

## At-a-glance

# Systematic news media scanning and synthesis: creating a dataset of emergent initiatives and localized responses to public washroom provision in Canada during the COVID-19 pandemic

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## Abstract

News media are an underused source of localized information on complex and structural public health issues that are neglected in policy and unaccounted for in mainstream data collection. We applied systematic review search methods to online news media and developed a dataset highlighting municipal reactions and initiatives in response to public washroom pressures during the first year of the COVID-19 pandemic. Reliance on consumer-based models of washroom access “became news” amid the closures and lockdowns. Our results showed that many municipalities were grappling with the issue, but overwhelmingly responding with temporary and pandemic-specific measures that did not address the needs of marginalized groups.

**Keywords:** *toilets, washrooms, COVID-19, news, media, Canada, public health, equity*

## Introduction

News media are an opportune source of localized information. Embedded in the community context, local news can serve as a forum for public and community leaders, as well as a source of evidence for local decision making and collective action.<sup>1,2</sup> Monitoring local newspapers is an established form of public health surveillance, especially in times of crisis<sup>3</sup>; however, news scanning is less established for detecting complex or structural community health issues across broad geographies. For issues that remain neglected in policy, and that are unaccounted for in mainstream data collection efforts, systematic news media scanning offers an alternative way to connect the disconnected.<sup>4</sup> Indeed, “many issues of structural inequality are problems of scale, and they can seem anecdotal until they are viewed as a whole.”<sup>4,p.98</sup>

Public washrooms are an example of neglected, yet critical, public health

infrastructures that are individualized and decontextualized from the needs and experiences of the people that use them, the role they play in public health and the consequences of their absence, resulting in gaps in provision that are not addressed in research or policy and are largely absent in public discourse.<sup>5-7</sup> Public washrooms play an integral role in peoples’ health, through broad mechanisms of health promotion, health protection and health equity.<sup>7</sup> Public washrooms influence the accessibility and inclusivity of public outdoor spaces, people’s modes of travel and transportation, social gatherings, work away from home, physical activity, recreation and play.<sup>8-11</sup>

Historically, public washrooms were introduced into the urban landscape in response to the sanitation problems of the industrial age. Part of what is known as the “great sanitation awakening,” the appearance of public washrooms greatly curtailed street filth and were instrumental in preventing the spread of disease.<sup>12,13</sup>

## Highlights

- Systematic news media scanning offers a different way to connect the disconnected for issues neglected in policy and unaccounted for in mainstream data collection.
- Public washrooms are critical public health infrastructure, yet they are scarce and there is little data on their provision.
- We adapted systematic review search methods to online news media to capture municipal responses to public washroom pressures during the first year of the pandemic.
- The resulting dataset showed that 33 unique municipalities across all provinces were represented in news coverage; responses to public washroom pressures were overwhelmingly temporary, pandemic-specific and lacked consideration for needs of diverse user groups.

Despite these benefits, public washroom provision has steadily receded in recent decades.<sup>14,15</sup> In Canada, public washroom provision is left to individual municipalities and hinges upon a public-private model.<sup>16</sup> In other words, municipalities rely on “publicly available” washrooms located in commercial sites where people must purchase goods to gain access.<sup>17</sup> Having to “pay to pee” introduces layers of gatekeeping to washroom access and disproportionately affects people experiencing poverty or homelessness, as well as causing other forms of stigma and

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exclusion.<sup>18</sup> As feminist geographer Joni Seagar lamented, “what gets counted counts;”<sup>19</sup> the lack of data on the availability and distribution of public washrooms remains a fundamental challenge for addressing inadequate provision. There is no centralized Canadian database for public washroom strategies, despite several crowdsourcing efforts to map locations and hours of operation.<sup>20-22</sup>

In the early stages of the COVID-19 pandemic, amid closures of private and retail spaces, as well as closures of public buildings housing washrooms available to the public (e.g. libraries, municipal buildings, transit terminals, etc.), pressure for public washroom provision was amplified. Thus, public washrooms “became news,”<sup>23,24</sup> which underlies our motivation for using an approach that highlights and synthesizes action-specific content about public washroom news coverage. In this At-a-glance article, we detail how we applied systematic review search methods to Canadian online news media to develop a dataset highlighting municipal reactions to the sudden and drastic reduction of public washroom availability and their initiatives in response.

Our objectives were both methodological and issue specific. We identified searchable online news databases, outlined a rigorous search strategy adapted from academic literature synthesis methods and compiled results into a functional dataset, demonstrating the process and establishing the feasibility of systematic news media scanning and synthesis. This article offers a documentation of public washroom provision efforts across Canada within the first year of the pandemic, thereby providing local decision makers and public washroom advocates with an overview of the actions taken in other jurisdictions and across Canada.

## Methods

We applied systematic review search methods to news media outputs<sup>25</sup> (Figure 1). Data were collected between March 2020 and March 2021 from several computerized news databases. News articles across databases were pooled and deduplicated. We independently screened titles and full-text articles, and then extracted

qualitative details about changes to public washrooms.

## Results

### *Description of news records*

Our search resulted in an initial sample of 2862 news outputs and a final sample of 170 news pieces (Figure 1), including 149 news articles (88%), 24 opinion pieces and editorials (14%), and three letters to the editor (3%). Articles came from all provinces and no territories, with the most from British Columbia (27%) and Ontario (41%). Sixty Canadian municipalities are represented in these data.

Most articles (70/170) focussed on alerting the public to an unreliable and changing landscape of public washroom availability by providing the dates and locations of public washroom closures and openings, as well as the cleaning and sanitation schedules. Some such announcements were included secondarily, alongside closure or opening announcements of other public amenities (e.g. parks).

### *Development of the dataset*

Of the 170 articles discussing public washrooms during the first year of the pandemic, 100 discussed new funding or new interventions across 33 unique municipalities, plus BC overall (Table 1). The scale and target of funding varied across announcements and locales. Investments included the re-allocation of operating budgets or the securing of pandemic-related emergency funding; however, most of these investments were geared towards temporary needs and solutions in response to pandemic conditions (e.g. closures of other facilities, need for greater sanitation).

There was a mix of initiatives, including extending opening hours of charitable organizations; taking over otherwise closed municipally owned buildings to increase toilet access; winterizing previously seasonally operated municipal washroom facilities; recruiting private businesses and corporations to provide washrooms for specific customer groups; and halting bylaw enforcement of fines for urinating or defecating in public. Most initiatives involved the introduction of porta-potties

or temporary toilet trailers and sanitation stations to specific locations (i.e. at truck stops, at trail heads, on transportation routes for drivers, or in downtown areas for people experiencing homelessness). Several articles also described the spread of porta-potty installations across large cities, including Vancouver, Toronto, Ottawa and Montréal. Five articles described permanent changes to the public washroom landscape.

We found evidence of community involvement advocating for improvements to public washroom provision alongside the coverage of investments and initiatives. For example, graduate students from McMaster University (Hamilton, Ontario) researched the issue and presented to the City’s Emergency and Community Services Committee on the feasibility of all-season public washrooms.<sup>26</sup> Another example of evolved community involvement included the GottaGo! campaign (Ottawa, Ontario),<sup>27</sup> which described letter writing strategies aimed at drawing attention to the need for stand-alone public washrooms in strategic locations. These efforts were connected to the shortlisting of two self-cleaning toilets among projects suitable for short-term federal and provincial COVID-19 funding. We discovered a pop-up toilet project, “Places to Go,” (Winnipeg, Manitoba)<sup>28</sup> from 2018; Winnipeg was the only city in which we found mention of permanent infrastructure being explicitly developed for people experiencing homelessness.

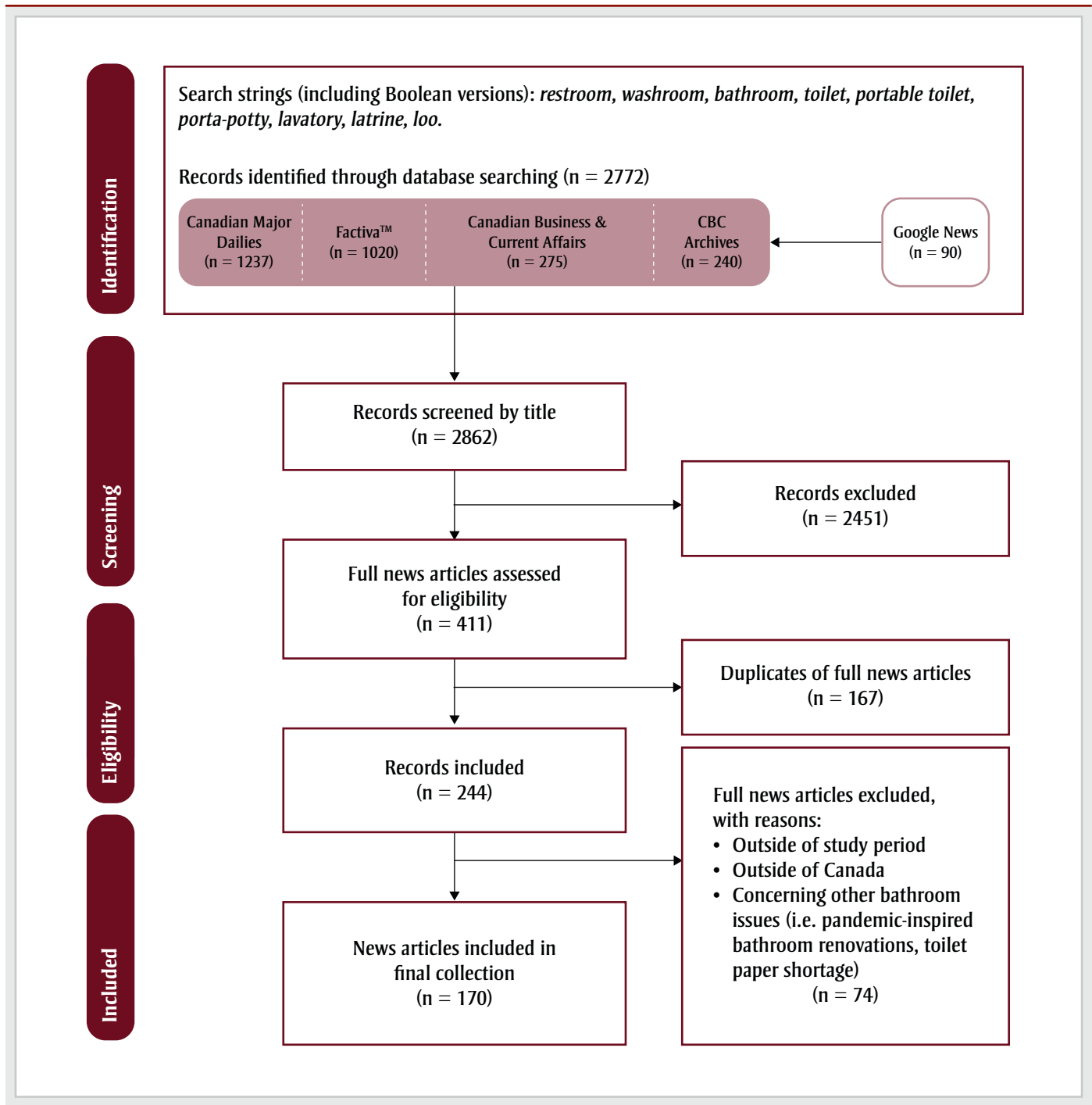
## Discussion

We leveraged local news media to learn about localized and emergent responses to the issue of public washrooms across Canada during the first year of the COVID-19 pandemic. This analysis offers important baseline data necessary for further exploring this issue, as no central database currently exists,\* nor are we aware of other research that pulls together and compares efforts across Canada.

Our approach highlighted the responses and strategies of a range of Canadian cities, including enough mid-sized and smaller cities to enable like-size, like-budget jurisdictional comparisons.<sup>29</sup> We found many municipalities grappling with this issue, but responses were overwhelmingly

\* Examples of data repositories for other types of public health infrastructure include: Muniscope (<https://www.muniscope.ca/>); CityShare Canada (<https://citysharecanada.ca/>); Open Data Portals (<https://open.canada.ca/en/open-data>); GeoHub (<https://geohub.lio.gov.on.ca/>); Municipal Affairs and Housing (<https://www.ontario.ca/page/ministry-municipal-affairs-housing>); MunicipalWorld—Associations of Municipal Clerks and Treasurers (<https://www.municipalworld.com/>)

**FIGURE 1**  
Diagram<sup>a</sup> of screening process and selection of news pieces related to public washrooms, Canada, March 2020 to March 2021



<sup>a</sup> PRISMA diagram adapted from Moher et al., 2009.<sup>25</sup>

temporary and pandemic-specific. We found minimal action towards supporting the needs of diverse user groups. In addition, we discovered that another potential form of “data” to be gleaned from news is the names of advocates working for change in other locales. This data subset could be of help in the development of sharing networks and coalition building for broadening

community organizing efforts. It is through the delocalization of each municipality’s struggle with public washrooms that we recognize larger patterns of neglect, and that the status quo model of provision can be challenged. Our study demonstrates the process and feasibility of systematic news media scanning and synthesis, thus offering a methodological contribution to

public health, albeit one that requires further development.

### **Strengths and limitations**

While offering valuable insight into structural public health issues, news media data are incomplete. News is subjective and biased, reflecting the political orientations

**TABLE 1**  
Investments and initiatives in public washrooms by location (city, province) as indicated in news piece, March 2020 to March 2021

Location	Demographics <sup>a</sup>	Investment/initiative
Unspecified locations, BC	N/A	<ul style="list-style-type: none"> <li>• 35 portable toilets along major transport routes in BC</li> <li>• 20 portable toilets installed at commercial pull-outs and inspection stations</li> <li>• Maintenance company installed a number of portable washrooms in the Kootenays</li> </ul>
Campbell River, BC	Population: 32 588 Density: 225.7	<ul style="list-style-type: none"> <li>• Portable washroom placed near downtown firehall</li> </ul>
Castlegar, BC	Population: 8039 Density: 408.6	<ul style="list-style-type: none"> <li>• Columbia Basin Trust provided CAD 322 000 to help pay for washroom upgrade project</li> <li>• Millennium Park project: all-season washrooms, change rooms, outdoor showers, dedicated family and disabled accessible rooms</li> </ul>
Hope, BC	Population: 6181 Density: 151.0	<ul style="list-style-type: none"> <li>• Handicap-accessible portable toilets and hand wash stations in Memorial Park</li> </ul>
Kelowna, BC	Population: 127 380 Density: 601.3	<ul style="list-style-type: none"> <li>• Ribbons of Green Trails Society and Friends of Okanagan Rail Trail wrote letters to Regional District of North Okanagan to install year-round toilets</li> <li>• Permanent, architecturally interesting washroom to be constructed (2 universal stalls, dog water station, drinking fountain)</li> </ul>
Ladysmith, BC	Population: 8537 Density: 711.9	<ul style="list-style-type: none"> <li>• Nearby business initiated petition for removal of portable washroom; City Council voted to leave in place for 3 additional months</li> </ul>
New Westminster, BC	Population: 70 996 Density: 4543	<ul style="list-style-type: none"> <li>• Advocacy group initiated petition calling for more bathrooms</li> </ul>
Oliver, BC	Population: 4928 Density: 896.0	<ul style="list-style-type: none"> <li>• 3 portable toilets with hand washing stations installed downtown</li> </ul>
Osoyoos, BC	Population: 5085 Density: 598.2	<ul style="list-style-type: none"> <li>• Portable toilets placed at truck stops all along Highway 3; province announced more will be funded</li> <li>• Dairy Queen put up portable toilet</li> </ul>
Penticton, BC	Population: 33 761 Density: 801.8	<ul style="list-style-type: none"> <li>• Council pursuing CAD 400 000 grant for public washrooms along Riverside Drive (2 unisex facilities) and Gyro Park (5–6 accessible, unisex, winterized stalls)</li> </ul>
Prince Rupert, BC	Population: 12 220 Density: 184.4	<ul style="list-style-type: none"> <li>• Council pursuing CAD 200 000 funding for installation of 24-hour, stand-alone public washroom facility</li> </ul>
Quesnel, BC	Population: 9879 Density: 279.2	<ul style="list-style-type: none"> <li>• Partnership between City and Emergency Management BC: temporary washrooms in 2 city parks, serviced and cleaned daily, includes hand washing stations</li> </ul>
Sidney, BC	Population: 11 672 Density: 2290	<ul style="list-style-type: none"> <li>• Saanich Peninsula Chamber of Commerce request for funding from city councils to cover costs of cleaning washrooms on HWY 17</li> </ul>
Vancouver, BC	Population: 631 486 Density: 5492	<ul style="list-style-type: none"> <li>• Vancouver Park Board operates 97 public bathrooms in parks and beaches across the city (sanitized and cleaned twice-daily)</li> <li>• City of Vancouver operates 11 automated public toilets and two comfort stations underground, plus 3 temporary washroom trailers</li> <li>• Set up portable toilets</li> <li>• Temporary washroom facilities set up in Strathcona Park homeless encampment</li> </ul>
Vernon, BC	Population: 40 116 Density: 417.7	<ul style="list-style-type: none"> <li>• One portable washroom set up in downtown, open 24 hours on 3-month trial basis</li> <li>• Modest, architecturally interesting washroom being constructed on Okanagan Rail Trail (fully equipped, universal stalls)</li> </ul>
Whistler, BC	Population: 11 854 Density: 49.3	<ul style="list-style-type: none"> <li>• Public washroom project includes 28 new toilet and urinal stalls in Whistler Village (accessible, family, universal options at each location)</li> </ul>
Collingwood, ON	Population: 21 793 Density: 645.1	<ul style="list-style-type: none"> <li>• Extending hours at park washroom</li> </ul>
Gananoque, ON	Population: 5159 Density: 733.6	<ul style="list-style-type: none"> <li>• Reopening previously closed washrooms; hired students for extra hours/cost savings due to cleaning and longer opening hours</li> </ul>
Hamilton, ON	Population: 536 917 Density: 480.6	<ul style="list-style-type: none"> <li>• City previously provided 6 portable toilets (removed as businesses reopened)</li> <li>• City set up portable washrooms in the core</li> <li>• St. Patrick parish to offer hygiene and rest space in the back of the church</li> <li>• Bylaw officers not handing out fines for public urination or defecation</li> <li>• McMaster graduate students presented to Emergency and Community Services Committee on dire need for washrooms; council considering feasibility of all-season public washrooms</li> </ul>

Continued on the following page

**TABLE 1 (continued)**  
**Investments and initiatives in public washrooms by location (city, province) as indicated in news piece, March 2020 to March 2021**

Location	Demographics <sup>a</sup>	Investment/initiative
Kincardine, ON	Population: 11 389 Density: 21.2	<ul style="list-style-type: none"> <li>• Portable toilets set up at select beach access locations</li> </ul>
London, ON	Population: 383 822 Density: 913.1	<ul style="list-style-type: none"> <li>• City of London, downtown YMCA partnered to provide sanitation services to homeless</li> </ul>
Ottawa, ON	Population: 934 243 Density: 334.8	<ul style="list-style-type: none"> <li>• Installed a dozen temporary portable toilets</li> <li>• Rents and pays staff to clean porta-potties across the city</li> <li>• GottaGo! campaign wrote to mayor requesting stand-alone public toilets in strategic locations (parks, high pedestrian traffic locations)</li> <li>• Short-listed two self-cleaning toilets among projects suitable for short-term federal and provincial COVID-19 funding</li> </ul>
Quinte West, ON	Population: 43 577 Density: 88.2	<ul style="list-style-type: none"> <li>• Two porta-potties installed at park and splashpad</li> </ul>
Toronto, ON	Population: 2 731 571 Density: 4334.4	<ul style="list-style-type: none"> <li>• TTC to place portable toilets at locations previously decided in collaboration with TTC drivers</li> <li>• City has opened sanitation and washroom service locations across the city, ranging from portables to fully equipped locations</li> <li>• City announced 79 new winter washrooms, on top of existing 64: at parks, stadiums, fieldhouses, other City-run locations normally inaccessible in colder months</li> <li>• Washrooms provided at 47 outdoor rinks once season begins in late November</li> <li>• Durham region opened community centres and added portable facilities</li> </ul>
St. Catharines, ON	Population: 133 113 Density: 1384.8	<ul style="list-style-type: none"> <li>• Municipality looking into self-cleaning washrooms that could be open year-round (as part of capital budget process)</li> </ul>
Winnipeg, MB	Population: 705 244 Density: 1518.8	<ul style="list-style-type: none"> <li>• City has CAD 670 000 grant to build one more permanent 24/7 washroom in the downtown, following pop-up toilet project from years prior</li> <li>• Bridgman Collaborative Architecture donating land for installation of permanent toilet</li> <li>• Proposed pilot project: City will partner with businesses to keep washrooms open, accessible, clean</li> <li>• 7 temporary public washrooms being set up, to be followed by permanent sites, after adopting “Places to Go” downtown public restroom strategy</li> <li>• Millennium Library shelter, St. Boniface Library shelter to be open daily with washrooms, funded by City</li> </ul>
Calgary, AB	Population: 1 239 220 Density: 1501.1	<ul style="list-style-type: none"> <li>• CAD 4.5 million funding for parks in Calgary area, some of which will support work in Fish Creek (trail improvements, parking, washrooms, shelters)</li> </ul>
Edmonton, AB	Population: 932 546 Density: 1360.9	<ul style="list-style-type: none"> <li>• City worked with local social agency to provide attendants at some public toilets, boosted cleaning of unstaffed parks washrooms</li> </ul>
Montréal, QC	Population: 1 704 694 Density: 4662.1	<ul style="list-style-type: none"> <li>• 139 porta-potties installed in various boroughs</li> <li>• 4 self-cleaning toilets in downtown core (pre-pandemic)</li> <li>• Portable toilets provided at outdoor drive-in theatres, to be sanitized and cleaned after each use</li> </ul>
Halifax, NS	Population: 403 131 Density: 73.4	<ul style="list-style-type: none"> <li>• 2 portable washrooms installed in plaza behind Halifax Central Library</li> <li>• Added public toilets information to open data site</li> </ul>
Regina, SK	Population: 215 106 Density: 1195.2	<ul style="list-style-type: none"> <li>• Husky Convenience washrooms and shower facilities are staying open</li> <li>• Tim Hortons said 400 of its locations along major highways across Canada have washrooms available for truckers</li> </ul>
Saskatoon, SK	Population: 246 376 Density: 1080.0	<ul style="list-style-type: none"> <li>• AIDS Saskatoon opened washroom to public; Saskatoon Community Foundation has paid for regular cleaning</li> </ul>
Moncton, NB	Population: 71 889 Density: 506.5	<ul style="list-style-type: none"> <li>• Put out tender for CAD 300 000 to purchase 2 permanent, self-cleaning toilet units (unisex) for downtown</li> </ul>
Saint John, NB	Population: 67 575 Density: 213.9	<ul style="list-style-type: none"> <li>• CAD 100 000 for improvements and accessibility upgrades at public library</li> </ul>

**Abbreviations:** AB, Alberta; BC, British Columbia; CAD, Canadian dollars; MB, Manitoba; N/A, not available; NB, New Brunswick; NS, Nova Scotia; ON, Ontario; QC, Quebec; SK, Saskatchewan.

<sup>a</sup> Population counts and density per square kilometre; 2016 Statistics Canada Census Profile for municipalities.



of the particular journalist and news outlet. Practically, news databases are not as searchable or reliable as academic literature databases. In terms of implementation, news reporting may not reflect the intentions of the decision makers in the stories, and in our case, news scanning may not capture the full extent of efforts addressing public washroom provision. A limitation specific to our study was the exclusion of non-English articles. Canada is an officially bilingual country, and we did not capture news from smaller or exclusively French-speaking communities where there may have been different efforts to address the issue of public washrooms. This limited the scope of our dataset and findings.

## Conclusion

In creating a dataset drawn from news reports about public washrooms during the early stages of the COVID-19 pandemic, we were able to demonstrate the method of systematic news media scanning and synthesis, while bringing attention to the issue of public washrooms as being one of scale. News-generated datasets can prompt action on public health issues otherwise neglected in research and policy.

## Conflicts of interest

The authors declare no conflicts of interest with respect to the research, authorship or publication of this article.

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## Authors' contributions and statement

JL—conceptualization, methodology, analysis, writing—original draft. EM—conceptualization, analysis, writing—review and editing.

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