

REPORT

Social and behavioural insights on mRNA technology in Canada

2nd Edition

NOVEMBER 2026

BRIDGE RESEARCH CONSORTIUM

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The Bridge Research Consortium (BRC) is a multidisciplinary team of leading social sciences and humanities scholars, along with public health and biomedical experts, from across Canada and beyond.

We bring together wide-ranging expertise and perspectives to better understand and support public trust and equitable access to new vaccines and immune-based innovations that strengthen Canada's readiness for future health emergencies.

The BRC is one of several projects funded as part of Canada's Immuno-Engineering and Biomanufacturing Hub (CIEBH).

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Executive Summary

This second edition of the Bridge Research Consortium's (BRC) Social and Behavioural Insights on mRNA Technology in Canada builds on findings from the first edition published in March 2026. This report provides an updated assessment of evolving public sentiment and discourse surrounding mRNA technology in Canada.

Although mRNA was first discovered in 1961, public awareness of the technology skyrocketed during the COVID-19 pandemic, when mRNA vaccines were deployed at an unprecedented scale. Decades of scientific research enabled the rapid development of novel mRNA vaccines targeting SARS-CoV-2, contributing to the prevention of millions of deaths worldwide. However, the initial positive reception of mRNA technology has waned over time, amid growing partisan polarization over vaccination and declining public trust in science and public health to varying degrees globally. As Canada continues to advance global leadership in mRNA research and development, investments in supporting public understanding, trust, acceptance and access are also essential to realizing its full potential in preventing and treating various diseases.

To better understand public sentiment and, in turn, inform interventions to build public trust and encourage societal adoption of immune-based innovations during health emergencies, the Bridge Research Consortium (BRC) has updated its social and behavioural insights. Using diverse methodologies — including online media analyses, a national survey, community dialogues, and literature reviews from BRC researchers — this second edition synthesizes key insights and offers recommendations to inform potential practices and strategies related to mRNA technology.

Key takeaways and recommendations

#1: While the majority of respondents in Canada agreed that they would take an mRNA vaccine during emergency (74%) and non-emergency periods (67%), skepticism in mRNA safety has significantly increased from 2025 (25%) to 2026 (30%). It is notable in certain populations (e.g., young and middle-aged adults, racialized individuals, right-wing political voters, adults in Quebec, and First Nations, Inuit, or Métis communities).

Recommendation: Tailored engagement on mRNA technologies, including co-producing communication materials and trust-building with high-priority groups, is needed. In addition to addressing misinformation or information gaps, a better understanding of the multiple and intersecting root causes of skepticism (e.g. health-care access, historical harms, etc.) is needed while maintaining established confidence through proactive communication.

#2: Respondents in Canada who trust scientific experts and health-care practitioners are 3.6 times more likely to perceive mRNA technologies as safe. Meanwhile, trust in social media is related to higher skepticism.

Recommendation: Support trusted messengers to understand and engage in discourse around mRNA. Investments in social media training and infrastructure for trusted health and science messengers could increase access to quality information online. Increasing trusted messengers' presence on social media can also in turn address current findings in our national survey that trust in social media is negatively associated with confidence in mRNA.

#3: Key concerns captured from multiple data sources around mRNA technology include the rigour of testing, government partnerships with industry, and adverse event risks.

Recommendation: BRC research findings show that access to knowledge about the therapeutic pipeline (how vaccines are made, tested, authorized, and monitored) would increase public confidence in the safety of mRNA. (See BRC's Therapeutic Pipeline Guide as a resource.) Demystifying the pipeline in an accessible way is thus a priority. Efforts to increase transparency around public-private cooperation and support for sensemaking around vaccine safety and adverse events requires multi-sectoral cooperation to address concerns.



#4: While online discourse about mRNA is driven by U.S. government announcements and social media influencers, awareness of U.S. vaccination decisions is associated with greater confidence for mRNA technology in Canada, as support for Canadian domestic manufacturing remains high (86%).

Recommendation: Promoting Canada's increasing investments in the technology could support public trust and interest, while positioning Canada as a global leader in public health and immunization amid evolving changes to vaccine policies and infrastructure in the U.S.

#5: Influencers dominate discourse online around mRNA technology, which is predominately negative; survey respondents who are passive users of social media who encounter negative vaccine information through their algorithms are least likely to be confident in mRNA technology.

Recommendation: Investments in substantial volumes of engaging, authentic and quality content about mRNA offers an opportunity to pre-bunk and shape narratives around mRNA. Strategic partnerships with influencers and trusted messengers can amplify credible, high-quality mRNA content, while strengthening digital media literacy — particularly around how algorithms shape personal feeds — can empower passive users to become more critical and active consumers of digital content.



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Update on the mRNA landscape

A review published in *The Lancet*[1] in July 2026 — the most comprehensive synthesis to date of evidence from global mechanistic studies, randomized trials, and post-authorization surveillance — re-affirmed the safety and high efficacy of mRNA vaccines. The review highlighted previously published estimates indicating that mRNA vaccines provided over 90% protection against COVID-19-related hospitalization and mortality during the first two to six weeks following vaccination. Following publication of the review, an article published two years prior in the British Medical Journal (BMJ) was retracted[2] for falsely suggesting an association between COVID-19 vaccines and excess mortality. The article was widely used by anti-vaccine advocates to justify claims that mRNA COVID-19 vaccines were unsafe.

The *Lancet* review also identified several opportunities to improve mRNA technology related to key public concerns, including reducing reactogenicity (a subset of reactions that occur soon after vaccination, like swelling or soreness) and extending the duration of immunity. While research addressing these challenges is ongoing, scientific developments throughout 2026 have demonstrated the versatility of mRNA as a platform with considerable potential to transform disease prevention and treatment.

For example, in October, Moderna and Merck announced results[3] from their joint Phase 3 clinical trial demonstrating that a personalized mRNA cancer vaccine, administered alongside standard post-surgical treatment, reduced the risk of melanoma tumour recurrence by 42%. The success of these findings has been hailed as a major scientific breakthrough and has heightened optimism surrounding applications of this personalized approach to pancreatic, lung and other cancers.

More recently, interim[4] results from a Health Canada-approved[5] Phase 1 clinical trial of Moderna's mRNA vaccine candidate targeting Bundibugyo ebolavirus (mRNA-1469) indicated that the vaccine was generally well tolerated across all doses tested in adults aged 18–65 in Canada. In November 2026, following a review of these interim findings, a WHO advisory group recommended advancing the candidate to a Phase 2/3 efficacy study in the Democratic Republic of the Congo, subject to regulatory approval.

This advance represents a significant milestone in the application of mRNA technology to an emerging infectious disease with pandemic potential since COVID-19.

Yet, despite these successes, mRNA technology remains entangled in legacy of the COVID-19 pandemic. One notable example is the Allison Inquiry held in September 2026, an unofficial event initiated by Conservative Party MP Dean Allison for "Canadians to share their personal experiences of injuries…from the COVID-19 vaccine(s)". The inquiry has been accompanied by public calls, warning that "all COVID-19 mRNA vaccination in Canada must stop immediately"[6]. Persistent public distrust and partisan hostility, alongside the growing politicization of vaccine discourse, makes mRNA a uniquely situated and relevant case study for examining the broader challenges of building public trust in emerging technologies, immunization, and public health.

Selected history and timeline of mRNA

The following timeline provides a high-level overview of the development of mRNA therapeutic technologies alongside key scientific, health and sociopolitical events. It expands upon the timeline originally shared in the March 2026 report.

January 28, 2025

Alberta publishes "Alberta's COVID-19 pandemic response: Alberta COVID-19 Pandemic Data Review Task Force: final report" which claimed that mRNA vaccines insufficiently tested and therefore unsafe.

August 5, 2025

U.S. Department of Health and Human Services announce wind-down of mRNA vaccine development activities and cease mRNA-based equity investments (projects worth $500 million).

September 17, 2025

Quebec announces COVID-19 vaccines will no longer be free to general public in Quebec.

September 19, 2025

Moderna announces shipment of first mRNA fully manufactured in Canada being shipped to provinces and territories.

December 2025

U.S. CDC vaccine panel votes to stop recommending birth dose of hepatitis B vaccine for all newborns and major CDC recommendations called mRNA vaccines unsafe.

January 5, 2026

U.S. CDC announces new childhood vaccine recommendations, suggesting fewer shots.

February 10, 2025

U.S. FDA refuses Moderna's application to review new mRNA vaccine.

February 18, 2026

U.S. FDA agrees to review Moderna's mRNA vaccine application.

July 18, 2026

Publication of *Safety and efficacy of mRNA vaccines: a mechanistic and public health perspective* report in *The Lancet*.

August 2026

Moderna began first in-human testing of mRNA vaccine against Bundibugyo ebolavirus.

August 11, 2026

BMJ Group retracts paper on COVID-19 vaccines and mortality featured in U.S. Senate hearing. BMJ Public Health retracted the paper for "misinformation in the discussion regarding the possible causes of excess mortality, and because the limited nature of the original work by the authors was not sufficiently described."

August 27, 2026

Pfizer and BioNTech receive U.S. FDA approval for XFG-adapted COVID-19 vaccine.

September 8, 2026:

Launch of Allison Inquiry by Conservative MP Dean Allison and subsequent opinion published in Toronto Sun: *Biggest health policy mistake in Canadian history at best, or crime against humanity at worst* (September 17, 2026)

September 17, 2026

Health Canada authorized Pfizer–BioNTech's XFG-adapted Comirnaty for individuals aged 6 months and older.

September 18, 2026:

Government of Canada announces major contribution to strengthen Canada's dual-use life sciences sector ($67 million investment, including Northern RNA based in Alberta to establish good manufacturing practice capacity for oligonucleotides and self-amplifying RNA).

September 22, 2026

B.C. offering time-limited RSV immunization program, using mRESVIA mRNA vaccine approved for adults >60 yrs and adults 18-59 at increased risk from LRTD (lower respiratory tract disease) caused by RSV., It will be free of charge for adults 75 and older, First Nations, Inuit, and Métis individuals of 60 and older.

October 22, 2026

Results of Merck-Moderna clinical mRNA cancer vaccine trial released showing prevention of melanoma recurrence and death.

November 5, 2026

Health Canada approves the use of mFLUSIVA, Moderna's mRNA seasonal influenza vaccine for adults 50 years and older.

November 2026

A WHO advisory group recommends advancing Moderna mRNA vaccine against Bundibugyo ebolavirus to a Phase 2/3 efficacy study in the Democratic Republic of the Congo.

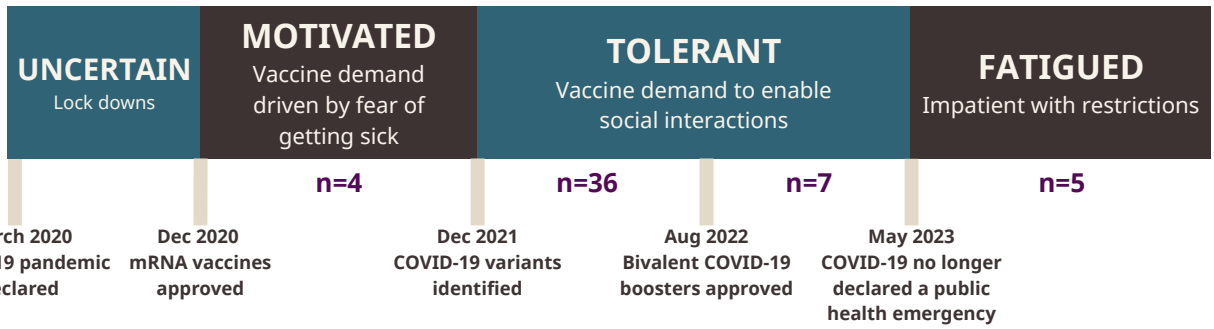
Global insights

Findings from our forthcoming scoping review[7], now capturing information from 157 published articles (including mixed method, qualitative and quantitative studies, and clinical trials), focuses on understanding how sentiments, comprised of identifying perceptions, attitudes, and behaviours, towards mRNA technology changed during and after the COVID-19 pandemic. Building upon key takeaways presented in our March 2026 report[8], our analysis included comparing sentiments between mRNA-based and non-mRNA-based vaccines. Only one-third of the articles reviewed compared sentiments between mRNA-based and non-mRNA-based vaccines, with fewer articles being published after the approval of the first mRNA-based boosters (see Figure 1).

KEY OBSERVATIONS:

- Articles with data collected early during the pandemic had more positive-leaning sentiments towards mRNA-based vaccines than articles with data collected later. People willing to be vaccinated preferred an mRNA vaccine. However, less comparative research was conducted in subsequent years, underscoring the need for continued investigation to determine any potential differences in sentiment between vaccine types.
- Location of vaccine production was found to be a more important determinant of willingness to get vaccinated than the vaccine technology used.
- Studies reporting more negative sentiments towards mRNA vaccines recommended community-tailored knowledge mobilization efforts using narrative storytelling and addressing misinformation to improve public understanding of the technology.
- Analyses with an equity lens evaluating variables like non-binary gender identity or lower socioeconomic status were routinely captured in descriptive tables but excluded from in-depth analyses or collapsed back into broader categories, obscuring the distinct realities of intersecting marginalized groups.

Figure 1: Publications (n=52) investigating sentiments between mRNA-based and non-mRNA-based vaccines at time intervals aligning with general sentiments captured through inductive analysis of preliminary deliberative dialogues outlined in our March 2026 report.

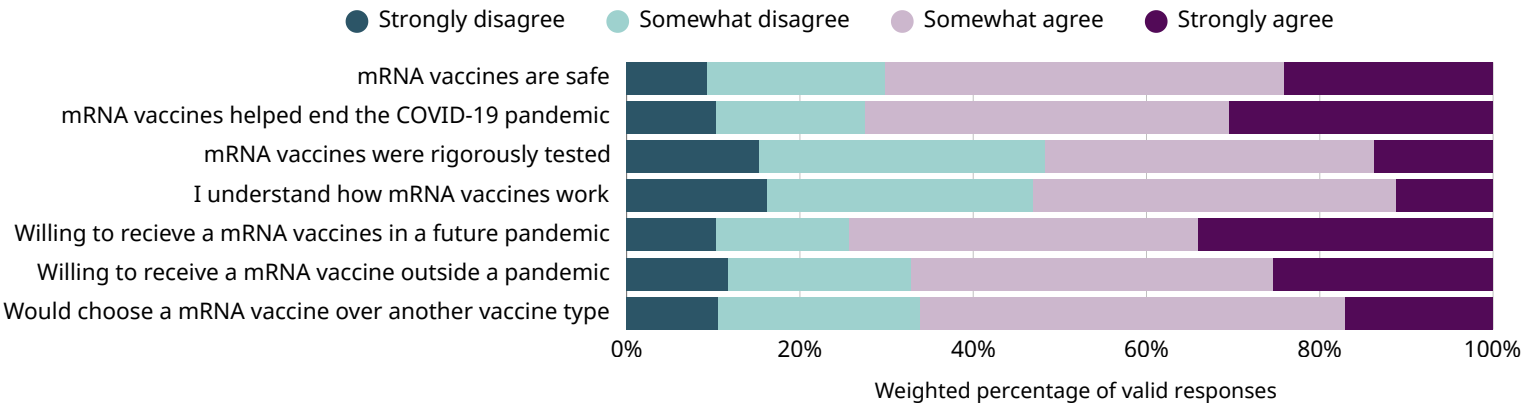


Social and behavioural insights in Canada

This section builds on insights from national survey data presented in the first edition of the report on public perceptions of mRNA technology in Canada. The Vaccine Behaviours, Attitudes, and Perspectives (VBAP) survey is conducted biannually online with approximately 2,500 adults in Canada and seeks to understand trends that can inform efforts to optimize new vaccine uptake and adherence to public health recommendations. The current analyses examine trends of public trust in mRNA technology between 2025 and 2026 (captured from three waves of VBAP data: Fall 2025, Spring 2026, Fall 2026) and the social and behavioural factors that may influence perceptions of safety. Additional questions related to mRNA attitudes, knowledge and intentions to vaccinate were added to the Fall 2026 wave and are presented descriptively. See Appendix A for methodology.

The rigour of mRNA testing is a top concern among respondents, yet the majority are willing to receive an mRNA vaccine in the future and prefer it to other vaccine types.

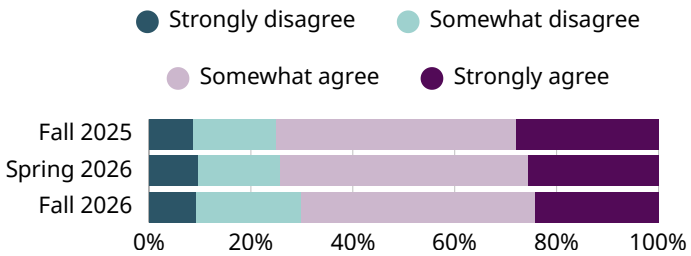
Figure 2: Attitudes, knowledge and behavioural intentions toward mRNA



Perceived mRNA safety has declined between 2025 and 2026.

While no significant changes occurred between Fall 2025 and Spring 2026, skepticism in mRNA safety significantly increased from Fall 2025 (25%) to Fall 2026 (30%).

Figure 3: Perceptions of mRNA safety

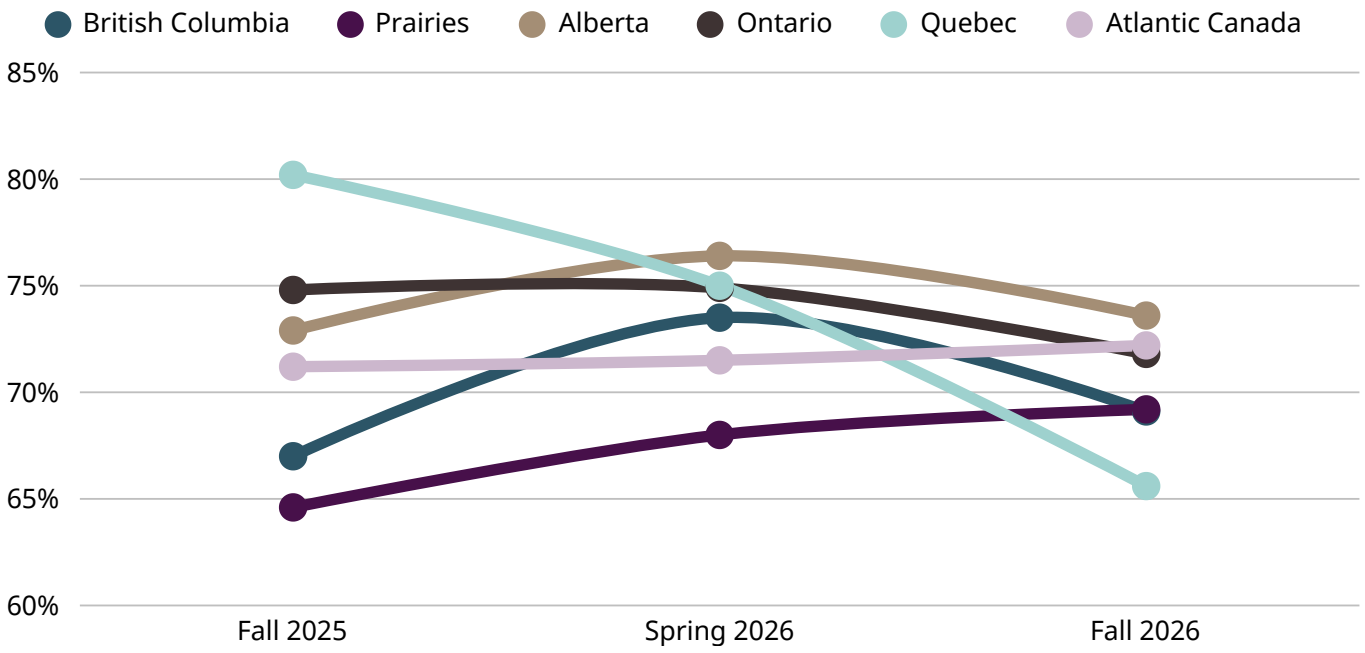


Across 2025 and 2026, significant differences in trust in mRNA were observed in the following populations. (See Appendix A, Table 1)

- **Older adults aged 65 years**+ had greater trust in mRNA safety compared to younger adults ages 22–44 year and middle-aged adults aged 45–59 years.
- Respondents who categorized their **gender as "Other"** perceived mRNA technology as less safe compared to respondents who identified as women. No difference between men and women were found.
- Compared to respondents with a **high school degree or less education**, respondents with college certificate and university education had higher confidence that mRNA technology is safe.
- **Parents with children aged 0–17**, **Indigenous** respondents, and **racialized** respondents who identified as neither White nor Indigenous had low confidence in mRNA safety.
- Among **political voters** those supporting the Liberal Party (88%), NDP (85%), and Bloc Québécois (81%) had the highest trust in mRNA safety. Compared to Liberal Party voters, trust in mRNA **safety was lower** among those who voted for the **Conservative Party**, and Green Party, undecided respondents or non-voters.

In Quebec, confidence in mRNA safety is drastically declining.

Figure 4: Wave-to-wave changes in perceived mRNA safety by region



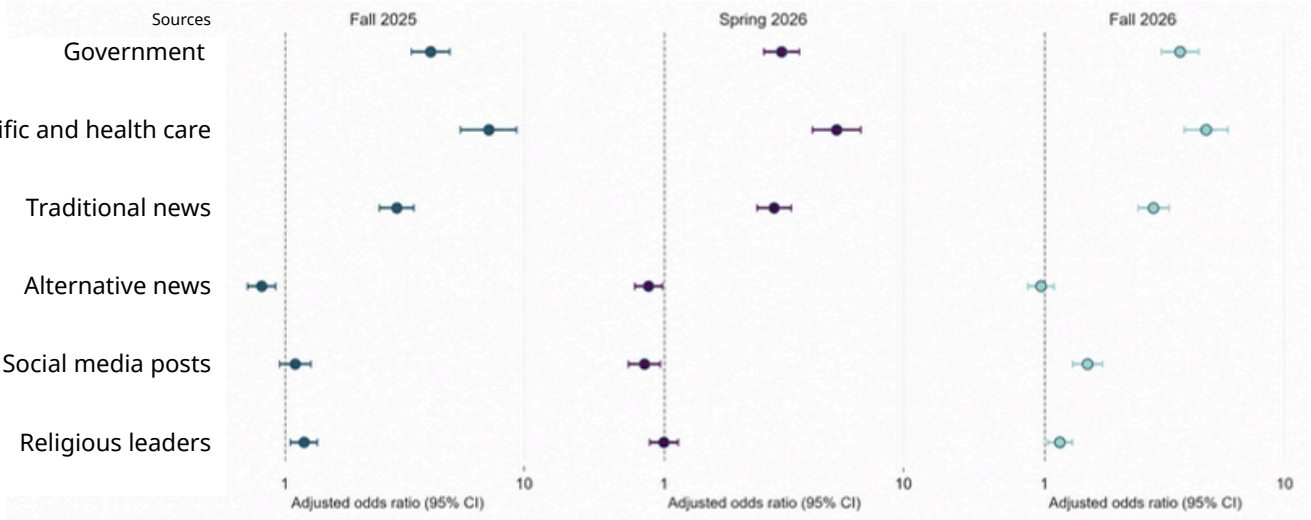
Access to more vaccine knowledge can strengthen trust in mRNA.

Respondents who self-reported greater knowledge of the vaccine therapeutic pipeline (how vaccines are developed, tested, authorized, and monitored in Canada) reported higher confidence in mRNA vaccine safety (OR 1.48, 95% CI 1.39–1.58). Those who indicated that they would be willing to be vaccinated if they had access to information about the therapeutic pipeline were also more likely to see mRNA as safe (OR 4.20, 95% CI 3.59-4.91).

Trust in credible health sources in 2025 and 2026 was a key indicator of confidence in mRNA safety (Figure 5).

- Respondents who trusted scientific and health-care experts had the highest confidence in mRNA safety, followed by trust in the government and traditional news sources.
- Trust in social media and alternative sources was associated with lower perceived safety of mRNA.
- While trust in religious leaders was not associated with the perception of mRNA safety in the broader population, it is significantly associated with the frequency of faith and religious practice. Trust in religious leaders was positively associated with confidence in mRNA safety among regular faith practitioners (OR=1.65, 95% CI, 1.45-1.88, p<0.001), and to a lesser extent those who practiced less frequently (OR = 1.37, 95% CI, 1.16-1.61).

Figure 5: Trust in information sources and peceived mRNA safety



Both U.S. vaccine news and Canadian investments in mRNA vaccines positively influence perceptions of mRNA.

Support for increasing Canadian manufacturing capacity remained high at 89.0% (Fall 2025) and 88.9% (Spring 2026), with a drop to 86.6% in Fall 2026, yet the reduction in support was significant. This support also was strongly associated with perceived safety in every wave.

Awareness of U.S. vaccination decisions declined from 46.8% (Fall 2025) to 41.7% (Spring 2026) and increased to 48.4% Fall 2026. Each one-level increase in awareness (e.g., selecting some knowledge vs. good knowledge) was associated with 62% higher adjusted odds of perceiving mRNA as safe in Fall 2026 (OR 1.62, 95% CI 1.35–1.93; p<.001). Those most aware of U.S news include respondents with graduate degrees, health-care professionals, Liberal and NDP voters, young people, men and those who identified as non-binary.

Algorithms negatively influence perceptions of mRNA

While daily usage of social media and platform was unrelated, respondents encountering vaccine information through their social media algorithms were 33% less likely to perceive mRNA technologies as safe.

Online discourse on mRNA in Canada

Who's driving mRNA discourse on social media?

KEY FINDING

- Influencers continue to be the main drivers of mRNA-related discourse on X, Instagram, YouTube and Bluesky – a consistent trend from Edition 1 (March 2026).

5,192 posts mentioning "mRNA" or "mRNA vaccines" were identified from prominent Canadian accounts on X, YouTube, Instagram and Bluesky, as well as posts and comments on Canadian Reddit pages (See Figure 6).

Analyses focused occounts belonging to federal and provincial politicians, government organizations (e.g., Health Canada), news media organizations, civil society organizations (e.g., Immunize Canada), and influencers (individual accounts with large online followings, which range from activists to satire accounts). Influencers dominated mRNA-related discourse across platforms (90.2%), which included the vast majority of posts discussing mRNA on X (95.3%). News outlets were the second most likely to comment on mRNA (6.9%), with posts mainly on YouTube and X. Civil society organizations, politicians and government organizations contributed a very small proportion (≤2%) of posts (see Figure 6).

Preliminary review of each of the 359 influencer accounts suggests that most lack professional health or medical credentials. Of these, the vast majority shared at least one post with negative sentiment toward vaccines (See Appendix B).

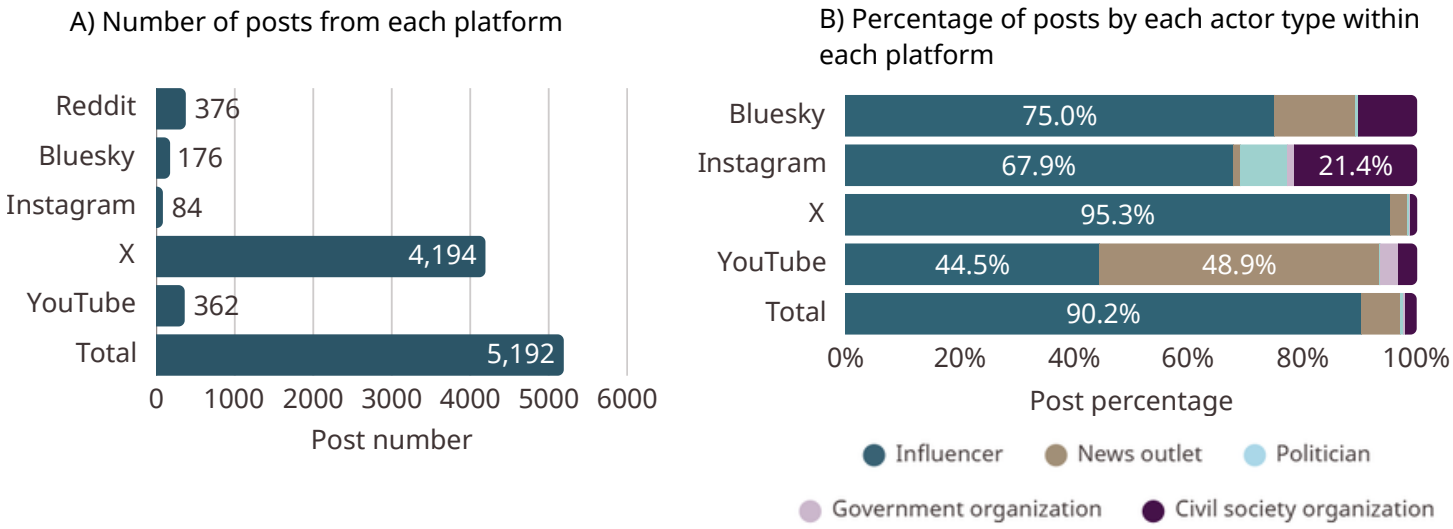
To further characterize messengers online, we deployed a machine learning model to detect conflict in their messages. Conflict is a key indicator because while difficult yet necessary conversations are important for democracies[9], antagonistic conflict, such as moral outrage or hostility towards an individual or group has been associated with the spread of mis/disinformation[10] (See Box 1 and Appendix C).

Influencers were also the most likely to drive conflict around mRNA-related discourse, with a conflict score (.5) more than double that of news outlets (.3), politicians (.21), and civil society organizations (.21).

Box 1:

Conflict likelihood scores (CLS), from a machine-learning model developed by the Digital Democracies Institute, ranges from 0–1. The higher the CLS, the more likely that dialogue contains antagonistic conflict, or a shared hostility towards an individual or group, which can be present even when speakers agree with each other.

Figure 6: Distribution of mRNA-related posts across social media platforms and actor types.
Note: Reddit is excluded from the right panel because actor-type information is unavailable for Reddit posts.



What mRNA content is discussed online?

KEY FINDINGS

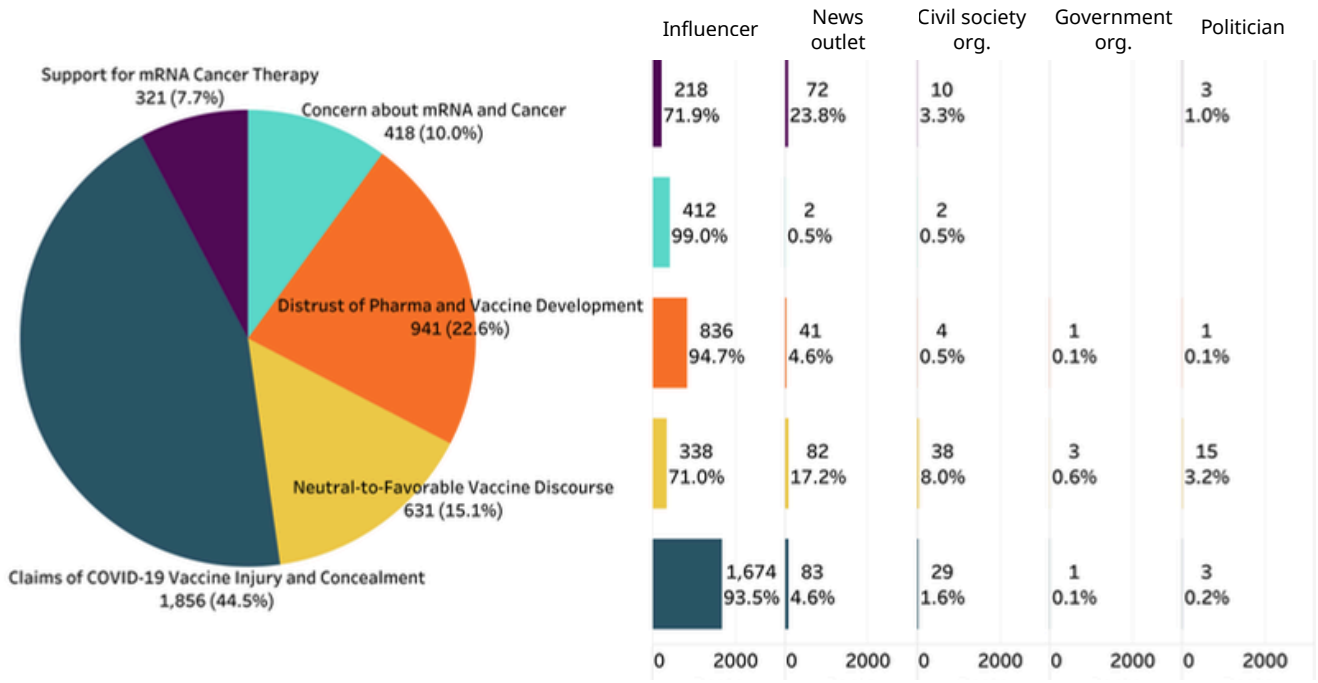
- Skepticism and hostility dominate Canadian social media posts on mRNA technologies.
- Negative posts are often grounded in criticism of vaccine-related harm during the COVID-19 pandemic, as well as skepticism toward future uses of mRNA therapies for new infectious diseases or cancer treatment.
- Positive sentiments on mRNA technologies for vaccination or cancer treatment are less common but present.

Analyses of the topics around mRNA technologies discussed in posts on X, Bluesky, Instagram, YouTube and Reddit were conducted. Video transcripts were examined for YouTube posts. Using computational and manual methods (see Appendix B), five major mRNA topics were identified and discussed across 4,167 posts (see Figure 7).

Topics discussed in order of frequency:

1. Claims of COVID-19 vaccine injury and concealment, which framed mRNA as a harmful or ineffective technology and alleged that governments, pharmaceutical companies, and others have ignored or covered up widespread harm caused by COVID-19 vaccines.
2. Distrust of pharmaceutical companies and vaccine development.
3. Concerns about mRNA and cancer alleging that mRNA immunotherapies cause cancer and/or were unlikely to effectively treat it.
4. Neutral to favourable vaccine discourse related to their use in the pandemic or their future use for influenza or Ebola.
5. Support for mRNA cancer therapies, often focusing on positive trial results for treating melanoma and pancreatic cancer.

Figure 7: General topics in mRNA-related discussions showing the total posts for each topic for all platforms alongside how different account types contribute to each topic.
Note: Reddit is excluded because actor-type information is unavailable for Reddit posts.



While mRNA continues to predominately be discussed in context of COVID-19, themes emphasizing skepticism toward future applications of mRNA technologies rather than relitigating their use in the COVID-19 pandemic are also surfacing.

How much conflict was there around content about mRNA?

Conflict scores varied considerably across topics, with the highest mean scores observed for Concerns about mRNA and Cancer (0.60) and the lowest for Support for mRNA Cancer Therapy (0.24) (See Figure 9 in Appendix B).

Across all topics, conflict scores tended to be highest on X with a mean score of 0.49, followed by Reddit (0.40), Instagram and YouTube (both 0.36), and Bluesky (0.30). X also contained more negative posts about mRNA compared to other platforms. Other platforms like Bluesky, contained a larger share of positive posts about mRNA. While 22% of posts across platforms were supportive of mRNA 70% of posts on Bluesky were supportive, compared with 15.4% of posts on X.

Conflict across English and French language posts were on average similar (0.46 in French and 0.49 in English), with the exception of content on YouTube. French posts scored an average of 0.56 (vs 0.29 for English posts). This was mainly driven by the fact that ~81% of the French mRNA videos were from influencer or alternative media accounts (the most conflictual account type) vs ~28% in English. (See Appendix C.)

When was there high engagement with mRNA topics?

KEY FINDINGS

- Political developments in the U.S. drove the largest spikes in engagement with mRNA discourse in Canada.
- Prominent announcements related to mRNA research and development resulted in spikes in both positive and negative stances on the technology, especially on August 2, 2026, which had the highest engagement and was triggered by the FDA's approval of an mRNA influenza vaccine.

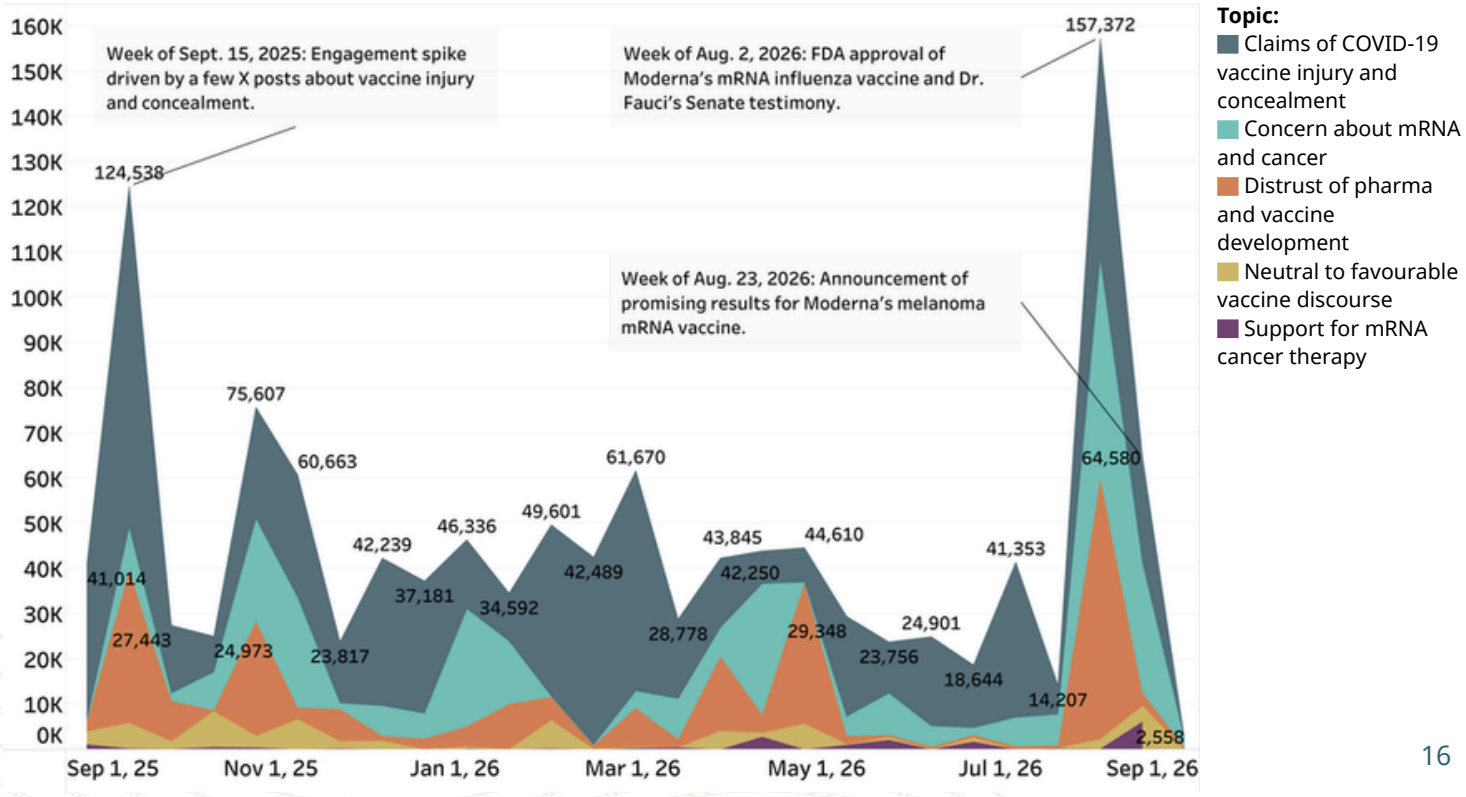
For this analysis, levels of engagement (likes and replies) with mRNA-related posts were examined. This analysis roughly tracks attention by other users on the platforms. The timeline of Canadian mRNA discourse across platforms often related to political developments in the U.S.

The largest spike — during the week of August 2, 2026 — was triggered by the FDA's approval of an mRNA influenza vaccine and included COVID-19 discourse spurred by Dr. Anthony Fauci's Senate Committee testimony on July 29, 2026.

Claims of COVID-19 vaccine injury and concealment, both concern and support about mRNA and cancer, and distrust of pharmaceutical companies and vaccine development had their highest discourse peaks during this spike.

This spike in engagement and posts continued to the week of August 23, 2026, extended by a leaked announcement of Moderna's promising melanoma mRNA vaccine results on August 19, 2026.

Figure 8: Timeline of engagement with topics across all platforms



The second highest spike in engagement with posts occurred in September 2025. It was driven by a small number of highly engaged posts on X — notably, two posts on COVID-19 vaccine injury and concealment were responsible for over 67,000 likes alone — although there were also posts with limited engagement that positively discussed the first Canadian-made mRNA vaccines.

During the week of April 19, 2026, there was a spike in posts — but not in engagement levels — driven by the announcement of successful mRNA trial treatment of pancreatic cancer, and subsequent criticism and support of Robert F. Kennedy Jr.'s cancelled mRNA funding.

Portrayals of mRNA in the popular press

KEY FINDINGS

- Specific discussion of mRNA and RNA is relatively limited compared to broader vaccine discourse and includes both supportive and critical perspectives.
- mRNA and RNA discourse in the Canadian popular press contains misinformation or negative perceptions typically aligned with the political right.

Analysis of Canadian based news articles from 2025-2026, using the Dow Jones FACTIVA database (see Appendix D), found that within ~9,500 articles on vaccines and vaccine-related topics, only 350 articles discussed "mRNA" specifically. Articles both supported and critiqued mRNA-based vaccines. The following represents themes of mRNA content shared by media outlets and do not necessarily reflect their own framing or accuracy of reporting (with the exception of op-eds).

Positive content

Articles that shared positive contentabout mRNA vaccines emphasized the technology's safety and effectiveness, particularly its role in saving lives and reducing harms within the COVID-19 context. They also celebrated it as a technological achievement, highlighting its rapid development and international collaboration, using the framing of "miracles and wonders" and showcasing the work of Canadian researchers, scientists and institutions.

Negative content

Negative portrayals of mRNA vaccines were almost exclusively attributed to, or aligned with, political figures and news sources associated with the political right.

> **"Now, I've had three shots of the vaccine. I wish I hadn't, quite frankly. And it's one of the things that's changed in my thinking — the so-called vaccine, the COVID mRNA shots."**
>
> ***—John Rustad***

Notable Canadian conservative politicians publicly choosing other vaccine technologies included Premier Danielle Smith[11]. John Rustad expressed regret in getting a "so-called vaccine"[12], while UCP convention members' launched an initiative to limit mRNA vaccine access in Alberta, including MLA Eric Bouchard calling for the halt of mRNA vaccines for children[13].

An op-ed[14] in the Toronto Sun raised serious issues of safety and efficacy and critiqued mRNA-related policy decisions in response to an independent inquiry commissioned by Conservative MP Dean Allison[6]. During the inquiry, several participants called for halts to mRNA-based vaccine deployment and criminal investigations. The op-ed expanded upon these statements, calling for a halt to mRNA-based vaccine development and deployment, as well as a public inquiry into public health officials. Meanwhile, another op-ed in the Winnipeg Sun[15] criticized Canada's new Chief Public Health Officer Dr. Joss Reimer's views on the mRNA vaccines.

There were also claims of mRNA-related deaths[14] and framing of the technology as "experimental"[16], and pronounced anti-mRNA sentiment among Alberta separatists[17]. There have also been several articles citing Robert F. Kennedy Jr.'s criticisms of mRNA vaccines and defunding their further development.

Aside from political critiques, articles have highlighted therapeutic-based concerns by sharing mRNA-based vaccine technology's links to both myo- and pericarditis. They also highlight these vaccines' waning efficacy over time against new COVID-19 variants. An economic lens has also been applied in these critiques, suggesting that Canada is not financially benefiting from development contributions due to mRNA-based technologies' weak return on investment.

"The pro-separatism Alberta Prosperity Project (APP) attempted to put dollars and cents on independence in a document entitled "The Value of Freedom," which, incidentally, gave a candid view into their ideology… The points-based immigration system in an independent Alberta would penalize those who'd received an mRNA vaccine."

—Op-ed in the Globe and Mail

Neutral content

Several articles included neutral content on mRNA-based technology developments, including updating the public on vaccine developments for flu season, the opening of a mRNA vaccine production facility in Montreal, stock market tracking of both rises and falls, and general information about the technology.

A path forward: Continuing to advance mRNA dialogue

KEY FINDINGS

- Factors impacting trust included the speed at which the COVID-19 mRNA vaccine was developed, concerns regarding public-private partnerships, disconnect between risks and uncertainty, and the politicization of mRNA technologies online.
- Key interventions to build trust include increased transparency and developing relationships across sectors and with communities prior to public health emergencies.

In May 2026, the BRC concluded a series of 11 deliberative dialogues and one self-led dialogue held with 77 contributors, including nurses, doctors, public health leaders, journalists, industry staff, scientists, and people with lived experience of long COVID and/or being immunocompromised. These dialogues were convened to discuss what builds or erodes trust in mRNA-based vaccines, including identifying additional points of tension which influence their acceptability and uptake. For each dialogue, contributors were provided a synthesis of evidence on public sentiments about mRNA vaccines and summaries of insights generated in previous dialogues.

Contributors observed that in the years following the recognition of the COVID-19 pandemic, enthusiasm for vaccines that could provide a pathway out of pandemic restrictions shifted to fatigue, hesitancy, and an erosion of public trust in government and science with variations across different publics.

They identified four points of tension specific to mRNA vaccines that played a pivotal role in shaping public trust in this therapeutic innovation:

- **Speed vs. safety:** mRNA vaccines were developed quickly to respond to the pandemic. Some people assumed this meant that shortcuts were taken, even though the science behind it had years of work.
- **Public money vs. private profit:** Heavily redacted government contracts with pharmaceutical companies for mRNA vaccine purchases led the public to question who was really benefiting.
- **"The way out" vs. real life:** Promising that vaccines would end the pandemic did not match what people lived through: boosters, side effects, and repeat infections.
- **Facts vs. a divided world:** Views on mRNA vaccines followed wider political polarization, social isolation, and online misinformation. More facts alone did not fix this. The volume of information erupted, and vaccines became the target of politicized efforts to mobilize divisive ideologies.

Contributors discussed how to navigate and respond to these tensions, as part of collective efforts to restore healthy trust in mRNA vaccines, but also in public institutions, scientific fields, health communicators, and industry partners that all play essential roles in efforts to mitigate or navigate threats to public health. They argued that trust in mRNA vaccines needs sustained action, not just better messaging, and described public trust as a social problem that needs social solutions.

- **Be honest about limits:** Say what vaccines can and cannot do. Name rare side effects. Warn people that advice may change. Present vaccines as one tool among many to build pandemic readiness.
- **Communicate with respect:** Use plain language, with stories and statistics, to communicate the efficacy, safety, and benefits of mRNA vaccines in comparison to the risks. Treat people with questions respectfully and in good faith, not as "anti-vaxxers". Use trained communicators and voices people already trust.
- **Work across sectors:** Governments, industry, health-care professionals, and journalists should share information and be open about public-private partnerships (which are often redacted or have privacy clauses), as well as the efficacy and safety of mRNA vaccines. Journalists and health-care professionals need support when they face attacks.
- **Build trust before the next crisis:** Trust in mRNA vaccines requires ongoing strengthening of public trust in public health institutions, governments, science, media, and industry. Start fostering trust locally, in schools, faith groups, workplaces, and community media. Keep working on science, health, and media literacy before an emergency occurs.

"It's not just about avoiding getting sick, it's about getting less sick than you would have if you hadn't gotten [the vaccine], and that people shouldn't have the expectation that they're never going to get COVID if they get the vaccine.

It's that now you've trained your body, and you will be able to fight it more, and you're not going to be as contagious for long... it flattens the curve."

—Deliberative dialogue participant

Building healthy public trust is a critical pathway to stronger public health and to being ready to respond when public health emergencies arise. Rebuilding trust is possible when efforts focus on communication practices that are clear about what we know and don't know, convey respect and trust in the public's ability to make informed decisions, and strengthen relationships across sectors, jurisdictions, and communities. Trust in mRNA vaccines can be strengthened as part of this wider effort.

> **"The [mRNA] technology had been around for a long, long time. So, that first misperception was that it was rushed, when the reality was that there had been very strong fundamental science, and we just pivoted over to dealing with COVID-19...**
>
> **We've got to do a better job at getting that back out into the public. Scientists sometimes are not the best at doing public engagement. So, I see we have people from the press here, that's where we can get their help to get that story and message out."**
>
> ***—Deliberative dialogue participant***



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Appendix A

VACCINE BEHAVIOURS, ATTITUDES, AND PERCEPTIONS (VBAP) SURVEY

Approximately 30% of respondents contributed to more than one wave. Each survey row was treated as an independent participant (i.e., if one participant contributed to both waves, their responses will be treated as two independent responses). Hence, the analysis compares repeated cross-sectional samples rather than following individuals. Population estimates and regression models used the survey weight (POND) and robust standard errors. Models adjusted for age, gender, education, region, political identity, having children aged 0–17, health-care worker status, Indigenous identity, non-White/non-Indigenous identity, and newcomer status. Findings are associations, not evidence of causation. Wave periods corresponded to responses collected in November 2025 (Fall 2025), March 2026 (Spring 2026) and October 2026 (Fall 2026). Missing data from Waves 1 and 2 were removed to account for the removal of the "Prefer not to respond" response category in Wave 3.

Characteristics	Comparison	Adjusted OR	95% CI		p-value
Survey wave	Fall 2025	1.00 (Ref)	—	—	—
	Spring 2026	0.91	0.78	1.07	0.267
	Fall 2026	**0.69**	**0.59**	**0.8**	**<0.001**
Age group	60 years or older	1.00 (Ref)	—	—	—
	18–24 years	1.24	0.97	1.59	0.901
	25–44 years	**0.63**	**0.53**	**0.76**	**<0.001**
	45–59 years	**0.69**	**0.59**	**0.82**	**<0.001**
Gender	Woman	1.00 (Ref)	—	—	—
	Man	0.99	0.88	1.13	0.926
	Another gender identity	**0.37**	**0.25**	**0.55**	**<0.001**
Education	High school or less	1.00 (Ref)	—	—	—
	College or technical education	**2.07**	**1.69**	**2.54**	**<0.001**
	Bachelor's degree	1.04	0.9	1.2	0.619
	University certificate	**2.27**	**1.75**	**2.95**	**<0.001**
	Graduate degree	1.35	0.99	1.84	0.057
Province or region	Ontario	1.00 (Ref)	—	—	—
	Québec	0.83	0.69	1	0.05
	British Columbia	0.96	0.79	1.15	0.644
	Alberta	**1.52**	**1.24**	**1.87**	**<0.001**
	Manitoba	1.19	0.88	1.61	0.262
	Saskatchewan	0.89	0.64	1.25	0.511
	Nova Scotia	1.15	0.75	1.77	0.517
	New Brunswick	1.08	0.75	1.54	0.688
	Newfoundland	0.67	0.39	1.16	0.154
	Prince Edward Island	0.6	0.22	1.62	0.311
Political identy	Liberal Party	1.00 (Ref)	—	—	—
	Bloc Québec	0.67	0.47	0.95	0.027
	Conservative	**0.17**	**0.14**	**0.2**	**<0.001**
	Green	**0.44**	**0.3**	**0.65**	**<0.001**
	New Democratic Party	0.82	0.61	1.11	0.205
	Other parties	**0.1**	**0.03**	**0.29**	**<0.001**
	People's	**0.04**	**0.03**	**0.08**	**<0.001**
	Undecided	**0.31**	**0.26**	**0.37**	**<0.001**
Child aged 0-17 in household	No	1.00 (Ref)	—	—	—
	Yes	**0.75**	**0.66**	**0.87**	**<0.001**
Health-care worker	No	1.00 (Ref)	—	—	—
	Yes	0.94	0.78	1.14	0.534
Indigenous identity	No	1.00 (Ref)	—	—	—
	Yes	**0.53**	**0.41**	**0.69**	**<0.001**
Non-white, non-Indigenous identity	No	1.00 (Ref)	—	—	—
	Yes	**0.83**	**0.71**	**0.97**	**0.02**
Newcomer status	No	1.00 (Ref)	—	—	—
	Yes	1.06	0.73	1.54	0.763

Appendix B

CENTRE FOR THE STUDY OF DEMOCRATIC INSTITUTIONS

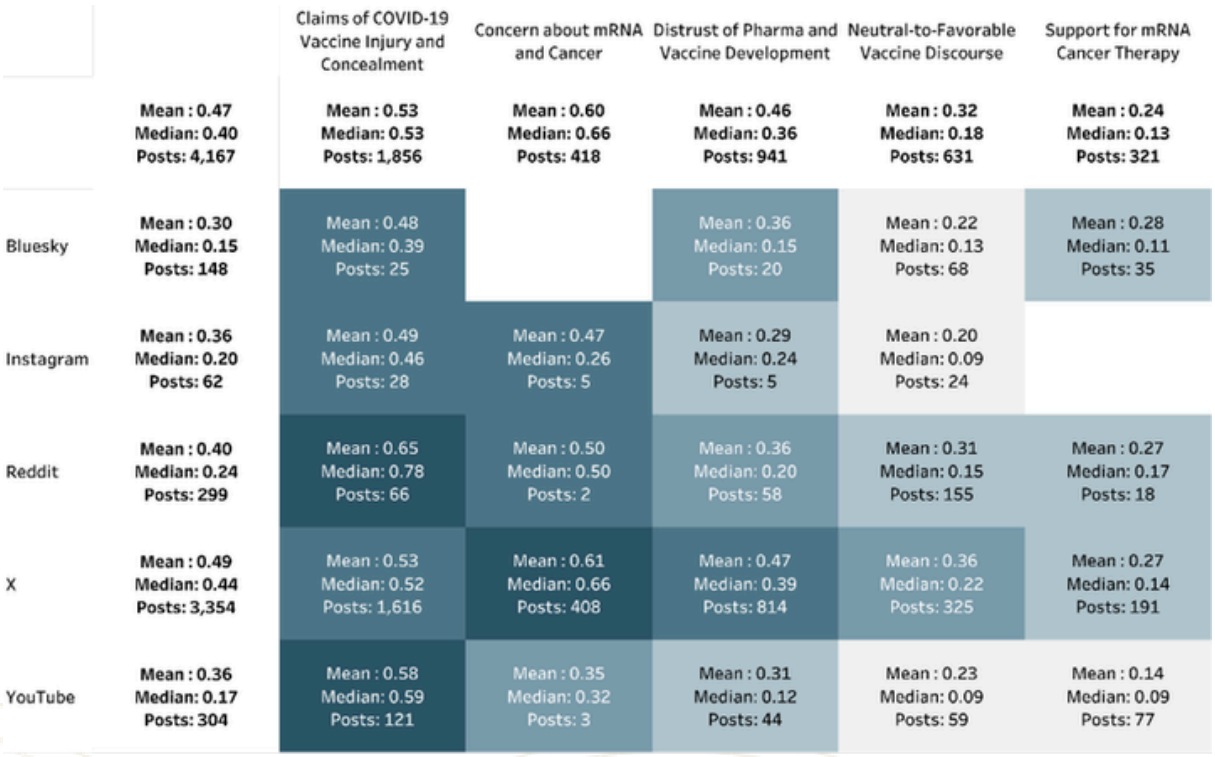
Posts from Canadian accounts on X, YouTube, Bluesky, and Instagram were retrieved by the Media Ecosystem Observatory (MEO). The primary text field was searched for mRNA-related keywords within posts published between September 1, 2025, and August 31, 2026. The search included references to mRNA technology in English and French (e.g., mRNA, messenger RNA, ARNm, and ARN messager); mRNA vaccine manufacturers and product identifiers (Moderna, BioNTech, mRNA-1273, and BNT162b2); and related technology terms, including lipid nanoparticles, self-amplifying RNA, and saRNA. The search patterns accounted for variations in capitalization, spacing, hyphenation, and related word forms. The retrieved posts were subsequently screened for relevance, with identified false positives reviewed and excluded from the analysis.

To identify latent themes in mRNA-related discourse on all five platforms, we employed BERTopic[18]. The model identified 46 distinct topics for 4,167 posts, along with a residual category of 1,025 outlier posts that did not belong to any topic. We aggregated the 46 topics through a combination of computational clustering and qualitative validation into five higher-level meta-topics that structure the thematic analysis. Before topic modeling, the textual data were processed to preserve semantic content while removing URLs and user mentions.

To characterize the educational background and sentiment toward vaccine technology among influencers, their social media profiles and posts were qualitatively assessed. Influencers were classified based on whether there was identifiable evidence of formal education in medicine or health sciences, or whether they held a relevant professional degree. Attitudes toward vaccine technology were evaluated based on the content of their social media posts; posts were coded as conveying negative, positive, or neutral sentiment toward vaccine technologies.

The conflict classifier was applied to Reddit, as well as posts across X, Bluesky, YouTube, and Instagram post descriptions YouTube posts were scored on their video transcripts. These were auto-generated captions, and their quality varied, particularly for spoken Quebecois French, overlapping speech, and lower audio quality videos.

Figure 9. Conflict scores across mRNA discourse topics and social media platforms. Each cell reports the mean and median conflict scores and the number of posts for a given topic and platform. Colour intensity represents the mean conflict score, ranging from 0.14 (lightest blue-grey) to 0.65 (darkest blue). The uncoloured top row and left column summarize conflict scores across platforms and topics, respectively. Blank cells indicate combinations with no posts.



Appendix C

DIGITAL DEMOCRACIES INSTITUTE

Reddit posts were gathered along with their comments, and any other comments gathered by the same mRNA-related keywords as described above from 30 Canadian regional, political, and pandemic-related subreddits (e.g., /r/Canada, /r/Ontario, /r/CanadianPolitics, /r/OnGuardForThee) during the same time period. Each post and comment was scored by a fine-tuned transformer-based text classifier that returns a score between 0 and 1, where 1 is an antagonistic and conflictual conversation.

113 French-language videos were sampled (a third of the videos in the YouTube dataset; 2% of all posts in the entire dataset).

To identify latent themes in mRNA-related discourse on all five platforms, we employed BERTopic. The model identified 46 distinct topics for 4,167 posts, along with a residual category of 1,025 outlier posts that did not belong to any topic. We aggregated the 46 topics through a combination of computational clustering and qualitative validation into five higher-level meta-topics that structure the thematic analysis. Before topic modeling, the textual data were processed to preserve semantic content while removing URLs and user mentions.

Appendix D

LIST OF NEWS SOURCES USED IN PRESS ASSESSMENT

Vancouver Province (British Columbia) Or Vancouver Sun (British Columbia) Or Vancouver is Awesome (British Columbia, Canada) Or The Canadian Press Or Victoria Times Colonist (Vancouver, British Columbia) Or Squamish Chief (British Columbia, Canada) Or Edmonton Journal (Alberta) Or The Edmonton Sun (Alberta) Or Saskatoon Star Phoenix (Saskatchewan) Or Fort Saskatchewan Record (Alberta) Or Calgary Herald (Alberta) Or The Calgary Sun (Alberta) Or Winnipeg Free Press (Manitoba) Or The Winnipeg Sun (Manitoba) Or National Post (Canada) Or The Globe and Mail (Canada) Or theglobeandmail.com (Canada) Or CBC.ca (Canada) Or The Toronto Star Or Regina Leader Post (Saskatchewan) Or Waterloo Chronicle (Ontario) Or Waterloo Region Record (Ontario) Or The Hamilton Spectator (Ontario) Or Windsor Star (Ontario) Or Sudbury Star (Greater Sudbury, Ontario) Or Ottawa Citizen Or The Ottawa Sun (Ontario) Or Toronto.com Or The Toronto Sun Or The Toronto Sun Online Or Montreal Gazette Or La Presse Canadienne (French Language) Or Daily Gleaner (Fredericton, New Brunswick, Canada) Or The Tribune (Campbellton, New Brunswick, Canada) Or Times & Transcript (Moncton, New Brunswick, Canada) Or CTV National News (Toronto)



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