Canadian Information Ecosystem (CIE)
SITUATION REPORT

Technical briefing on the state of the information ecosystem, May 2024 • www.cdmrn.ca

Welcome

Welcome to the first Canadian Information Ecosystem Situation Report! Each month, we report on the state of the information ecosystem in the previous month as it relates to politics, media and the broader state of democracy. Our goal is to enhance collective understanding of the stable and dynamic dimensions of the Canadian information ecosystem (CIE), articulate its vulnerabilities, and characterise current and emerging information threats. Our **method** combines digital trace data (social media analysis of Canadian individuals and organizations that are politically influential across TikTok, Twitter/X, Instagram, Facebook, YouTube, and Telegram), opinion tracking (a monthly survey of the Canadian population), and media monitoring.
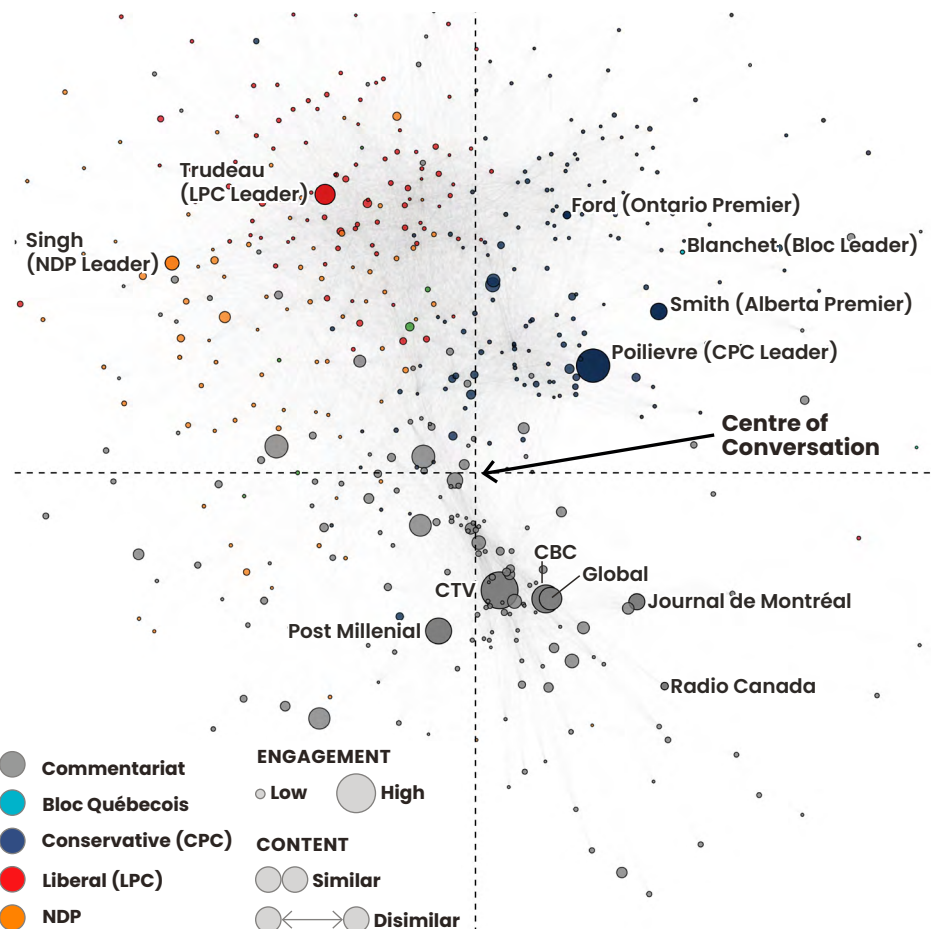
Key findings:

◆ **Ecosystem influence is highly concentrated in a small number of voices** — The Canadian Information Ecosystem *remains highly unequal*, with a small number of accounts receiving a supermajority of engagement. This inequality remains even more extreme for media outlets, with the top five media organizations (CTV, Global News, CBC, The Post Millennial, and Rebel News) receiving approximately 65% of all news engagement across social media platforms. Local news only accounts for 25% of all news engagement.

◆ **Canadians have low trust in information providers** — Key information providers in the ecosystem are generally not trusted to act in the best interests of Canadians, with fewer than 1 in 3 Canadians trusting big tech companies like Meta and Google or politicians. Journalists and media organizations are more trusted, but close to half of Canadians still have little to no trust in them at all.

◆ **Misinformation-producing websites receive significant attention** — While overall volume of misinformation content in the ecosystem is low, *there is high engagement with content linking to known misinformation-producing websites*. We observed very low foreign influence in May, however, close to half of Canadians are concerned about misinformation and foreign influence.

◆ **Conservative voices dominate the online Canadian conversation** — Engagement with politicians in Canada is currently very unequal, with elected officials of *Conservative parties receiving more engagement* and being more central to the Canadian conversation than those of other major party families in Canada. This centrality extends to right-wing media organizations as well.

CIE This Month
Ecosystem snapshot

Each month we provide a visualisation of the CIE that highlights key findings. This ecosystem snapshot provides a 2-dimensional projection of the relationships between key actors in the CIE, with influential political and media entities identified. We observe clustering of Liberal (high) and Conservative (moderate) party families, with the major difference being only weak links between federal and provincial Conservative-family politicians. We see that the Conservative Party of Canada (CPC) leader, Pierre Poillivre, and the cluster around him are closer to the centre of the conversation. Moreover, the Conservatives received significantly more engagement than the liberals (shown as larger versus smaller circles on the projection). Alberta's Premier, Danielle Smith, receives a large amount of engagement, far exceeding, for example, that of the third and fourth federal party leaders who are both on the periphery of the overall conversation. We observe CTV, CBC and Global close to the centre of the conversation as well. Across media outlets, top stories and themes are fairly consistent which situates them in a relatively non-partisan cluster.

Legend:
- Commentariat
- Bloc Québecois
- Conservative (CPC)
- Liberal (LPC)
- NDP

ENGAGEMENT: Low — High

CONTENT: Similar — Disimilar

**Health of the
Information Ecosystem**

VULNERABILITIES

We evaluate the vulnerability of the information ecosystem by looking at four characteristics. First, **inequality** helps us understand the extent online conversation in the CIE is skewed towards a minority of voices. Second, **polarization** shows how segregated information flows are within communities. Third, **toxicity** captures how harmful and uninviting the information environment can be to individuals, communities, and organizations. Fourth, we measure **trust** to gauge the extent people are confident information gatekeepers are acting in the best interests of Canadians. Together, these four characteristics can open or restrict information flows, diversify or narrow information sources and beliefs, and influence acceptance or denial of false or accurate information. Most measures are reported on a scale of 0 (low) to 1 (high).
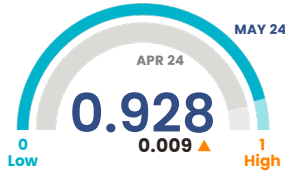
Inequality

Measurement

We evaluate inequality using the gini coefficient (the extent influence within an information ecosystem deviates from a perfectly even distribution). The scale ranges from 0 (each entity has equal influence) to 1 (a single entity has all the influence). Fewer information sources (high value) severely restricts information flows, which can lead to faster spread and deeper penetration of misinformation.

Findings

Inequality in the CIE is extremely high (Gini coefficient of 0.928). The conversation is highly skewed to a small number of highly influential accounts.

Inequality of the CIE

How skewed is the CIE towards a small set of accounts?

APR 24 / MAY 24

0.928

0 Low — 0.009 ▲ — 1 High
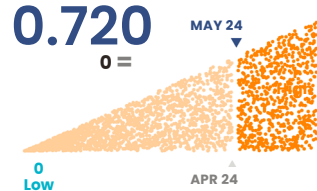
Polarization

Measurement

We evaluate polarization through **segmentation** (the extent a network is divided into distinct communities, 0=low segmentation and 1=high segmentation), **insularity** (the extent political party families engage with others outside their political party, with a higher number representing a more insular party family) and **division** (how people feel about their own political party versus other parties, 0=low and 1=high).

Findings

Group segmentation is moderate-to-high, with a score of 0.720. The least insular party is the Conservative Party family (0.119) and the most insular is the NDP family (0.191). Division towards political outgroups is moderate, with a score of 30.4%. These moderate-to-high polarization scores indicate that information flow does occur across and between communities but that the flow is quite unequal and there is suspicion of information coming from political outgroups.
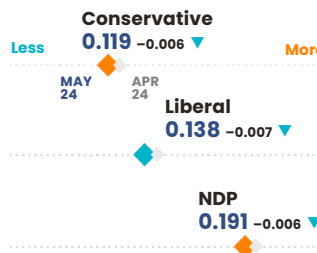
Segmentation

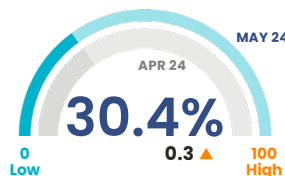How divided into distinct communities is the CIE?

0.720

0 =

MAY 24 ▼

0 Low — APR 24 ▲

Insularity

How insular are parties relative to one another?

Conservative
0.119 –0.006 ▼
Less — More
MAY 24 / APR 24

Liberal
0.138 –0.007 ▼

NDP
0.191 –0.006 ▼

Division

How do people feel about their own political party versus other parties?

APR 24 / MAY 24

30.4%

0 Low — 0.3 ▲ — 100 High

Toxicity

Measurement

We evaluate toxicity through a **toxic speech** score (presence of toxic speech among posts by political influencers, with lower values indicating lower toxicity), **chilled speech** (extent people avoid online political discussion and opinion sharing, 0=low to 1=high), and **news avoidance** (extent people avoid the news all together, 0=low to 1=high).

Findings

The toxicity score is very low, with a score of 0.009, 65% of Canadians are fairly hesitant to engage in politics online and/or refrain from sharing personal opinions on politics, and 33.3% of Canadians actively avoid seeking out news stories. Together, we observe that content produced by key figures in the CIE has low toxicity, but that a significant number of Canadians still avoid the news and abstain from political discussion.

Toxic speech

How prevalent is toxic speech in the CIE?

0.009 0.001 ▲

APR 24 / MAY 24

Less — More

Chilled Speech

To what extent do people avoid political discussion and opinion sharing?

100 High / 0 Low

MAY 24 / APR 24

65%
0.5 ▲

News Avoidance

To what extent do people avoid the news?

100 High / 0 Low

MAY 24
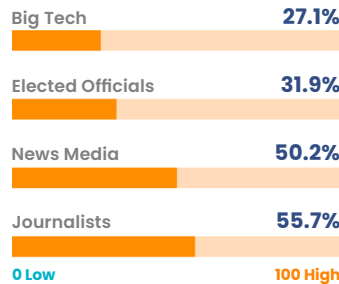
33.3%

Trust

Measurement

We evaluate trust by asking Canadians about their confidence in **information gatekeepers** (journalists, media organizations, politicians, and big tech).

Findings

41.2% of Canadians possess a fair amount or a lot of trust in the overall gatekeepers of our online information ecosystem. The most trusted actors are journalists (55.7%), followed by news media (50.2%). The actors with the least trust are elected officials (32%) and big tech companies like Meta and Google (27.1%). Low trust in information gatekeepers makes the CIE more vulnerable to external influence and/or misinformation.

Trust

How much do people trust each type of gatekeeper?

Big Tech — **27.1%**

Elected Officials — **31.9%**

News Media — **50.2%**

Journalists — **55.7%**

0 Low — 100 High

Trust in Information Gatekeepers

How much do people trust the information gatekeepers?

MAY 24

41.2%

0 Low — 100 High
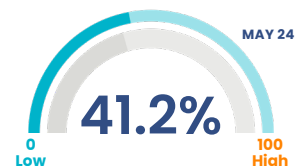
Health of the Information Ecosystem
THREATS

We assess threats to the CIE through evaluating the presence of and concern regarding **misinformation**, **foreign influence** and **AI-generated content**. Each of these threats can distort the conversation, mislead and manipulate Canadians, and decrease our collective ability to understand and respond to challenges and opportunities.
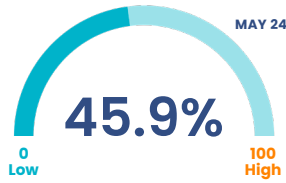
Misinformation

Measurement

We evaluate the threat of misinformation through measuring Canadians' **concern** about misinformation (0=low to 1=highly concerned), the extent **misinformation links** are shared across social media platforms by politically influential voices (0=little to 1=high sharing), and public **discussion about misinformation** and associated information phenomena (0=low to 1=high discussion).

Findings

45.9% of Canadians are very concerned about misinformation. We find that 2.08% of links shared in posts by Canadian influential voices are to known misinformation websites. Although this number appears small, these posts receive 17.7% of total engagement. We find that only 0.33% of posts reference the topics of misinformation, disinformation, foreign interference, fake news, or deep fakes. Canadians are deeply concerned about the role misinformation plays in our political discourse. This concern is appropriate, as significant engagement with the CIE goes to posts sharing links to known misinformation websites.
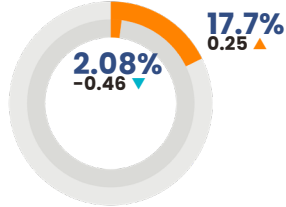
Concern about misinformation
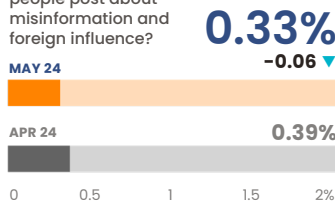How concerned are people about misinformation?

MAY 24
45.9%
0 Low — 100 High

Linking to known misinformation websites
How common and popular are web links to known misinformation websites?

17.7% 0.25 ▲
2.08% −0.46 ▼

Discussion about misinformation
How often do people post about misinformation and foreign influence?

0.33% −0.06 ▼
MAY 24

0.39%
APR 24

0   0.5   1   1.5   2%

Foreign Influence

Measurement

We evaluate the threat of foreign influence through measuring Canadians' **concern** about foreign influence, and by evaluating the extent overt foreign influencers (China, Russia and India) are influencing the Canadian conversation.

Findings

50% of Canadians are concerned about foreign influence. Of all connections identified in our network, we observe that Indian accounts most strongly influenced Canadian ones with 1.15% of all incoming connections to the CIE being from overt Indian accounts. China followed with 0.54%, and Russia with just 0.26% of all connections. While Canadians believe foreign interference is being generally attempted, for this month we observe low overt information influence on the overall Canadian conversation.
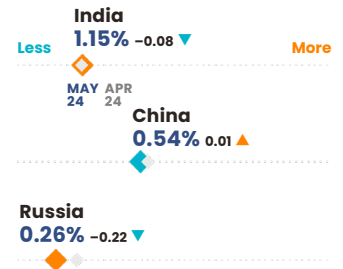
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Concern about foreign influence
How concerned are people about foreign influence?

MAY 24
49.6%
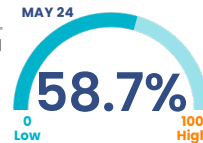0 Low — 100 High
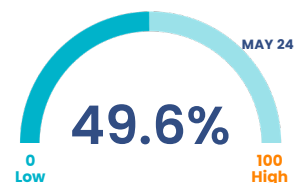
Directed foreign influence
To what extent are overt foreign influencers impacting the CIE?

Less — More

India 1.15% −0.08 ▼
MAY 24   APR 24

China 0.54% 0.01 ▲

Russia 0.26% −0.22 ▼

Artificial Intelligence

Concern about AI
How concerned are people about artificial intelligence?

MAY 24
58.7%
0 Low — 100 High

Measurement

We assess the threat of generative AI by measuring **concern** about AI generated content misleading the general public.

Findings

58.7% of Canadians feel that AI-generated content misleading the public is a serious problem.

Health of the Information Ecosystem
STATE OF ENGAGEMENT WITH NEWS & POLITICS

We report on the state of engagement with news and politics to provide insight into social media preferences and behaviours for news and politics consumption and dialogue. We evaluate **news** by looking at news seeking and sharing to capture the appetite for news, regional preferences for news consumption, and engagement in political online conversation. Second, we characterize engagement with **news outlets**, by assessing inequality, top outlets and platform preferences to identify dominant news sources and the main mechanism for engagement. Finally, we examine online engagement with politicians by looking at relative engagement with party leaders and **politicians**, as well platform preferences. We do so to identify where most of the political discussion takes place (on which platform) and who leads this conversation. In a healthy ecosystem, we would expect to see a high level of news seeking, across a variety of sources, and the free flow of ideas and commentary on the political and media landscape.
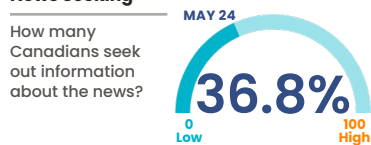
News

Measurement

We evaluate engagement with news using six indicators: 1) **news seeking** (the extent Canadians seek out news); 2) **news sharing** (the frequency of sharing news and opinions on social media); and 3-6) **news consumption types** (the extent Canadians consume news from social media, local, national and international news outlets.)
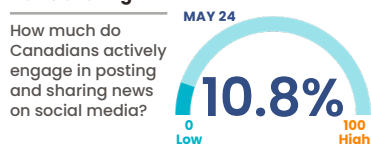
News Seeking
How many Canadians seek out information about the news?

MAY 24
36.8%
0 Low — 100 High

News Sharing
How much do Canadians actively engage in posting and sharing news on social media?

MAY 24
10.8%
0 Low — 100 High

Findings

We observe that 36.8% of Canadians search for news and 10.8% share news and their political views at least once a week. Local news (45.4) is the most reported source for Canadians to receive information, followed by social media (39.6%), national (39.1%), and international news sources (30%). Less than half of Canadians are attentive to political information, and fewer than a quarter engage in the online political conversation.

News Consumption
Where do Canadians get their news?

Local News 45.4%
MAY 24

Social Media 39.6%

National News 39.1%

International News 30%

0 Low — 100 High

News Outlets

Measurement

We evaluate four characteristics of Canadian news outlets: 1) **inequality** of engagement with Canadian news outlets; 2) **top outlets** (the scale and nature of engagement with Canadian news outlets); 3) **national versus local news engagement** (preference for local versus national news providers); and 4) **social media platform usage** trends by Canadian news outlets.

Findings

Engagement with Canadian news outlets is more unequal than the overall ecosystem with a gini coefficient of 0.955. We find the top-5 Canadian outlets that attract the most engagement are CTV, Global News, CBC, The Post Millennial, and Rebel News. Collectively they receive 64.9% of all engagement with news content. Local news outlets received just 24.6% of all engagement with news content. Overall, TikTok was the platform where the most engagement with news outlets occurred (45.6%) followed by Twitter/X (27.9%). Engagement with the ecosystem is heavily biased with Canadians tending to engage with a small number of outlets on TikTok and Twitter/X. Local news outlets, despite being a preferred destination for many Canadians and being much more numerous than national ones, do not receive nearly as much attention.
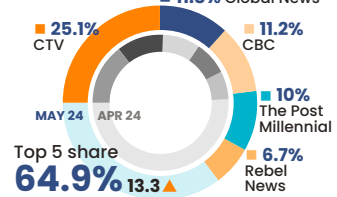
Inequality of news outlets

How skewed is the CIE to a small number of news outlets?

MAY 24
APR 24
0.955
0 Low   **0.008** ▲   1 High
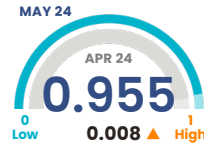
Top-5 Canadian news outlets

What are the top 5 Canadian news outlets? What is their share of total engagement?

- ■ 11.8% Global News
- ■ 11.2% CBC
- ■ 10% The Post Millennial
- ■ 6.7% Rebel News
- ■ 25.1% CTV

MAY 24   APR 24

Top 5 share
64.9% 13.3 ▲

National vs. local news engagement

How skewed is preference for national versus local news?

National news	Local news
75.4% 2.3 ▲	**24.6%** −2.3 ▼

MAY 24
APR 24
0   25   50   75   100
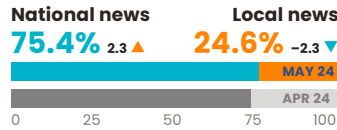
Social media platform usage

Which social media platforms are most popular for news?

- ■ 45.6% TikTok
- ■ 27.9% Twitter/X
- ■ 12.4% YouTube
- ■ 10.5% Facebook
- ■ 3.7% Instagram

APR 24   MAY 24
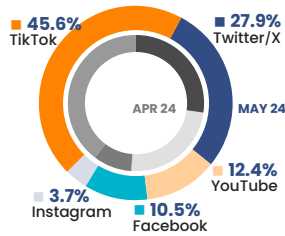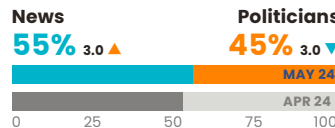
Politicians

Measurement

We evaluate the role and characteristics of politicians in the information ecosystem using four measures: 1) the **top social media platforms** for engagement with Canadian politicians; 2) political engagement on social media (**engagement with Canadian federal party leaders and elected party families**); and 3) **politicians versus news engagement** (comparing engagement between politicians and news outlets).

Findings

Politicians received the most engagement on Twitter/X (28%) followed by Facebook (27.15%) and Instagram (24.3%). Last month, Facebook was more popular than Twitter/X (35.2%, 32.4%). TikTok engagement rose this month (2 to 17%). Despite few Canadian politicians active on TikTok, several viral posts increased the platform's popularity. Pierre Poillievre, the leader of the Conservative Party of Canada (67.9% of all leader engagement) and members of Conservative parties in Canada (41.9% of all non-leader politician engagement) receive significantly more engagement than other elected party leaders and members. Engagement with news outlets (55%) is slightly higher than engagement with politicians.
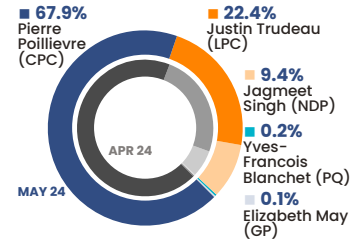
Politicians vs. news engagement

How skewed is engagement with politicians versus news outlets?

News	Politicians
55% 3.0 ▲	**45%** 3.0 ▼

MAY 24
APR 24
0   25   50   75   100

Engagement with federal political party leadership

Which federal party leaders are most engaging with Canadians?

- ■ 67.9% Pierre Poillievre (CPC)
- ■ 22.4% Justin Trudeau (LPC)
- ■ 9.4% Jagmeet Singh (NDP)
- ■ 0.2% Yves-Francois Blanchet (PQ)
- ■ 0.1% Elizabeth May (GP)

APR 24
MAY 24

Engagement with elected party members

Which elected party members are most engaging with Canadians?

- ■ 41.9% Conservative
- ■ 39.7% NDP
- ■ 15.8% Liberal
- ■ 2% Bloc Québécois
- ■ 0.5% Green

APR 24
MAY 24
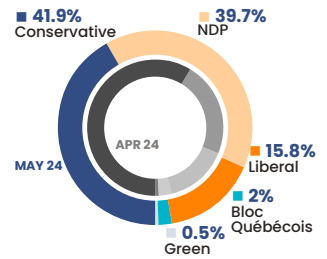
Top Social media platforms

Which social media platforms are most popular for Canadian politicians?

- ■ 28% Twitter/X
- ■ 27.2% Facebook
- ■ 24.3% Instagram
- ■ 3.4% YouTube
- ■ 17.1% TikTok

MAY 24
APR 24
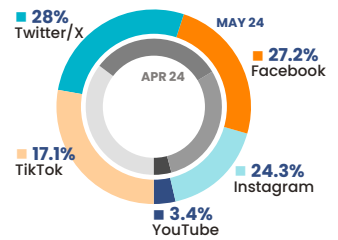
STORIES

Every month, we identify important true and false stories and claims, and include them in our survey to gauge public attentiveness and belief. These stories are mixed together without any indication provided that any could be fake. We also evaluate the emergence of these stories in the CIE by measuring how often they are mentioned online, by whom, and on what platform.

We depict the patterns of these stories and claims using violin plots. The 'violin' (the shape of the outline) indicates the distribution of engagement with each topic. The width of the plot is normalised against maximum engagement (when an story is being talked about the most) across the time period. A small violin indicates a burst of attention whereas a large violin indicates a longer drawn out conversation). Shapes depict different platforms (Facebook, Instagram, Twitter and YouTube). Colours are used to identify the type of source (influencer, media, and politician). Combined, this research provides insight into uptake levels of news stories and shows levels of misinformation across given news stories or events.
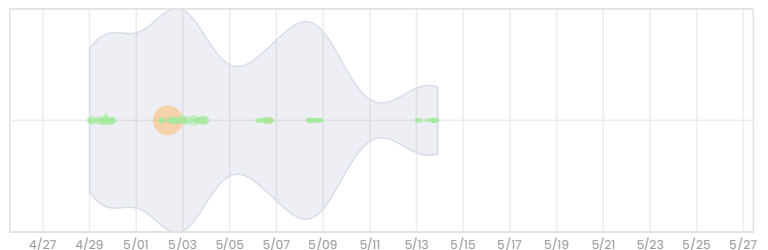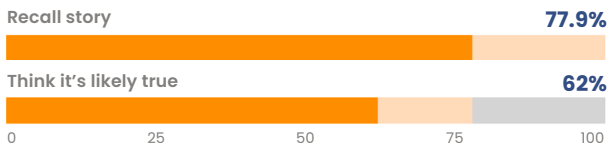
Violin plot

Width = % of peak engagement

Time →

- ● Influencer
- ● Media
- ● Politician
- ■ Facebook
- ● Instagram
- ▲ Twitter
- ◆ YouTube
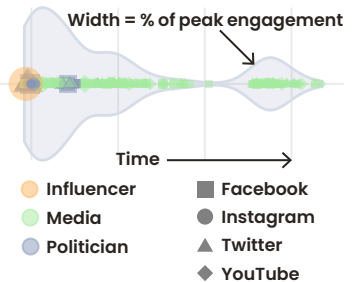
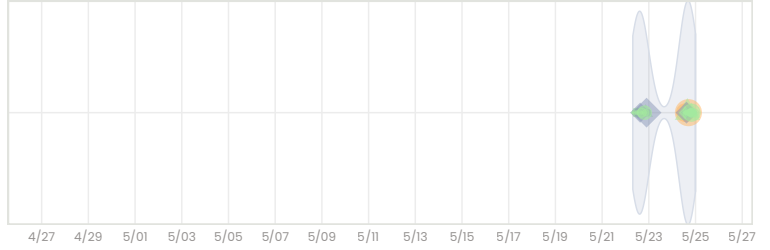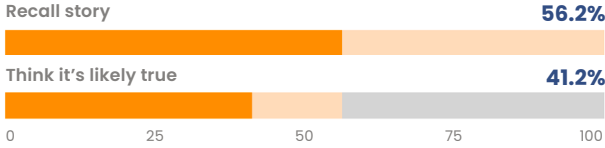**News story:**

Pro-Palestinian University Encampments

University campuses across Canada are dealing with pro-Palestinian tent encampments which student-led demonstrators say they won't leave until their demands are met.

Recall story   **77.9%**

Think it's likely true   **62%**

0   25   50   75   100

4/27   4/29   5/01   5/03   5/05   5/07   5/09   5/11   5/13   5/15   5/17   5/19   5/21   5/23   5/25   5/27

**News story:**

ICC Arrest Warrants, Israel

The International Criminal Court (ICC) sought arrest warrants for the Israeli Prime Minister and Defence Minister, accusing them of committing multiple offences since Israel declared war on Hamas in response to the Oct. 7 attacks.

Recall story	**56.2%**
Think it's likely true	**41.2%**

News story:

BC re-criminalizing hard drugs

The federal government is granting B.C.'s request to recriminalize hard drugs in public spaces, after the province asked to end its pilot project early over concerns of public drug use.

Recall story	**50%**
Think it's likely true	**42.5%**
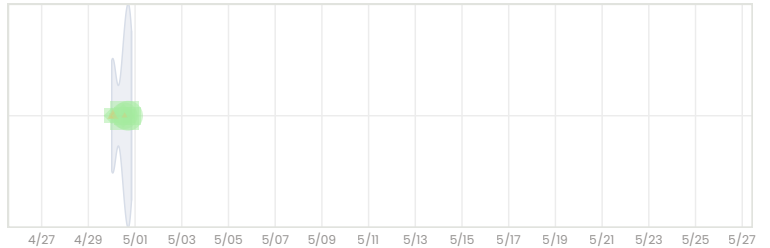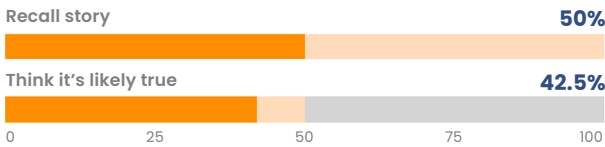
ABOUT THE RESEARCH

Data for this report includes 434,796 social media posts from 1,882 distinct entities with a total of 3,884 unique and active social handles for the period of April 27th to May 26th, 2024, and survey responses from 1496 Canadian adults conducted from May 29th to June 2nd using a commercial survey panel provider. The margin of error for a comparable probability-based random sample of the same size is +/-2.5%, 19 times out of 20. Engagement totals include engagement from Canadian and international audiences, which cannot be distinguished from each other.

For a link to our detailed methodology **click here**. To sign up for our month situation reports, **click here** . Please provide any comments you have on these reports to **info@cdmrn.ca**.

ABOUT THE CDMRN

The Canadian Digital Media Research Network (CDMRN) is a pioneering initiative committed to fortifying and fostering resilience within Canada's unique information ecosystem. Our mission is to understand the dynamics of information production, dissemination, and consumption across digital media with the goal of empowering Canadians to navigate the complexities of the modern digital age.