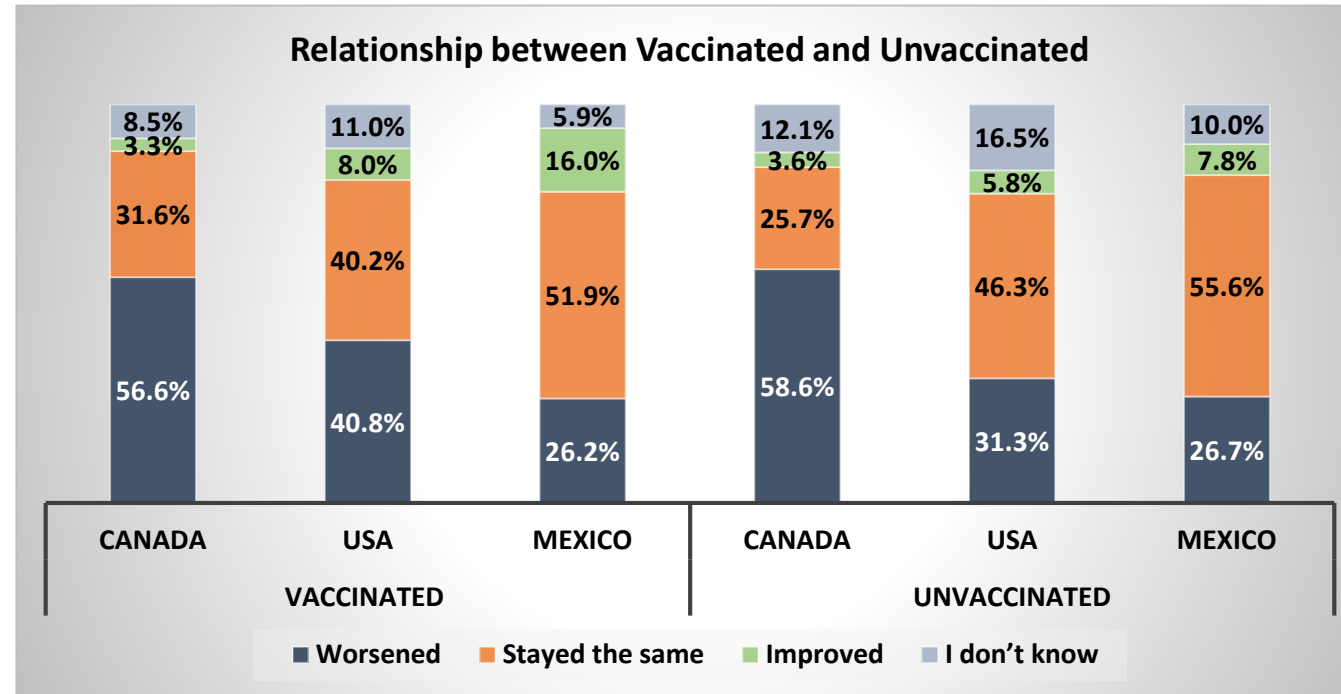
- Mexico respondents more involved in trying to persuade their unvaccinated friends/family to get vaccinated
- Relatively fewer Canadians and Left leaning respondents believed vaccination status to be a private matter

Interaction of vaccinated people with the unvaccinated

Asking vaccinated people the following questions (% Yes)	18-24	25-34	35-44	45-54	55-64	65+
Do you personally know someone who is refusing to get vaccinated?	55.7%	58.2%	63.2%	62.7%	64.7%	68.2%
Are you arguing with them about their vaccination status?	38.0%	36.5%	37.0%	28.7%	21.0%	17.5%
Have you tried to persuade someone who is not vaccinated to get vaccinated?	52.4%	56.3%	51.2%	48.1%	44.6%	49.8%
Would you invite a family member or a friend into your home if you knew they were not vaccinated?	57.1%	57.9%	60.6%	54.6%	51.7%	40.7%
Would you accept a family member's or a friend's invitation to a party if you knew there would be unvaccinated people at the gathering?	43.8%	43.7%	49.1%	44.2%	42.6%	31.4%
Would you ask family members or friends invited to an event if they are vaccinated or to provide proof of vaccination?	53.7%	51.8%	54.2%	54.9%	52.8%	53.2%
Do you believe that people that refuse to get vaccinated are putting others at risk?	70.9%	69.8%	68.9%	72.4%	74.5%	80.5%
Do you believe that someone's vaccination status is a private matter?	49.8%	50.9%	58.3%	53.6%	52.3%	42.2%
Do you care if non-vaccinated people get COVID?	57.7%	57.8%	58.8%	61.8%	60.6%	61.0%

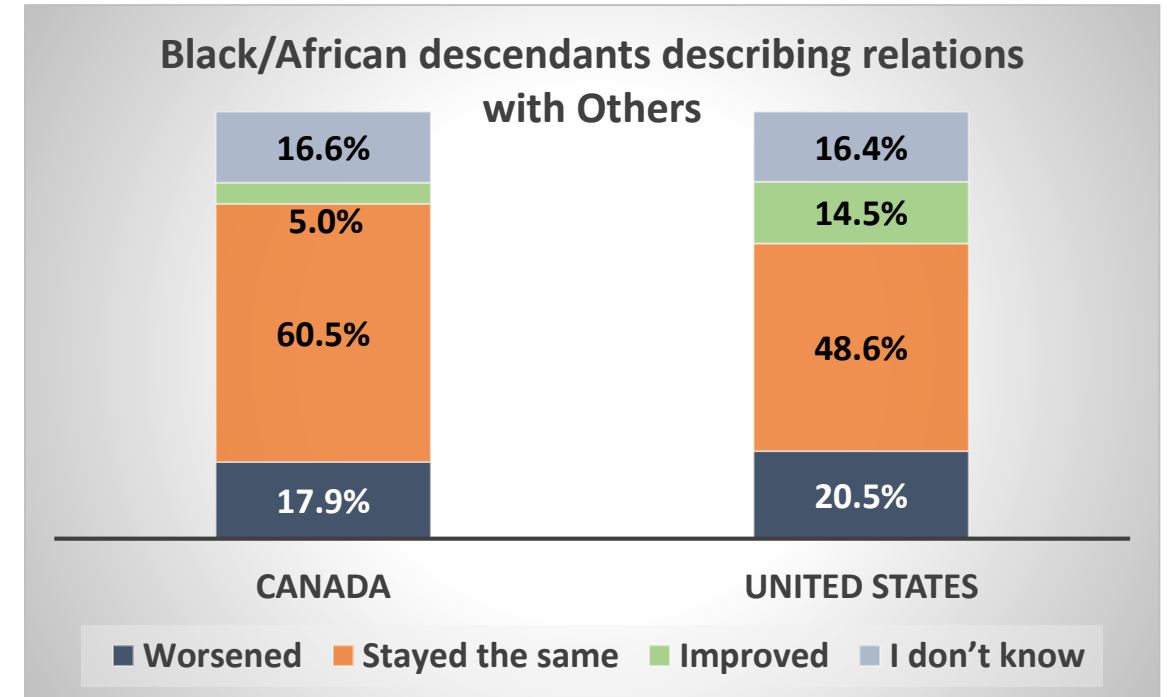
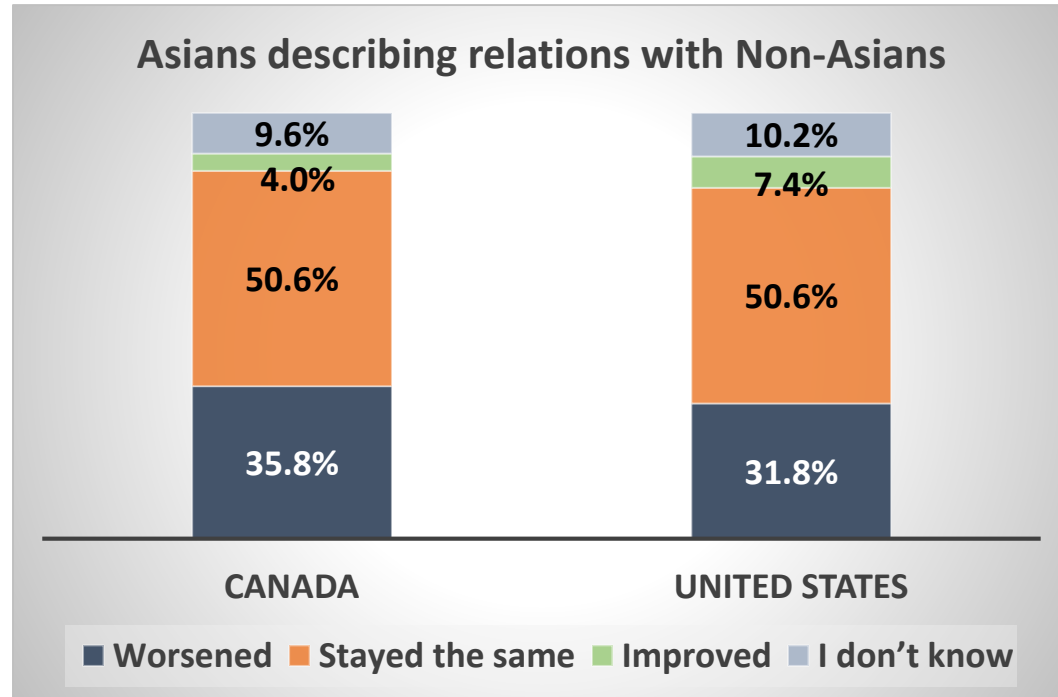
- Younger respondents (< 45) more likely to argue with and try to persuade unvaccinated people about vaccination.
- Older respondents (65+) less likely to attend gatherings with unvaccinated people as well as consider vaccination status as a private matter

Inter-group relations since the pandemic



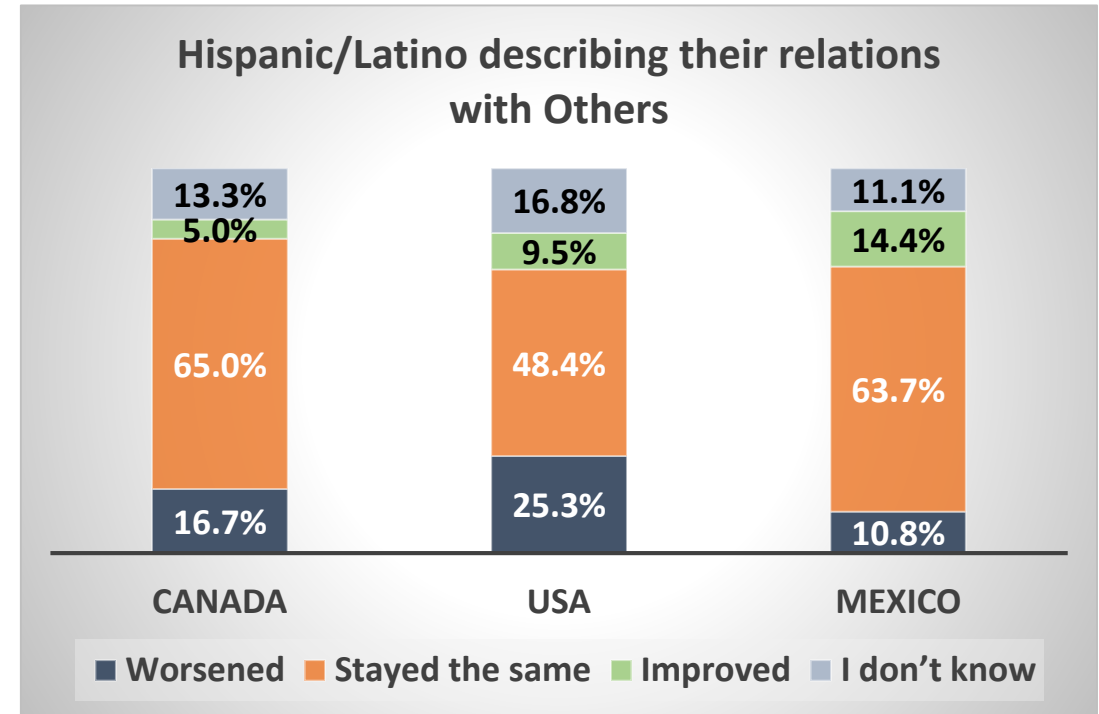
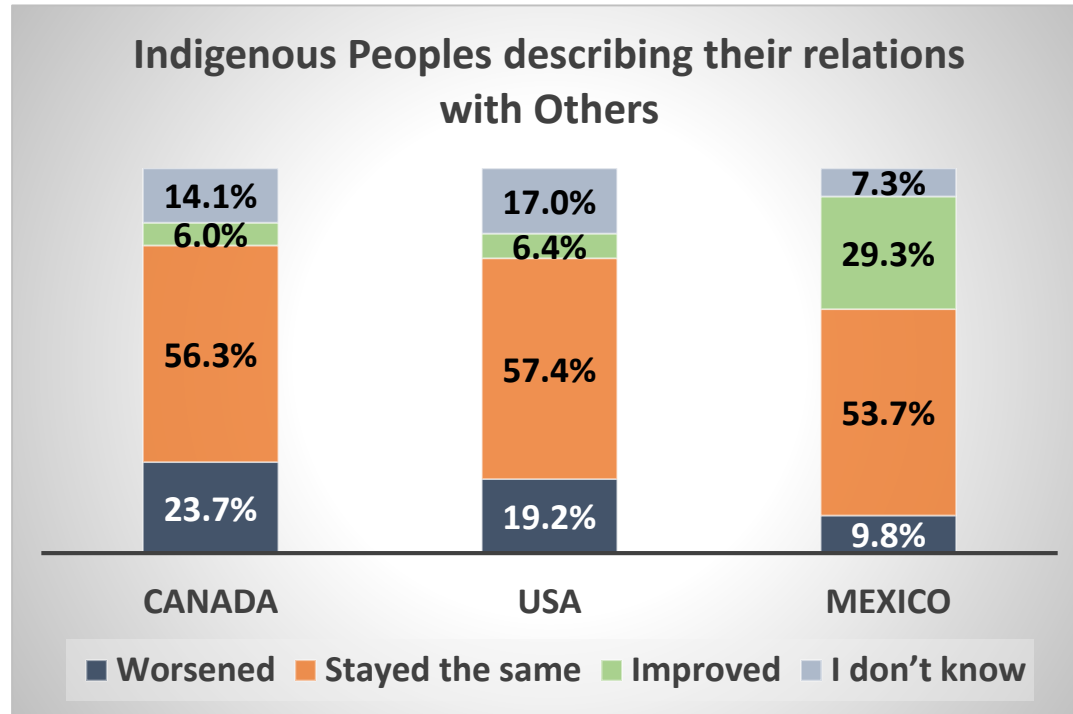
- More than half of the Canadians think the relations between vaccinated and unvaccinated people have worsened during the pandemic.
- Vaccinated people in the US much more likely (than unvaccinated) to believe that their relations with unvaccinated people have worsened.

Inter-group relations since the pandemic



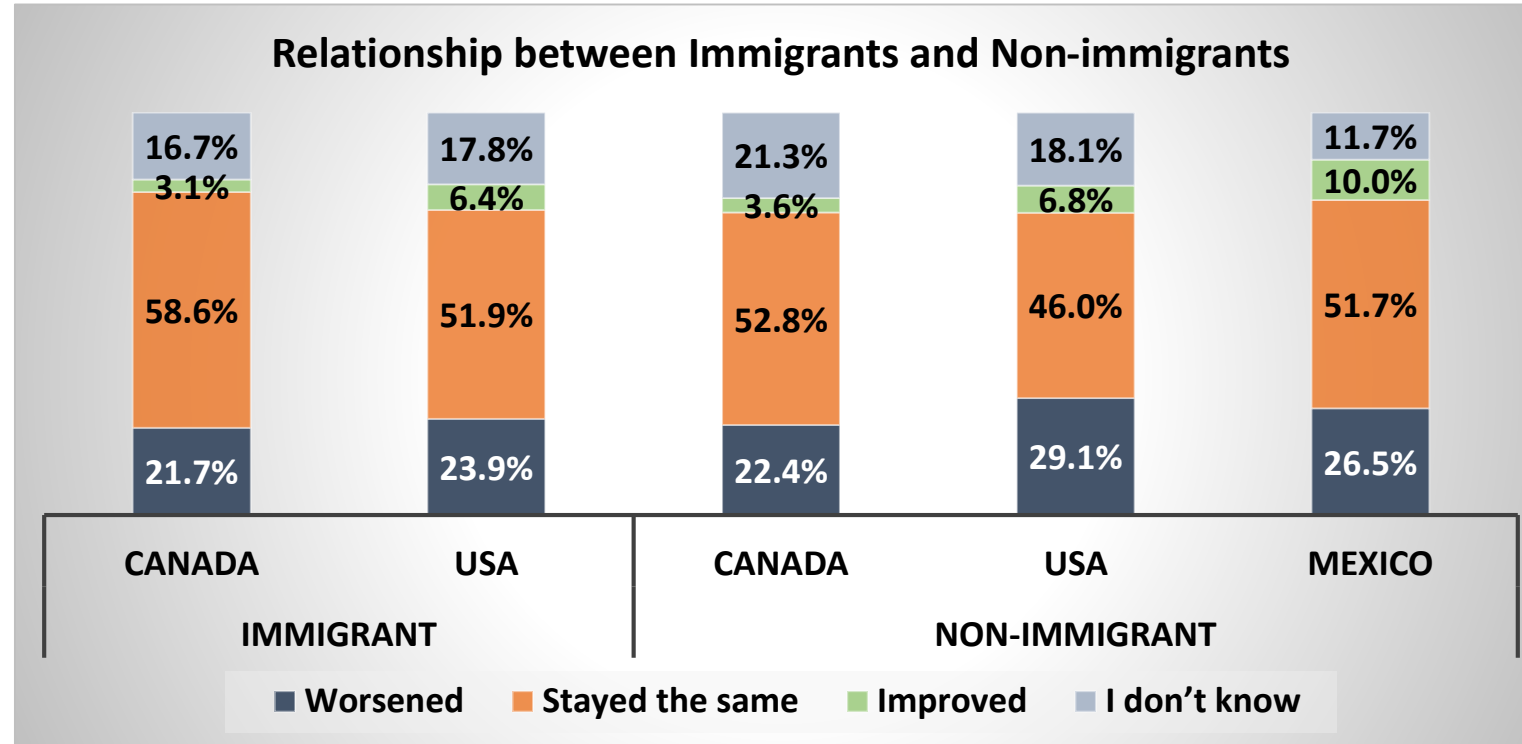
- Around a third of Asians believe that their relations with Non-Asians have worsened since the pandemic
- 18-21% of Black/African American respondents think relations with other groups worsened, while 15% of those in the US believed the opposite

Inter-group relations since the pandemic



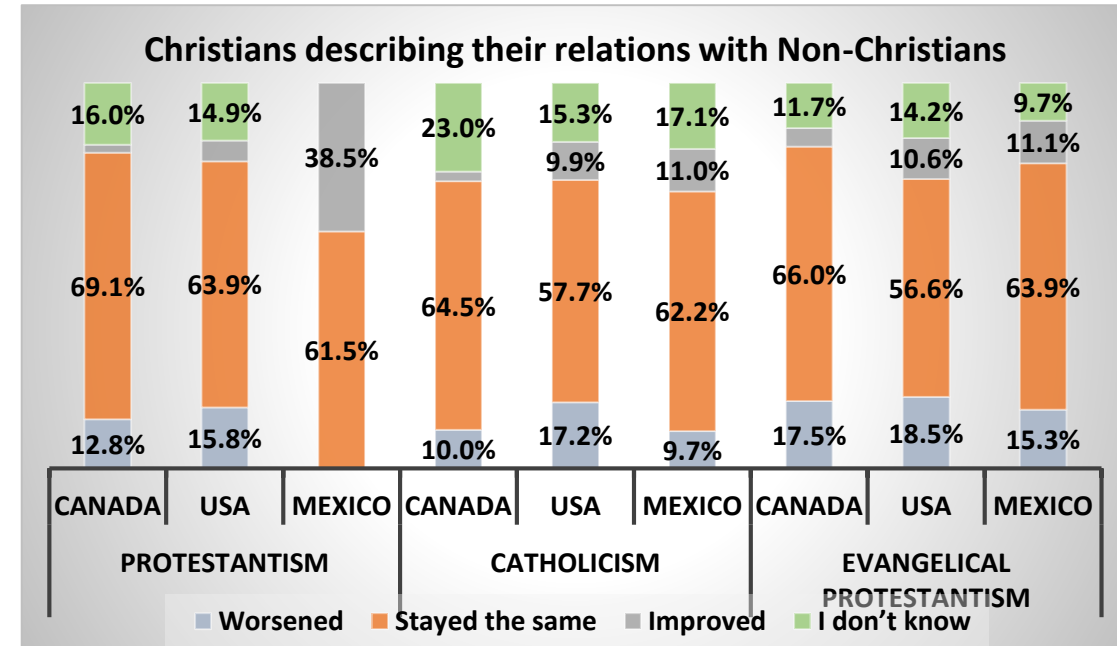
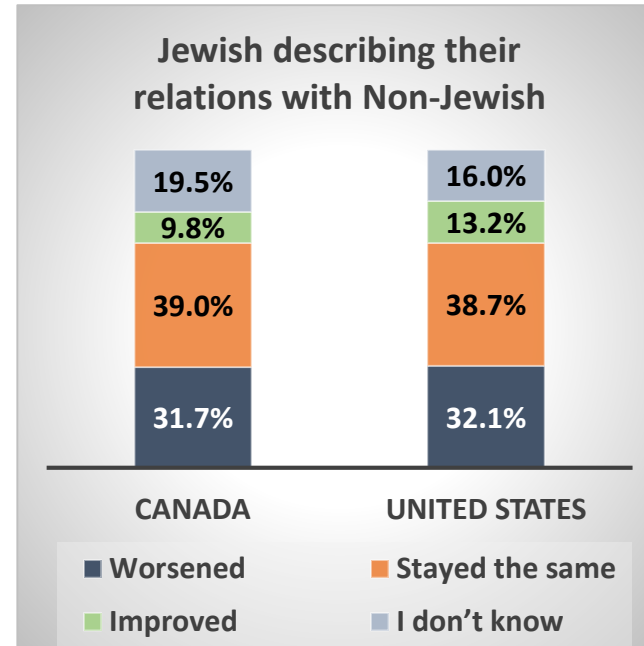
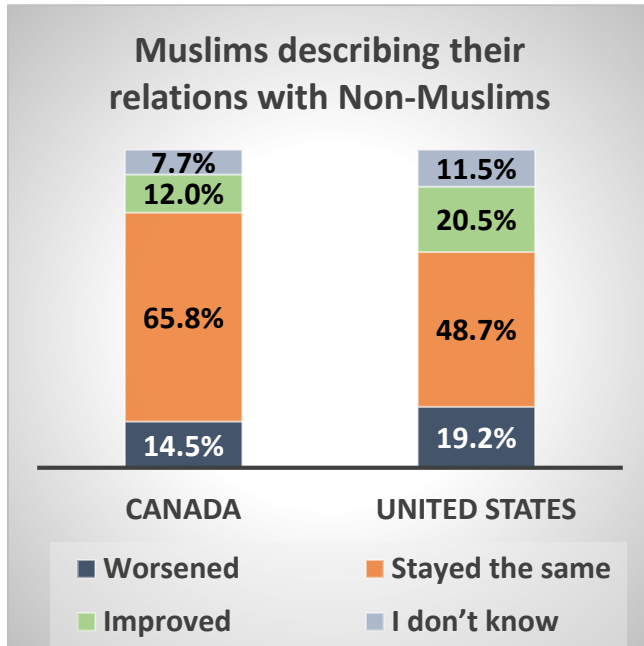
- Nearly a quarter of Indigenous Peoples in Canada feel relations have worsened with other groups
- Hispanic/Latino in the US more likely to believe relations with other groups have worsened

Inter-group relations since the pandemic



- 22-24% immigrants in both Canada and USA feel that relations with non-immigrants have worsened since the pandemic

Inter-group relations since the pandemic



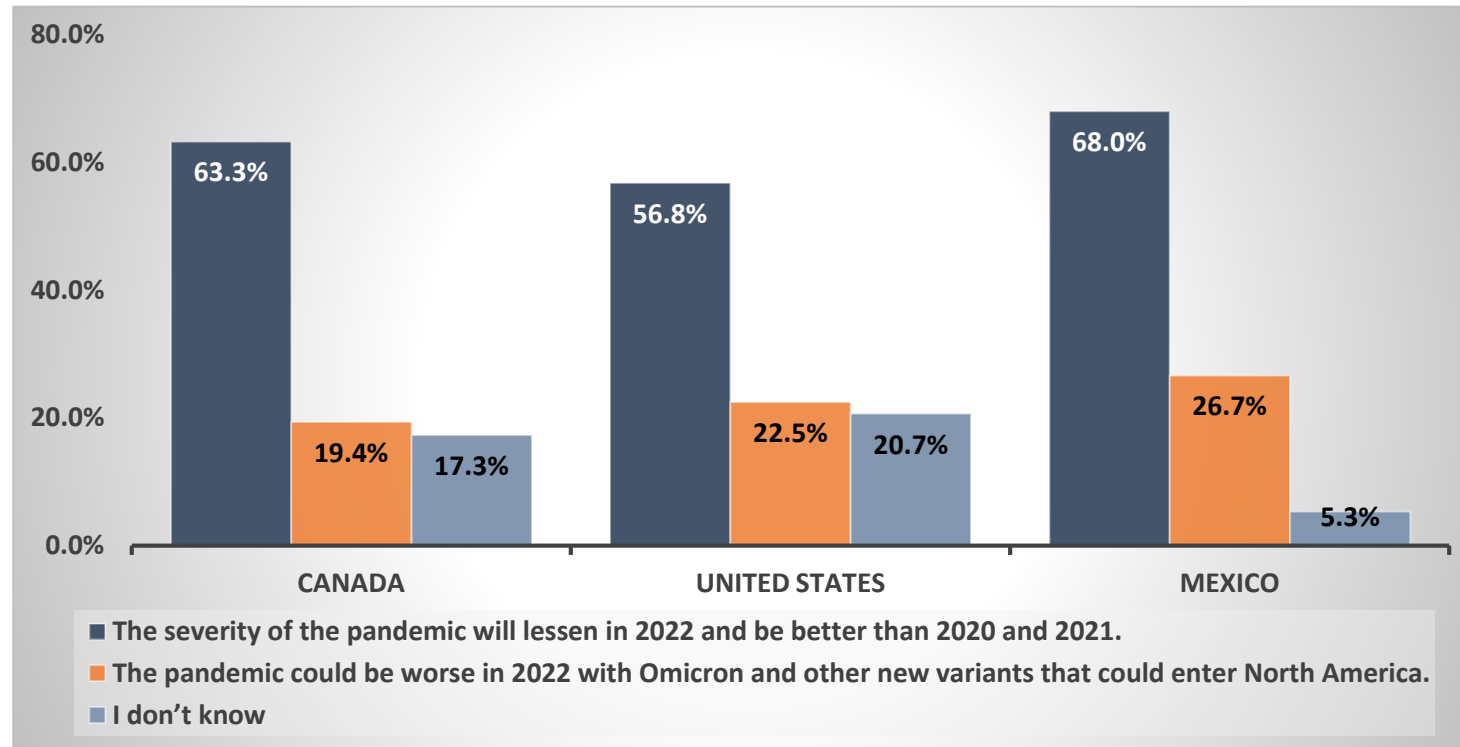
- 20% of Muslims in the US felt that relationships with Non-Muslims worsened, 20% thought they improved.
- Nearly a third of Jewish respondents felt their relations with the Non-Jewish worsened
- Higher number of Christians in the US felt the relationship with Non-Christians had worsened

Trust in many institutions declined compared to previous wave

Trust in institutions (% Yes)	Canada		United States		Mexico	
City/Municipal authorities	58.7%	-9.8%	52.9%	-3.2%	46.9%	-6.7%
Province/State government	56.5%	-8.0%	53.8%	-1.2%	48.5%	-7.3%
Central/Federal government	58.5%	-9.0%	51.5%	-3.2%	49.4%	-9.7%
My tribe/band/nation	62.0%	-8.9%	71.8%	3.7%		
Public health officials	75.0%	-4.8%	67.8%	-1.2%	62.8%	-4.5%
Media/Journalists	47.9%	-1.4%	42.6%	-0.3%	50.7%	6.4%
Police/Military	51.2%	-9.9%	54.8%	-6.2%	57.4%	-0.4%
WHO	70.5%	-1.7%	62.6%	-0.5%	79.3%	-1.0%
People in general	39.2%	-2.6%	41.8%	-2.1%	47.1%	10.7%
Immigrants/Newcomers	38.6%	-4.0%	34.9%	-4.4%	23.2%	4.9%
Pharmaceutical companies	57.2%	-5.3%	55.9%	0.3%	70.8%	2.3%
Scientists	85.0%	-1.8%	76.1%	0.1%	89.4%	4.8%
Religious leaders	26.1%	-3.3%	41.9%	-2.8%	31.0%	-0.9%
Community leaders	60.7%	-11.1%			60.0%	14.9%

- Trust in city authorities, province/state and central government, and police/military dropped by 8-10% in Canada
- Lower trust in government in Mexico
- Trust in immigrants or newcomers and religious leaders was low across the continent

Predicting the state of the pandemic



- Slightly higher optimism regarding the state of the pandemic in 2022 in Canada and Mexico, while 20-27% in all three countries believe it could be worse

Thank you!

Questions?