

Canada's "COVID-19 Referendum": Voting in the Federal Election of 2021

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Impacts of COVID Research Panel
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Early Call: Canada's Recent Federal Election History

- Canada's next federal election, its 45th, is expected to be held sometime between now and October 20th, 2025.
- Canada Elections Act specifies that a general election be held on a fixed date since May 2007, on the 3rd Monday of October in the 4th calendar year following the previous election.
- Even if called early in 2025, it would not come nearly as early as its 44th federal election held on September 20th, 2021.
- That federal election of 2021 was only two years after the on-cycle 43rd federal election on October 21st, 2019.

Early Call: “COVID Referendum” and Incumbent Victories

- Objective of early election call was the Liberal government’s perceived opportunity to **turn minority** government, from 2019, back **into a majority** for 2021, which they had gotten in 2015.
- Reasoning for early call was mostly based on their **response to the COVID-19 pandemic**, making this an unofficial referendum on their pandemic response. The first listed mandate on their election platform was “Finishing the Fight Against COVID-19”.
- But, it was also partly based on the **incumbent success rate** at the provincial level, from the onset of COVID-19 to the early federal election call, which was one hundred percent (5 of 5): New Brunswick (9/14/2020), British Columbia (10/19/2020), Saskatchewan (10/26/2020), Newfoundland and Labrador (3/25/2021), and the Yukon (4/12/2021).

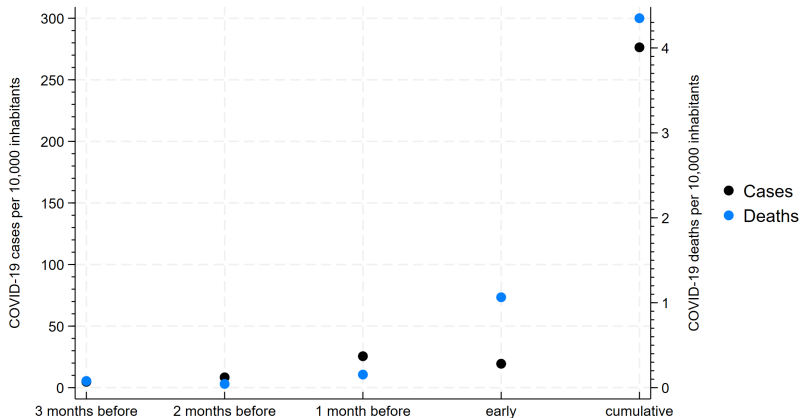
Early Call: Research Questions of Our Current Study

- Our **original goal** was to examine the impact of working from home, which greatly increased during COVID-19, on voting outcomes. We intended to simply cite the paper that already examined the impacts of COVID-19 on voting in order to do. Despite many COVID papers for Canada, **it didn't exist!**
- **Research Question #1:** How did COVID-19 influence voter behaviour and outcomes in Canada's 2021 federal election?
- **Research Question #2:** Was the Liberal Party correct in calling an early election in order to regain a majority?

Data: Sources for Health and Voting Data

- **Health Data:** COVID-19 Canada Open Data Working Group
 - Collected from national websites, like Public Health Agency of Canada, and provincial websites, in weekly surveillance reports.
 - Data are daily confirmed cases, deaths, hospitalizations, and vaccinations at the provincial level, along with daily confirmed cases and deaths at the within province health region level.
 - Daily cases and deaths were calculated based on changes from the previous day, which sometimes results in negative numbers.
 - Aggregated from daily to monthly in order to minimize the number of empty cells, especially for deaths.
 - Five forms of COVID severity: three months before, two months before, one month before, early, and cumulative.
- **Voting Data:** Elections Canada (more on this in Estimation)

Data: Five Forms of COVID Severity



Method: Harmonizing Data Across Different Borders

- The **main issue** in dealing with these two data sources together is that the health data are collected by health region and the voting data are collected by federal electoral district.
- Therefore, our **main contribution** is the harmonization of the data between health regions and electoral districts, which is done by weighting electoral districts within a health region.
- What follows are **four different examples** of how these borders look for: Canada, Alberta, the Edmonton–Wetaskiwin Electoral District, and the Lethbridge Health Region.

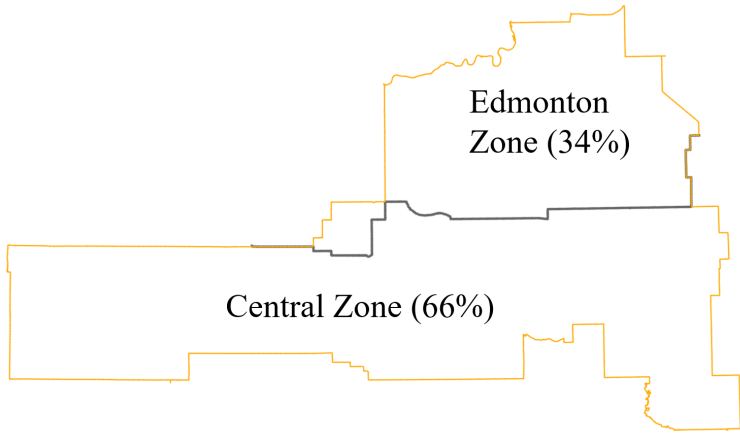
Method: Border Differences Within Canada



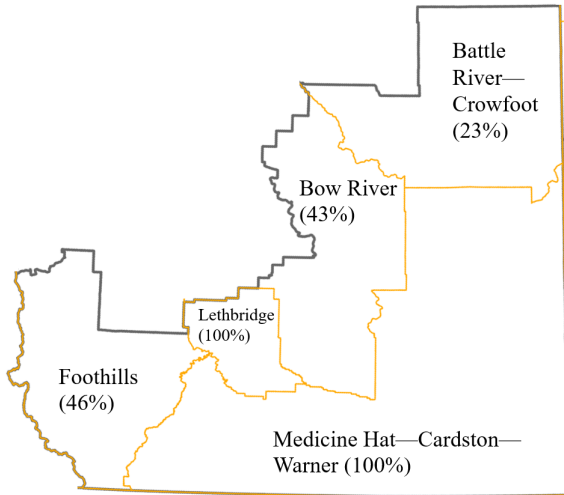
Method: Border Differences Within Alberta



Method: Edmonton–Wetaskiwin Electoral District



Method: Lethbridge Health Region

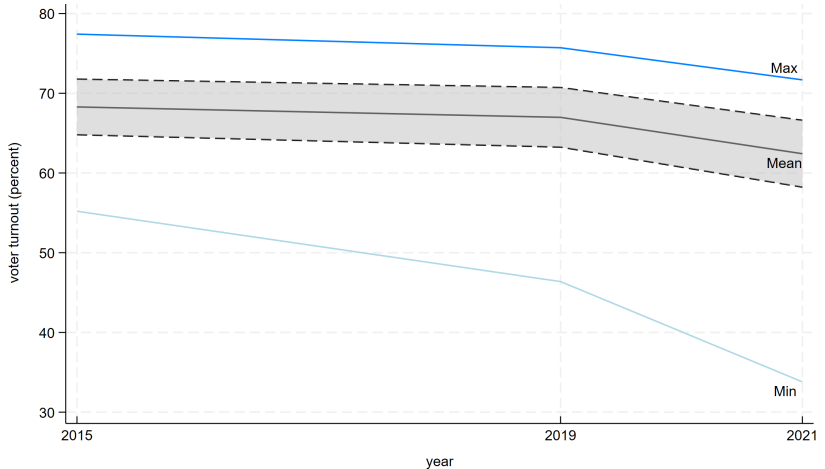


Estimation: Preferred Regression Specification

$$\Delta(VOTE_{2021-2019,h,p}) = \alpha + \beta \cdot \log(COVID_{h,p}) + \gamma_p + \Delta\varepsilon_{h,p}$$

- $\Delta(VOTE_{2021-2019,h,p})$ is the change in voting, in a health region h and province p , between the 2019 and 2021 elections.
- $\log(COVID_{h,p})$ is the natural log of COVID-19 severity, using confirmed cases or deaths, under a previous time horizon.
- γ_p are provincial fixed effects included to pick up provincial differences, such as in COVID protocols or political culture.
- Voting outcomes are examined in three ways: in Voter Turnout, in Party Vote Shares, for Party Dominant Regions.

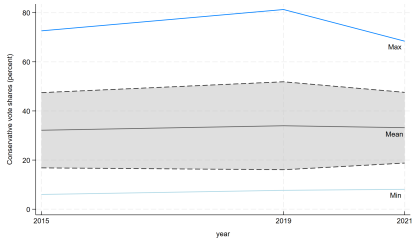
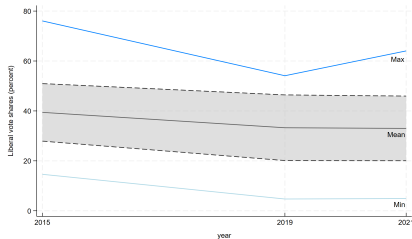
Voter Turnout: Federal Turnout Decreased Since 2015



Voter Turnout: COVID Severity Decreases Turnout

- Statistically significant and negative relationship between local COVID severity and voter turnout. This was likely anticipated.
- A ten percent increase in COVID severity is associated with a 3.9 to 8.9 percentage point decrease in voter turnout, with COVID deaths one month out having the largest magnitude.
- This is supported by data from the Canadian Election Study (CES). Almost 12 percent of people were uncomfortable voting in person during the pandemic. People were also 2 percent more likely to vote if they did feel comfortable with it.

Party Vote Shares: Liberal and Conservative Vote Shares



Party Vote Shares: COVID Severity Favours Liberals

- Local COVID severity is also associated with a higher vote share for Liberals and a lower vote share for Conservatives.
- A ten percent increase in COVID severity is associated with a 3.5 to 4.3 percentage point increase in the Liberal share and a 3.6 to 4.5 percentage point decrease in the Conservative share.
- COVID severity had no statistically significant effect on smaller party shares (New Democratic Party, Bloc Québécois, etc.).
- This points to the Liberals being correct to call an election two years early in the midst of the COVID pandemic. However, ...

Party Dominant Regions: Turnout and Party Together

- The final analysis is an attempt to mix the previous two outcomes of voter turnout and party vote shares together.
- We construct Liberal Dominant and Conservative Dominant Regions based on having a share difference greater than 15 percentage points and compare them to Neutral Regions.
- Conservative Dominant Regions increased voter turnout by 0.9 to 1.2 percentage points more relative to Neutral Regions, while Liberal Regions decreased by 1.5 percentage points more.
- This could be interpreted as the blind spot that wouldn't have been obvious. But, this does not necessarily mean that only Conservatives turned out more in those Conservative regions.

Marchand & Wang (2024): Summary of Our Evidence

- Our evidence summarized in three parts:
 - **Voter Turnout:** COVID severity associated with decreased turnout; supported by CES findings of mild discomfort with in person voting during pandemic.
 - **Party Vote Shares:** COVID severity associated with increased Liberal support and decreased Conservative support, with no statistical significance among other parties.
 - **Party Dominant Regions:** Conservative dominant regions associated with increased turnout, while Liberal dominance associated with decreased turnout.
- Although it could have been **anticipated** that turnout would be lower due to the pandemic, and the **assumption** that COVID would translate into more Liberal support was correct, it may have been **difficult to predict** that voters in Conservative areas would increase turnout, while Liberal areas turned out less.



Marchand, J., Wang, Y. 2024. Canada's "COVID-19 Referendum": Voting in the Federal Election of 2021.

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