POLICE USE OF FORCE IN CANADA:
A REVIEW OF DATA, EXPERT OPINION, AND THE INTERNATIONAL RESEARCH LITERATURE

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PART A: INTRODUCTION

Police use of force has emerged as one of the most important and controversial issues facing the law enforcement community in North America. In the United States, high profile use of force incidents—including recent cases involving George Floyd, Philando Castille, Ataliana Jefferson, and Breonna Taylor—have served to increase tensions between racialized communities and the police and solidify perceptions that the police are racially biased (Joseph et al., 2003; Walker & Archbold, 2018; Walker et al., 2016). The negative impact of police violence on community cohesion can be profound. For example, over the past 30 years, specific incidents of police violence against Black civilians have sparked major urban riots in several American cities including Ferguson (Missouri), Miami (Florida), Cincinnati (Ohio), Los Angeles (California) and New York City (New York). Allegations of police brutality against racialized communities have also directly contributed to large-scale urban unrest in both France and England (Kawalerowicz & Biggs, 2015).

As in the United States and Europe, police use of force against Black, Indigenous and other racial minority civilians emerged as a social issue in Canada. Well publicized use of force cases––including recent cases involving Michael Elgin, Ozama Shaw, Tommy Barnett, Raymond Lawrence, Sammy Yatim, Pierre Coriolan, Jermaine Carby, Andrew Loku, Abdirahman Abdi, Olando Brown, Dafonte Miller, Sandy Alaku, Clive Mensah, Rodney Levi, Chantel Moore, Natanne Abraham, Patrick Everett, Jason Collins, Eishia Hudson, D'Andre Campbell and Ejaz Choudry—have led to community allegations of police discrimination, public demonstrations, urban unrest and the rise of the "Black Lives Matter" social movement.

In the Summer of 2020—following the death of George Floyd and the emerging global protest movement—the authors of this report were bombarded by the media with questions about police use of force in Canada: How often do the police use force against civilians in Canada? How often does police use of force result in civilian death? Has police use of force increased or decreased over the past two decades? How frequent are police shootings compared to other use of force options? Are the police in Canada more likely to use the force against Black, Indigenous and other racialized populations than against members of the White majority? Our responses to these questions were consistent: very little is known about police use of force in Canada.

Police use of force is a crucially important issue. It directly engages with issues of public safety and the safety of law enforcement officers. However, when done improperly, police use of force can cause the unnecessary death or serious injury of civilians, undermine public trust in the police, and compromise the legitimacy of the entire criminal justice system. Finally, police use of force can erode social cohesion and contribute to radicalization, riots and other social control issues. Unfortunately, despite its importance, police use of force has been subject to surprisingly little empirical research—especially in the Canadian context.

The following report attempts to address this gap. The authors of this report were retained by the Canadian Criminal Justice Association (CCJA) to examine police use of force in Canada. The project, funded by Public Safety Canada, addresses several important research questions:

1) How often do the police in Canada use physical force against civilians?

2) Is police use of force more common in some police jurisdictions than others?

3) Has use of force increased or decreased over the past ten years?

4) What regions of the country have witnessed the greatest declines in police use of force? What policies or practices contributed to these declines?

5) What are best practices with respect to police use of force? How can use of force be reduced while simultaneously ensuring public safety and the safety of police officers?

6) What is the state of Canadian research on police use of force? How can data collection and research on police use of force be improved?

This report attempts to address these important research questions using a multi-method approach. In the next section (Section B), we describe our research methodology and how we reached out to various Canadian police services, and civilian oversight agencies, for information about use of force practices. Section C provides an analysis of how Canadian police services collect data on use of force incidents. It also presents an analysis of the use of force statistics we were able to obtain. Section D presents the results of our qualitative interviews with Canadian police use of force experts. Section E provides a detailed review of the international literature on police use of force and police use of force options. This review includes evaluations of use of force training, policies and oversight mechanisms. In the final section of the report, we provide recommendations with respect to reducing police use of force in Canada. We highlight the need for a national, standardized data collection system. The establishment of such a system is needed to accurately examine national use of force trends and patterns and identify best practices that could reduce police use of force incidents.

PART B: PROJECT METHODOLOGY

As a result, the research team made the strategic decision to contact a large sample of Canadian police services and directly request information about the collection and dissemination of data on police use of force incidents. As part of this request, we asked whether we could gain access to each service's use of force data collection form, use of force dataset and any internal use of force reports. We also asked each to service to identify their own use of force experts in order to be interviewed about best use of force practices. A copy of the letter sent to each police service is provided in Figure 1. Approximately one month after the initial letter was sent, the research team re-contacted services that had not yet replied.

FIGURE 1:
DATA REQUEST TEMPLATE SENT TO POLICE LEADERS

Dear (Name of Police Chief or Civilian Oversight Official)

As you are aware, over the past decade there has been increased public and policy interest in police use of lethal and non-lethal force in Canada. To address this critical issue, the Canadian Criminal Justice Association (CCJA), in partnership with Public Safety and Emergency Planning Canada, have commissioned a research study by three eminent academics from the University of Toronto: Dr. Scot Wortley, Dr. Akwasi Owusu-Bempah and Mr. Erick Laming. The purpose of the study is to identify, through the research literature, data collection and consultations with Canadian police officials, best practices with respect to use of force policies, training, technologies and practices. The research team will seek to 1) Identify trends and patterns with respect to police use of force across Canada and 2) Identify police services with low use of force rates or a significant decline in use of force over the past decade.

As an initial step we are investigating how use of force incidents are documented by Canadian police services. As such we were hoping that you might be able to answer the following questions:

- How does your police service document use of force incidents? For example, does your service use a specific Use of Force form or data template to record information about use of force incidents? If yes—can our research team receive a copy of this form or template?
- Does your police service maintain a dataset documenting use of force incidents? If yes—how many years of data are captured by this dataset?
- What type of incident-level information is captured in your use of force data? For example, does your service collect information on the type of force used, the reason for using force, type of injury to civilians and/or officers, civilian weapons use, time and location of incident, officer rank or assignment, etc.?
- Does your police service collect information on the personal characteristics of civilians involved in use of force incidents (i.e., age, gender, race or ethnicity, mental health status, criminal history, etc.)?
- Does your service release use of force statistics to the public through annual reports, press releases or other means?

In addition to documenting how use of force information is collected, we are also interested in obtaining use of force data from police services across the country. If available to you, would you agree to share detailed data gathered over the past decade pertaining to lethal and non-lethal incidents by type of force used? As well, any other available information that might assist us in documenting patterns and trends in police use of force would be most helpful for our study.

We must stress that we are only interested in de-identified information. We have no interest in identifying individual civilians or police officers involved in use of force incidents. Although we would appreciate answers to the above questions in written or tabular form, we would also be interested in receiving a specific use of force dataset from your service. This would enable our own data analysis and perhaps reduce the burden on your personnel.

Finally, we are hoping that you might be able to identify members of your service who would be able to discuss emerging best practices with respect to police use of force. These individuals could include police leaders, training staff or any other member of the service with specialized knowledge.

We hope that this correspondence serves as an appropriate and effective introduction to what we hope you will agree is important and timely research in public policy. Please let us know if you have any questions or would like to talk to a member of our research team. Due to tight timelines, we hope to hear back from you by November 20th, 2020.

Please send your responses electronically to ccja-acjp@rogers.com or by hard copy to:

Canadian Criminal Justice Association,
101-320 Parkdale Ave.,
Ottawa, Ontario, K1Y 4CX9

Thank you in advance for your consideration and assistance.

Sincerely,

Irving Kulik
Executive Director
Canadian Criminal Justice Association

Our data request was sent to thirty-five different police services from across Canada.[1] These services included the largest police services in Canada, a range of medium and small municipal police services from different regions of the county, and a sample of Indigenous police services. A list of the services that we contacted for participation in the study is provided below:

Federal-level Police Agency:

    (1) Royal Canadian Mounted Police (RCMP)

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[1] The Akwesasne Mohawk Police Service were not part of the original survey. However, a use of force expert from the service was interviewed and those data are included in the qualitative data section. Akwesasne Police were not contacted and asked the specific data-related questions all other police services in our survey were.

Provincial-level Police Agencies:

    (2) Ontario Provincial Police (OPP)
    (3) Sûreté du Québec (SQ)
    (4) Royal Newfoundland Constabulary (RNC)

Municipal-level Police Agencies[2]:

    (5) Toronto Police Service (ON)
    (6) Service de Police de la Ville de Montréal / Montréal Police Service (QC)
    (7) Peel Regional Police Service (ON)
    (8) Calgary Police Service (AB)
    (9) York Regional Police (ON)
    (10) Ottawa Police Service (ON)
    (11) Edmonton Police Service (AB)
    (12) Winnipeg Police Service (MB)
    (13) Durham Regional Police Service (ON)
    (14) Vancouver Police Department (BC)
    (15) Halton Regional Police Service (ON)
    (16) Waterloo Regional Police Service (ON)
    (17) Service de Police de la Ville de Québec / Québec City Police Service (QC)
    (18) Hamilton Police Service (ON)
    (19) Niagara Regional Police Service (ON)
    (20) Service de Police de Laval / Laval Police Service (QC)
    (21) Regina Police Service (SK)
    (22) Halifax Regional Police Service (NS)
    (23) Fredericton Police Force (NB)
    (24) Charlottetown Police Service (PE)
    (25) Deep River Police Service (ON)
    (26) Altona Police Service (MB)
    (27) Stellarton Police Department (NS)
    (28) Kentville Police Service (NS)

Indigenous Police Services

    (29) Nishnawbe Aski Police Service (ON)
    (30) Blood Tribe Police Service (AB)
    (31) Kahnawake Mohawk Peacekeepers (QC)
    (32) Kativik Regional Police Force (QC)
    (33) Treaty Three Communities Police Service (ON)
    (34) File Hills First Nations (SK)
    (35) Akwesasne Mohawk Police Service (ON)

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[2] Provincial jurisdiction identified in parenthesis.

In addition to selected police services, we also contacted ten police oversight agencies with respect to their information on police use of force cases. These agencies are listed below:

1) Newfoundland and Labrador – Serious Incident Response Team of NL (SIRT-NL)
2) Nova Scotia – Serious Incident Response Team (SiRT)
3) Quebec – Bureau des enquêtes indépendantes (BEI)
4) Ontario – Special Investigations Unit (SIU)
5) Manitoba – Independent Investigations Unit (IIU)
6) Alberta – Alberta Serious Incident Response Team (ASIRT)
7) British Columbia – Independent Investigations Office (IIO BC)
8) Civilian Review and Complaints Commission for the RCMP (CRCC)
9) BC Ministry of Public Safety and Solicitor General
10) Ontario Ministry of the Solicitor General

Tables One and Two provide a summary of how each police service and civilian oversight agency responded to our data request. Tables Three and Four provide a summary of these responses. Overall, 25 of 35 police services that we contacted responded to our data request (71.4% of all services in the sample). However, only 19 services (54.3%) agreed to participate in the study (see Table 3). Only nine police services provided full answers to our data-related questions (25.7%). Another nine services (25.7%) answered some questions, but not others. Ten services (28.6% of the sample) provided us with the use of force forms or reports that officers must fill out following a use of force incident. However, only seven services (20.0%) provided us with a report that documented use of force statistics within their jurisdiction. No police service (0.0%) provided us with access to a use of force dataset that would have enabled our own analysis. It should be noted that five of the seven use of force statistical reports provided by police services were already publicly available. Only two services (5.7% of the sample) provided us with previously unreleased data. Finally, 14 police services (40.0% of the sample) provided us with the names of their own use of force experts that we could contact for interviews.

Responses from the police oversight entities were even less positive. While eight of the ten agencies (80.0%) responded to our request, only six (60.0%) indicated that they would participate in the study. Only two agencies (20.0%) answered our questions with respect to use of force-related data collection. Most indicated that the data-related questions in our request were not applicable to their agency and that they did not actually engage in data collection or dissemination activities. None of the civilian oversight agencies that we surveyed (0.0%) provided us with access to public or internal reports that provided statistics or other information on police use of force incidents under their jurisdiction. However, five agencies did provide the names of use of force experts within their organization that we could contact for interviews.

Overall, the research team was disappointed—but not necessarily surprised—with the low response rate to our data request. A number of different factors could have contributed to the low level of participation. First of all, the timelines for the current study were quite tight—especially for such an ambitious project. The project research agreement was not signed until late September 2020. Data request letters were not sent out to police services and civilian oversight agencies until mid-to-late October. We asked respondents to provide their response to our request by the third week in November 2020. This was the only way to ensure enough time to

complete our data analysis and prepare a report before the original March, 2021, project deadline. This may not have been enough time for some police services to compile the requested data. Indeed, several police services did not respond to our request until January or February 2021. Furthermore, other police services indicted that, although they would like to participate in the study, we would have to go through a lengthy internal research review process before access to sensitive data could be granted. Unfortunately, the timelines provided for the project could not accommodate such delays. In other words, a longer-term project may be needed to access a higher volume of use of force data, from a broader spectrum of Canadian police services.

We must also consider the possibility that some police officials declined to participate in this study because they were uncomfortable with our use of the term "police use of force" to describe our study objectives. The following 2015 correspondence—sent by former Ottawa Police Chief Charles Bordeleau, to Yasir Naqvi, Ontario's Minister of Community Safety and Corrections—illustrates the policing community's apparent discomfort with "use of force" terminology:

> The fact is that all Canadian officers need to make good decisions often when seconds count. Frequently the information they have is incomplete and they are increasingly operating in a hostile, chain reacting environment in which the consequences really matter. And while the Use of Force Model is an excellent part of a broader system that allows officers to function in challenging surroundings, great strides could be achieved by simply changing the name to something more appropriate. "Police Intervention Model" and "Public Protection Model" are among those titles which could permit this 'book' to be more appropriately judged by its cover. Five hundred years ago Shakespeare penned: *What's in a name?* I believe this poetic question is valid today with respect to our Use of Force Model. This ill named label has for decades fueled erroneous assumptions and there are compelling reasons to contemplate change. I propose not just a simple rebrand, but a symbolic representation that modern officers are trained to use appropriate judgment, sensitivity and de-escalation to minimize injury and the need for force.

Reflecting Chief Bordeleau's concerns, a number of police services have begun a rebranding process that recasts "use of force" incidents as "police interventions." For example, a recent RCMP report that documents RCMP use of force incidents, including police shootings and Conducted Energy Weapon use, is titled the *2010 to 2019 Police Interventions Options Report* (see https://www.rcmp-grc.gc.ca/transparenc/police-info-policieres/intervention/2010-2019-eng.htm).

It is possible, however, that even with a longer study period, and a rebranding of the study from police use of force to police interventions, many police services would still not volunteer data for an academic study on police use of force. After all, although police use of force has been a controversial issue in Canada since at least the 1960s, there has never been a major, national level, use of force study conducted in Canada. This itself, in our opinion, provides strong historical evidence that many police officials, and police unions, do not want to collect and publicly disseminate detailed information about use of force incidents. Perhaps officials are worried that such data will be "misinterpreted" or used by the media to criticize police

operations. Others may be worried that a comparative analysis would make their service look worse than other law enforcement agencies. As discussed in the literature review (Section E), police services have often viewed law enforcement data as a proprietary issue. For many police officials, data is intelligence. It should only be shared when it promotes policing interests and withheld when it could potentially cause harm to law enforcement's reputation.

Thus, we must acknowledge that in Canada, law enforcement's traditionally conservative, risk adverse approach to data collection and dissemination has significantly impeded Canadian research on use of force. This study is no exception. It is quite possible that high quality use of force data, as well as data on other sensitive policing issues, will never be widely released to academics and the general public, unless police services are compelled to do so by government legislation. Nonetheless, in the next section we provide an analysis of the important, if somewhat limited, use of force we were able to obtain.

TABLE 1: Summary of Data Requests and Responses from Canadian Police Services

Police Service	Responded To Project Request (Y/N)	Agreed to Participate in Study (Y/N)	Answered Data-related Questions	Provided Sample of Use of Force Form	Provided Access to Use of Force Data Report	Provided Access to Internally Produced Use of Force Reports	Provided Access to Raw Use of Force Data for Analysis	Recommended Use of Force Experts for Interviews	Interviews Conducted With Service Members
RCMP	Y	Y	ALL	Y	Y	N	N	Y	Y
Ontario Provincial Police	N	N	NONE	N*	N	N	N	N	N
Sûreté du Québec	Y	N	NONE	N	N	N	N	N	N
Royal Newfoundland Constabulary	Y	Y	MOST	Y	Y	N	N	N	Y
Toronto Police Service	N	N	NONE	N*	N	N	N	Y	Y
Service de police de la Ville de Montréal	Y	Y	SOME	Y	N	N	N	Y	Y
Peel Regional Police	Y	Y	SOME	N*	N	N	N	N	Y
Calgary Police Service	Y	Y	SOME	N	Y	N	N	Y	Y
York Regional Police	Y	Y	ALL	Y*	Y	N	N	N	N
Ottawa Police Service	Y	Y	ALL	N	Y	N	N	Y	N
Edmonton Police Service	Y	Y	SOME	N	N	N	N	Y	Y
Winnipeg Police Service	Y	Y	SOME	Y	Y	N	N	N	N
Durham Regional Police Service	N	N	NONE	N*	N	N	N	N	N
Vancouver Police Department	Y	N	NONE	N	N	N	N	N	N
Halton Regional Police Service	N	N	NONE	N*	N	N	N	N	N
Waterloo Regional Police Service	Y	Y	ALL	Y*	Y	N	N	N	N
Service de police de la Ville de Québec	Y	N	NONE	N	N	N	N	N	N
Hamilton Police Service	N	N	NONE	N*	N	N	N	N	N
Niagara Regional Police Service	Y	N	NONE	N*	N	N	N	N	N
Service de police de la Ville de Laval	Y	N	NONE	N	N	N	N	N	N
Regina Police Service	Y	Y	ALL	N	N	N	N	Y	Y
Halifax Regional Police	Y	N	NONE	N	N	N	N	N	N
Fredericton Police Force	Y	Y	ALL	Y	N	N	N	Y	N
Charlottetown Police Service	Y	Y	ALL	Y	N	N	N	Y	Y
Deep River Police Service	Y	Y	SOME	N*	N	N	N	N	N

TABLE 1 (Continued): Summary of Data Requests and Responses from Canadian Police Services

Police Service	Responded To Project Request (Y/N)	Agreed to Participate in Study (Y/N)	Answered Data-related Questions	Provided Sample of Use of Force Form	Provided Access to Use of Force Data Report	Provided Access to Internally Produced Use of Force Reports	Provided Access to Raw Use of Force Data for Analysis	Recommended Use of Force Experts for Interviews	Interviews Conducted With Service Members
Altona Police Service	Y	Y	ALL	Y	N	N	N	Y	Y
Stellarton Police Department	N	N	NONE	N	N	N	N	N	N
Kentville Police Service	Y	Y	SOME	N	N	N	N	N	N
Nishnawbe Aski Police Service	N	N	NONE	N	N	N	N	Y	Y
Blood Tribe Police Service	N	N	NONE	N	N	N	N	Y	Y
Kahnawake Peacekeepers	N	N	NONE	N	N	N	N	Y	Y
Kativik Regional Police Force	Y	Y	ALL	Y	N	N	N	N	N
Treaty Three Police Service	Y	Y	NONE	N	N	N	N	N	N
File Hills First Nations Police Service	Y	Y	SOME	Y	N	N	N	Y	Y
Akwesasne Mohawk Police Service	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Y

*The use of force form in Ontario is publicly accessible and can be found here:
http://www.forms.ssb.gov.on.ca/mbs/ssb/forms/ssbforms.nsf/AttachDownloadV2?openagent&TM=2_54_41_PM&ENV=ODAE&NO=008-0270E&SEQ=1&VER=1

TABLE 2: Summary of Data Requests and Responses from Canadian Police Oversight Agencies

Police Service	Responded To Project Request (Y/N)	Agreed to Participate in Study (Y/N)	Answered Data-related Questions	Provided Sample of Use of Force Form	Provided Access to Use of Force Data Report	Provided Access to Internally Produced Use of Force Reports	Provided Access to Raw Use of Force Data for Analysis	Recommended Use of Force Experts for Interviews	Interviews Conducted With Service Members
Nova Scotia Serious Incident Response Team	Y	N	N/A	N/A	N/A	N/A	N	N	N
Special Investigations Unit [Ontario]	Y	Y	N/A	N/A	N/A	N/A	N	Y	Y
Independent Investigations Office of British Columbia	Y	Y	N/A	N/A	N/A	N/A	N	Y	Y
Bureau des enquêtes indépendantes	Y	Y	N/A	N/A	N/A	N/A	N	N	N
Alberta Serious Incident Response Team	Y	Y	N/A	N/A	N/A	N/A	N	Y	Y
Independent Investigations Unit [Manitoba]	N	N	N/A	N/A	N/A	N/A	N	N	N
Serious Incident Response Team of Newfoundland and Labrador	N	N	N/A	N/A	N/A	N/A	N	N	N
Civilian Review and Complaints Commission for the RCMP	Y	Y	N/A	N/A	N/A	N/A	N	Y	Y
BC Ministry of Public Safety and Solicitor General	Y	Y	ALL	Y	N	N	N	Y	Y
Ontario Ministry of the Solicitor General	Y	N	ALL	Y	N	N	N	N	N

TABLE 3:
Summary of Police Service Responses to The Project's
Use of Force Information Request

POLICE RESPONSE	NUMBER	PERCENT
Responded to study request.	25	71.4%
Agreed to participate in study.	19	54.3%
Answered all data-related questions.	9	25.7%
Answered some data-related questions.	9	25.7%
Did not answer data-related questions.	17	48.6%
Provided use of force report forms.	10	28.6%
Provided use of force data report.	8	22.9%
Provided raw use of force data for analysis.	0	0.0%
Provided use of force expert to be interviewed.	14	40.0%
TOTAL	**35**	**100.0%**

TABLE 4:
Summary of Civilian Oversight Responses to The Project's
Use of Force Information Request

AGENCY RESPONSE	NUMBER	PERCENT
Responded to study request.	8	80.0%
Agreed to participate in study.	6	60.0%
Answered data-related questions.	2	20.0%
Provided use of force report forms.	2	20.0%
Provided use of force data report.	0	0.0%
Provided raw use of force data for analysis.	0	0.0%
Provided use of force expert to be interviewed.	5	50.0%
TOTAL	**10**	**100.0%**

PART C: AN ANALYSIS OF CANADIAN POLICE USE OF FORCE DATA

In the following section of the report, we provide a preliminary analysis of available Canadian use of force data. The purpose of this analysis is to document use of force patterns and trends, in the hope of identifying innovative policies or practices that may have contributed to declines in use of force incidents.

Deadly Force

We begin with an analysis of the most serious incidents—police use of force cases that resulted in civilian death. Unfortunately, as discussed above, there is no national government agency that collects and disseminates data on Canadian use of force incidents—included deadly force cases. However, following the example set by the *Washington Post* in the United States, the Canadian Broadcasting Corporation (*CBC*), has developed a Canadian deadly force dataset that tracks cases since 2000. The *CBC*'s research librarians collected detailed information on each case, including the ethnicity of civilian, the role of mental illness or substance abuse, the type of weapon used by the civilian and the police service involved. According to the *CBC*, the database focuses on fatal encounters in which the police used deadly force against civilians. It does not include in-custody deaths, self-inflicted wounds as a result of suicide or attempts to evade police, or accidental police-caused deaths (such as a traffic accident). The data were drawn from numerous sources including media sources, police reports and information from civilian oversight agencies (https://newsinteractives.cbc.ca/fatalpoliceencounters/). The research team was able to secure a copy of this dataset in Excel format.

Table 5 presents data, from the *CBC* Deadly Force Dataset, covering the period 2000 to 2020. Overall, the data reveal that there has been a steady increase in deadly police encounters over this twenty-year period. For example, from 2000 to 2010, the data reveal that an average of 22.1 civilians were involved in a fatal police encounter per year. This figure rises to an average of 31.3 per year from 2011 to 2020. Additional analysis reveals that the increase in the number of deadly force cases, over time, cannot be dismissed as a product of population growth (see Table 6). From 2000 to 2010, the mean annual deadly force rate in Canada was 0.68 per million. By contrast, between 2011 and 2020, the mean annual deadly force rate rises to 0.87 per million (a 28 percent increase over the previous decade). It should be noted that, despite this increase, the Canadian police still use deadly force far less than their American counter parts (see Figure 1). In 2019, for example, the *Washington Post* reports that the police in the United States caused the death of at least 1,021 civilians in 2019 (https://www.washingtonpost.com/graphics/investigations/police-shootings-database/. This number of police-related deaths produces an American deadly use of force rate of 3.09 per million, three times the rate for the Canadian police (1.06 per million).[3]

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[3] The American rate reported here is based only on fatal police shootings—it does not include deaths that may have been caused by other types of police force (i.e., CEWs, choke holds, etc.). The Canadian rate, however, includes both fatal police shootings and deaths caused by other types of force. In other words, the difference between the American and Canadian rates, reported above, are only a conservative estimate and would likely be significantly greater if non-shooting incidents were included in the American data.

Table 7 examines the annual number of deadly force cases in Canada, between 2000 and 2020, by province. The results suggest that, in most provinces, deadly force cases either increased, or remained constant, during this time period. For example, Quebec averaged 3.5 deadly force cases per year between 2000 and 2010. However, this figure rises to 5.9 cases per year between 2011 and 2020. Similarly, Alberta averaged only 3.1 deadly force cases per year between 2000 and 2010, compared to an average of 5.8 cases between 2011 and 2020. Though, there are exceptions to this general trend. Ontario, for example, experienced a slight decline in deadly force cases: from an average of 9.1 cases per year between 2000 and 2010, to an average of 8.3 cases between 2011 and 2020. Similarly, British Columbia dropped from an average of 5.8 deaths per year between 2000 and 2010, to only 4.8 deaths per year between 2010 and 2020.

Figures 2 and 3 demonstrate that, per capita, deadly use of force rates tend to rise as we move from Eastern to Western Canada. The highest rates are observed in British Columbia and the Territories. Nunavut has the highest annual deadly force rate (8.47 per million), followed by the Yukon (2.31 per million), the North-West Territories (1.06 per million) and British Columbia (1.05 per million). Alberta (0.98 per million), Manitoba (0.97 per million) and Saskatchewan (0.81 per million) have higher annual deadly force rates than both Ontario (0.57 per million) and Quebec (0.54 per million). Ontario and Quebec, in turn, have higher annual rates than all four maritime provinces (see Figure 3).[4]

Use of Force Across Police Services

Deadly force cases only capture a small proportion of all police use of force incidents. Thus, to capture a broader spectrum of cases, this report will now focus on use of force data derived from individual police services. As described in our methodology section, we asked 35 different Canadian police services for access to their use of force data. While no service provided us with an internal use of force dataset, seven services sent us a use of force report. Five of these reports were already available to the public. Through our own research, we were able to identify use of force data from an addition nine police services. Thus, in the end, we were able to gather use of force from 16 Canadian police services (see Table 8). The extent and detail of the data provided in each report varied widely from service to service. For example, both the Winnipeg Police Service and the Royal Newfoundland Constabulary provided previously unreleased use of force data to the research team. RCMP use of force statistics were drawn from a publicly available report on use of force. Data from Calgary, Peel Region, York Region, Edmonton and Waterloo were derived from use of force reports that had been submitted to their respective police boards. The Calgary use of force report was provided to the research team by the Calgary Police Service. All other use of force reports, discussed in the report, were located on publicly available police board websites. Data for Halton Region, Niagara Region, Hamilton and Regina were derived from the minutes of local police boards. In these four cases, the police presented the statistics before the board, rather than submit a formal report. Finally, the data from the remaining police

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[4] It must be stressed that, due to small population size, the rates for the territories should be interpreted with caution. In many years, the territories experienced no deadly force cases. However, one or two cases can cause the overall rate to increase dramatically. Nonetheless, we cannot discount the fact that, on a per capita basis, the Territories, particularly Nunavut, have experienced a disproportionate number of police use of force incidents that resulted in civilian death.

services (Toronto, Montreal, Ottawa and Durham Region) were derived from publicly available Annual Reports.

Table 8 provides the total number of use of force incidents, per year, for the sixteen services for which we were able to obtain data. The data period ranged dramatically, from only two years of data for both Niagara Region to Regina, to ten years of data for the RCMP, Winnipeg, Montreal, Ottawa, and Hamilton. Table 8 presents the total number of use of force incidents, per year, for each service. For each service, the table also provides the percent change in cases between the first year of documented data collection and the most recent year.

The data suggest that, during the documented data collection period, only four police services (25% of the sample) experienced a decline in police use of force incidents. These declines were less that ten percent for three of these four police services (RCMP, Niagara Region, and Regina). The largest decline was experienced by the Winnipeg Police Service. In 2010, Winnipeg recorded 1,049 use of force cases. By 2019 this figure had dropped to 857 cases (a decrease of 18.3%).[5]

The other twelve police services (75% of the sample) all experienced an increase in recorded use of force incidents. These increases range from less than ten percent, to over two hundred percent. Montreal experienced the greatest increase. In 2010, Montreal recorded only 282 use of force incidents, compared to 892 in 2019 (an increase of 216.3%). The Royal Newfoundland Constabulary saw a 90% increase in use of force cases: from 250 in 2016 to 474 in 2019.[6] Waterloo documented an 85.6% increase: from 222 cases in 2015 to 412 cases in 2020. York Region experienced a forty percent increase in use of force cases between 2014 and 2020. Three other services (Durham Region, Ottawa and Peel Region) saw increases of greater than 30%, three services (Halton, Calgary and Toronto) saw increases of greater than 20%, and two services Edmonton and Ottawa saw increases of greater than 10%. Hamilton, by contrast, experienced only a slight, 5.1 percent increase in use of force cases between 2010 and 2019.

Based on the available data, it is impossible to determine the exact cause of the observed increases in use of force documented in Table 8. Nor is it possible to determine what distinguishes services with large increases in use of force from those with small increases or small declines. It is possible that these increases are the result of improved data collection practices, rather than real increases in police use of force incidents. It is also impossible to determine whether increases—or decreases—in police use of force cases, across jurisdictions, are the result of changing police policies and practices, or changes in the types of civilian behaviour officers are experiencing on the street. Nonetheless, the data do reveal that, despite new technologies, training regimes and use of force policies, use of force *has not* declined significantly within most Canadian police services.

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[5] The recorded declines for both Regina and Niagara must be interpreted with caution. Not only are these declines modest, they also only involve two years of recorded data (2018 and 2019).

[6] The Royal Newfoundland Constabulary's 2015 use of force incidents totaled 158. However, there was a note saying that the 2015 data are incomplete. Therefore, we do not know how many incidents are not included in the dataset for that year. Based on the numbers provided to us, there was a 202% increase in use of force incidents from 158 in 2015 and 474 in 2019. Though, this must be interpreted with caution given the incompleteness of the data provided to us.

Use of Force Rates by Jurisdiction

Use of force data, for 2019, were available for all police services in our sample (see Table 9). Thus, population estimates, drawn from the 2016 Canadian Census, were used to calculate 2019 use of force rates for each police jurisdiction (per 100,000).[7] The data indicate that, per capita, the Edmonton Police Service has, by far, the highest use of force rate (420.9 per 100,000), followed by Winnipeg (121.5 per 100,000), the Royal Newfoundland Constabulary (91.2 per 100,000), the Regina Police Service (85.0 per 100,000) and the Toronto Police Service (77.4 per 100,000). Five other police services (Durham Region, Ottawa, Calgary, Peel Region and Montreal) have use of force rates over 50.0 per 100,000. All other services have rates below 50.0 per 100,000. Niagara Region (30.6 per 100,000) ad York Region (36.8 per 100,000) have the lowest recorded 2019 use of force rates (36.8 per 100,000).

What can account for the huge variation in use of force rates across police jurisdictions? Do the Edmonton Police really use force at a rate five times greater than the Toronto Police? Are the Edmonton Police much more likely than all other police services to encounter civilian behaviour than warrants a use of force response? We have serious reservations—especially since the Edmonton Police Service has a reputation as one of Canada's most progressive police services. It is more likely that the different use of force rates observed above reflect dramatically different methods of collecting and disseminating use of force data. In other words, Edmonton may have a higher use of force rate because they have better, more complete use of force data.

Our examination of police use of force data, that we were able to obtain, reveals three different units of analysis: 1) use of force incidents; 2) use of force reports; and 3) use of force applications. Use of force incidents refer to a police incident or occurrence in which use of force was employed. A single use of force incident could involve multiple police officers and multiple civilians. By contrast, the term "use of force report" refers to each use of force form, report or document completed as a result of a use of force incident. For example, some services require each officer involved in a use of force incident to fill out their own use of force report. Thus, if three officers used force during a specific use of force incident, that single incident would produce three different use of force reports. Finally, use of force applications document each time that a specific use of force tactic was employed during an incident. For example, assume that a use of force incident involved two civilians. One civilian was subject to hard control tactics, a CEW deployment and a police shooting. The other civilian was subject to pepper spray and soft control techniques. In this example, a single use of force incident resulted in five different applications of use of force. In our opinion, the documentation of police use of force will vary dramatically depending on the unit of analysis. Use of force incidents will produce the lowest estimates, use of force reports will result in higher estimates, and use of force applications will result in the highest estimates.

The problem is trying to figure out what is being reported when looking at police data from different police services. Some services are better at explaining their methodology than others. In our analysis, we took to the middle-ground and tried to focus on use of force reports rather than incidents or applications. However, at times, it was impossible to make that designation.

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[7] It should be noted that we were not able to calculate use of force rates for the RCMP. We could not find a proper benchmark that would capture the total population policed by the RCMP. The RCMP provides policing services to hundreds of different communities across Canada.

For example, the RCMP data, discussed above, refers to use of force occurrences. It is impossible for us to determine whether an occurrence is referring to an incident, a report, or an application. This makes jurisdictional comparisons problematic. Furthermore, some services have different definitions of what constitutes use of force. For example, some services report strip searches as a type of use of force, other services do not. Similarly, some services report the drawing of a CEW as an application of force, others do not. All these issues may account for some of the variation in use of force rates across jurisdictions.

A specific concern about the Edmonton data involves the completion of use of force reports. Most services, it appears, require that each officer involved in a use of force incident fill out their own use of force report. Thus, if two officers used force during an incident, two use of force reports would be produced. One report would be filled out for each officer—regardless of the number of civilians involved. However, it appears that, in Edmonton, each officer must fill out a different report for each civilian that they used force against. Thus, suppose that an incident involved two officers who used force against two civilians. In most services that would result in two use of force reports (one for each officer). However, in Edmonton, it appears that this same incident would result in four use of force reports—each officer would have to fill out two reports, one for each civilian involved. We must consider that Edmonton's more stringent reporting practices may account for some of the inflated numbers documented in Table 9 and Figure 4. This example also underscores the need for standardized use of force practices across police jurisdictions. Standardization is the only way that we will ever be able to make accurate regional comparisons. We will return to the issue of standardization in the conclusion of this report.

Use of Force Recorded by Civilian Oversight Agencies

Another source of data on police use of force in Canada comes from provincial police oversight agencies charged with the investigations of police behaviour. We were able to obtain limited data on use of force investigations conducted by six different oversight agencies (see Table 10). All numbers were derived form agency annual reports. Similar with the statistics on deadly force incidents and overall use of force cases, the data from provincial oversight agencies reveal that use of force investigations have increased over the past few years. For example, in Ontario, the number of Special Investigation Unit cases involving police use of force increased from 209 in 2010 to 247 in 2020 (an increase of 18.2 percent).[8] Similarly, in British Columbia, only 11 use of force investigations were conducted in 2010, compared to 67 in 2019 (an increase of 509.1 percent). All other oversight agencies experienced increases of greater than one hundred percent. Once again, it is difficult to determine the cause of these increases. For example, the observed increase in use of force investigations might be due to an increase in use of force incidents. However, it might also be the result of increased civilian oversight powers or increased reporting of use of force incidents to agency officials.

Figure Five presents 2019/2020 use of force investigation rates (per million) by province. The data reveal that Manitoba has the highest use of force investigation rate (24.2 per million), followed by Ontario (18.4 per million), British Columbia (14.4 per million) and Nova Scotia

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[8] SIU use of force investigation data must be interpreted with caution. Unlike many other provincial police watchdog agencies, the SIU do not breakdown investigations into types as effectively as their counterparts in annual reports. Therefore, use of force investigations may be higher than what is documented in this report.

(11.9 per million). Alberta (7.9 per million) and Quebec (4.0 per million) have significantly lower rates than the other provinces in the sample. However, this data must be interpreted with caution. Provincial differences in investigation rates may reflect regional differences in the mandate and powers of respective civilian oversight agencies rather than regional differences in police use of force.

Types of Force

So far in this report we have focused on only deadly force cases and overall use of force. We have not examined the various use of force options that can be employed by police officers. To explore this issue, we focus on recent use of force data released by the RCMP. We do this for two reasons: 1) the RCMP data provides a much more detailed breakdown of use of force options than data released by other police services; and 2) the RCMP data covers a full decade of use of for cases (from 2010 to 2019). Most other services only provide five years of data. Finally, as a national police agency, the RCMP provides policing services across the country and is thus much more likely to capture regional variations than provincial or municipal services.

The RCMP data (see Table 11) reveal that, overall, use of force occurrences or incidents have declined slightly over the past decade. Between 2010 and 2015, the RCMP averaged 4,778 use of force cases per year, compared to 4,497 cases from 2015 to 2019. A decline of approximately six percent. However, further analysis reveals that use of force trends vary dramatically by the type of force employed. For example, fatal shootings increased by almost 40% over the past decade: from an average of 17.2 fatal shootings between 2010-2014, to an average of 25.2 fatal shootings between 2015-2019. This finding is consistent with the *CBC*'s deadly force statistics reviewed above. Non-fatal shootings are also up by 50%, as are cases in which RCMP officers have drawn and pointed their firearm at a civilian.

The use or deployment of CEWs (also known as Tasers) also increased dramatically over the past decade: from an average of only 185 deployments per year between 2010-2015, to an average of 432 deployments per year between 2015-2019. This represents an increase of 134 percent between the first and second half of the decade. Cases in which CEWs were drawn and pointed at civilians, but not deployed, also increased by 31 percent. Finally, cases in which civilians were bitten by a police dog also increased by 45 percent between 2010-2014 and 2015-2019.

By contrast, hard control tactics, including strikes, punches, and kicks, declined significantly over the past decade. Between 2010 and 2014, the RCMP averaged 745 hard control tactics per year, compared to 330 per year between 2015 and 2019 (a decrease of 56 percent during this time period). Soft control tactics (i.e., joint manipulation, pressure control tactics, holds, etc.) also decreased during this period (minus 47%), as did the use of OC (pepper) spray (minus 51 percent), and baton strikes (minus 46 percent).

Similar trends were observed with respect to the other police services for which we were able to obtain data. These services also experienced significant declines in hard and soft contact techniques, but a significant increase in the use of CEWs. For most police services, shootings either increased or remained at approximately the same level over the past ten years. It is interesting to note that several police experts, interviewed as part of this study, believe that police shootings have declined since the introduction of CEWs and other non-lethal force

options. However, the data reveal that both CEW and firearm use have increased over the past decade. Thus, while it appears that CEWs may have reduced police use of force tactics that involve close contact with civilians—including holds, punches, kicks, strikes, baton use, and the use of pepper spray—CEWs have not resulted in a reduction in police shootings or other deadly force incidents.

Use of Force Reports

In addition to requesting actual use of force data, the research team also requested that police services provide us with the mandatory use of force reports or forms that police officers are required to complete after each use of force incident. We were eventually able to acquire ten use of force forms: one from the Ontario government and nine from individual police services (see Table 12). It should be noted the standardized use of force form provided by the Ontario government must be used by all police services within the province.

Table 12 provides a list of all the police agencies that provided the research team with a use of force form. This Table also provides information on the types of use of force variables—or fields—officers from each service must fill out when completing these forms. A summary of these variables or fields is provided in Table 13. The findings reveal that the type of information collected varies significantly from service to service. All police services require that officers provide the date and time of the use of force incident. Officers from all services are also required to provide a description or narrative account of the incident. Nine out of ten use of force forms (90%) require officers to provide information on the types of force used (i.e., firearm, baton, CEW, hard control tactics, etc.), the number of civilians involved in the incident, the number of officers involved in the incident, type of police deployment (i.e., call for service, arrest warrant, patrol observation, etc.), and whether the civilian sustained an injury during the incident. Eight out of ten forms (80%) required information on the location of the incident, subject's weapons possession, and environmental conditions (i.e., weather conditions, lighting conditions, etc.). Seven out of ten forms (70%) require information on officer injuries, the reason or justification for the use of force, and the age/gender of the civilians involved.

Only five use of force forms (50%) require officers to provide information on the outcome of the incident (i.e., arrest, charges, mental health apprehension, etc.). Another 50% require that officers provide the General Occurrence (GO) number related to the incident. The General Occurrence number, in our opinion, is important because it enables the use of force form to be linked to other police documentation that may provide more details about the incident. For example, if the use of force form does not contain information on criminal charges related to the incident, or information on the age and gender of the subjects, researchers can access this information by linking to the General Occurrence Report.

Only four use of force forms (40% of the sample) request information about the subjects' race or ethnicity. Ontario only added race to its use of force form in 2020. Interestingly, while Ontario's form includes information on subjects' race—it does not require information on the subjects' age or gender. This is a serious limitation that will impede future analyses. For example, Ontario use of force data, collected after 2019, will not be able to examine the representation of young Indigenous and Black males—groups previously found to be grossly over-represented in use of force incidents.

An additional four use of force forms (40%) require information on the attire of the officers involved in the incident (i.e., plainclothes or uniform). Finally, only three of the ten forms sampled require information on officer characteristics. In all three cases, information is only requested about officer rank and length of service. Officer age, gender, education and race/ethnicity—characteristics that the research literature identifies as important predictors of use of force—are not required. Finally, only 30% of use of force forms request information about the subjects' previous criminal history or the subjects' mental state/intoxication. Thus, most forms would not enable an analysis of how subjects' mental health or intoxication contribute to use of force decisions.

Several conclusions can be drawn from our analysis of Canadian use of force forms. First of all, use of forms vary dramatically with respect to the information they collect. Secondly, many forms exclude information identified as important in the research literature (see Section E of this Report).[9] For example, most forms do not require information on civilian race, subject mental health, subject criminal history, subject intoxication, or officer characteristics. Clearly, inconsistent measurement, and the exclusion of important variables, underscore the need for national standardization. On a positive note, the data suggest that most police services already collect a great deal of data about use of force incidents. This fact supports the argument that a standardized, national strategy for collecting and disseminating high quality use of force data is feasible.

Summary

This section of the report provided an analysis of available Canadian police use of force data. Several significant findings emerged:

1) The data suggest that deadly police use of force incidents have not declined significantly over the past two decades—even after taking population growth into account. Nationwide, the deadly force rate, per 100,000, actually increased by 28% over the past two decades, despite a growth in de-escalation training and alternative use of force options;

2) Comparisons across Canadian jurisdictions are highly problematic due to different data collection and dissemination standards. However, the data that does exist suggests that, similar to data on crime patterns, police use of force rates gradually increase as we move from East to West. Use of force rates are lowest in the maritime provinces, followed by Ontario and Quebec. They are highest in the western provinces and in the northern territories;

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[9] We do acknowledge that all of the use of force forms we examined have a space for the officer's description of the incident. Thus, while some forms may not have specific fields—like the reason for the use of force—this information might be found in the narrative description. Such open-ended fields would require coding before they could be captured in a statistical database.

3) The data indicate that both fatal and non-fatal shootings have increased in Canada over the past decade. For example, between 2010 and 2019, RCMP fatal shooting increased by 39% and non-fatal shootings increased by 50%. There was also a 12% increase in RCMP officers pointing firearms at civilians.

4) The use of Conducted Energy Weapons (CEWs) has also increased dramatically across Canada. For example, between 2010 and 2019, RCMP CEW deployments increased by 134%, There was also a 31% increase in RCMP officers pointing CEWs at civilians.On the other hand, the police use of both hard and soft control techniques (strikes, punches, kicks, pressure holds, etc.) have dropped significantly. For example, between 2010 and 2019, the RCMP experienced a 46% decline in baton strikes, a 51% decline in the use of OAC spray, a 56% decline in the use of hard control techniques, and a 47% decline in the use of soft control techniques.

5) An analysis of use of force forms/reports reveals that: 1) data collection standards vary dramatically by jurisdiction; and 2) various police services are more than capable of collecting detailed information about use of force incidents. This finding provides evidence that a standardized system for collecting and disseminating use of force data is feasible.

Our review of Canadian use of force data is also important for what it does not show. Although Canadian police services seem to collect a wealth of data on use of force incidents, that data is rarely provided in publicly available reports. It also appears that, in general, raw data on use of force incidents is not made available to academics or members of the public who may want to conduct their own analyses. Indeed, most of the use of force reports we reviewed only provide basic data on the number of force incidents over a specific period, sometimes broken down by the type of force used. These reports do not, in general, offer greater context by providing detailed information concerning use of force incidents. For example, despite collecting the data, information is rarely provided about the reason force was used, civilian behaviour at the time of the incident, civilian weapons possession, civilian mental health, civilian intoxication, civilian characteristics (i.e., race, age, gender, etc.) or officer characteristics.[10]

We maintain that available Canadian use of force data prohibits an analysis that would help answer the question at the core of this report: Are there Canadian police practices, policies or technologies that have significantly reduced use of force over the past two decades. That question simply cannot be answered with the available data. Indeed, non-standardized data collection practices, and a lack of transparency about the data that are collected, prevent an accurate analysis of Canadian use of force trends or regional comparisons. In order to properly evaluate the impact of new use of force policies, practices and technologies, the following conditions must be met:

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[10] We did find a few reports that provided basic information on civilian weapons possession. However, these reports did not provide details about the type of weapon: they only distinguished between armed and unarmed subjects. This lack of detail is a crucial limitation—as many recent policy recommendations distinguish between civilians armed with guns and those in possession of other weapons (see Section F of this report).

- Municipal, provincial and federal governments must work together to develop a standardized strategy for collecting information on police use of force incidents;

- The standardized form should collect information on important *situational factors* (type of police deployment, types of force used, civilian behaviour at the time of the incident, civilian weapons use, location of the incident, reason for use of force, environmental conditions, number of subjects, number of police officers present, officer and civilian injuries, etc.); *civilian characteristics* (race, age, gender, etc.); and *officer characteristics* (age, gender, education, length of service, rank, type of assignment, etc.);

- Ideally, the evaluation of specific use of force initiatives—including use of force policies, use of force training, and use of force technologies—should involve 2-5 years of data prior to the implementation of a new initiative (the pre-test period), and 2-5 years of data after implementation (the post-test period);

- Ideally, evaluations should also involve a matched control group (i.e., police services of similar size, etc.) that have not implemented the same use of force reforms;

- Finally, a high-quality evaluation should control for other social changes that might have an impact on use of force rates across regions (i.e., population growth, economic change, change to local crime rates, etc.).

Unfortunately, to date, the type of data needed for high quality Canadian evaluations of policing practices in general, and use of force practices in particular, simply do not exist. With this in mind, we now turn to an exploration of the perspectives of Canadian use of force experts (Section D). After reviewing Canadian expert opinion, we provide a review of the international literature on use of force, including best practices (Section E).

**TABLE 5: Canadian Police Deadly Force Numbers and Rates (per million), 2000 to 2020[11] (*CBC* Dataset)**

YEAR	Population Estimate	Number of Lethal Force Cases	Lethal Force Case Rate (per million)
2000	30,588,383	19	0.62
2001	31,021,000	15	0.48
2002	31,360,000	14	0.45
2003	31,640,000	15	0.47
2004	31,940,000	27	0.85
2005	32,164,309	31	0.96
2006	32,570,000	22	0.68
2007	32,852,800	28	0.85
2008	33,250,000	25	0.75
2009	33,630,000	25	0.74
2010	34,147,564	28	0.82
2011	34,340,000	29	0.84
2012	34,880,500	23	0.66
2013	35,158,300	24	0.68
2014	35,540,400	24	0.67
2015	36,026,676	36	0.99
2016	36,382,944	40	1.10
2017	36,732,095	34	0.93
2018	37,074,562	32	0.86
2019	37,411,047	34	0.91
2020	37,742,154	40	1.06

[11] The 2020 CBC data were incomplete/partially provided. However, one of the authors of this report independently tracks police-involved encounters that result in death (e.g., death caused by police shooting, CEW, OC spray, etc.). Therefore, we can verify that at least 40 people were killed during a police use of force intervention in Canada in 2020.

TABLE 6:
Mean Number of Police-related Deaths per year and the Mean Annual Deadly Force Rate, Canada, 2000-2010 and 2011-2020 (CBC Dataset).

TIME PERIOD	Mean # of Deadly Force Cases Per Year	Mean Annual Use of Force Rate (per million)
2000-2010	22.1	0.68
2011-2020	31.3	0.87
Percent Change	+41.6%	+27.9%

Figure 1: American and Canadian Deadly Use of Force Rates (per million), 2019
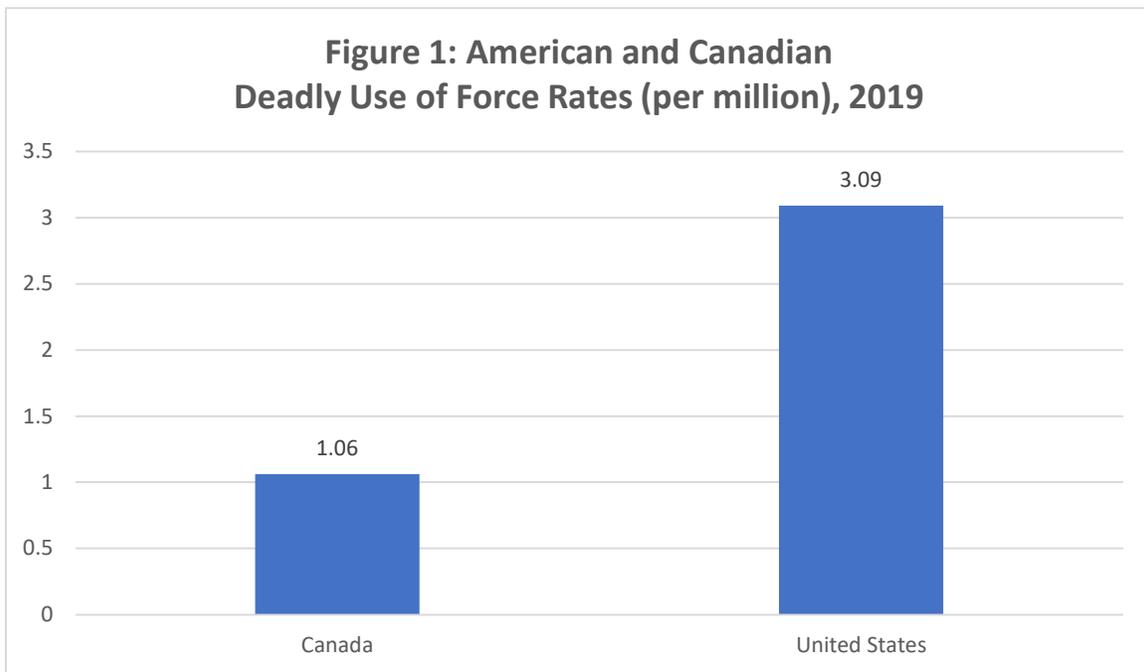
**TABLE 7: Canadian Police Deadly Force Counts,
2000 to 2020, by Province (CBC Dataset)**

YEAR	Nfld	Nova Scotia	PEI	NB	Quebec	Ont.	Man.	Sask.	Alberta	BC	Yukon	NWT	Nun
2000	2	0	0	0	3	8	0	0	3	3	0	0	0
2001	0	0	0	0	0	5	1	6	3	0	0	0	0
2002	0	0	0	0	2	4	0	0	3	4	0	0	1
2003	0	0	0	0	2	4	0	0	2	6	1	0	0
2004	0	0	0	0	5	9	0	2	2	9	0	0	0
2005	0	2	0	1	4	12	4	0	3	5	0	0	0
2006	0	0	0	0	1	12	0	1	4	4	0	0	0
2007	0	0	0	0	7	10	2	1	0	8	0	0	0
2008	0	1	0	0	3	6	3	3	4	4	1	0	0
2009	0	0	0	0	3	9	0	0	4	9	0	0	0
2010	0	0	0	0	5	12	2	0	3	6	0	0	0
2011	0	0	0	0	8	7	1	0	8	5	0	0	0
2012	0	0	0	0	4	8	0	0	4	5	0	1	1
2013	0	0	0	1	4	11	0	2	4	2	0	0	0
2014	0	0	0	1	4	6	0	0	6	7	0	0	0
2015	1	0	0	1	5	9	3	0	7	10	0	0	0
2016	0	0	0	0	14	12	0	1	5	7	0	0	1
2017	0	0	0	0	13	6	3	1	6	3	0	0	2
2018	1	1	1	0	3	8	1	1	12	4	0	0	0
2019	0	1	0	1	2	12	4	2	5	7	0	0	0
2020	0	2	0	2	8	12	4	0	7	3	0	0	2
TOTAL	4	7	1	7	100	182	28	20	95	111	2	1	7

**Figure 2: Overall Police Deadly Use of Force Rate.
Per Million, 2000-2020 (CBC Data)**

Region	Rate
PEI	6.3
NS	7.2
Nfld	7.6
NB	9
Quebec	11.3
Ontario	12
Sask	16.9
Manitoba	20.3
Alberta	20.7
BC	21.9
NWT	22.1
Yuk	48.6
Nunavut	177.9
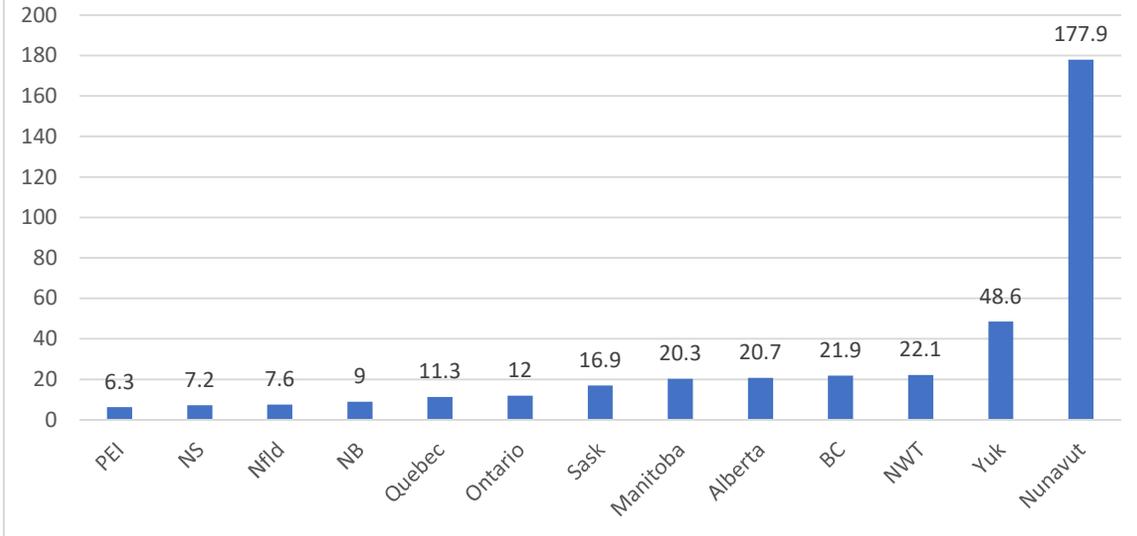
**Figure 3: Average Annual Police Deadly Use of Force Rate,
Per Million, 2000-2020 (CBC Data)**

Region	Rate
PEI	0.29
NS	0.34
Nfld	0.36
NB	0.43
Quebec	0.54
Ontario	0.57
Sask	0.81
Manitoba	0.97
Alberta	0.98
BC	1.05
NWT	1.06
Yuk	2.31
Nunavut	8.47
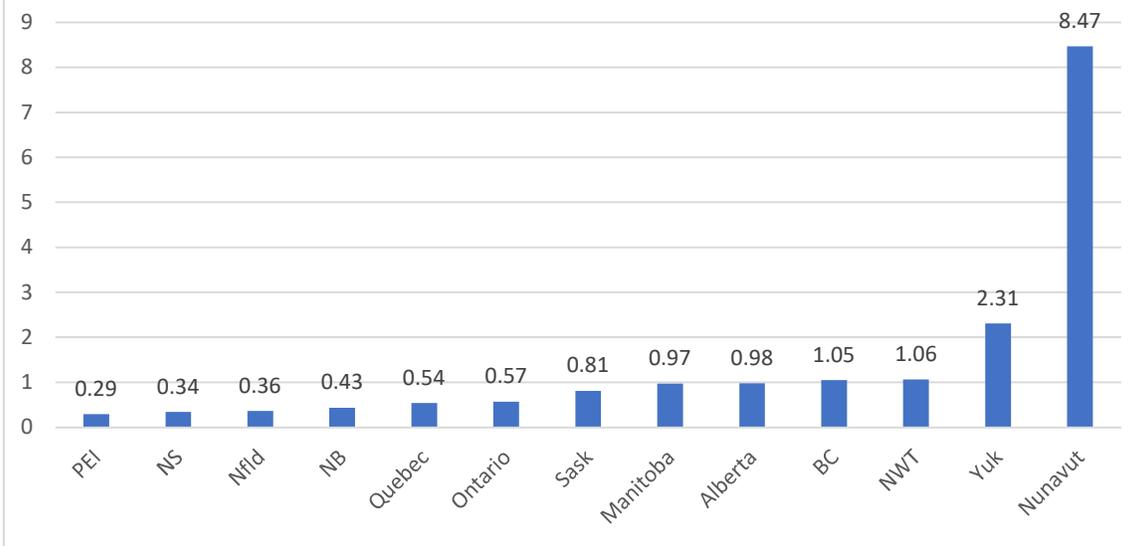
TABLE 8: Number of Recorded Use of Force Reports, by Selected Police Services, Publicly Available Data, 2010 to 2020

POLICE SERVICE	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	Percent Difference between 1st and Last Year of Available Data
RCMP	4,981	5,047	4,883	4,581	4,399	4,794	4,563	4,222	4,253	4,652	NA	-6.6%
RNC	NA	NA	NA	NA	NA	158	250	392	526	474	NA	+200.0%
Toronto	NA	NA	NA	NA	NA	1,699	1,699	1,817	2,077	2,114	NA	+24.4%
Montreal	282	303	533	363	355	445	602	743	873	892	NA	+216.3%
Peel	NA	NA	NA	NA	NA	620	654	755	808	838	NA	+35.2%
Calgary	NA	NA	NA	NA	NA	694	645	732	966	939	843	+21.5%
York	NA	NA	NA	NA	254	429	337	333	342	409	356	+40.1%
Ottawa	550	497	458	443	485	463	437	440	529	609	NA	+10.7%
Edmonton	NA	3,453	3,527	3,687	3,488	4,500	4,074	4,288	4,071	3,926	NA	+13.7%
Winnipeg	1,049	925	947	716	759	947	858	872	757	857	NA	-18.3%
Durham	NA	NA	NA	296	211	209	241	238	245	409	NA	+38.2%
Halton	NA	NA	NA	NA	NA	195	195	190	225	239	NA	+22.6%
Waterloo	NA	NA	NA	NA	NA	222	270	267	199	253	412	+85.6%
Hamilton	252	234	311	238	238	208	172	238	233	265	NA	+5.1%
Niagara	NA	NA	NA	NA	NA	NA	NA	NA	140	137	NA	-.2.1%
Regina	NA	NA	NA	NA	NA	NA	NA	NA	209	201	NA	-3.8%

TABLE 9: Number of Use of Force Reports and Use of Force Rates (per 100,000), 2019, Selected Canadian Police Jurisdictions

Police Service	Population of Jurisdiction (2016 Census)	2019 Number of Use of Force Reports	2019 Use of Force Rate (per 100,000)
Toronto	2,731,570	2,114	77.4
Montreal	1,704,690	892	52.3
Peel Region	1,381,739	838	60.6
Calgary	1,392,609	939	67.4
York Region	1,109,909	409	36.8
Ottawa	934,243	609	65.2
Edmonton	932,546	3,926	420.9
Winnipeg	705,244	857	121.5
Durham Region	645,862	409	63.3
Halton Region	548,435	239	43.6
Waterloo	535,154	253	47.3
Hamilton	536,917	265	49.3
Niagara	447,888	137	30.6
Regina	236,481	201	85.0
RNC	519,716	474	91.2

Figure 4: 2019 Use of Force Rates (per 100,000), by Police Jurisdiction

Jurisdiction	Rate
Niagara Region	30.6
York Region	36.8
Halton Region	43.6
Waterloo	47.3
Hamilton	49.3
Montreal	52.3
Peel Region	60.6
Durham Region	63.3
Calgary	67.4
Toronto	77.4
Regina	85
Winnipeg	121.5
Edmonton	420.9
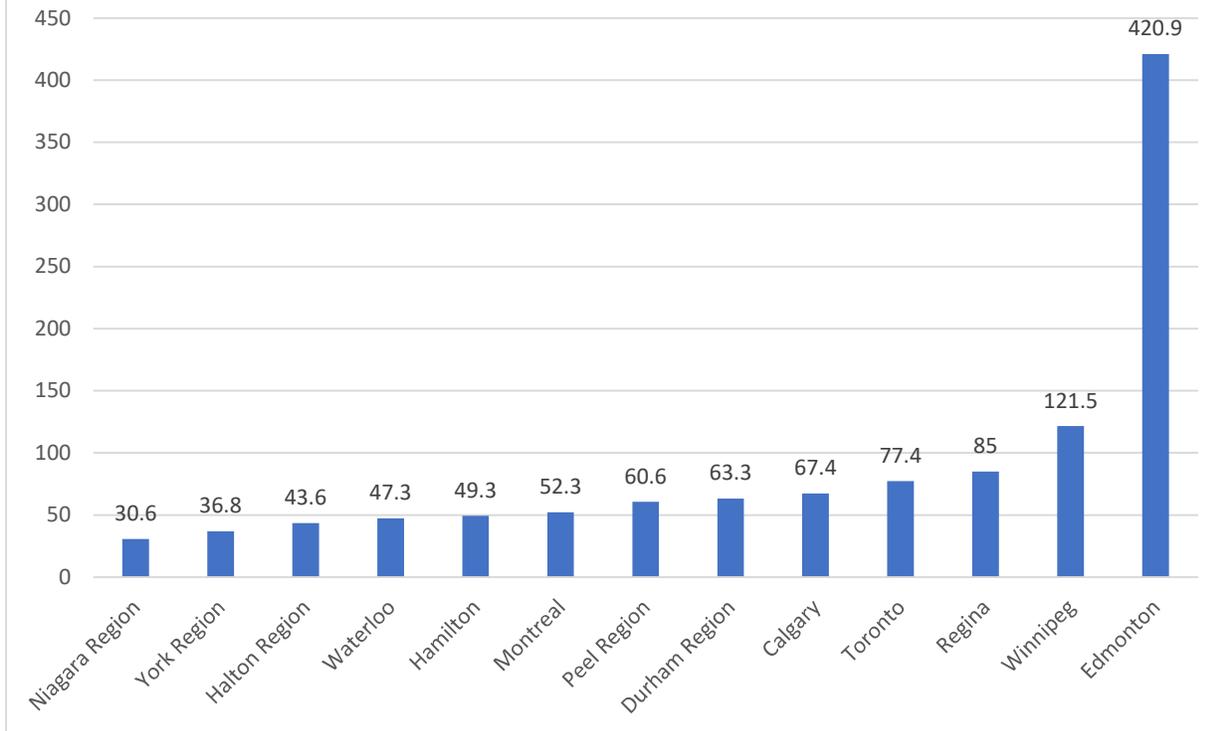
TABLE 10: Number of Recorded Use of Force Investigations, by Police Oversight Agency, Publicly Available Data, 2010 to 2020

POLICE SERVICE	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	Percent Difference between 1st and Last Year of Available Data
Ontario Special Investigations Unit	209	183	276	230	196	220	236	260	257	215	247	+18.2%
Nova Scotia Serious Incident Response Team	NA	NA	5	5	11	4	5	7	11	NA	NA	+120.0%
Bureau des enquêtes indépendantes (QC)	NA	NA	NA	NA	NA	NA	16	28	26	33	NA	+106.3%
Independent Investigations Unit (MB)	NA	NA	NA	NA	NA	9	11	19	25	31	NA	+244.4%
Alberta Serious Incident Response Team	NA	NA	NA	NA	NA	9	30	26	36	31	32	+255.5
Independent Investigations Office (BC)	NA	NA	11	31	36	9	14	55	47	67	NA	+509.1%

Figure 5: Use of Force
CIvilian Oversight Investigation Rates (per million)

Province	Rate
Quebec	4
Alberta	7.9
Nova Scotia	11.9
British Columbia	14.4
Ontario	18.4
Manitoba	24.2
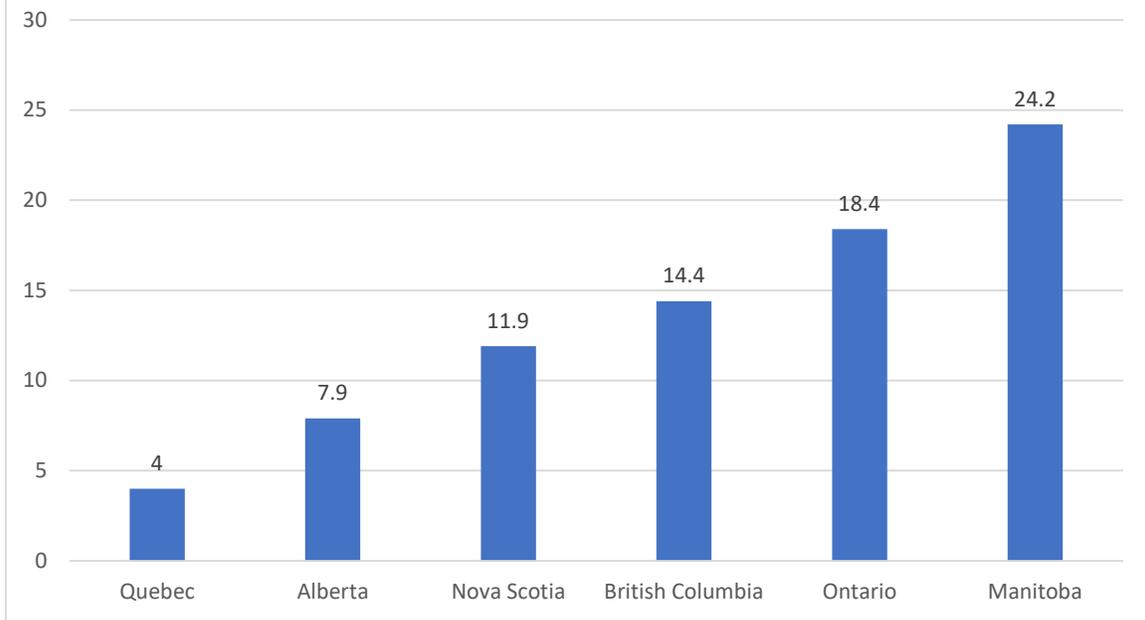
TABLE 11:
MEAN NUMBER OF RCMP USE OF FORCE CASES, PER YEAR,
BY TYPE OF FORCE USED, 2000-2014 and 2015-2019

TYPE OF FORCE USED	MEAN # OF CASES PER YEAR: 2010-2014	MEAN # OF CASES PER YEAR: 2015-2019	PERCENT CHANGE
Non-fatal Shootings	11.6	17.4	+50.0%
Fatal Shootings	5.6	7.8	+39.3%
Total Shootings	17.2	25.2	+44.8%
Firearm Pointed at Civilian	1,748.2	1,963.4	+12.3%
Firearm Drawn but not Pointed	957.4	1,075.5	+12.3%
CEW Deployed	184.6	432.0	+134.0%
CEW Pointed	261.2	341.0	+30.6%
Total CEW Use	736.4	1,119.2	+51.9%
Dog Bites	297.2	430.4	+44.8%
Baton Strikes	77.2	41.8	-45.6%
OAC Spray	725.6	356.6	-.50.9%
Hard Control Techniques	744.8	329.6	-55.7%
Soft Control Techniques	848.2	446.4	-47.4%
Total Use of Force Cases	**4,778.2**	**4,496.8**	**-5.9%**

TABLE 12: Information Provided on Use of Force Forms, by Police Jurisdiction

Information Included on Use of Force Incident Reports	POLICE SERVICE OR JURISDICTION									
	Ontario	BC	Newfound-land	Montreal	Winnipeg	Charlotte-town	Fredericton	Altona	Kativik	File Hills
Date/Time	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Location	Y	Y	N	Y	N	Y	Y	Y	Y	Y
Age/Gender of Subject	N	Y	N	Y	Y	N	Y	Y	Y	Y
Race of Subject	Y	N	N	Y	Y	N	N	N	Y	N
Officer Characteristics	Y	Y	N	N	N	N	N	N	N	Y
Type of Force Used	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Reason for Using Force	Y	Y	Y	Y	Y	N	N	Y	Y	N
Subject Injuries	Y	Y	N	Y	Y	Y	Y	Y	Y	Y
Officer Injuries	Y	Y	N	Y	Y	N	N	Y	Y	Y
Subject Weapons Use	Y	Y	Y	Y	N	Y	N	Y	Y	Y
Outcome (i.e., charges)	N	Y	N	Y	Y	N	N	Y	Y	N
Number of Subjects	Y	Y	Y	Y	N	Y	Y	Y	Y	Y
Number of Officers	Y	Y	Y	Y	N	Y	Y	Y	Y	Y
Officer Attire	Y	N	Y	N	N	Y	N	Y	N	N
Subject Mental Health	N	Y	N	Y	N	N	N	N	N	Y
Type of Police Deployment	Y	Y	Y	Y	Y	Y	Y	Y	Y	N
Environmental Conditions	Y	Y	N	Y	Y	Y	Y	N	Y	Y
Subject Criminal History	N	Y	N	N	N	N	N	N	Y	Y
Incident Narrative	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Occurrence Number	Y	N	N	Y	N	Y	N	N	Y	Y

TABLE 13:
Summary of Information Provided on Police Use of Force Reports

TYPE OF INFORMATION	NUMBER OF FORMS	PERCENT OF FORMS
Date and time of incident	10	100.0%
Narrative description of the incident	10	100.0%
Type of force used against civilian	9	90.0%
Number of subjects/civilians involved in the incident	9	90.0%
Number of officers involved in the incident	9	90.0%
Type of police deployment	9	90.0%
Subject/civilian injuries related to the incident	9	90.0%
Location of the incident	8	80.0%
Subject/Civilian weapons use and/or possession	8	80.0%
Environmental/weather conditions	8	80.0%
Officer injuries related to the incident	7	70.0%
Reason or justification for use of force	7	70.0%
Age/gender of the subject/civilian	7	70.0%
Outcome of incident (i.e., charges, etc.)	5	50.0%
General occurrence number	5	50.0%
Race of civilian/subject	4	40.0%
Officer attire	4	40.0%
Officer characteristics (rank, length of service, etc.)	3	30.0%
Civilian criminal history	3	30.0%
Civilian mental health/intoxication at time of incident.	3	30.0%
TOTAL	**35**	**100.0%**

PART D:
BEST PRACTICES IN POLICE USE OF FORCE:
PERSPECTIVES FROM THE POLICNG AND POLICE OVERSIGHT SECTORS

Introduction

As part of our research into police use of force in Canada, we conducted a series of interviews with police officers and representatives of police oversight agencies. The purpose of these interviews was to examine the experiences and perspectives of experts—police officers and oversight agency representatives with extensive experience in, or knowledge about, police use of force. In addition to examining their own experiences, we also sought to illuminate their perspectives on the use of force in Canada, including changes over time to policy and practice, on pressing issues such as the over-representation of Black and Indigenous people, and people suffering from mental illness in police use of force incidents, as well as on measures to address the illegitimate use of force.

Between January and April, 2021, interviews were conducted with 12 serving police officers and six representatives from police oversight agencies in Canada. Participants were recruited in several ways—members of the research team identified individuals they knew from prior research and from their existing networks and invited them to participate in the work. Requests were also sent directly to police services and oversight agencies, asking for members to be nominated to participate. Finally, word of mouth (snowballing) also resulted in the recruitment of participants. The one-on-one interviews (see Appendix A and B for the interview scripts) were conducted over the phone or using the Zoom web-conferencing platform. Interviews lasted between 45 minutes and two hours and were digitally recorded. These recordings were then transcribed and imported into QSR's NVivo 12 data management and analysis software for coding and analysis. Participants were offered confidentiality to avoid any potential risks of participating and to ensure respondents felt comfortable talking about openly about the issues at hand. All but one of the respondents indicated that they did not want to be identified. As such, we have decided to keep the names of all respondents and the organizations that they work for confidential when presenting data throughout the body of the report. Below we provide an overview of our findings.

Sample Characteristics and Experiences

Our research participants were drawn from police services and oversight agencies representing jurisdictions across the country—from coast to coast and including northern and rural areas. Our police participants were mostly veteran officers, with length of service ranging from approximately 18 to 44 years and rank ranging from sergeant to chief. Five of the twelve respondents worked in First Nations policing, with the remaining seven serving with the RCMP and various municipal police services. Policing experiences included patrol work, training assignments, specialized investigations, research, emergency response coordination, and administration. The oversight agency respondents we spoke had worked in the field for between 1.5 and twenty years, occupying different positions with provincial and federal oversight bodies. Prior to entering into oversight, these individuals also worked as police officers, as defence and crown counsel, and in other investigative, adjudicative and tribunal settings.

We were interested to know what direct experience our participants had in use of force specifically. Again, experience here varied—from participating in, developing, and leading training, to involvement in specialized tactical police units.

> *My basic knowledge comes from dealing with use of force in the field myself. Where the expertise comes from is attending the use of force course down at the Ontario Police College. Upon successful completion of that, you're deemed to be an expert in that field on use of force… From there, my responsibility is to deliver our annual training in the use of force. So, a refresher training that entails a firearms component, defensive tactics, officer safety, and so that's developing tactical scenarios which is where my focus has been on more hands-on training.*

> *I've been a use of force instructor since 2004, I've been active training in service members since that day. I began with firearms instruction in 2005, a combination of firearms and use of force instruction… Then I got into training the trainer type of training. My move to [jurisdiction redacted for privacy] which brought me here 10 years ago was to do with training the trainer. I worked in the tactical training section, and I oversaw and coordinated the officer safety instructor course, the taser instructor course, our immediate rapid deployment instructor course, and our basic firearms instructor course. I oversaw those, travelling from division to division ensuring that we were training in compliance with the course training standards and adhering to the lesson plans, and ensuring consistency. So, one hosted in BC is the same as one hosted in Nova Scotia and everywhere in between. Quite extensive background in training and then got into the course evaluation and course creation/lesson creation following trends. Eventually promoted and transferred to the section I'm at right now, the national police intervention unit, formerly known as national use of force. I've been doing that. There's a couple times I've testified in court for subject matter expert in use of force and police training. I've had to do that in front of the court, fatality inquiries. Taken a number of years. Been involved with course writing, policy writing, a number of initiatives.*

> *I would say that my experience draws a lot from being a hands-on police officer. For several years, I was the use of force analyst, which gives me some insight into police use of force. At that time, I took various courses including the use of force instructor's course at the OPC [Ontario Police College] and trained police officers firsthand. I also developed a program for over several thousand frontline police officers. I was the lead in terms of the program development.*

Evidently, a lot of the expertise garnered by the police respondents was gained through hands on experience as front-line police officers, as well as in the context of their responsibilities as trainers within their services and for other agencies. Our police oversight respondents also had varied experience with police use of force—one participant had been a police officer for over two decades prior to entering into the police oversight field and, like the officers identified above, had been involved in the development and delivery of police use of force training. Others had gained experience with police use of force standards, policies, practices, and trainings in their varied capacities within the oversight agencies they worked for.

On the Evolution of Police Use of Force in Canada

We were interested to know whether our participants believed there had been significant changes to police use of force policies and practices over the course of their careers and if so, what those changes included. As might be expected from a diverse group of respondents, their perceptions of the scope of change varied. Indeed, whereas all of our police respondents believed there had been some change over time, there was inconsistency with respect to the nature and scope of that change. Below are some of the key areas in which our respondents noted evolution in police use of force policy and practice in Canada.

> *When I first started, and really almost to the point of when I became Deputy Chief, we really didn't have any kind of policy guidelines at all on anything to be quite honest. So, over the period of time, I now have the operations manual, and that is all electronic now. We've seen ourselves develop and move over time, where years ago you never saw things in terms of what's a policy for pursuit, what's a policy for use of force? It was basically what you got trained in at the academy or any in-service or if you were an academy graduate until we started rolling things out on our own. Doing our own use of force training, and in the last 10 years or so with new updating in the police act, we now have the use of force requirements that are mandated for annual recertification.*
>
> *So, the big emphasis I would say when I started was on officer safety. That always seemed to be a big driver of what was taught. And by that, I mean the focus initially was always on, in the late 90s – the original use of force model – was focused on the physical safety of the officer and then the subject. Things like tactical skills, reactionary gap and use of force continuum were emphasized, with an emphasis on your personal safety above the subject. At that time, there was minimal to no training on effective communication, crisis intervention and de-escalation, nothing to do with antiracism or cultural competence. And how those pieces integrate so if you actually have a proper, holistic approach to your officer safety, you will never end up in a use of force encounter.*

These two officers describe a situation early in their careers where less guidance was given with respect to use of force and less training was offered to police (see Obasogie & Newman, 2017; Rajakaruna et al., 2017; Staller & Körner, 2020). Focus also centered on officer safety rather than the general protection of life and with minimal attention to effective communication and de-escalation (see Engel et al., 2020). In addition to more regulation, the introduction of new technologies was also cited as a driver of change.

> *It's changed dramatically especially when you add in different technologies. I think there's been a real focus on the community, collaboration and integration. We take more of a holistic approach – it's not just of use of force, even our mindset is different, I feel. We are integrating so many different things, such as the CEW, that's part of it. The availability of in-car camera systems which record officers' actions as well as audio recording and more recently, body worn cameras. All of this oversight ensures police legitimacy not only for officers themselves to make sure they are following the right protocols, but also transparent for various judicial bodies and citizens to see what*

actually happened versus somebody's recollection of it. Now with the policies, some things have obviously changed dramatically. For example, the use of a CEW anytime it is pointed, activated or used, a use of force report is put in as well as a taser report. Obviously, those instances would skyrocket because previously those incidents may have physical use of force. Physical use of force was not reported. The policy has changed. Let's say somebody was going hands on with somebody and it did not result in an injury, that typically would not have been as per policy and provincial policy, did not require a use of force report. Now, if somebody is demonstrating assaultive behaviour, a CEW could be drawn on that person, and a use of force report could be required.

As mentioned by this officer, the introduction of new technologies has not only expanded the range of use of force options, it has also influenced, along with related policy changes, use of force reporting practices (e.g., see Jennings & Rubado, 2017). New technologies, increased oversight and better training were credited by the officers with reducing use of force generally (Ferdik et al., 2014; White & Ready, 2010). Indeed, the majority of the officers believed use of force by the police had decreased in Canada over the past two decades, even if the statistics (where available) paint a different picture.

I think it's probably decreased. I think our police officers are better trained in terms of de-escalating events. They have the incident management model which we use for training and for determining what is acceptable force. As before, I think members, they would have to have verbal skills which is in the use of force continuum. Using your hands on someone, using weapons all the way up to deadly force. They are all options, but they have to be implemented at proper times. Unless someone just came out of house shooting at you, you wouldn't go for your gun if you're trying to diffuse the situation. I think our police officers are better trained at those things than they were 30 years ago, 40 years ago. No doubt there are some illegitimate cases. It happens. Just following things in the media and stuff like that where there's certainly some which have been questionable. It's not for me to judge but on the surface, I've seen cases that certainly raised eyebrows and need investigating further. But I think overall, just because the police are more under scrutiny now in the age of social media that it's not as rampant as some people might think.

So, we have to be aware of what's going on around us in the world. And I think because of how the world is now, it's all of this social media, I think that use of force is more out there in the media. So, it seems like there's a lot more use of force that's going on. But really, it's hard to say. From our perspective here, use of force hasn't increased, although we now have different tools that we use.

I guess everything is relative depending on where you are. For us, we have requirements for members to report if they use OC, if they use a conducted energy weapon, even if they unholster a weapon, they're to file their reports on that.

What I think is twenty something years ago when I started, officers did not submit use of force reports based on the parameters established at the time. What we saw was you would go to a call and because it wasn't something that was enforced, two decades ago,

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you would go to a call and let's say you drew your firearm which would be a need for a report, it was misconstrued how that was being applied. I don't even remember what those parameters or rules were to be honest, I just knew you really only put in a use of force report if somebody was injured. The guidelines haven't changed much. Form an educational piece we've been encouraging officers to put your use of force report in if you've behaved lawfully and you've used force appropriately, don't have reluctancy in doing that. Which leads to greater accountability and tracking. That's a big change from two decades ago. We didn't have tasers two decades ago. A lot of our use of force was empty handed because of discriminatory practice on size, hiring, fitness requirements: a lot of officers could physically control people which didn't require a use of force report. Because its an empty hand technique, a soft hand technique even if somebody was struck. That changed in the last ten years. Markedly, I remember noticing around 2010 use of force and the communication of that to managers etc. to make sure your people are putting force reports in. there was greater accountability put in procedures and it was formalized more.

Since I've become the Emergency Response Team, our call volume has gone up. I think the biggest, now this is obviously just my opinion based on what I see out in the field, the mental health is going through the roof right now. Obviously COVID is not helping anything, but ever since the drugs have increased with fentanyl and what those harsher drugs are doing to people is I find it is warping their minds a lot quicker and it's causing a lot more mental illness which I think we now have to deal and tweak our training towards that mental health, right? Or we're going to have a lot more issues we're seeing in the Sates, right? I think, it's my own opinion, but the reason for this, when we're trained at OPC, we're trained to be authoritative right? In my eyes, that's very militant style of policing, which is not a bad thing, you know, you gotta work with the members and at times you have to be an authoritative figure. But, when you're dealing with people with mental illness, the training we're provided it kind of works against it. Dealing with someone who is in a mental health crisis, yelling and screaming at them is not going to get you anywhere which leads to in my eyes, the excessive use of force cases. But it's the only force they can use at the time based on the subject's behaviour, right?

As evidenced above, there was a perception amongst respondents that the type of force used by police in Canada has changed over the past two decades. These changes were promoted by changes in use of force training (such as an increased focus on de-escalation) and policy, with the introduction of new technologies such as CEWs and OC spray (Laming, 2015; Smith & Greaves, 2002). There was also a perception that use of force incidents were generally down but that increases in reporting would influence statistics, where available—the lack of availability of reliable statistics on police use of force emerged here as a theme in our discussions and will be addressed below.

We were also interested in the oversight agency representatives' perceptions on changes in police use of force. Unlike the police officers, there was less consensus among this group as to whether the use of force was up or down over time.

I would say they've generally decreased [...]. Certainly though, there's probably been a transition across different types of force being used. Just looking back on my RCMP training from 1999 to today, there's certainly been a shift for the use of more physical control to the use of more intermediate weapons. Whether it be pepper spray, taser or anything like that. Initially there was a transfer to some of those uses of force. As we saw greater reporting requirements, for things like the taser, of course use of force shifted away from the taser to other uses of force. Overall, I think the use of force decreased, but I think there's been a shift in terms of what type of force is used depending on the realities of the time, the reporting requirements, and the training.

Yeah, I guess it is, I mean I'm aware of the trends here in my province, and I think the trends certainly show an increase. But I think a big part of the increase too is with increased accountability, but I know in my province in particular, we're really big on gathering statistics and publishing them on our website so, is it because of climate, the world climate that it's increased? I don't know, and I'm also aware to that it's very situational, so some years the use of force will go up, the other years it will go down. So, it's really hard to pinpoint why that is because of the human factor.

That's such a good question, probably the key question. You'd like to think that one of the reasons you have an oversight body is for its deterrent value. I'm not sure anyone's actually taken a look at that question specifically before and after the [name of agency redacted for privacy]. I really don't know without actually delving into the data as to whether use of force has increased, decreased, been stable through large periods. I couldn't tell you exactly what the effect has been on use of force.

I would say I don't know enough to say because I haven't looked at statistics and I also don't know whether those statistics were collected in the same way over the last ten years. I would be hard pressed to say there is a pattern other than anecdotally. And anecdotally I can tell you that oversight investigations have increased over the years that I've been with [name of agency redacted for privacy]. That is likely the consequence of a number of different factors because I don't think there's just one that drives them all. I think particularly in [name of province redacted for privacy] we've seen increase mental health crisis which increases critical incidents, we've seen greater reporting. I don't know if that means police use of force was not occurring before, or whether it's being reported and recognized and responded to better. We've also seen in this province a lot of meth use involved in our critical incidents in use of force. I think there's societal factors and better reporting measures and better oversight and a better process, although it's certainly not a great process, than there was ten years ago.

As evidenced by the data presented above, whereas some oversight respondents felt that use of force had decreased, others felt that their numbers were up. Again, a lack of reliable data and changes in reporting practices limited the ability of respondents to speak with any certainty (see Davies et al., 2021; Kiedrowski et al., 2015). Whereas the introduction of police oversight agencies and accountability measures, combined with developments in training were credited with reducing use of force by some respondents, the policing of people with problematic

substance use disorder and mental health problems were cited as reasons use of force may have increased. We turn to a closer examination of these issues below.

On Mental Illness, Race and Police Use of Force

Mental Illness and Use of Force

A key driver of recent calls for police reform and criticisms over the use of force by the police in Canada has resulted from police use of force involving people in mental health crisis or distress (Jacobs et al., 2021). We asked respondents whether they believed the police are more likely to use force on people experiencing mental health crisis than they are people who are not, and if so, what the drivers of these disparities are.

> *I think it's just repetitive interactions and this increases the stats on that area. I think we do have a high proportion of mentally ill persons that are interacting with the police and it's just because they aren't getting the services whether they are not being provided with the assistance or the lack of assistance, you know, a lack of family support, a lack of services accessible to them.*

> *I think especially frontline, or patrol police officers have to be jack and jill of all trades, it's an unfair position for them to be supplementing what would take years to develop as a mental health professional in terms of judgement and ability to deal with situations, etc. I know that there are some good models in place, like I worked with a partner from children's services, police working with folks who are mental health professionals. Even still, I've talked about situations where we absolutely need police in there, not only because other professions aren't set up or equipped to deal with some of the violence or erratic nature of psychotic outbreaks. But it's also a legislative mandate. I know mental health acts are provincial, but I don't know of a provincial mental health act that doesn't have some sort of police mental health clause added to it. Because police are operating in that space, I don't think we have all the training that we could, but I also think it would be unfair to expect that every patrol officer could operate as a mental health therapist, as well as all of the other specialties that policing has to dabble with because of either limited budgets or time constraints of other occupations. There are few other organizations that operate 24/7 like policing does. That's a consideration, but I think we need to expand the way we deal with mental health calls for service. Who's going and whether it's an appropriate response or not. All that comes down to the cooperation between the various levels of healthcare administration and policing and emergency medicine, and all of those things in a way that we don't have the capacity or mandate to operate in sort of crossing silos like that in public service. [...] I think there are a number of good efforts going on, but I do think all of them are shooting blindly into, well maybe this will work better than what we have now. And I don't know that there's a key answer out there. I would suggest that there's more mental health complaints that come to the police than there would have been when I first started, that's my impression I don't know for sure. I think a lot of it has to do with divesting from other public services, so health care has taken a number of hits over the years, mental health is more frequently being*

treated in the community than secure facilities. Which for a lot of reasons is more appropriate, but this is one of the side effects, I think.

I'm willing to share the blame, I'm not willing to take it all. If there are more people on the street that have "mental issues" has society as a whole, has the health care system abandoned them? I'll take my share of the blame as a police officer, but I'm not gonna take all of it because if I am confronted with an individual who should have been diagnosed earlier who should have received the care that he was justifiably entitled to as a human being and who is not simply let go and unleashed on the streets because of a lack of funding from the hospital perspective. It falls onto my plate because it can't go anywhere else, and if I have to bring him back to the hospital that should have treated him in the first place, if I have to use force, is it my fault? To simplify and point the finger when we're trying to find a scapegoat, when the truth is that we as a society, as a people as a commute as a culture as a country, should be looking at each other in the face and say, "What can we all do collectively to solve this problem"?

Right now, we're always called to mental health issues and unfortunately, because we're 24/7, because we're always out there, we get that first call. When you're looking at these other entities or departments that can take on that role, they generally, and we've experienced that here, they call us and say we're dealing with this guy, he's off his meds, can you come with us. So, just our presence escalates things. When you're looking at health care professionals for their own safety want us to come along with them, but it escalates the situation. Then it turns us to making an arrest and taking them to the hospital and etc. etc. If we were somehow removed from that, if we had this connection to the healthcare providers and the person who were able to deal with in a scenario, and then either make the necessary referrals or take them by maybe perhaps family, to a facility, as opposed to the police, I then think you start to see a change in behaviour when the police, unfortunately right now are put into that position of dealing with somebody who is very stressed, who could be off their meds, who could be going through an episode or something, and the police officer is not equipped to deal with or understand some of that. So, what do they do, they resort to their training. They resort to use of force. So, if that person is uncontrollable, well the Taser comes out, the OC spray comes out, or the gun comes out. And that's where the fatal interactions happen. If we're to change that in a way where we had properly trained people to deal with mental health clients and not have the police there unless there was an actual real need, I think you would see a severe drop in those fatal encounters between police and a mental health patient in that scenario because the police wouldn't even be there. You definitely have something, I guess more positive where the person who is in that crisis is now getting the help that they need and that could be even for the long term because we generally, all the time, we're putting band-aids on things because we're the only ones who answer the phone at 3 in the morning.

As evidenced in the data presented above, there was a widespread perception that people suffering from mental health problems are more likely to experience police use of force and that their over-representation in use of force incidents stems from on over-reliance on police to deal with mental health issues (consistent with recent empirical research in Dymond, 2020; Rossler &

Terrill, 2017). Indeed, the officers pointed out that a decrease in services provided to people suffering from mental health problems, combined with the limited capability of police to effectively deal with this population contributed to increased instances of use of force.

Beyond providing more adequate services to people who experience mental health problems and reducing police involvement with these populations, better training was identified by the officers we spoke to as a means of reducing levels of force used against people with mental health problems.

> *It's very easy for anybody for that matter to someone to say you don't need to escalate that situation or yelling and screaming for them to comply, but that does work in some instances, it does not work for people who are experiencing the mental crisis, right? It works the opposite way. So, it's training our members on best practices in how to recognize when people are in mental crisis and how to deal with it properly.*

> *Again, all of this stuff goes back to training and I think even though here in Canada we have an excellent training regime, whether you go through Depot or the Quebec police training school or the Ontario Police College, I think those people are experts, the one's giving the training and developing new officers. But I think there needs to be a bigger and better and more encompassing training block on mental health issues. I think what needs to happen is that it needs to be scenario base and I think people in basic training need to go and work with, like they need to do stages with police services who are dealing with these things, so they get a real good idea for it. It's easy to go and get all this training and get 100% on your training course and be really invested and then you go out there and you try to put all this practice in the real world, it's not the same thing. We need to develop our people and then also our existing officers need to make this their recurring training because what we do every year, we work on our firearms, we work on cuffing, we work on our use of force like all of the tools we have for that, but do we work on our people skills? Maybe some departments do, maybe they don't. Here, we have no choice, we do it because that's what our community requires. So, that needs to be something that needs to be recurring training. It has to be mandatory.*

In addition to use of force involving people with mental health problems, we were also interested in the officers' perspectives on race and use of force.

Race and Use of Force

Respondents were asked whether they felt Black and Indigenous people were more likely to experience police use of force and to explain these racial disparities where they felt they existed. The responses from officers were varied, whereas some officers doubted that racial disparities in use of force existed in Canada, others felt that such disparities were a product of racial differences in criminal offending, while others still pointed to broader societal factors influencing the nature and frequency of contact with the police, and thus police use of force. These perspectives are shared below:

I'd like to see the data. By the way, we're working proactively through various community groups, through our training, we are addressing the disparities. However, we are in the process of gathering the data through use of force reporting to see if there is systemic racism, in specific use of force. That work is underway, I know our service is actively working on various initiatives to address bias and policing, bias in use of force… I personally have not seen that there is a higher incidence of use of force against racialized folks versus non racialized folks. What I can say is that these incidents on an individual basis are scrutinized. As a supervisor, I would regularly review uses of force and if they were on video, have an opportunity to say is this use of force appropriate given the totality of the circumstances. I am very keen on learning more and seeing the stats. I know we are proactively working towards and have been in training to address bias in policing, period. I think the work is excellent, I think it's cutting edge. Personally, because I know this is work being doing at the provincial level and locally, I haven't seen any stats definitively to say police officers act with a higher use of force on racialized folks compared to non-racialized folks.

This officer, who comes from a large urban police service questioned the presence of racial disparities in police use of force cases, citing his own experience and lack of data for his skepticism. Other respondents also pointed to the American experience as influencing Canadians' perceptions of the impact of race on police use of force (e.g., Fridkin et al., 2017), as we can see below.

Whether it's 100% true or not, those stats I don't have and I'm not sure. A lot of it is coming from media, and U.S. media specifically, and in Canada I don't think we do a good job telling our story, the Canadian perspective. We do police a large Indigenous population, a number of communities in Indigenous areas, are they overrepresented in our jails. We know that to be true. Having said that, whether its females or minorities no question that we're underrepresented in our ranks, our supervisors, every aspect we're underrepresented. Back to my experience policing Indigenous communities, I can't speak to a large visible minority community other than Indigenous. It would be the fact that a lot of Indigenous communities are marginalized, in poverty, social issues, family issues, being alcohol, substance or physical abuse. That type of situation now where we are primary police jurisdiction in that community, so now we're overrepresented there as opposed to an affluent neighborhood.

Moving beyond perceptions, reference to the social marginalization experienced by Indigenous and Black people in Canada were identified as drivers of racial disparities in police use of force (Edwards et al., 2019; McCarthy et al., 2019). This theme emerged prominently in our conversations, as the following quotes illuminate.

I think that those findings unfortunately are a lot more complex, we're trying to simplify something that's a lot more complex than we might think. There are a lot more issues at hand than strictly police conduct. There are societal issues there that might have rendered a certain portion of the population not as well educated, and therefore not as financially stable, and therefore more capable of committing crime. Poverty breeds crime. It's because of your poor population that has been neglected by society over the

years – is that a police issue? That the police then I confronted with that and they have to use force, they have to force on this portion of the population. Is that a police problem strictly, or are we just a piece of the greater puzzle? The Indigenous population, is the fact that we might have to use force on members of the indigenous population who are under the influence of drugs or alcohol, is that strictly of a police issue or is that the result of what society has sown many decades in the past? That's the point that I'm getting to. If I'm a police officer and I have to confront a member of the Indigenous population who is under the influence of alcohol and is in a park, and I've received a complaint because they're loud and belligerent, my only option is to bring them into the drunk tank at the station. Is that because I woke up that morning and said today, I am going to beat up somebody that's from a native reserve, or is that because in the 1940s or 50s, the white man took them away from their families and threw them into the orphanages and all the substance issues that related as a result came about. Is that just a police issue? I think that sometimes we try to simplify a matter that is greatly complex.

I think there are a couple of things going on. One, this is a much bigger conversation than just policing. Policing is the sharp end of the spear of all community, public service, policies, and practices. But there's lots of contributing factors for why folks fall through the cracks or don't succeed in life. We can go to the number of different issues that have been brought up as well with health care, with education, when you look at the average literacy level of folks who are in prison being between grade 3 and grade 5 reading level, that's a long time before the police get their hands on the person that has been failed by the education system, and we know that those communities that you mentioned, our BIPOC community members historically and continue to do poor in education. And the same with healthcare. I worked for years side by side with children's services and how their system is set up to let kids fail. They're moved from disparate situations with all kinds of childhood trauma, so many of them are just warehoused in group homes and foster care until they turn eighteen and they're out in the world and it isn't very long before they end up in prison. We can talk about the contributing factors that police have in that, and I think we should, but it needs to be acknowledged that its part of a much larger conversation about systems not working very well together and letting people down. Once you get into policing, it's easy to get lost in the dealing with the offender in front of you and the situation at hand and whether or not a law has been broken and when you back it up to look at that bigger picture, it becomes pretty tricky to operate as a responding officer to crimes when you think about the man that you're charging for a horrific sexual assault of a child, about they're life that led up to that. Where do we draw the line, between well, you have to be charged and deal with the thing that you did but nobody has offered a person the supports that may have benefited their life and the victims in front of them. The overlap between victim and offender is really quite substantial, and often, especially with women who have found they have always been victims of some other crime before they offend. That to me is where we have these continuing loops of victims and offenders and without a monumental shift in how we deal with our justice system, we're destined to keep that limping along until there are calls to do better.

Look at our service for example. 99% First Nation, Indigenous people, right? So our data is going to be skewed. So, I don't know if that has anything… that's a difficult question. I think there's a lot of different issues that are stemming from it. I don't think you can put the nail on the head on one specific reason. Low income is one, right? What people are subjected to throughout the course of their lives. Residential schools, right? That's been an ongoing issue. Education is another one. And when we see in our communities, like we have people who are going up in isolated communities, not knowing a lot of what larger urban centres and what those expectations are. For example, you can walk down the street in some of our First Nations communities with a gun because you're a sustenance hunter. You do that in a larger urban centre such as Toronto or York or Thunder Bay, there's going to be problems right? So, there's a lot of that, and the education system. And what's provided up North, we see that too is that we have these young kids that are getting pushed along through the education system in the North. They are coming out and going to larger urban centres and with a grade 3, grade 4 education and they are trying to go into grade 9, they are set up for failure. This leads to frustration and getting out in the streets where they are billeted and being away from their families and going down the wrong road and getting into the wrong circles, right? There are a lot of different issues that I think out there that are pushing some of these stats.

I don't know. I think it's a socio-economic thing. Unfortunately, people live in areas that are more or less controlled and they tend to be higher crime areas and things like that where there's violence. It's still very common. Violence against police is still common. Things can be heightened and cause confrontations and things like that. There's no one good answer to that. I thought a lot about it and even the stuff about carding people and stuff like that, again a lot of bad press on that, but it is a very useful tool for police if it is used properly. Maybe not always in a positive way, but if police know they are going to stop a person of colour or an Aboriginal person, they know they may be scrutinized or criticized even if they have total authority and responsibility to look into something, they may be hesitant to go ahead with it which is not a good thing. Two sides of that coin, I guess.

Now racialized overrepresentation of use of force. What I've seen is distrust from members of the community who are racialized towards police attending or showing up. There is also a great deal of officers that show to situations where things have taken place, it seems that they're primed because they're expecting hostility. Now of course, there's just the obvious which is racial bias, in terms of whether Black males are more violent, or capable or involved in certain crime. And there is a certain lens placed on – especially when I was doing work in the area of street gangs, because there was often the belief that gang members were exclusively male Blacks that I had to deconstruct for a lot of people. It's probably a combination of community mistrust which causes hostility to being overpoliced or being engaged by the police. Then there's a large disparity over the years, there has to be some racial bias. I think there's also an important piece that has to do with when officers think they need to use force. By that I mean what incidents are they attending that they think need force. Rarely do you have a use of force report put in at a domestic. If you're going to police in certain areas, and go to certain clubs that are frequented by certain members of a community that you think engage in gun violence, or

deadly violence and that's who you're gonna engage with. You may believe members of that group have a heightened use of firearms or use that results, when you're dealing with them, as an explanation for how you're going to detain them or use force. I'm trying to explain what that gap is. We know that there's patterns that have traditionally been in place. I know this from our racial profiling data, that officers will often go to certain communities with certain demographics believing they're involved in certain kinds of crime and target those members of that group especially the Black community that way which obviously results in an increased number.

Most of the officers we spoke to understood the over-representation of Black and Indigenous people in police use of force cases in Canada as a product of a complex set of historical and contemporary social circumstances. Indeed, Black and Indigenous people's experiences with poverty and social marginalization, concentration in underserved areas, poor outcomes in the educational and employment sectors, combined with various forms of bias on the part of police were cited of drivers of these disparities. Our respondents also provided their perspectives on ways to reduce racial disparities in police use of force. These include the following:

More representation in our rank structure, no question. I think society as a general whole to do a better job with our marginalized communities in poverty that need our resources and they don't just need criminal justice and law enforcement resources.

I think it's incumbent on the police to foster and build a relationship within the community, not to be always seen as the enforcer. That is easier said than done. I know we've been at it, through community policing, for a long time. In some places, it doesn't work that well. Especially when there is total distrust.

One of the biggest things that needs to be done is enhanced training in the area of de-escalation, crisis intervention and effective communication. And then it has to be drilled. So not only give them the skills, but it's gotta be skills and drills and they have to be able to practice it on a regular basis.

Measures to reduce racial disparities in use of force proposed by the officers include reducing social inequality, increasing the representation of under-represented groups in policing, advancing community policing efforts and enhanced training.

Best Practices in Use of Force and Use of Force Training

We were generally interested in learning what our research participants viewed as best practices with respect to use of force generally and with respect to use of force training in particular. Below we provide some examples of their perspectives.

Though it seems implied, communication and effective communication. The issue often starts from the first point of contact. The minute you engage in an interaction, this is the procedural justice piece, you set the tone. The awareness of what your presence alone brings when you show up to the station as a police officer in uniform with the use of force tools that you have, physical size with the equipment and the gear. Automatically its

important that you're able to approach that person in a way that's assertive but no threatening. The know and recognize that you're here and have a job to do, but isn't instrumental in design how that interaction is going to go. If you're good at that and know how to regulate your presence and utilize it in an effective way, rarely does the situation escalate.

I think your greatest tool in any use of force encounter is your ability to communicate and communicate effectively and most importantly to deescalate. From my personal experience, those skills I learned at I've taken with me through almost every encounter. Rarely did I ever have to use force on anyone, and as I said I did a lot of gang work. dealing with people where I had legitimate information were involved in deadly violence. A lot of the people I arrested, I knew before hand. But I always said, and it could also be because I was physically imposing. I think my biggest sill was my ability to communicate and in a way that wasn't gonna escalate the situation and being aligned to that, and how to deescalate it. And these were some of the most challenging people and that was the most important piece, because I didn't learn that in my use of force training. I came in with that skillset, so I think I've never used pepper spray in my life and I've arrested hundreds of people. I've never used my baton on anybody, and I've used my taser twice in a total of 23 years. In those incidents it was a combative person assault/wanted for organized crime with related charges, and the other time it was someone in complete mental health distress and a danger to themselves; I needed an actual ambulance to sedate the person, a lifesaving incident for the person as a last resort. It was only when it became no choice, because he would have gone into the road and I had to tase the individual and wait for an ambulance. I had to tase the individual.

This is I think it's an effective communication because they may be using training yelling at somebody, raising their voice or come at it aggressive and giving very clear commands but there's a big difference between they did it and the way that causes it to escalate. When I'm in the cells as a staff sergeant, thousands of people arrested come through my cells and that person may have just been in a fight with my officer. And what the seem to be wondering is how do you keep this guy calm and under control. It's the communication ice, any communication you're removing all barrier to understanding. The person understands and receive the message. You build a very quick rapport with someone and finding some sort of common rapport so that they're less likely even if it's as simple as what's your name […] I found that's missing. When we see new recruits in scenarios and we see people come back they're missing that part of taking a few minutes to communicate. I know it seems obvious, btu sometimes there so task focused or mission focused with the arrest they don't understand it's a vital piece, probably the most powerful piece they have.

Something I saw when I was as junior, though I was good at de-escalation, senior constables had great experience in is they knew how something was gonna go five or six seconds into an interaction and guide it the way they wanted it to go. They were very good at what we would call now situation escalation. Often it was effective communication and asking those probing questions about why are you angry? I'm here if have to keep you safe, I have to keep other safe. And we would wrap that up with de-

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escalation but effective communication and its starts from the beginning that they show up, that first contact.

Here, developing effective communication skills and utilizing de-escalation techniques where possible emerged as key themes with respect to use of force best practices (see Bennell et al., 2021). Our respondents also had broad and varied perspectives with respect to training.

Well, the best use of force training that an officer can have is for them to be presented with high stressful situation and high stressful scenarios prior to. Let me explain. In situations of intense stress, your mind will revert to place where it's been before. If it hasn't been to threat place before, it's gonna be amateur night and we're gonna improvise. That's why in places such as my tactical unit life, a higher degree of training better prepares the candidates to the instances that they will potentially confront. That can be done in a variety of ways, like an event simulator - a big video game is fantastic. Present the trainee to a variety of instances that he or she may confront before actually confronting them. That is the best way to properly train candidates to react accordingly. there's another facet to that. Where we are lacking in terms of a police force is that the technical, the tactical, the physical, adept seems to be mastered. When it comes time to sit down, write and explain why we did certain things, it becomes a bit more complex. And a greater degree of effort should be placed on that, is writing, putting on paper what you did. Putting it on a screen; writing down what you did and why, and what led you to behave a certain way. That's pretty much the best way to train the police officer. That's from an individual point of view. Organizationally, I can speak for my service, there's work to be done in term of transparency with regards to the public. Not the transparency in terms of we're hiding what we do because we don't hide what we do. Its better explained to the public why we did what we did and what were the circumstances surrounding those situations. The silent majority that's out there, will more often than not, will side with the police officers' course of action. I know we're thinking, how can we justify what we saw with Floyd – we can't justify that. That was, in terms of my experience in Canada in twenty years, I've never seen someone go to that extent. It's clearly an anomaly. Even in Canada what is the percentage of use of force compared to the number of interactions that police have with the public, it's below one percent. That's where it is.

More is always best, but I think we need to look at the quality as well because it's one thing to shuffle the Canada, North American standard of somewhere between 22 and 28 weeks of recruit training in which you take sort of regular folks off the street and give them the capacity to use force up to deadly force. That's a pretty monumental task that we're asking our curriculum designers and trainers to provide. I think you can get to the basics of how to deal with ground fighting and use of force and knowing the most appropriate use of force given whatever the scenario is. I think so much is reliant on once those training officers hit the streets and start seeing what they've learned in the classroom looks like, and the nuance of how and when it is appropriate to use and how and when it isn't appropriate, and how tis possible but you don't have to. All of those things are not things that are covered when I was in recruit class. I also think there's a certain degree of talking about the actions and the mentality that goes into it. I remember

seeing a video of some UK officers – these were not armed officers because they weren't part of their firearms response team, but they do carry tasers – dealing with a subject who was armed with a knife, a rather large knife and acting very aggressively. In the short video they formulated the plan, deployed the taser, it didn't work, deployed again, managed to wrestle the knife out of the subject's hands. And then there was this very quick switch from this quick divisive action needing to take place as soon as that knife was out of his hands, there was a switch from all the commanding officers to calm him down, to be as nonconfrontational as possible and reassure him that was going to be okay. To me it is all about being able to control that this person nearly killed us or could have nearly killed us, now that we've controlled the situation, it's our job as professionals to calm him down. And that's something I've never seen in training, how to check your emotions and see that this is still a moment of crisis for that person and to use the authority that you have to defuse the situation. That's not something that I've ever been trained on. I don't know if that's a common training in UK, I don't know enough about it. I haven't spoken to any of my colleagues over there that I know to talk about that one video, but it would be interesting because I do think there's something – it's okay to use force, this is something that's legally mandated for the police. It's the professionalism with which it's used I think is important and the nuances in how and when its used and when its strategically not used that is also vital. The Denmark model of recruit training lasts up to 3 years. They graduate with a degree in policing, their national police college has a degree granting authority. They do a back-and-forth approach between classroom and practical application. Whereas our training is 25 weeks or so of recruit training and then you're out in the real-world live action training with a training officer. In Denmark and lots of other areas in Europe, you're pulled back and they add to your theoretical knowledge, now that you've got a good basic understanding. Then they add to your theoretical knowledge back out in the field and then you're back in class again. They do this a few times. I think using that type of approach would set our officer, our communities, and our organization up or a better success. With respect to the quality of policing you could expect, even though they've been on the job three years, your probationary officers. ... Speaking of other professions, something I think is gathering a bit of momentum in policing is the idea of a college of policing. The same way physicians have a college, nurses have the same type of organization that stands and makes common practice decisions except we don't really have that. They have that in the UK, and I've seen how it has affected I think in leaps and bounds the professionalism in the UK of police officers. It something being pushed in Canada, but it's a different beast with the idea of urban to rural policing, to policing in really remote communities. It's such a varied profession across the country.

Among respondents, the need for extensive, repeated training that presents trainees with realistic scenario's was seen to be beneficial (James et al., 2016; Staller & Zaiser, 2015). Communication—both between officers and a member of the public and between officers themselves also emerged as a key element of good use of force training. This aligns with the support for de-escalation as a best practice in use of force mentioned above (see Engel et al., 2020). Below we turn to examine in further detail our respondents' perspectives on new use of force technologies.

New Technologies and Police Use of Force

Over the past two decades, new technologies have emerged that give police officers a broader range of tools to employ in the context of use of force, such as CEWs and OC spray. In car and body cameras have also been introduced as a means of providing a measure of transparency and accountability in the context of use of force (Ariel et al., 2015). We were interested to know whether our respondents believed these technologies have reduced civilian deaths or injured by police activity, and whether cameras, for example, provide increased accountability. As documented below, there was a general consensus among respondents that CEWs and OC spray have served to reduce civilian injuries and deaths (consistent with empirical research in Alpert & Dunham, 2010; DeLone & Thompson, 2009; Kane & White, 2016; Lin & Jones, 2010; Rogers & Johnson, 2000).

> *At the end of the day—OC spray, that certainly has helped reduce injuries to individuals and officers of course—as a diversionary thing it may have worked. Certainly, a CEW, or a taser, has certainly had effects in terms of more serious, preventable injury or death for sure. We haven't necessarily experienced that ourselves personally here, but when you look at it as a collective it certainly would have.*

> *Based on my own perspective, for sure, 100%. And I can go back to an example that happened with two of my partners, I think it was April actually. They were on a call and they were dealing with someone in a mental health crisis. The person had an axe, threatening harm and ran out in the bush. So, my two partners are attending the call, and they track him through the bush line through the snow with the footprints. Came upon him and he was threatening harm to them with the axe. Instead of using lethal force, they had the CEWs on them and the CEW was very effective in that case which if we didn't have, it would have resulted in serious bodily harm or death.*

> *Yeah, I think they really have. It gives police another option rather than going directly to deadly force. There's all kinds of different things that are now available to the police rather than just shooting bullets at somebody. Unfortunately, sometimes guns are required. I think if the police have different options, it could end up saving a life or sparing a life. I'm always watching the technology that's coming out for police to use, because we're always looking for less-than-lethal tools to solve the problem. All officers here carry Tasers, pepper spray, they have expandable batons, and they're well trained in use of force. Every year they have to be certified in use of force—takedowns, cuffing techniques and stuff like that. Just basically to know how to approach an aggressive person to make sure they are keeping themselves safe and trying to de-escalate it at the same time.*

> *The technology of CEW I would say for sure. It's made it safer for officers and citizens alike. Early in my career I attended a call where somebody was deemed as suicidal, I went to that apartment and this young lady had her hands behind her back. I wanted to see what she was holding and she had a razor blade and she started slicing her wrists in front of me. At that time I had no taser, and to save her life I had to go hands on which is*

pretty dangerous all the way around. In this day and age I would have a taser, to save her and save me. Its super important because officers really need to check themselves, especially with body worn cameras. Everybody knows that they're being recorded. But more, what I see even more, is the officers good work is being highlighted. It keeps citizens in check if they know they're being recorded.

There was less consensus among respondents from police oversight agencies, as the two quotes below demonstrate (see also Ariel et al., 2019; Den Heyer, 2020; Ferdik et al., 2014; Terrill & Paoline, 2012).

That's another interesting questions. Tasers, part of thinking when they were being introduced is perhaps it may lead to a reduction of police resort to lethal force. There's another option, presumably, other than lethal force officers might resort to. I don't know in terms of the data what they say […] I can tell you this. When you look at the shootings [name of agency redacted for privacy] does year to year, it seems to be fairly stable, there aren't any real spikes or deep valleys in those numbers. They seem to be right around the same number year to year. In terms of shootings, I'm not really sure if there's much of a difference.

I think the availability of certain use of force options have increased the toolbelt for police officers. For example, you use a CEW, and I think that is a good tool to have. There's a lot of public concern about CEWs though, particularly in the context of what we see termed as excited delirium deaths. Each additional tool has its own pros and cons. But I like anything that gives a police officer, in a position where it's appropriate to go with a less lethal option

A lack of consensus was also observed with respect to police perspectives on whether in-car and body cameras served to reduce civilian injury and death.

I don't want to give the impression with my body worn camera is the answer—that all of a sudden officers are acting way differently. Because they are being recorded. To be brutally honest, I think the overwhelming response is officers actually wanted to have body worn cameras, because the overwhelming majority are doing what is required and they want it reported. I think that is extremely positive. Those that may have been quick to conclude an incident, they might take a few extra moments to use that technology to their advantage, set the tone and paint the picture. I don't think by the introduction of body cameras and in-car camera systems we're changing the way we're doing things, playing to the camera. I think it's a recording of what was happening a long time ago. Cellphones were out long before body cameras. We've always known that cellphone cameras and closed circuit cameras have always been in place.

I think it's going to ensure from a policing standpoint, people are going to be conscious and adhere to best practices when they're engaging with the public. More of a civility piece, from officers and then conversely, I think you'll see more civility from people we engage with, because of the cameras. That's what my general feeling is, I don't have any data to support that but the two are interrelated. The officers aware that what they're

saying is going to be scrutinized by review of video then they're more likely to ensure that the civility is got be there, they're going to be more conscious of what they're saying and being as professional as possible. That'll eliminate those situations that are based in demeanor, presentation and what caused us to kick off. Because you have an authority to investigate something, where it does escalate to an arrest, the person resists and it becomes a use of force issue. I think a lot of that should be eliminated.

Most assuredly, undeniably, and unequivocally because I have a perfect example of that. We have body cams as a pilot project in [name of city redacted for privacy] for a while. One of the groups that were targeted as the pilot project had these cams on them, and at first, they were a tad reluctant. After a while—and anybody knows the times you get insulted most are when you are giving someone a ticket. Traffic cops mor often than not get their fair share of insults thrown their way. This group in the pilot project were assigned traffic enforcement, they said after. About a week of use, the fact that they warned people prior to commencing their interaction that they were being filmed, the citizens behaviour and respect dramatically changed for the better. I don't care if you are wearing a uniform or not, the human being will behave accordingly when they are being watched. I don't have a masters in sociology or behavioural psychology, but I can tell you if you're in a classroom of children when the teacher walks in everybody stops talking for some reason. It's the same parallel. Body cams, you bet. Get them out there as quickly as possible. If they were to give me a body camera, I have nothing to hide, absolutely nothing. Everything to gain from my perspective being shown.

Yes and no. Again, you have the ability to influence a scenario before you press record. So, if you have an officer who is maybe agitating or just the mere behaviour is escalating the person who is under stress and then ultimately, you start recording and it starts from there and it shows them at a stress level that was perhaps heightened by the officer. But, also on the other side as well, you now have the ability to record where an officer would have been calm or dealing with someone and the other person was escalating and not complying with whatever they were being asked to do. So, it's on both ends, but I think it's very important to when it comes down to policies and the practices of those deployments to make sure that they are followed and also that everyone knows it, so there's no picking and choosing when you can activate these recordings. It's actually just done automatically and that officers don't have access to delete or modify any of the recordings. Certainly, there are some safeguards in place, but it looks like dash cam or body-worn cameras, Taser cam, but at the same time, we want to make sure it's all uploaded properly before they are modified for other purposes. I think it's perception. Sometimes cameras don't capture audio, so you can see some physical actions, but yet you don't capture the context of the audio. Who is yelling at who? Who said what to trigger the other person? So, that stuff is sometimes not there when you're look at surveillance camera. Everyone's got a cell phone nowadays with a camera, but then again, if you don't capture the entirety of the situation, then there is that quick rush to judgment. Oh wow, that officer shouldn't have done that. Well, let's look at the entirety of the situation before we just say we're shocked at that single situation. So, certainly there's lots to understand, but I think in the moment, public would have the ability to

record their own interactions, but again it could be to their own detriment with what they say or how they provoke a response from the police.

In terms of positive implications for these technologies, the following factors were identified across all responses: increased accountability (Jennings et al., 2017), improved investigations to achieve procedural justice (Morrow et al., 2016; Owens et al., 2014), and better behaviour from officers (Headley et al., 2017; Owens & Finn, 2018). Challenges with this technology were varied, including a reversion back to training in high stress settings, despite of the presence of a body camera, issues with storage, officer manipulation of footage, and a limited view of the incident (see Fan, 2018; Laming, 2019). When police respondents discussed the impact of this technology on civilian behaviour, they identified the benefit of improved context, better behaviour and accountability for citizens, extending to prevent false claims (Crow et al., 2017; Gaub et al., 2016). The same question was asked of our police oversight participants.

> *I think body worn cameras, the cameras that are in the cars when they're doing traffic stops; I think that they've come to be seen as a bit of a panacea, but it doesn't take very long looking at the past. Look at the incident in the States with George Floyd – every single one of those officers is wearing a body cam – the footage is there. I don't see it as changing police accountability. When you talk to Brian Sauvé, who's the president of the RCMP, they're happy about the body worn cameras because they think it's going to increase the accountability of the people they're arresting, the situations in which they find themselves. I think what we're trying to do is put a Band-Aid on the situation, I'm a big believer in the fact that the training has to be adjusted. There is no doubt that it'll pick up on those officers that are rogue, but I don't think it will make them stop and pause before the use of force in the situation.*

> *I think there definitely is an impact, and I've experienced that personally as a police officer in the later part of my abbreviated career in policing, we started to have in-car cameras. If anything, you start to think a lot more carefully the entire interaction. Not just use of force but the approach you're taking. At the use of force level, the training is so engrained and so reactive. There may not be a lot of conscious thinking of how you're gonna respond, but there's a lot of lead up to that. The approach you take into a situation, the things you say, the tones you use, the tactical considerations you're gonna use when approaching a situation. When it's being recorded, you're much more mindful of that. It's not that you're intentionally saying, "I need to be more accountable", it's that you're just being mindful of it now. More than anything that it's useful in evidence in terms of whatever you're investigating. That mindfulness may lead to a decrease in the need to use force. From an oversight perspective, the cases that we've generally seen, we certainly see that there's many cases where a complainant makes allegations about police use of force or police conduct that are disproven through the use of video. It goes both ways – it's a very effective tool in defining concerns. There are cases where it's been supported through video as well. Probably the area where we see it most prevalently used is in cell blocks right now. In these cell blocks there's almost universally video recordings, of multiple angles, in a cell, down the corridors, from the guard station. You've often got three or four camera angles on the same incident. That's been particularly helpful, because often the single angle of a single camera is not as helpful in*

identifying what's happening. The precise use of force might be blocked by a person or slightly out of frame. The cell block has been area where we see a tremendous value in having those video recordings. From multiple angles, you can definitively say what was happening and who did what.

I wouldn't venture to say, because I actually don't know. One would think that having a recording being done in the course of one's duty would deter intentional bad behaviour. Theoretically it seems to make sense, but I don't know what the data shows. And its early on in terms of data in Canada, we're far behind the states in terms of body worn cameras. I'm not sure what the data in the United States would tell us. How does this make your job easier? Any limitations? There's nothing like video; we know it doesn't tell the whole story but it's often a key, and pivotal in terms of evidence. You can have a bunch of witnesses, police and civilian to an incident, and they'll all tell you something that is different. It's human nature and perception, but there is nothing like having a video to nail down critical aspects of what actually happened. There is no doubt from my point of view, that it makes the job of oversight investigations overall so much better. You just need to be careful that you are considering the whole picture—sometimes you don't get the whole picture in terms of video. The other concern I would have – which might detract from the value of that evidence—is if police officers review that evidence before they do up their notes or their interview by the [name of agency redacted for privacy]. What we want to know is an officer's subjective mindset and what he actually perceived and recalled. There is always potential for tainting of a witness's recollection if they review video, which can be a subconscious thing or intentional, regrettably. That's a real concern in terms of oversight when we interview these witnesses – are we getting their pure independent recollection, or is it influenced by video? The other thing is, does a body camera recording constitute a subject officer's note? And I firmly take the position no, and we've had to launch civil litigation when a police service took the opposite view. We were able to settle that when they, in due course, did provide us the video. That is something I am prepared to litigate if necessary, because I believe it does not constitute a subject note

While our police oversight respondents had mixed feelings as to whether in-car and body worn camera were a useful tool in reducing civilian injury and death, there was support for these technologies in the context of oversight investigations specifically—with the footage captured by these cameras being a useful source of information and evidence for investigators (see Fan, 2018). Next we turn to examine the police oversight landscape and its impacts on use of force specifically.

On Oversight and Police Use of Force in Canada

Respondents were asked their opinions about police oversight agencies in Canada and their perspectives on whether or not the introduction of independent oversight mechanisms had had a beneficial impact on police accountability and transparency, and whether they'd reduced the illegitimate use of force—responses from police participants were generally positive with respect to the impact of such agencies, although some criticisms emerged.

If we asked for civilian oversight of the lawyers and judges by civilians, they'd say we're crazy. If we asked civilians to judge whether a doctor did the right thing during an operation, that would be crazy too. But basically, people seem to think that people who aren't police, who have never been police can make the determination that in my mind kind of stretches, again, it's all about the perception, but I think in reality it's problematic.

That question in itself needs a thesis… I think there are lots of calls for more civilian oversight with respect to policing. I think any oversight that we have needs to be really well versed in police use of force especially, but police tactics. I think about the world of police being judged by those snippets of video that hit social media or regular media and I'll just go on my own experience, sometimes I watch a video and go that's ridiculous, and I can't believe they did that. Until I back up, learn a little bit more about the situation, it makes sense, there are others where video like that is just, there's literally no explanation why the officer behaved the way that they did. I think it's easy to judge all of the officer's behavior on some of these more clear-cut ones. But I think when it comes down to the nuance of how an officer behaves, there's so much that needs to be known about policies and training, and if the officer acted in the way that they did because that's the way that they were told to act or because they were outside of the policy. So much of that becomes political and difficult to understand without having one foot in the door. At the same time, I think that creates bias towards supporting police when maybe we shouldn't be… I also worry a bit about the idea of oversight. That we deal with each incident independently, and nobody is in charge of aggregating those incidents and looking for the systemic issues the training issues, the hiring practices, the whatever it is, the policy issues that need to be tackled. Just to continue, I do think the idea of officers investigating other officers probably isn't the best solution for the community, and it's also not fair for those officers because they have to go back and work with the officers they investigated in a number of different ways. Look back on my own career, and how many moves I've had—that's not uncommon. I think we do a disservice to our own members by setting them up like that. Perhaps that compromises the decision making that they do when they're in roles like that. I think there are lots of reasons to separate out an oversight investigative area from the police itself.

I think they're definitely beneficial in the sense that to appease the accountability to the civilian population which might think that "ah its police officers investigating police officers; therefore, they're protecting their own." If we can be gone with that lack of trust by assigning civilians to the task, then why not. But the order of doctors and of lawyers and the order of dentists, aren't those investigations by people who understand the work? the parallel with that is, should a civilian oversight be present in the medical field, where more often than not life is lost as a result of human error. Do civilians investigate doctors who make mistakes or do doctors? I'm asking the question because I know the answer, but you understand the gist of what I'm saying. Whether it's an independent civilian or whether it's another police force that which I did on a certain event, will not change how I behave, how I behaved. It might change the public relations aspect of it… If it's an independent civilian body that presents the case to the public, then they might say we'll listen to you. If it's the police force presenting, they'll say you're just backing your

officers. If you go back to why the force is used or that which was done, who's investigating afterwards strictly from a police perspective, has no bearing.

It's right in Peel's principles that in order for police to be legitimate and have the trust and confidence of the public we serve it's absolutely critical that we have police oversight. Officers listen to the news, that there's this party of police oversight that have charged and arrested and convicted through the court system police officers who were not acting in accordance with the law. Overwhelmingly, I think police officers support it.

What I'll say, that's a difficult question in that it is hard to say definitively. But what I will say is that civilian oversight is necessary. Obviously, you need to have civilian oversight from people who are in the know. They have to have a certain set of skills to understand how policing works. Not just knee-jerk reactions because that's all the public reacts in many situations. First thing in policing is that it's been scrutinized to the nth degree compared to other professions. We're always looked on from Public Safety Canada, from the province, from the feds. In our community, we have our own civilian oversight, we have our own board who oversees the administration of the department, in essence they are my boss. All these things have been happening for a long time. Way before some of the bigger services got online with this. So, I do believe it does have an impact on policing. I do believe it has a positive impact and again I'll go back to the comment I made: it's incumbent on the service to build a relationship with the community they are policing in order to make sure all of these relationships go well.

Accountability and increased transparency emerged as the most commonly cited benefit of police oversight, with a reduction of internal tensions and decreased perceptions of bias on the part of the public also raised. Police culture and the code of silence were mentioned by officers as impediments to effective oversight (see Prenzler & Ronken, 2001). Our police oversight agency respondents also held mixed views with respect to the beneficial impact of police oversight in Canada.

I think one thing that I will say is that the creation of the [name of agency redacted for privacy] in the province that has them, and not every province has them—I think that has made a bit of a difference. Because now there's a bit of realization that if they're involved in a use of force that leads to serious injury or death, that they're gonna be investigated by an outside agency in which they have no control. And I think that probably has an impact in those locations where those bodies exist.

They have a tremendous impact at the higher management levels of the [name of agency redacted for privacy]. On the day-to-day operations of the frontline police officer, I'm not sure they see a direct impact from us. But certainly, there is an indirect impact.

I would suspect that is the case, I don't have the firm data at my fingertips. When we take a look at jurisdictions that don't quite have the model of oversight we do in Ontario, compare that to United States and what's happening down there, what we have is certainly not perfect. There are certainly things we can do to improve our systems of oversight; I think we are so far ahead of other jurisdictions. I'd like to think that

eventually in the long run, it does add a certain sense of legitimacy to policing. If the public comes to believe that oversight is credible, truly independent and is fair. We have the pieces in place, there are issues about public credibility of those pieces, but I think we are far more developed than jurisdictions in the United States and elsewhere in the world.

I mean, I would like to say yes, statistically I don't know if we've looked at that. The agency is one of the oldest oversight bodies you'll have. I don't know that it has reduced the incidence of use of force; we've received a lot of complaints about use of force, some of them are founded some of them aren't. But at the end of it I don't think the officers are thinking I'm going to be held accountable for this so I'm gonna change things. The approach of a lot of police services, and particularly front-line officers, is to call out and complain about oversight bodies. A lot of them don't see the need for oversight bodies and feel that they should be able to manage these things themselves. I think where oversight comes into play is with an officer dealing with somebody and they're rude, I think it has a bigger impact there. but officers when they use force, I haven't heard from any of them that "I decided to use force in that case, but I wasn't justified in doing so". Their focus tends to be justifying that use of force instead of thinking about what those options are. In all the cases I've looked at they feel that they're justified in using force. I think one thing that I will say is that the creation of the [name of agency redacted for privacy] in the province that has them, and not every province has them – I think that has made a bit of a difference. Because now there's a bit of realization that if they're involved in a use of force that leads to serious injury or death, that they're gonna be investigated by an outside agency in which they have no control. And I think that probably has an impact in those locations where those bodies exist.

We were also interested in the police agency representative's perceptions of the limitations of police oversight.

In all cases, with the exception of the [name of agency removed for privacy], which was headed down the road of doing all their investigation, we're all a little bit hand strung with the fact that the police do most of the investigation. And that's simply a resource piece.

I came into [name of agency removed for privacy], and I looked at our vision our values––transparency is not in there anywhere. Nowhere. The difficulty there is that it creates suspicion among the public, because of certain levels of suspicion about the police.

I can only tell you from the experience of the [name of agency removed for privacy]. We continue to occasionally have issues with obtaining the records we need from police services to do the investigations we need to do. For example, this whole notion around what constitutes a subject officer's note continues to be a challenging one. I've taken the view that it should be a very narrowly defined term and one that is strictly limited to an officer's memo book notes. The notes made in the wake of an incident and that's that. But we have attempts by some in the police community to expand that term. we talked about the body camera issue, but it's not just body cameras. Arrest reports that are authored by

a subject officer, prisoner log sheets from time to time. We're constantly having to go back and forth on this issue… We're still left in this issue where we have to debate this issue. In terms of investigations, I feel like I don't always get the information that I need in as timely a fashion as I think we're entitled to.

Certainly, the legislative mandate and the powers granted to the agencies, in our case, is limited. We don't have the power to make binding orders. We don't have the power to direct discipline or direct a criminal investigation. In cases where we do discover egregious conduct, our remedies are limited in that we can simply make recommendations... There's not a lot of timeliness in our process, because we're not doing a criminal investigation or awarding civil damages it might not be as high a concern. Our role is to look at the bigger picture, policies, trainings things like that. But in terms of justice perceived by individual complainants or members, that's a concern. Another big concern is the lack of consistency across jurisdictions. Every jurisdiction has their own civilian oversight body. We don't do criminal investigations, depending on what province they're in, there may or not be an oversight agency that does that… With jurisdiction another significant issue we have is that different legislation in different provinces are gonna have jurisdiction over different members, or police officers. We generally don't have jurisdiction over jail guards in cells; because those are civilians, civilian contract employees. We don't have jurisdiction over them. If there's an allegation that a jail guard participated in some fashion in a use of force complaint, we have no jurisdiction over that. We can't look at their conduct. Similarly, we have no jurisdiction over auxiliary constables… They're given similar intervention equipment – not given a firearm—but pepper spray, a baton something like that. They may very well be using force that could cause serious injury, we have no jurisdiction over them. We're not able to look at circumstances of their conduct. We've had cases where a complainant, their only issue is with the conduct of an auxiliary constable or the conduct of the jail guard. We have to refuse their complaint, because there is no jurisdiction for that, and there's often no one left.

I'll speak from my perspective as a criminal investigative agency. Our limitations, number one, is that our only role is to determine whether or not an officer has committed a crime. And that's a very blunt instrument because crime is a sanction on behaviour that's on one end of the scale. You can have a variety of circumstances where there may be some kind of policy breach, they may not have done everything perfectly right. They may have struck him on the head two or three times, but maybe it's not quite across the line on the particular circumstance. I for one, am not a fan of any strikes to the head. And of course, there's an abundance of case law that says the police have a difficult job and you can't "Monday morning quarterback" too much and you have to give them a broad range, etc. The bottom line is a lot of times it doesn't provide any real form of sanctions. In that way, conduct and disciplinary matters are much better. The other side is generally we aren't allowed to make policy recommendations or requirements. The other side of it is when we do have cases—and this is a big one that my colleagues across the country speak on—Crowns do not prosecute our cases very much. We frequently go to them with very prosecutable cases, and they won't prosecute them. It is one of my greatest frustrations. I have literally considered quitting this job a few times in the past year.

Crowns in this country are afraid to prosecute police, unless the case is really, really strong. When I say that I say that in general, I don't mean there aren't individual Crowns that are great at it, but… There are conflict issues. Crowns work with police on a regular, daily basis. Whether they like it or not, they become aligned with police… The other issue is they are really hard prosecutions. They are very, very challenging because [the police] always have the best defense lawyers who are paid well by their unions and associations. Which I have no problem with, I think it's great that they get good representation. But they put up a really strong fight every time. I'll be blunt with you, that scares away Crowns.

The police oversight landscape in Canada is diverse with different agencies holding different mandates and powers across the country. Our research found that there was general support for the existence of police oversight mechanisms among police officers (and perhaps unsurprisingly, among the representatives of police oversight agencies). There were a number of limitations raised by the agency representatives (many relating to their specific organizations), among which are a lack of transparency, a lack of cooperation from police, limited power to discipline, a narrow focus on criminal offending, and investigations being referred back to police services. Overall, there were mixed feelings about whether the existence of police oversight mechanisms has an impact on police behaviour and, as noted by several respondents, it is difficult to tell if oversight has an impact on police use of force nationally given a lack of comprehensive data (see Campeau, 2015; Kwon & Wortley, 2020).

On the Collection of Use of Force Data in Canada

Our review has illuminated some fairly large gaps in use of force data collection in Canada. We asked respondents a series of questions investigating their perspectives on why so little demographic data about people subject to police use of force is collected in Canada, and about standardizing data collection across the country. As with many of the other topics addressed in this research, our respondents' views were varied. We first look at the demographic data point before addressing standardized data collection more broadly. When asked about the lack of demographic data collected in the context of use of force, and on whether or not such data should be collected, our police respondents had the following to say.

I think they've been basically told not to. Privacy issues, or anything that can be used as a bias or as some kind of systemic racism by collecting that kind of data have become problematic for police. My police board has said can we know what percentage of the people are First Nations? I said, no you can't because it's not there. Before when we were using paper files, you'd put race and complexion and everything on there. All that stuff has been removed from the automated system, for different reasons. I don't know if they are legally required to do it, but there's always somebody making the argument that it's some kind of bias to collect that personal information on people

I think that there's value in that, but I would go further, I would suggest that there should be mandated data collection for subject demographic characteristics across the board. I think we also should have police services providing, standardized, identifying factors removed but open data to the outside world. I think about somewhere like Austin, Texas–

–as many really horrific incidents have happened out of the States, they also have a lot more budget, they're just a bigger market so there's a lot more money being spent in some places not that money is always the answer. But I think some creative ideas paired with money goes a long way. Austin, Texas has been working with a third party not for profit—measure Austin – for years. The Austin police has an open data policy; measure is geared to look at the detrimental outcomes with respect to equity and inclusion in police outcomes. And study the Austin polices data specifically for that purpose and will got to them and say you have an issue with this use of force in that only Hispanic males are getting this type of treatment, or whatever the situation is. They've actually created a good working relationship between this not for profit who deals with this and the police. Let's be honest, any organization studying itself doesn't want to reveal all their big systemic cracks. I think it's important for policing to embrace when folks are doing that in a way that is trying to make the profession, the agency a better more responsible place for its community. I do think that data collection, use of force but I would go beyond that to lots of other areas should be mandated, because I think data tracking over all in policing and I've been working with a couple of organizations on their, sort of the race-based data, its abysmal. That's a great way to hide inequitable practices by not keeping track of it. I would suggest that that's inappropriate and unethical.

I actually think there is the use of force working group out there that wants a First Nations perspective, and they are now going down that road. They were still in its infancy stages there in trying to make everything, the biggest issue is the racial piece right now—to capture that obviously. After that, for use of force in collecting that data. I think they are trying to come up with categories basically that blends in with the whole use of force—since it was designed for stats and develop training around issues. Every area, like we talked about earlier, in each community is different, but how do we as trainers, collect data to better provide those skills and abilities to our members to serve of our communities better. That's kind of where we are at. I know they haven't been collecting, but the Ministry is working hard now to start collecting all of those things. It's just making sure that the information is not skewed, right? And it's only as accurate as the people who are filling out the paperwork. So, that's a big component – making sure it's filled out correctly.

Our police respondents confirmed that race-based and other demographic data is generally not captured in the context of use of force and noted concerns with privacy as well as institutional protectionism as the key drivers of this lack of data. The oversight agency representatives discussed the challenges of collecting such data in the context of the work that they do.

The politics behind are challenging, and it's a little… I can see the challenges of collecting race-based data, because you're going to be calling on that police officer to form their own opinion about the suspect or the other parties' race. I think there's a great hesitation to do that, since they'll likely get it wrong a significant amount of the time. And we've seen public complaints where people have been called one race when they're another. I think police want to avoid doing that. Also, the politics of that. The evidence suggests there will be a disproportionate amount of force against minority groups, so I think there's a politics associated to that to say we don't want to collect that

and have those numbers. You're gonna be relying on the police officer to make judgments about the persons mental health status, their race, immigration status may be more difficult to conclusively determine. But otherwise, I think you're talking about perceptions, those perceptions can be dangerous not only to the politics, the optics but also to a criminal case too. I can see a reluctance to have the police commenting on someone's mental abilities, or mental health status because of the possibility that it could present a defense at a later trial.

I am very cautious about the collection of people's personal information and the potential for misuse. Somebody is calling me about how hard it is to prosecute police officers and one of the issues is that in our use of force cases, people often judge our affected person. More information on that is more information to paint a picture of a person with bad character when it may not matter at all. Everybody is entitled to be treated the same, compassionately, and respectfully and as carefully as anyone else.

The evidence suggests there will be a disproportionate amount of force against minority groups, so I think there's a politics associated to that to say we don't want to collect that and have those numbers.

Again, issues related to privacy emerged as potential barriers to the collection of demographic information about people subject to police use of force. While little such data currently exists in the Canadian context (see Wortley et al., 2020), it is important to note that race-based and demographic data collection is being instituted in several Canadian jurisdictions.

In addition to a lack of readily available demographic data on people subject to police use of force in Canada, our review has also uncovered marked inconsistencies in the way in which police use of force data is collected and reported across the country. We asked both the police and oversight agency respondents whether they saw value in a standardized national data collection system for police use of force data in this country, something similar to the way in which crime data is collected through the UCR. We heard the following from our police respondents.

Asking the question is answering it, because absolutely. There should definitely be a standardized form, or manner in which to report the use of force. In 2021, I can't wrap my mind around a police service anywhere in the country using force on an individual and not putting it down on paper in as standardized form. Because we have to be held accountable for that which we do. Those statistics, oddly enough, will end up helping us in the long run. Will end up helping the police force, showing what we do and why we did things. Increasing our transparency and increasing our trust in the public, the trust of the public is what's key... If we work on that trust, the rest falls into place, and a way in which to increase that trust saying what you did and why. Putting it down on paper and everything will be fine.

I think there's benefit. Our data bank, the officer behaviour subject response data bank is very robust and helps a lot of our stat and data collection and is probably one of the best in the country for gathering, but I think to strengthen it for an international perspective it would

be to have everybody reporting the same type of stuff on the same page would be a huge benefit to Canadians.

The disadvantage would be the perception of a lack of will to change. You have to have the right people in the right space to make it happen. Otherwise, it will be on an agenda somewhere, but not really looked at like it should be.

We heard similar support from the oversight agency representatives.

I would buy you a dinner if you were able to accomplish that. It goes back to what I said, this data is extremely valuable to understand trends. To identify trends and see how the police are dealing with certain groups. But more importantly, if we were able to—it's really hard now because we can't compare one groups problem to another often. We can't compare my organization to another organization because we all do things differently and it's really challenging. It's a much bigger project that one might think but it would be really wonderful for us all to compare one to another, to do it apples to apples.

If StatsCan can get all the police agencies in Canada on the UCR score so criminal justice statistics are standardized, surely, they can come up with something for use of force reporting.

Yes, I do. And the reason why I say that is there are different thresholds for reporting nationally. So, [name of province redacted for privacy] has our standards for reporting use of force; we have a certain level that force has to be reported on to a standardized form. In other jurisdictions, their threshold for reporting will be different, as will their actual use of force report be different. So, to go from [name of province redacted for privacy] reporting standards to the [name of province redacted for privacy] reporting standards, its apples and oranges. You're not often speaking the same languages for when force should be reported and how.

I can't see any harm in it, I can only see value in it. If there's a real problem and I accept that—standardization of the collection of this information across Canada—it just makes sense to me that we would do something to standardize that across the province. In Canada it lends itself to that, we have one criminal code that applies federally to all of Canada, so one standard with respect to justified use of force. I think there could be a lot of value in that.

I absolutely do. I think it needs to be done so that you can see where the outliers are, you can identify the areas where it's more of an issue, if certain groups are subjected to police use of force more than others. I think it would be an excellent and very valuable tool.

Evidently, there was a high level of support for the development of a standardized national system for the collection of use of force data in Canada.

Conclusions

Our interviews with police use of force experts and representatives from Canadian police oversight provided valuable data reflecting the current landscape of police use of force in Canada. As observed in the literature (see Obasogie & Newman, 2017; Rajakaruna et al., 2017; Staller & Körner, 2020), our police respondents reported marked changes with respect to the evolution of police use of force policies and practices in Canada—with more formalized, regulated approaches to use of force today that place a greater emphasis on effective communication and de-escalation. As a result of these changes, combined with the introduction of new use of force options (e.g., OC spray and CEWs) and developments in training, our respondents generally felt that the nature of force used by police in Canada has changed over the past two decades—with less force being used by the police against the public than in the past.

We were particularly interested in examining how our respondents understood and explained the over-representation of Black and Indigenous people, and individuals suffering from mental health problems in police use of force cases. As with many of the topics covered, there was variation with respect to perspectives on this issue. Many participants agreed that the over-representation of mentally ill people as subjects in police use of force incidents stems from the overreliance on police to deal with these populations—a problem exacerbated of cuts in funding to mental health and social services. These officers acknowledged that the police were not well equipped to deal with these populations, and although training was suggested as a means of improving outcomes, it was not seen as a real solution to the problem. There was slightly less consistency with respect to perspectives on use of force involving racialized people. Whereas a small number of respondents questioned the validity of the documented racial disparities in police use of force, suggesting Canadians' views are skewed by American media, other respondents cited increased rates of criminality among certain racialized groups and experiences with social and economic marginalization as drivers of these disparities (Edwards et al., 2019; McCarthy et al., 2019). Measures to reduce racial disparities in use of force proposed by the officers include reducing social inequality, increasing the representation of under-represented groups in policing, advancing community policing efforts and enhanced training. Little was said about the individual and institutional-level mechanisms known to contribute to such racial disparities (Holmes & Smith, 2012; Smith & Holmes, 2014).

We were also interested in our respondents' general perspectives on best practices with respect to use of force and on the ways in which police use of force can be kept in check (e.g., how to reduce illegitimate uses of force by the police). A focus on effective communication and de-escalation training, as mentioned above were advanced as best practices. Respondents' views were mixed with respect to whether in-car and body cameras would reduce the illegitimate use of force, however, some of our agency respondents did highlight the value of body camera footage can have in aiding their investigations. We also found general support for the presence of police oversight agencies in Canada, although the impact such agencies have had on the nature and scope of police use of force in Canada is yet to be determined.

Perhaps one of the most consistent themes emerging from our discussions centred on data—the lack of available data on the demographic characteristics of individuals subject to use of force in Canada and inconsistencies with respect to how use of force data is collected across the country. While respondents had mixed feelings with respect to the collection of demographic data (political, privacy and practical concerns were raised), there was a high level of support for the idea of a standardized national police use of force data collection strategy in Canada.

PART E: A REVIEW OF POLICE USE OF FORCE RESEARCH

Introduction

As indicated in Parts C and D of this report, data on police use of force in Canada is scarce. It is very difficult, therefore, to document trends and patterns in use of force at the national, provincial and municipal level. Due to the lack of high-quality data, it is also impossible to identify Canadian jurisdictions with lower use of force rates or service-specific training, policies or practices that have significantly reduced use of force incidents and their impact on local communities. Thus, in order to supplement the results of our own data analysis and interviews with Canadian use of force experts, we conducted a systematic review of the international literature on police use of force. This review captures the few Canadian studies that have been conducted, as well as the results of research from the United States, England, Australia and other western nations.

Law enforcement agencies across North America receive hundreds to thousands of calls for service each day. In most calls, the police handle the situations without using force. In the U.S. it has been estimated that less than two per cent of all police-civilian encounters result in the use of force (Eith & Durose, 2011; Hickman et al., 2008). These estimates are often cited as being much lower (e.g., 0.001%) by many Canadian police officials. However, the available data on police-civilian encounters are often inconsistent or inflated (e.g., some agencies may only report/document calls for service where officers attend while other agencies may report/document all calls for service regardless if an officer responds).

If an agency documents use of force strictly—for example, only reports cases where an officer uses a weapon and/or causes an injury requiring medical assistance—but widely documents police-civilian encounters, then this may result in a very low use of force rate. Comparably, if an agency reports all use of force incidents—for example, anytime an officer physically handles a civilian regardless of if it results in an injury requiring medical attention—and has a lower reporting threshold for police-civilian encounters (e.g., only those encounters that result in arrests), then this may lead to a high use of force rate. Because of the inconsistent variations in how agencies document use of force as well as police-civilian encounters, it is difficult to accurately verify and compare use of force rates across jurisdictions. Alpert and Dunham (2004) summarize this dilemma pointedly by stating that:

> The rate of force used depends on the definition of the baseline incidents against which they are measured. In this formula, the numerator, or lowest level of force counted, can range from verbal coercion, "pat-downs," handcuffing, and come-along holds, to levels that include extremely physical tactics, both offensive and defensive, including the use of deadly weapons. Clearly, the stricter the definition, the fewer the number of cases that will be captured in the numerator. Additionally, the inclusion of handcuffing and pat-downs as use-of-force events can create a problem, as these actions may be required by policy or for officer safety, resulting in no officer discretion. As the measures used in previous studies vary considerably, it is difficult to determine a true rate of force used by police. Different studies also use different denominators which range from all police-

citizen contacts to only discretionary contacts or arrests. As the denominator increases, the rate of force decreases. (p. 2)

Moreover, most data on use of force are generated from surveys, individual law enforcement agencies, independent police oversight agencies, or crowdsourcing websites that track cases of deadly force from media sources. Therefore, definitively determining how often the police use force is a significant challenge because of how data are reported and collected by agencies (Engel, 2008; Shane, 2018).

The lack of quality use of force data is a long-standing issue. In 1931, after confirming allegations of widespread police brutality across the United States, the Wickersham Commission recommended that all police agencies collect data on police use of force incidents (Shane, 2018). Since then, several other American commissions and inquiries have noted the poor quality of police use of force statistics and called for improved data collection practices.

For years, researchers have been arguing for better data collection and reporting by police on their use of force. For example, Kane (2007) argued that "all police departments should adopt as a collective professional standard the practices of (1) collecting comprehensive data on all coercive activities, including disciplinary actions, and (2) making those data available with minimal filtering and justification to members of the polity" (p. 773). Further, Hickman et al. (2008) noted that local, state, and federal governments collect and report very little information about police use of force, and even less about police behaviour in general. In the U.S., one of the only systematic, national-level indicators used to estimate rates of police use of force—the Police-Public Contact Survey (PPCS) administered by the Bureau of Justice Statistics (BJS)— underestimates the amount of force because of the exclusion of recently incarcerated persons (Hickman et al., 2008; Engel, 2008). Another source of data on police use of force comes from private sample surveys of law enforcement agencies that are funded by the government (see Garner et al., 2018). Hickman et al. (2008) proposed that using the Survey of Inmates in Local Jails (SILJ) in combination with the PPCS toward national estimates of force would provide a more sound and complete estimate of use of force incidents. However, using multiple data sources on use of force can provide a great deal of inconsistency in how often police use force because the data are collected and reported differently (Klinger, 2008; Williams et al., 2016). Due to other methodological limitations and weaknesses in pooling data from disparate sources, it remains a challenge to determine "reliable national estimates of the amount of force, the rate of force, or the correlates of force" in the United States (Garner et al., 2018, p. 3).

Researchers have also been vocal in arguing that historically, law enforcement agencies have been uncooperative with reporting use of force incidents. Smith (2008) stated that there have been several attempts at getting police services to report all use of force incidents for the purposes of creating a national database. One challenge is that police agencies are not mandated or required to report cases involving use of force (at least at the federal level). Even in situations when they have been legislated to report use of force, agencies have neglected to do this. For example, the *Violent Crime Control and Law Enforcement Act* of 1994 required the Attorney General to collect data on police use of excessive force and to publish annual reports from the data (McEwen, 1996). However, police agencies have failed to report cases of excessive force because they are protected under the Tenth Amendment of the U.S. Constitution (Hickman &

Poore, 2015; Shane, 2018). In other words, policing is controlled by state legislatures and the federal government cannot mandate local police agencies to report use of force because it is outside of its jurisdiction.

Researchers have suggested several ways to improve the current state of collecting data at the national level. For example, Smith (2008) recommended that one method for "collecting use-of-force data on a large-scale basis would be to establish a federal grant incentive program that would provide law enforcement agencies with direct funding for their participation" (p. 621). Although this method could increase the number of services that report use of force incidents, the reality that all, or even most services will contribute and participate may be a far stretch. Although recent public outcry against police violence in the U.S. and calls for increased transparency and accountability of law enforcement may put pressure on local agencies to begin participating in a national data collection effort (see discussion below on the FBI use of force data collection project).

Moreover, Zimring (2017) examines three U.S efforts to collect national data on police killings of civilians: 1) the National Vital Statistics System (NVSS); 2) the Uniform Crime Report's Supplemental Homicide Reporting System (which documents "justifiable homicides" involving police officers); and 3) the Bureau of Justice Statistics Arrest-Related Deaths Program. Drawing on insights from an FBI data quality exercise, along with information from crowd-sourced and media-compiled datasets, Zimring (2017) argues that the U.S. government typically undercounts the true number of police killing by more than half. While government statistics estimate that the annual number of civilians killed by police in the United States is approximately 500, the true figure appears to be closer to 1,000 (Zimring, 2017).

This gap emerges because the reporting of police killings—let alone less serious use of force incidents—is only voluntary. Some services provide data on all incidents, others provide data on only some incidents, while others provide no data at all. Zimring also questions the validity and completeness of the police data that is provided to federal agencies and criticizes that there are no data quality assurance checks. He notes that some police services may not want to provide information that could cause reputational damage or challenge the legitimacy of officers' use of force decision-making (see also Nix et al., 2017; Ross, 2015; Williams et al., 2019). In other words, even when data are provided by American police services, there are concerns that it is often incomplete and/or inaccurate.

In 2015, *The Washington Post* began to log every fatal shooting by an on-duty police officer in the United States. After Michael Brown (who was unarmed) was killed in 2014 by police, a *Washington Post* investigation found that the FBI undercounted fatal police shootings by more than half. *The Washington Post*'s data relies primarily on news accounts, social media postings and police reports. The team collecting the data attempt to provide disaggregated statistics when possible. For example, they try to identify the race of the civilian shot by police, the location, the gender, age, whether the civilian had a mental illness at the time, if the civilian had a weapon on their person, if an officer was wearing a body camera, and whether the civilian was fleeing the scene. Analysis of more than six years of data reveals that the number and circumstances of fatal shootings and the overall demographics of the victims have remained relatively constant (*The Washington Post*, 2021). Despite the unpredictable events that lead to fatal shootings, police in

the U.S. have shot and killed almost the same number of people annually—nearly 1,000—since *The Washington Post* began its project. Probability theory may offer an explanation as it contends that the number of rare events in large populations tends to remain stable absent any major changes in society, such as a major shift in police culture or gun ownership restrictions (*The Washington Post*, 2021).

What the database tells us is that although half of the people shot and killed by police are white, Black Americans are shot at a disproportionate rate. Black civilians account for less than 13 percent of the U.S. population, but are killed by police at more than twice the rate of white Americans (*The Washington Post*, 2021). Likewise, Hispanic Americans are killed by police disproportionately compared to white individuals. The majority of people shot and killed by police are male (over 95%) and more than half of the victims are between the ages of 20 and 40 years old. Between 2015 and 2020, over 5,700 people have been shot and killed by police; over 350 were unarmed civilians while over 3,200 were armed with some type of firearm; over 660 incidents involved an officer who was wearing a body-worn camera; over 1,200 individuals were mentally ill; over 700 were fleeing the scene on foot; and over 100 were under 18 years old (*The Washington Post*, 2021). Interestingly, Alaska has one of the highest shooting death rates at 60 per 1,000,000 while New York state's shooting death rate is approximately 6 per 1,000,000 (among the lowest in the U.S.).

Despite this attempt at collecting data on lethal force, the database does suffer from several limitations. For example, Shane (2018) notes that *The Washington Post* database has limitations concerning the data such as:

> (a) All of the cases involve fatalities, so comparing nonfatal shootings is not possible; (b) only deadly force is captured, so comparing less-lethal force options is not possible; (c) no data on the officer's characteristics, which limits demographic comparisons; (d) no data on environmental characteristics, which limits controlling for the tactics, approach, crime type, offender resistance, and the immediate situation; (e) no data on organizational composition, so it is not possible to identify agency correlates; (f) the data on offenders and the situation are very limited; and (g) the data do not differentiate intentional and unintentional shootings. (pp. 134-35)

Notwithstanding the limitations, these collection efforts do provide some insight into police use of lethal force and highlight areas that can be improved for police practitioners in documenting these cases for the purposes of improved data collection and reporting. However, the data available from *The Washington Post* database are incomplete and can lead to problems in drawing accurate conclusions around police use of force generally (see Jacob, 1984).

In 2019, the FBI began collecting use of force statistics from law enforcement agencies throughout the U.S. Primarily, the data collection efforts are aimed at national-level statistics on law enforcement use-of-force incidents and basic information on the circumstances, subjects, and officers involved.[12] However, like other attempts participation in this program is voluntary and not mandated. Although the FBI works closely with all participating agencies, the FBI

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[12] Please see https://www.fbi.gov/services/cjis/ucr/use-of-force for a full list of variables that the FBI collects as part of this program.

cannot authorize or direct any agency to reports its use of force. The ultimate goal of this program is to acquire more in-depth understanding on use of force incidents across U.S. jurisdictions and to make it accessible to the public. One limitation with this program is that the FBI requires a certain percentage of law enforcement agencies to submit use of force data before the FBI makes the information publicly available. For example, at specific thresholds the FBI will release certain data (i.e., 40% of the total law enforcement officer population; additional data are released when 60% and 80%, respectively, of the total law enforcement population are reached). As of mid-2021, it is reported that nearly 50% of law enforcement agencies (or nearly half of the total law enforcement population in the U.S.) have submitted use of force to the FBI on a monthly basis (Cantú, 2021). This is encouraging; however, because the program is voluntary there is no long-term guarantee that law enforcement agencies will continue to report its use of force. Also, none of the data are currently available for public review. The FBI has made it clear that the actual use of force data will not be released until at least 80% of law enforcement agencies in the U.S. participate in the program (Cantú, 2021). Until that milestone is reached, the public's access to use of force data is hindered.

These data limitation problems contribute to issues around truly understanding the nature and extent of police use of force. Although there have been minor improvements to police use of force data collection and reporting over the decades, it is still problematic. Therefore, what do we know about police use of force? What do we not know about police use of force? In an attempt to address these questions, the following provides a review on police use of force by exploring different areas of research and evidence including, but not limited to: training, policies, predictors and correlates of use of force, less-lethal force (e.g., CEWs and OC spray), body-worn cameras, and police oversight.

What is Police Use of Force?

There is no universally accepted definition of police "use of force." The term is often conflated with negative connotations such as police brutality, violence, abuse, and misconduct. The International Association of Chiefs of Police (IACP) defines use of force as "[t]he amount of effort required by police to compel compliance by an unwilling subject" (International Association of Chiefs of Police, 2001). The IACP also identifies five categories of force: physical, chemical, electronic, impact, and firearm. These categories are most often illustrated on a use of force continuum that several agencies employ as a guideline for situations that may require forceful action (Boivin & Lagacé, 2016; Crawford & Burns, 1998).

In Canada, all law enforcement agencies employ the same continuum which was created and governed by the Canadian Associations of Chiefs of Police (Hoffman et al., 2004). Conversely, the use of continua broadly differs throughout jurisdictions in the United States. Paoline and Terrill (2007) reported that several agencies fail to employ any use of force continuum. Further, Lawton (2007) explains that practitioners and researchers disagree on where to place certain forceful actions on a continuum. The debate often involves the placement of nonimpact weapons such as Oleoresin Capsicum (OC spray, or pepper spray) and Conducted Energy Weapons (CEWs, or most often referred to by its popular brand name Taser). These use of force options are generally placed below deadly force (i.e., firearms) but above physical force or impact (i.e., baton, physical restraint). However, some agencies see nonimpact weapons as lesser force than

impact and this creates the inconsistency seen in U.S. agencies that employ a continuum (Terrill & Paoline, 2013).

Use of Force Training

Police officers in Canada are required to undergo annual training on the use of force. Although there may be variations in the types of training officers receive, it is standard practice that all law enforcement officers must, at the very least, receive re-qualification on firearm usage once every 12 months. Similar re-qualification training is required for other types of use of force amongst law enforcement officers. For example, police officers in Ontario are required to undergo annual training on lethal force and less-lethal force procedures (e.g., CEW training, OC spray training, physical force training, etc.). New recruits must also undergo extensive training, particularly on the use of force, prior to becoming a sworn police officer. As such, RCMP cadets (recruits in training) are required to complete a 26-week basic training program before they assume the role of a sworn officer. A good portion of this training consists of defensive tactics and use of force procedures and techniques. The use of force training for RCMP cadets consists of "joint locks, takedowns, use of OC spray, placement and removal of resistant subjects in and out of vehicles, moving resistant subjects through doorways, stances, blocks, strikes, use of batons, carotid control technique, grappling, ground defence, body hold releases, handcuffing and searching subjects, and use of weapon defences" (Royal Canadian Mounted Police, 2019). Cadets also receive firearm training as well as in-class instruction on laws and policies related to police use of force intervention.

The academic literature on police use of force training in Canada is limited. For example, Bennell et al. (2007) explored use of force simulation training in Canadian police agencies. Use of force simulation training has evolved over the years with more police services employing these types of training scenarios (see U.S. research in James et al., 2013, 2014, 2016). Bennell et al's (2007) research was favourable to use of force simulation training because these scenarios afford countless opportunities for increased and repetitive training than would real-world or observational contexts. However, there continues to be limited research on police use of force simulation training in Canada specifically, and police use of force training generally (see also Armstrong et al., 2014; Mugford et al., 2013).

Academic research on police use of force training in the U.S. is also limited. More work and scrutiny on this front have increased in recent years with a large number of high-profile controversial police-involved killings of Black men. Additionally, the President's Task Force on 21st Century Policing, which consisted of leading experts tasked with identifying best practices in reducing crime and improving public confidence and trust in policing, recommended that use of force policies should focus on de-escalation training (see President's Task Force on 21st Century Policing, 2015). However, Engel et al. (2020) report that the de-escalation training suggestion was the only recommendation the Task Force presented concerning the use of force. Despite the Task Force's report and other use of force reports published by the Police Executive Research Forum that stress the need for increased de-escalation training, there remains no consensus or uniform definition of de-escalation within policing (Todak & James, 2018). Moreover, police use of force training in the U.S. varies considerably throughout agencies between and within states. Similar to Canadian law enforcement officers, police officers in the U.S. are typically required to

undertake re-certification training on use of force either on an annual or bi-annual basis. The re-certification training generally consists of classroom instruction that covers updates to laws and policies as well tactical training on firearms or other types of force (Wolfe et al., 2020; see also Morrison, 2006).

There has been some empirical research that has examined varying degrees around use of force training such as, but not limited to: expertise of use of force training coaches (Staller & Körner, 2020); supervisor education and use of force training (Lim & Lee, 2015); pedagogical practices in use of force training (Staller & Zaiser, 2015); efficacy of training programs (Rajakaruna et al., 2017); and lethal use of force simulation training and racial bias (see James et al., 2016, 2014, 2013). Most recently, the use of de-escalation tactics during use of force training has received significant attention with several political leaders and community advocates demanding reform under these guidelines (see Hentoff & Hentoff, 2016). Despite the calls to increase de-escalation tactics into use of force training regimes, there is limited empirical evidence on the efficacy of such training (Lum et al., 2016). To respond to this, Engel et al. (2020) conducted a systematic review of de-escalation training evaluations conducted over a 40-year period that were mainly conducted in the nursing and psychiatry fields. Although the researchers found positive components and few adverse consequences of the de-escalation training, the impact de-escalation has on use of force is inconclusive due to lack of quality concerning the evaluation research designs under study (Engel et al., 2020). Thus, more critical research is necessary to further understand strengths, weaknesses, and effect that de-escalation has within use of force training and policies (see also Bennell et al., 2021).

There has also been discussion regarding police recruitment within the topic of use of force. Ideally, recruitment processes will screen out individuals who may retain certain biases that can increase the risk of use of force encounters. Some research has attempted to identify predictive factors such as racial bias or behavioural and attitude problems of officers through different types of training, particularly simulation training exercises (Peeples, 2020). For example, Goff and Rau (2020) examined social psychology research and laboratory studies to determine officer behaviours and racially disparate policing. The authors found that:

> Physical threat and perceived threats to officers' group and self-concept can provoke aggressive and/or biased responses toward civilians. Additionally, some situations that are likely to provoke those threats—from physical threats, to cognitive depletion, a motivation to perform normative masculinity, and concerns with appearing racist—are all prevalent in the daily experiences of patrol officers. (p. 82)

Since patrol officers are often in contact with marginalized segments of society, this may trigger negative behaviours and attitudes towards these individuals and groups leading to use of force incidents. Goff and Rau (2020) propose that because of these on-the-job risk factors, there exists opportunity to interrupt and prevent those types of behaviours from forming, particularly through front-end regulation (e.g., recruitment, early training, policies, policing strategies, etc.; see also Jany, 2018). Packaged with effective training and strong police policies, different methods of screening and vetting aimed at identifying psychological, personal, and behavioural concerns or biases of police recruits could lead to better and improved encounters with the public. However, increasing hiring standards for recruits may create obstacles for police services who may be

struggling to draw and retain high quality police officers, something particularly evident in many U.S. law enforcement agencies (Peeples, 2020).

Use of Force Policies

The use of force is typically governed by several policies whether it be at the agency-level and/or at the state/provincial or federal-levels. In Canada, each police service has a use of force policy. Provinces/territories may also have guidelines governing the use of force that local agencies must adhere to. For example, when the Ontario government decided to allow all police officers in the province to be equipped with CEWs, provincial officials created a specific CEW policy that agencies were required to follow. The policy was not exhaustive, meaning that local police were still required to create a CEW policy for their agency that went beyond the provincial guidelines (e.g., post-deployment procedures, etc.; see Laming, 2015). Other provinces such as British Columbia, Alberta, and Nova Scotia for example have provincial use of force guidelines that police agencies in those jurisdictions must follow while also adhering to local use of force guidelines at the agency-level. Police use of force policies are not widely available to the public in Canada. In most cases, a freedom of information request is required to obtain use of force guidelines. Though, as a response from community members to be more transparent, the Toronto Police Service (TPS) made their use of force procedures available to the public in early-2021. The policy provides details around governance and reporting of use of force as well as officer responsibilities and restrictions in using force and supervisory responsibilities in reviewing force incidents (Toronto Police Service, 2021). It is important to note that the actual guidelines and procedures that dictate when officers are permitted and/or restricted from using force for each intervention option is not made available to the public. This is consistent across Canada as most police use of force policies in the country remain restricted from public access. Therefore, it is difficult to conduct any comparisons between agencies' use of force policies to determine best or leading practices. Also, the academic literature and empirical research on police use of force policies in Canada is almost non-existent.

Somewhat comparably, academic literature on police use of force policies in the U.S. is thin. Although the empirical research in this area is limited, there are some recent studies that highlight the importance of use of force policies in reducing incidents and/or violence. For example, Terrill and Paoline (2017) examined three agencies' less-lethal force policies that varied in policy direction and restrictiveness. The authors found that officers working for agencies that had the most restrictive use of force policies used force less than those officers working for agencies with more permissive policies (Terrill & Paoline, 2017). Evidence from other studies suggests that having more restrictive less-lethal policy directives (e.g., OC spray or CEWs placed higher on a use of force continuum) resulted in less force by officers for those applications (see e.g., Ferdik et al., 2014; Morabito & Doerner, 1997; Thomas et al., 2010). Other research shows that having more restrictive lethal force policies reduces lethal force (e.g., Fyfe, 1979; White, 2001; see also Jennings & Rubado, 2017). Some research such as Ferdik et al.'s (2014) found that agencies with less restrictive CEW policies resulted in substantially more CEW use of force incidents, but also resulted in fewer police-involved lethal shootings. The authors noted a dilemma in that creating more liberal guidelines for CEW use may result in public concern due to the likelihood of increased usage of the weapon. But the outcome could

also lead to improved community relations because a less-restrictive CEW policy may reduce fatal police shootings (Ferdik et al., 2014).

Moreover, Obasogie and Newman (2017) found that incorporating stronger and more restrictive language for when use of force is permitted is a factor in reducing the quantity and severity of use of force incidents. The authors concluded by saying that the use of force policies they examined were faulty and that "police violence is at least partially precipitated by these flawed use of force policies that allow officers to produce the quantity and severity of force that they currently do" (Obasogie & Newman, 2017, p. 292). Additionally, Garrett and Stoughton (2017) found that use of force policies from the fifty largest police services in the U.S. were inconsistent and that many of the policies were weak or did not offer sufficient guidance for officers.

Unlike most Canadian jurisdictions, many U.S. agencies make use of force policies available to the public. For example, the Orlando Police Department publicizes its use of force policy (see Orlando Police Department, 2020 for details on the policy). Though, Orlando terms "use of force" as response to resistance and the policy is named "Response to Resistance and Apprehension Techniques"; it is important to note the wording distinctions between agencies because this varies throughout the U.S. (many other jurisdictions use the standard terminology which is "use of force" but others may use variations surrounding response to resistance or tactical control). In Canada, there are fewer differences in terminology. Use of force policies are quite consistent across the country, though there may be noticeable differences in the names or databases for how officers document use of force incidents. In Ontario for example, officers complete a use of force report whereas RCMP officers complete a Subject Behaviour / Officer Response form. Locally, Edmonton police officers complete a Control Tactics Report if they are involved in a use force intervention.

As previously noted, all Canadian law enforcement officers follow the same use of force continuum across the country. This standard approach allows for consistency for policy makers and administrators when creating use of force policies and guidelines. Conversely, there is no standard uniform use of force continuum employed across U.S. law enforcement. Several agencies employ different continua where the placement of certain less-lethal force options vary. For example, one agency may place OC spray higher than CEWs and physical force whereas another agency may place physical force higher on the continuum than both OC spray and CEWs. Additionally, with the sheer number of law enforcement agencies that exist in the U.S., finding consistent use of force continua may be a challenge. It is unknown whether every single law enforcement agency employs a use of force continuum or even maintains a use of force policy. Many law enforcement agencies in the U.S. are small, local sheriff detachments that often employ fewer than ten officers. It is undetermined if many of these small agencies utilize a continuum and/or specific policies governing use of force techniques. Stunningly, Jennings and Rubado (2017) reported that while nearly all U.S. agencies require documentation for when an officer discharges their firearm, less than half of those agencies require an officer to report when they draw/display their firearm but do not discharge it. In other words, in over half of U.S. law enforcement agencies, policies or guidelines do not require officers to document instances when they display their firearm but do not shoot. The limited academic research on use of force policies in the U.S. and the dearth of literature on the topic in Canada underscores our lack of understanding in this area.

Early Research on Police Use of Force

Most research on police use of force has emerged from the U.S. Early research into police use of force produced varied and mixed findings because of several issues related to the measurement of use of force, and methodologies were largely based on officer observations and interviews rather than documented data (see Klahm et al., 2014). Also, most early research focused specifically on deadly force (e.g., Fyfe, 1981; Jacobs & Britt, 1979; Kania & Mackey, 1977) primarily because the firearm was one of the only options officers had when dealing with a situation that required forceful intervention. Over time, researchers began looking at other types of forceful encounters between the police and the public which posed challenges because of the difficulty in obtaining these data from police services. Researchers have attempted to study several variables that may serve as predictors for use of force incidents. Officer, suspect, and encounter/situational characteristics are the most common variables that researchers have analyzed and continue to analyze (see below for more detailed discussion).

Police use of force research began during the 1950s and was strictly focused on acts of physical force that were violent, excessive, and/or lethal (Klahm et al., 2014). Bittner (1970) was among the first scholars to argue that there was a large inconsistency in clearly stating and conceptualizing what we mean by use of force. Bittner provided the first firm conceptualization of a police officer's role when force may present itself. Bittner's (1970) conception was that the police address all sorts of human problems and "this lends homogeneity to such diverse procedures as catching a criminal, driving the mayor to the airport, evicting a drunken person from a bar, directing traffic, crowd control, taking care of lost children, administering medical first aid, and separating fighting relatives" (p. 44).

Despite Bittner's broader conception of force, many researchers continued to only focus on excessive and/or deadly force throughout the 1970s. Reiss (1980) criticized research that focused exclusively on deadly force because the measure ignored "all decisions where force gave way to alternative ways of coping with situations" (p. 12). Klahm and Tillyer (2010) explain that police use of less-lethal (or nonlethal) force only received scant attention in the 1970s and early 1980s, and it was not until the mid-1980s that less-lethal force became a popular research area for scholars. Further, Sherman (1980) indicated that the police viewed the community differently in the late 1970s compared to the 1950s. He argued that the change in police violence/force occurred because of policy, reform, and professionalism (Sherman, 1980). This can be supported by the fact that the first recognized use of force policy appeared in the New York Police Department in the mid-1970s.[13]

Less-than-lethal Force Research

Prior to the 1980s when officers were faced with a situation that warranted forceful intervention, they most often resorted to the use of deadly force because the only other option available was the baton stick, which could only be used at close range and in specific cases. Trostle (1990) explained that law enforcement agencies recognized a major concern for officers when faced with a forceful situation because the baton and a gun may be either too weak or too strong a

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[13] The NYPD use of force policy was strictly around the use of deadly force.

response. Beginning in the late 1980s and throughout the 1990s, law enforcement agencies expanded the availability of two less-than-lethal options to officers: OC spray and CEWs.

When OC spray and CEWs entered the market, they were branded as nonlethal weapons for police agencies. This misconception quickly disappeared after several cases of civilians dying after being exposed to either OC spray or a CEW (Rappert, 2002). The term less-than-lethal was borne out of a U.S. Department of Justice conference in 1986 and defined as "devices or agents used to induce compliance with law enforcement personnel without substantial risk of permanent injury or death to the subject" (Trostle, 1990, p. 28). Sweetman (1987) explained that the term less-than-lethal was adopted instead of nonlethal because any weapon or force can be lethal if used inappropriately.

Research on OC spray received considerable attention throughout the 1990s as several law enforcement agencies adopted the technology (Smith & Greaves, 2002). Some studies suggest that OC spray is effective 90-100% of the time in subduing a suspect (Alpert & Dunham, 2010; Gauvin, 1994; Kingshott, 1992; Phillips, 1994). Further, it was reported that the spray also reduced officer and civilian injuries as compared to the use of other force options such as the baton or physical restraints (Rogers & Johnson, 2000). However, other research suggests that OC spray may not be as effective as first perceived. Kaminski et al. (1999) claimed that OC spray was effective in 70.7% of cases in their study which is relatively below that of most other evaluations. Despite the results from Kaminski et al's study, the researchers still argued that OC spray is a useful tool for law enforcement agencies.

OC spray has also received criticism because of its association with citizen fatalities after exposure to the weapon. The most well-known case of OC spray contributing to a citizen death occurred in 1993 when a pathologist determined that a North Carolina man died from asphyxia due to bronchospasm which was precipitated by OC spray (Rappert, 2001). This case resulted in several U.S. law enforcement agencies withdrawing OC spray from their use of force options for a period. Agencies began to introduce the tool back into use as more research was conducted that suggested OC spray was relatively safe to use on humans with minor risk to long-term health (Vilke & Chan, 2007). However, Amnesty International has fought for the prohibition of OC spray as they claimed in a 2004 report that over 100 individuals in the U.S. had died after exposure to OC spray since the introduction of the weapon in the early 1990s (Amnesty International, 2004). Additionally, there have been a handful of cases in Canada in the 2010s where a civilian died after being pepper-sprayed by police. For example, in 2020, two Quebec men died following a police encounter where pepper-spray was used (one in Montreal and one in Sherbrooke). Despite the criticism and opposition by some groups to the use of OC spray by law enforcement, most agencies in the U.S. and Canada continue to utilize the spray as a use of force option. In Canada, OC spray has been infrequently used by many municipal police services in part because of other options available to officers that are viewed as more effective, most notably CEWs.

Law enforcement agencies have been using CEWs since the 1970s. The device has gone through an extensive developmental process throughout the past three decades with at least 95% of U.S.

law enforcement agencies using the weapon[14] (Sussman, 2012). Comparatively, nearly all law enforcement agencies in Canada carry CEWs. In the 1970s, the Los Angeles Police Department became the first agency to use CEWs. However, the agency used the weapon sparingly because of its ineffectiveness in controlling individuals (Kedir, 2006). Further, the New York City police commissioner criticized the device and classified them as danger weapons in 1975 (Sussman, 2012). The ineffectiveness of the device, and the criticism it received from law enforcement officials delayed the widespread adoption of CEWs until the late 1990's when the weapon was revamped, made safer to use on humans, and tailored and marketed specifically for law enforcement use.

The research on CEWs is an expanding area of interest. Most research around CEW use has occurred within the last 10-15 years because of the rapid adoption of the weapon by thousands of law enforcement agencies throughout the world. Some research has looked at CEW use within one or a handful of agencies assessing the weapon's placement on use of force continua and the policies around its use (Adams & Jennison, 2007; Alpert & Dunham, 2010). Further, several studies have examined CEW use in relation to civilian and officer injury (DeLone & Thompson, 2009; Den Heyer, 2020; Terrill & Paoline, 2012), effectiveness in subduing suspect resistance (Ariel et al., 2019; Lin & Jones, 2010; Smith et al., 2007; Somers et al., 2020; White & Ready, 2010), ecological predictors (Sytsma et al., 2021), and other personal and encounter predictors such as race and mental illness (Brandl & Stroshine, 2017; Crow & Adrian, 2011; Hallett et al., 2021; Riddell & Worrall, 2021; Thomas et al., 2010; White & Ready, 2009). However, very little research has been conducted on the health effects of individuals exposed to CEW use. A handful of notable studies that tested CEW use on human subjects revealed that there were no changes in any cardiac levels after being shocked by the weapon (Baliatsis et al., 2021; Ho et al., 2006; Kane & White, 2016; Levine et al., 2007).

Research around the effectiveness of CEWs is limited for several reasons. The available studies that have analyzed CEW use have either faced challenges from poor data (Terrill & Paoline, 2012), or have been commissioned by Axon Enterprises Inc. (the company that makes Taser weapons; Kedir, 2006). Since Axon has been involved in several CEW studies, there remains a lack of rigorous and independent research around the safety and effectiveness of the device (Kedir, 2006; McStravick, 2011). Axon claims that the effectiveness rate of the weapon is somewhere between 80% and 94% based on research commissioned by the organization (White & Ready, 2009).

However, CEWs have also been associated with the deaths of several civilians. For example, Amnesty International claimed that there have been more than 540 deaths connected to CEW use in the U.S. between 2001 and 2013 (Amnesty International, 2013). Additionally, a *Reuters* investigation found that between 1980 and 2018, 1,081 people in the U.S. were killed after police deployed a CEW on them (*Reuters*, 2018). It is important to note that most of these Taser-related deaths have occurred after 2000 which coincides with the widespread adoption of this weapon by law enforcement agencies. *Reuters* was also able to verify that the CEW was the cause of death or a contributing factor in at least 163 of the cases as determined by autopsy findings. Further, the majority of those killed (over 560) had a mental illness, were experiencing emotional

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[14] There are approximately 18,000 law enforcement agencies in the U.S. It is estimated that at least 17,000 agencies currently deploy CEWs.

distress, or were considered to be in a state of "excited delirium" (*Reuters*, 2018). Likewise, the majority of the civilians who were killed were alleged to be under the influence of drugs or alcohol. As well, most of those killed (over 950) were unarmed at the time of encounter with police. Moreover, there have also been several Taser-related deaths in Canada. Perhaps the most infamous example is the death of Robert Dziekanski by RCMP officers that occurred in 2007 at the Vancouver International Airport. More recently, Rui Nabico was killed in 2016 after Toronto police deployed a Taser on him. An independent investigation found that the Taser was not the cause of Nabico's death. A 2020 coroner's inquest mirrored the independent investigation's findings and reported Nabico's death was an accident and whereby he died from sudden cardiac arrest after being subjected to a Taser deployment. Similarly, Jason Koehler died in British Columbia in 2020 after RCMP officers deployed a Taser on him. Koehler was reported to be experiencing a mental health crisis at the time of encounter and the independent investigation is pending. Since there is no national database on the use of CEWs by police in Canada, it is unknown how many CEW-related fatalities there have been in the country since police began using the weapon.

Limited research on CEWs also exists outside of the U.S. For example, Den Heyer (2020) examined CEW use by New Zealand officers between 2009-2017 and found that the use of the weapon increased each year as did the race of the individual being subjected to its use. Even though the Maori population of New Zealand comprises roughly 16% of the total population, they represented over 50% of those subjected to the use of CEWs by police (Den Heyer, 2020). It was also found that injuries sustained by officers and subjects increased during this study period (Den Heyer, 2020). Moreover, in an experimental study on CEW use in the U.K., Ariel et al. (2019) found that the presence of a CEW significantly increases the use of force more generally. The authors concluded that the presence of a CEW heightens aggression in subjects (Ariel et al., 2019). Despite expanded research around the effectiveness of CEWs in recent years, the empirical evidence remains largely inconclusive on this front and may be best understood as the weapon being more effective on certain people and in certain situations (e.g., see Brandl & Stroshine, 2017; Den Heyer, 2020). However, anecdotal evidence from several municipal police agencies in Canada suggests that CEW use is widely effective (for both demonstrated force presence as well as probe mode).[15]

Beyond CEWs and OC spray, other "less-lethal" use of force options police may have access to include the baton (or police stick), flashlights, bean-bag shotgun or other projectiles, and canines (also known as K9 or police service dogs). Police officers may also use their hands and feet to administer physical blows against subjects and this can range from soft control to hard control tactics. These use of force applications are generally found in empirical research that examines police use of force more broadly with few of these tactics being independently investigated. However, there are a handful of studies that have examined police use of canines or service dogs

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[15] Taser CEWs can be used in four different ways. The first is that officers merely display or show the device and this often leads to subject compliance. This is termed as "demonstrated force presence." The second is when an officer deploys the Taser CEW and both darts shoot out at the subject. This is called "probe mode." The third is when an officer uses the Taser CEW as a stun which requires physical contact for the purpose of pain compliance. This is termed "stun mode." The fourth is when an officer first uses probe mode, but that application does not result in compliance, leading an officer to detach the "probe" and use the weapon as a stun for pain compliance. This is known as "three-point contact."

during use of force situations (e.g., Bloch & Martinez, 2020; Hickey & Hoffman, 2003; Loder & Meixner, 2019; Melosh, 2006; San Miguel & Justice, 2009). The available research on police service dogs and use of force is very limited, especially in the Canadian context. Due to the paucity of research, we do not have a strong foundation of evidence-based work on the efficacy of canine deployment and the use of force. Despite this, official RCMP use of force data show that dog bite incidents have increased by 133 between 2010 and 2019. In 2010, there were 291 dog bites and in 2019 there were 424 dog bites on civilians (Royal Canadian Mounted Police, 2020). Although police dog bite incidents only comprise a small fraction of all RCMP use of force incidents, they are higher in frequency than many other use of force tactics (e.g., OC spray was used 292 times in 2019; batons were used 50 times in 2019). With the increase in police dog bite incidents, focused Canadian research on police service dogs and the use of force is urgently required.

Use of Force Predictors

The empirical research around what factors may result in the use of force is widespread. Researchers have attempted to understand why police use force against civilians. Civilian, officer, and encounter (or situational) characteristics are the primary areas that researchers have examined in detail. Klahm and Tillyer (2010) claim that the empirical evidence suggests few characteristics are highly predictive in determining police use of force.

Civilian Characteristics

Gender

Males are significantly over-represented in American use of force statistics. For example, over the past decade, males have constituted 90% to 95% of civilians killed by police shootings in the United States, although they represent only 50% of the U.S. population. Several studies suggest that, controlling for situational factors, the police are more likely to use force—or greater levels of force—against male than female suspects (Crawford & Burns, 1998; Garner et al., 2002; Kaminiski et al., 2004; McCluskey et al., 2005; Schuck, 2004; Terrill, 2005; Terrill & Mastrofski, 2002; Terrill & Reisig, 2003; Terrill et al., 2003). By contrast, only a handful of studies have found that suspect gender has no impact on use of force decisions (Engel et al., 2000; Lawton, 2007; Morabito & Doerner, 1997). For example, Kaminski et al. (2004, p. 218) found that officers were no more likely to use force on male suspects compared to female suspects but that officers were more likely to use a higher level of force against male suspects. Also, Edwards et al. (2019) discovered that the lifetime odds of men in the U.S. being killed by police are 1 in 2,000 while the odds for women are 1 in 33,000.

Age

In general, American research suggests that age is negatively associated with police use of force. A number of studies suggest that, controlling for situational factors, officers are more likely to administer force against younger than older civilians (McCluskey & Terrill, 2005; Paoline & Terrill, 2007; Terrill & Mastrofski, 2002; Terrill & Reisig, 2003). Edwards et al. (2019) claim that the risk of being killed by police in the U.S. is highest for those between the ages of 20 and

35 years old. However, some studies found that age is not a significant predictor of the level of force used by the police (Crawford & Burns, 1998; Engel et al., 2000; Kaminski et al., 2004; Terrill et al., 2008). Since American Census estimates suggest that the Black population is significantly younger than the White population, racial differences in age might help explain racial disparities in police use of force.

Race/ethnicity

One of the most controversial aspects of police use of force involves the race/ethnicity of civilians (Crow & Adrion, 2011). A majority of the research exploring the relationship between use of force and race has been focused in the United States. The empirical evidence is mixed on whether the race/ethnicity of an individual influences police use of force. Some studies found that an individual's race/ethnicity did not influence police use of force during encounters (Engel et al., 2000; Garner et al., 2002; Lawton, 2007; McCarthy et al., 2019; McCluskey et al., 2005; Morabito & Doerner, 1997; Sun & Payne, 2004). However, several studies support the claim that race/ethnicity does impact and/or predict police use of force (see Brown & Langan, 2001; Edwards et al., 2019; Eith & Durose, 2011; Jacobs & O'Brien, 1998; Kramer & Remster, 2018; Paoline et al., 2018; Smith, 2004; Terrill & Mastrofski, 2002; Wright & Headley, 2020). As such Paoline et al. (2018) reported that white officers "used higher levels of force against black citizens. This suggests that white police may find blacks' noncompliance particularly offensive or threatening" (p. 67). Further, Edwards et al. (2019) found that Black, Indigenous and Latino peoples in the U.S. face a higher lifetime risk of being killed by police than do white civilians. Additionally, research shows that Black individuals are grossly overrepresented in deadly force incidents in both the U.S. and Canada (Nix et al., 2017; Shane, 2018; Pedicelli, 1998; *The Washington Post*, 2021; Wortley et al., 2020). Likewise, Native Americans are grossly over-represented in fatal use of force incidents in the U.S. (Schroedel & Chin, 2017).

Moreover, Fryer (2016) analyzed use of force data from four diverse sources to examine if there were racial disparities in forceful incidents. Two sources included data on less-lethal force and two sources included data on officer-involved shootings. The findings suggest that Black civilians are 21.3% more likely to endure some form of less-lethal force (Fryer, 2016). However, in terms of lethal force, Black civilians were no more or less likely to endure the most extreme use of force. Fryer (2016) argued that officers face higher costs for lethal force relative to less-lethal force which could explain why there were racial disparities in less-lethal force but none for lethal force.

Research exploring the relationship between CEW deployment and race show that non-white male citizens were more likely to be subjected to CEW use than their white and female counterparts (Crow & Adrion, 2011; Gau et al., 2009; Lin & Jones, 2010). More specifically, Gau et al. (2009) claimed that Hispanic civilians were twice as likely as white civilians to be the recipient of a CEW deployment. Conversely, DeLone and Thompson (2009) reported that CEW use was not disproportionately targeted towards racial minorities, as white civilians were most often the recipient of the weapon's use.

There exists a small body of literature that has tested the relationship between police use of force and race/ethnicity in a controlled shooting simulation setting (see James et al., 2013, 2014,

2016). James et al. (2016) conducted the first known experimental study that tested police officers in realistic deadly force simulation scenarios. The results suggest that officers were slower to shoot armed Black civilians than armed white civilians, and they were also less likely to shoot unarmed Black civilians than unarmed white civilians. The researchers tested the participating officers' implicit racial biases by using the well-validated "race/weapons" version of Harvard's Implicit Association Test (IAT). The implicit biases test was important in determining whether an officer's implicit racial bias predicts their decision to shoot. The IAT findings suggest that implicit bias is unrelated to officers' decisions to shoot in deadly force simulations (James et al., 2016).

Research conducted in controlled shooting scenario settings do pose several limitations. For example, Fridell (2016) argues that the laboratory setting used does not accurately reflect the real world because there are no consequences to the officers in being under-vigilant in deadly force decisions concerning Black civilians. Being under-vigilant in the real world can result in an officer suffering a serious injury or death. Further, Terrill (2016) points out that James et al.'s research location (Spokane, Washington) should be taken into consideration when interpreting the findings. Terrill (2016) states that "on average, Spokane police officers have been involved in just two shootings per year over the last several years… the number of shooting scenarios presented in the simulator research and that which is experienced on the street vary widely" (p. 494).

Socio-economic status

Despite the strong bivariate correlation between race and police violence, some criminologists have argued that the over-representation of Black Americans in use of force incidents is more about social class than race (see Walker et al., 2016). They maintain that, regardless of race, police tactics of control and coercion are focused on poor, socially disadvantaged segments of society. Research findings with respect to civilian social class and use of force are somewhat inconclusive (Klahm & Tillyer, 2010). Some research suggests that socio-economic status is predictive of serious police use of force (e.g., see McCarthy et al., 2019; Motley Jr. & Joe, 2018). Though, several studies suggest that there is a negative relationship between socio-economic class and use of force (Friedrich, 1980; McCluskey & Terrill, 2005; Terrill & Mastrofski, 2002; Terrill & Reisig, 2003), while other studies indicate only a weak, statistically insignificant relationship (Sun & Payne, 2004; Paoline & Terrill, 2005). It is important, however, to interpret any findings related to civilian socio-economic class with caution. Social class, at the individual level of analysis, is difficult to measure. Some studies have been criticized for using unreliable observer perceptions of civilian social class rather than self-reports (see Klahm & Tillyer 2010; Weitzer & Tuch, 2004).

Officer Characteristics

Officer gender

Some scholars theorize that female police officers, due to gender socialization norms and higher levels of empathy, are less aggressive and thus less likely to use force than their male counterparts. However, research on the impact of officer gender has been mixed. Some studies

suggest that officer gender is not a significant predictor of use of force (Crawford & Burns, 1998; Kaminski et al., 2004; Lawton, 2007; McCluskey & Terrill, 2005; Paoline & Terrill, 2007; Terrill & Mastrofski, 2002; Terrill et al., 2008). Other research, however, has found that, after controlling for situational factors, male officers are more likely to use force—especially deadly force—than female officers (see Alpert & Dunham, 1997; Ba et al., 2021; Carmichael & Kent, 2015; Garner et al., 2002).

Officer age and experience

Officer age and experience are highly correlated. Some research suggests that officers with more experience are less likely to use force than younger, less experienced officers (McElvian & Kposawa, 2008; Paoline & Terrill, 2007; Terrill & Mastrofski, 2002; Worden, 2015). However, other research indicates that—after controlling for rank and type of policing assignment—officer experience has no influence on use of force decisions (Lawton, 2007; McCluskey & Terrill, 2005; Sun & Payne, 2004). Other studies suggest that while officers with more years of experience are less likely to use deadly force than younger officers, they are actually more likely to employ other, less-lethal use of force techniques (Crawford & Burns, 1998; see also Kaminski et al., 2004; Morabito & Doerner, 1997; Klahm & Tillyer 2010).

One factor that might influence the relationship between officer experience and use of force is the type of policing assignment. Younger officers are more likely than older officers to be assigned to frontline patrol work that involves aggressive or proactive policing tactics—including stop, question and frisk practices (see Worden, 2015). This type of work increases the frequency of negative interactions with civilians and thus the probability of use of force. By contrast, older, more experienced officers are more likely to be assigned to special units, detective work or supervisory positions that will decrease their likelihood of experiencing a use of force incident.

Officer education

The education of an officer and whether this has any impact on the use of force has received considerable attention through general discussion, but relatively little empirical research has focused on this issue. It is argued that those who have attained a higher level of education possess better decision-making skills and should be less likely to resort to violence (Worden, 1990; see also Paoline & Terrill, 2007). The empirical evidence around this issue has produced mixed findings. Sun and Payne (2004) reported that an officer's level of education did not influence the likelihood of force being used. Conversely, Paoline and Terrill (2007) found that officers with a post-secondary degree were less likely to use force compared to their colleagues with only a high school education (see also McElvain & Kposowa, 2008). Similarly, Rydberg and Terrill (2010) found that "officers with some college exposure or a four-year university degree are significantly less likely to use force relative to non-college-educated officers" (p. 110). In Canada, there is no empirical research that has examined the relationship between officer educational attainment and the use of force.

Officer racial background

Several scholars have theorized that white police officers, due to both explicit and implicit biases, would be more likely to use force against Black civilians than Black police officers. However, several studies have found that officer race is not a significant predictor of police shootings of Black civilians. In fact, a few American studies have found the opposite—that Black civilians are more likely be shot by Black than White officers (see Johnson et al., 2019; Menifield et al., 2019). A number of factors might explain this unpredicted relationship—including the fact that Black officers are more likely to work in large urban centres and are more likely to be assigned to patrol high-crime areas within those cities. Moreover, most of the research that has explored the relationship between officer race and use of force found that an officer's race/ethnicity did not influence the likelihood of force being used (Crawford & Burns, 1998; Friedrich, 1980; Lawton, 2007; McCluskey & Terrill, 2005; Paoline & Terrill, 2007; Terrill & Mastrofski, 2002).

However, a handful of studies have produced results showing that Black, white, and Hispanic officers differed in use of force practices (see Ba et al., 2021; Garner et al., 2002; Headley & Wright, 2020; Klahm & Tillyer, 2010; McElvain & Kposowa, 2008; Paoline et al., 2018; Sun & Payne, 2004; Wright & Headley, 2020). For example, McElvain & Kposowa (2008) found that the race/ethnicity was a strong predictor in use of force cases. They stated that "white officers were more likely to engage in shootings than Hispanic officers" (p. 517). The results also found that Black officers were no more likely to be involved in deadly force incidents as their white counterparts. Further, Wright and Headley (2020) found that "Latino officers were 1.27 times more likely to use higher levels of force on Black civilians" (p. 856) in their study on Dallas and Indianapolis police officers. The authors also found that white officers used lower levels of force on Latino civilians. Nonetheless, these findings have contributed to the debate that increasing diversity may not necessarily decrease police use of force incidents (see also Headley & Wright, 2020).

Encounter (Situational) Characteristics

Civilian impairment

Some scholars have suggested that civilian impairment could increase the likelihood of police use of force. The logic is that persons, under the influence of drugs or alcohol, may act in a more irrational, aggressive or violent manner towards the police and eventually compel police coercion. However, the empirical evidence is mixed. While some studies suggest that civilian impairment increases the likelihood of police use of force (Bolger, 2015; Engel et al., 2000; Friedrich, 1980; McCluskey & Terrill, 2005; McCluskey et al., 2005; Morabito et al., 2017; Paoline & Terrill, 2007; Terrill & Mastrofski, 2002; Terrill et al., 2003, 2008), other studies reveal no significant relationship between impairment and use of force decisions (Lawton, 2007; Morabito & Doerner, 1997; Crawford & Burns, 1998). Doubt has also been raised about the validity of "civilian intoxication" measures. Civilian intoxication measures are often based on officer perceptions rather than self-reports and physiological testing. There are also concerns that officers often conflate civilian intoxication with symptoms of mental illness.

Civilian mental illness

Civilian mental illness can be viewed as both an individual characteristic and an encounter variable. A growing body of American evidence suggests that a large proportion of all police use of force cases involves civilians with mental illness and/or experiencing a mental health crisis at the time of their interaction with police (Morabito and Socia, 2015). This includes cases of severe depression in which civilians try to induce "suicide by cop" (Parent, 2011). It is theorized that, as with cases of civilian intoxication, people in mental crisis may appear "irrational" during police encounters, fail to obey police instructions, or act in a violent or threatening manner towards police officers. All these factors may increase fear and concerns about officer safety and ultimately increase the likelihood of a use of force intervention.

Despite growing public awareness and concern of this issue, empirical research on the relationship between police use of force and mental health is limited, but slowly increasing. Most research in this area has either examined police perceptions of mentally ill persons (Desmarais et al., 2014; Livingston et al., 2014; Watson et al., 2004; Wells & Schafer, 2006), or police encounters with mentally ill persons (Engel, 2015; Hails & Borum, 2003; Morabito, 2007; Morabito & Socia, 2015; Parent, 2007). Of the research that has examined mental illness and police use of force, some findings suggest that there is a positive relationship between mental illness and the likelihood of experiencing a use of force incident (e.g., see Dymond, 2020; Kesic et al., 2013; Rossler & Terrill, 2017). For example, Bailey et al. (2016) found that police were more likely to deploy a CEW on individuals with a mental illness than those without a mental illness. Likewise, Dymond (2020) found a positive relationship between CEW use and mental illness. Similarly, Parent (2011) examined all police deadly force cases in British Columbia over a 10-year period and found that in nearly one-third of cases the civilian had a mental illness. Further, Hall et al., (2013) found that in one of six use of force incidents involved a person exhibiting common signs of Excited Delirium (often associated with a mental illness).

However, some research also suggests that mental illness has no impact on use of force (see Morabito & Socia, 2015). Moreover, in jurisdictions that have employed Crisis Intervention Teams (CITs), use of force against persons with mental illness decreased (Morabito et al., 2012). CITs are a specialized police approach where officers are trained to effectively respond and manage calls involving mentally ill persons and act as liaisons to the mental health system (Morabito et al., 2012; see also Borum et al., 1998). The Memphis Police Department first developed the CIT model in the 1990s and this intervention strategy has spread to other urban police agencies in the U.S. (Parent, 2007). Several Canadian law enforcement agencies utilize similar teams and/or health professionals to respond specifically to mental health calls for service either independently or in tandem with police officers.

It is estimated that at least 10% of all police-civilian encounters involve people with mental illness (Hails & Borum, 2003; Morabito, 2007). Data validity often depends on the ability of individual police officers to identify the signs of mental illness and react accordingly. Officers often find it difficult to differentiate between people who are impaired or intoxicated and people with mental health issues (Alpert, 2015; Morabito & Socia, 2015). Morabito et al., (2012) claim that "police officers may encounter individuals who have a mental illness and are also under the influence of drugs or alcohol—increasing their difficulty in managing the incident and perhaps

making it difficult for the officer to recognize the mental illness" (p. 61). Although officers, at least reportedly in Canada, are receiving increased mental health training, they are not trained mental health professionals and cannot be relied upon to accurately record whether an individual has a mental illness at the time of encounter. Such measurement challenges may contribute to inconsistent research findings and impede efforts to determine the true relationship between mental health and police use of force.

Civilian behaviour during encounters with the police

Technically, the police are only permitted to use force—including lethal force—when they or others are either threatened or attacked by a suspect. In other words, officers must fear for their own safety, the safety of fellow officers, or the safety of other civilians before they make the decision to use force. This fear must be considered reasonable. In support of this general principle, previous research consistently reveals that, in a high proportion of police shooting cases, civilians were alleged to have been threatening, attacking or shooting at police officers (Haider-Markel & Joslyn, 2017; Klinger & Slocum, 2017; Zimring, 2017). Though, few academic studies have assessed whether a weapon possessed by a suspect influences the use of force. Some studies have found that suspects brandishing a weapon were more likely to be the recipient of force (Bolger, 2015; Hine et al., 2018; McCluskey et al., 2005; Paoline & Terrill, 2007; Sun & Payne, 2004; Terrill & Mastrofski, 2002), whereas other research reported that the presence of a weapon had no impact on whether or not the police used force (Crawford & Burns, 1998; Kaminski et al., 2004; Morabito & Doerner, 1997).

Research also suggests that a high proportion of use of force derives from police attempts to arrest suspects accused of criminal behavior. In many cases it is alleged that force is justified because civilians have actively tried to resist arrest or avoid apprehension (Klahm & Tillyer, 2010). Most research suggests that officers enforcing an arrest are much more likely to use force than officers involved in other types of civilian interaction (McCluskey & Terrill, 2005; Paoline & Terrill, 2007; Terrill & Mastrofski, 2002; Terrill et al., 2003).

It is important to note, however, that research on the temporal ordering of the arrest/use of force relationship is limited. Most studies, for example, are unable to determine whether force was used before or after arrest initiation (see Klahm & Tillyer, 2010). Further, the operationalization of "arrest" and "use of force" has been inconsistent across studies. Some studies classify arrests as a type of use of force—regardless of whether physical force was used or not (see Alpert & Dunham, 2004; Klahm et al., 2014; Terrill & Mastrofski, 2002). By contrast, other empirical studies measure police use of force in terms of physical strikes and blows or the use of weapons against civilians (see Bazley et al., 2007).

Civilian demeanour

Scholars have argued that the demeanour of civilians may have a major impact on police decision making—including the decision to use force. Some studies have observed that the police are more likely to use force against citizens who are argumentative, resistant, belligerent or defy their authority (Bolger, 2015; Dymond, 2020; Garner et al., 2004; Macdonald et al., 2003; Terrill 2003). It has been suggested that some police officers react negatively to even

legitimate questions from civilians. In other words, civilians who show attitude or display disrespect may be more vulnerable to police violence than those who are passive or compliant (see Worden, 1995).

Overall, the research record is mixed. Some studies indicate that officers are more likely to use force against suspects with poor demeanour towards the police (Boivin, 2017; Brooks, 1993; Engel et al., 2000; Garner et al., 2002; Morrow et al., 2018), while other research suggests that civilian demeanour has no impact (Paoline & Terrill, 2007; Terrill & Mastrofski, 2002; Terrill & Reisig, 2003). Unfortunately, some scholars have questioned the measurement of civilian demeanour and note that it has been operationalized inconsistently across studies (e.g., see Klahm & Tillyer, 2010). Inconsistencies in the measurement of demeanour may, in fact, help confirm inconsistent results.

It should be further noted that some critics have suggested that researchers have focused far too much on citizen demeanour towards the police and not enough on police demeanour towards civilians (see Walker, 2001). Indeed, civilians may sometimes display disrespectful or defiant attitudes towards the police as a response to police mistreatment, verbal abuse or incivility. Is it the demeanour of citizens that leads to violent police encounters, or does the demeanour of the police officer set the tone for many civilian-police interactions?

Presence of bystanders

Previous research has also examined whether the presence of other police officers and/or civilian bystanders influences police use of force decisions. Several studies have found that police officers are more likely to use force when additional officers are present (Garner et al., 2002; Paoline & Terrill, 2007; Terrill & Mastrofski, 2002). Other research has found no relationship between use of force and the number of officer's present (Engel et al., 2000; McCluskey, et al., 2005). To date, most studies suggest that the presence of civilian bystanders has no or little impact on police use of force decisions (McCluskey et al., 2005; Paoline & Terrill, 2005; Schuck, 2004; Terrill & Mastrofski, 2002; Terrill et al., 2008; see also Petersson et al., 2017). However, there has been some speculation that the increasing presence of civilians with cell phones and/or officers with BWC technology may curb police violence within some crowded social settings.

Community characteristics

Research suggests that neighborhood characteristics may have a major impact on police use of force. Several studies have found that use of force rates are significantly higher in economically disadvantaged, high-crime communities than wealthy, low-crime communities (e.g., see Lee et al., 2010, 2014; McCarthy et al., 2019; Terrill & Reisig, 2003). Importantly, American research reveals that neighbourhood crime—especially violent crime—typically emerges as a stronger predictor of police use of force than neighborhood poverty. In many American cities, high-crime communities also have large Black populations. Thus, some scholars have argued that Black people are overrepresented in police use of force statistics because they are more likely to live in poor, high-crime communities. Some American research suggests that racial disparities in police shootings are rendered statistically insignificant after controlling for community-level crime rates

(see review in Johnson et al., 2019). Also, Klinger et al. (2016) found a negative relationship between high-crime neighbourhoods and officer-involved shootings. In other words, there were fewer police shootings in neighbourhoods with the highest levels of criminal violence. It has been theorized that as crime increases in certain neighbourhoods, officers begin to withdraw and spend less energy and resources engaging with criminal and other deviant activity occurring in those communities (see Klinger, 1997).

Moreover, critics warn that community-level crime rates should not be used to justify the use of force against specific individuals. An individual's presence in a high-crime community does not justify police use of force. Many of the most notorious cases of police violence has taken place in high crime neighbourhoods. Nonetheless, several studies appear to use community crime rates as a proxy measure for minority aggression against police officers. The suggestion seems to be that—if the police use force in high crime neighbourhoods—it is most likely "legitimate." Others suggest that use of force may be more prevalent in high-crime communities because of police deployment patterns (high-crime communities have a greater police presence than low-crime communities) and more aggressive police strategies (Menifield et al., 2018). Another possibility is that police officers may be more vigilant (e.g., on edge) in high-crime communities and more anxious about their personal safety. This fear or apprehension could directly or indirectly impact use of force decisions.

Canadian Research on Police Use of Force

Police use of force research in Canada is limited in its breadth and its scope. Nearly three decades ago, Stansfield (1995) stated that the use of force by and against the police is arguably the most important issue in contemporary Canadian policing. For example, he argued that the most striking feature about the use of deadly force by and against Canadian police is how little is known (Stansfield, 1995). Most empirical research in Canada on police use of force has been focused on lethal force.

Parent and Verdun-Jones (1998) examined the underlying reasons for police use of deadly force in British Columbia during the period of 1980-94. The authors recommended that police personnel in British Columbia be given more alternatives to firearms when responding to potentially lethal threats. Parent and Verdun-Jones (1998) also recommended that nonlethal tools of compliance should be made readily available to police officers in the field with a view to providing alternatives to the use of deadly force. Shortly after the publication of this work, British Columbia became the first jurisdiction in Canada that allowed for the availability of CEWs for officers. Moreover, Pedicelli (1998) examined officer-involved shooting deaths in Toronto and Montreal between 1994 and 1997 and found that deadly force was most often used against visible minorities. She found that although Black people represented less than 2% of Montreal's population at the time of study, five of the 11 people (45%) shot and killed by the police during the study period were Black males. Similarly, although Black Canadians represented only 3.3% of Toronto's population at the time of the study, six of the 12 civilians (50%) shot and killed by the police during the study period were Black males (Pedicelli, 1998, p. 63).

Further, Wortley (2006) examined police use of force cases documented by Ontario's Special Investigations Unit (SIU) between 2000 and 2006. This research suggests that Black and Indigenous individuals in Ontario were significantly over-represented in use of force incidents as well as police shooting fatalities compared to other groups (Wortley, 2006). Similarly, Wortley et al. (2020) found that Black people in Toronto were over-represented in SIU investigations of police use of force. Examining SIU data from 2013 to 2017, Wortley et al. (2020) discovered that although Black people comprise 8.8% of Toronto's population, Black people were over-represented in SIU use of force cases (28.8%), use of force cases that resulted in a civilian death (61.5%), shootings (36%), and shootings that resulted in a civilian death (70%). Likewise, Wortley et al. (2020) found that between 2016 and 2017, Black people in Toronto were grossly over-represented in lower-level use of force incidents (i.e., those incidents that do not meet the threshold to warrant an SIU investigation). As such, Black people were involved in 38.9% of the lower-level use of force cases. Comparatively, White people and people from other racialized groups were under-represented in these incidents.

In other research, Carmichael and Kent (2015) examined police shootings in large cities throughout Canada between 1996 and 2010. The authors collected lethal force data from media sources and found that cities with more visible minorities, immigrants, and/or Indigenous peoples have more police shooting fatalities than cities with small minority populations. Also, the researchers found that cities with more female officers have fewer police shooting fatalities than jurisdictions with few women officers (Carmichael & Kent, 2015). Moreover, Boivin and Legace (2016) found that there are several factors that may influence police use of force but the relationship between officer force and civilian resistance is negligible. These findings are consistent with similar studies in the U.S. The findings also suggest that use of force should be understood as a trichotomy where police coercion is lower, equal, or higher than the level of civilian resistance (Boivin & Legace, 2016).

Canadian policing scholarship has also examined the effects of use of force on those with mental illness (see Desmarais et al., 2014; Hall et al., 2012, 2013; Livingston et al., 2014; Parent, 2007, 2011). There has also been some Canadian research that has explored other areas related to use of force including, but not limited to subject resistance and use of force (Boivin, 2017); ecological and situational predictors of use of force (Boivin & Obartel, 2017; Sytsma et al., 2021); use of force injuries (Hall et al., 2009); public and officer perceptions and attitudes of police use of force and videos (Boivin et al., 2017; Brown, 2016); challenges with use of force data collection (see Davies et al., 2021; Kiedrowski et al., 2015); and conceptual pieces on use of force (see Cyr, 2015; Oriola et al., 2012).

Despite the paucity of research in Canada, the available evidence does suggest that there are issues related to police use of force, particularly its disparate impact on minority civilians. Specifically, the over-representation of Indigenous and Black individuals in police use of force incidents illustrates significant concern in this area. Although in recent years there has been more empirical research on police use of force in the Canadian context, we are still limited in our knowledge in this area, particularly regarding data related issues. Improved data collection and additional research on police use of force in Canada is required to advance our collective understanding on the potential correlates of police coercion (see Laming, 2017; Malone et al., 2020). Particularly, studies examining personal, situational, and ecological predictors and

determinants of police use of force will certainly contribute to a growing network of evidence-based research in Canada.

Advancing Police Use of Force Research

A recent article written by Bennell et al. (2021) discussed current issues around police use of force research and practices. The article was composed by several police scholars and practitioners whereby they each offer commentary on prospective areas that researchers need to consider in advancing discussion on police use of force. For example, some of the areas covered in the article include: use of force training (e.g., de-escalation); understanding complexities around the use of force encounter (e.g., examining the role of the civilian and not just of the response of the officer); use of force policies (e.g., reforming use of force response models and/or continua); racial bias in police use of force; public education on use of force and accurate narratives on the issues; and the public misunderstanding over the frequency of police use of force (see Bennell et al., 2021 for all areas covered). The authors profess that this work is not exhaustive in all the issues related to police use of force—for example, there is no commentary about the problems with use of force data collection or issues related to conceptualizing and operationalizing use of force consistently across jurisdictions—but rather a starting point to advance research that is urgently required. As such, the article is a good starting point in understanding some of the major concerns related to police use of force presently.

There are two commentaries in particular that are focused on the Canadian context. One commentary written by the Chief of the Vancouver Police Department argues that there is a disconnect between actual reported use of force incidents and public education on the matter. Further, the Chief of police notes that police in Vancouver (and British Columbia generally) are governed by oversight bodies who investigate incidents of use of force. One oversight body has a mandate to investigate any time a police officer causes the death or serious injury of a civilian in the province while the other oversight body investigates misconduct complaints made against the police by community members (these complaints may involve the use of force; also, please see below for a broader discussion on police oversight in Canada). The Chief of police argues that the oversight bodies, specifically the complaints agency, rarely finds officer use of force misconduct. In fact, he states that the rate is one use of force misconduct case for every 54,000 calls for service annually (Bennell et al., 2021, p. 15). The Chief argues that this is an accurate portrayal of use of force and improved dissemination of these results will enhance public trust and confidence in the police. Although the Chief makes valid points here, it is important to keep in mind that not all use of force incidents are investigated by a civilian agency and it would be inaccurate to compare those investigations against all calls for service. We do not know how many use of force incidents occur where the civilian does not file a formal complaint. We also do not know how the internal processes work in terms of investigating all use of force incidents (e.g., all lower-levels of force—those that do not meet the standard for a civilian external investigation). Therefore, even if these narratives are reported to the public, there are still holes and limitations in our understanding of use of force. Another problem with this premise is that the police do not systematically release use of force data to the public. For the services that do publicly release data, it is often aggregated and summary level statistics that only provide a limited snapshot on use of force. Thus, public education remains stifled by a lack transparency, accuracy, and reporting on the use of force by police.

The other commentary is similar in that it claims that there is a public misunderstanding of police use of force. The authors of this commentary argue that the public often over-estimates the frequency of use of force by police and that they do not have a good understanding on the topic generally (Bennell et al., 2021). Although the authors make valid inferences, they fail to recognize the lack of transparency and access to use of force data in Canada which could be a significant factor in the misunderstanding of the public's perceptions of police use of force. Therefore, the public understanding of police use of force is only as good as what is available to them. This highlights a major concern that without good, reliable, accurate, and accessible use of force data, any progress in fulfilling our understanding in this area and enhancing public trust and confidence in the police will remain hampered.

Police Body-Worn Cameras

Research on body-worn cameras (BWCs) has greatly expanded in recent years and the literature and evidence continues to grow as more agencies choose to test and adopt the technology. There are several perceived benefits of the use of BWCs by law enforcement. Some of these perceived benefits include: the reduction of use of force; decrease in complaints against officers; stronger evidence collection; enhancements in court proceedings (e.g., quicker case resolutions); increased officer efficiency; cost-savings for police and the wider criminal justice system; improved relations between police and the community; and increased transparency and accountability. However, there exists several perceived concerns with BWC technology. Some of these perceived concerns include: privacy of officers and civilians; storage of data; high costs of a BWC program; and policy development. Several law enforcement agencies have adopted BWCs throughout the world despite inconclusive evidence over the efficacy of the technology. The academic research available on the topic has shown mixed findings in terms of how effective BWCs may be for law enforcement.

Since widespread adoption of BWC technology has occurred, a significant amount of research has followed which allows us to understand and identify the advantages and disadvantages of BWCs. Two highly touted outcome variables researchers have often examined are the use of force and complaints against officers. These outcome variables are regularly conducted using methodological designs such as randomized-controlled trials (RCTs) where some officers are assigned to wear cameras while other officers do not wear cameras. Reducing use of force and complaints against officers are often touted as the most valued benefits of adopting BWCs (Ariel et al., 2015). Additionally, BWCs are expected to civilize officer and citizen behaviour, enhance court evidence, produce cost savings, and improve accountability and transparency.

Empirical research on BWCs has produced strong evidence that the technology improves officer performance in several areas. Of the published RCT studies, the majority suggest that there are significant reductions of use of force and complaints against officers after the deployment of the technology (e.g., see Ariel et al., 2015; Ariel et al., 2017; Braga et al., 2018; Henstock & Ariel, 2017; Jennings et al., 2015, 2017). Most experimental research that has tested the effects of BWCs on use of force also measure the impact on complaints against officers (see Ariel et al., 2017). In Ariel et al.'s (2015) landmark study of police BWCs in Rialto, California, the researchers found that use of force was approximately 50% lower for officers who wore cameras

compared to those who did not, and that complaints against officers dropped by 88% compared with the 12 months prior to the experiment.

Similarly, Jennings et al. (2015) found that officers wearing cameras in Orlando, Florida had a significantly lower prevalence of use of force incidents and accumulated a significantly lesser number of serious complaints compared with the officers who did not wear the cameras. Jennings et al. (2017) conducted a similar study of the Tampa Bay Police Department and found that use of force decreased by more than 8% in the 12 months after body cameras were deployed compared to the pre-deployment period. Likewise, Braga et al. (2018) found that officers equipped with BWCs in Las Vegas had fewer complaints and use of force reports compared to officers not wearing cameras. In other experimental research, White et al. (2017a) found that both citizen complaints and use of force incidents decreased for both camera wearing and non-camera wearing officers after BWCs were deployed in Spokane, Washington. However, use of force incidents and citizen complaints increased for camera wearing officers during the post-experimental period. The researchers explain that officers may at first be willing to adjust their behaviour because of the novelty of the new technology but return to "normal" behaviour after the novelty wears off (White et al., 2017a).

In other research, Ariel (2016) found that the use of BWCs by Denver [Colorado] police were associated with significant decreases in complaints against officers. Owens and Finn's (2018) research on the London Metropolitan Police suggest that officers wearing BWCs had less complaints than the control group of officers not wearing cameras. Also, officers wearing BWCs were less likely to receive an allegation of oppressive behaviour than the control group (Owens & Finn, 2018). In a meta-analysis of 10 RCT BWC studies, Ariel et al. (2017) found complaints against the police decreased by 88% after cameras were implemented.

In terms of whether BWCs have impacted officer proactivity, Wallace et al. (2018) found an increase in self-initiated calls for service by officers wearing BWCs in Spokane, Washington. The surveillance aspect of BWCs suggests that the technology may result in de-policing by officers (Wallace et al., 2018). This concept is also known as the 'Ferguson Effect' which suggests that the increased public scrutiny of law enforcement will lead to a reduction of police activity to avoid accusations of racial profiling or illegitimate force. However, Wallace et al. (2018) found no evidence of de-policing in their study as there were no differences in officer activity, arrests, and response time between treatment (camera-wearing officers) and control (no cameras). Similarly, Braga et al. (2018) found that camera-wearing officers made more arrests and issued more citations than their non-BWC counterparts. Conversely, research conducted by Hughes et al. (2020) found that officers made lesser low-level citations at the neighbourhood level, but that self-initiated activity and arrests for more serious crimes were not impacted by the implementation of BWCs. Though, the researchers point out that the decrease in citations may be a change in enforcement activities ultimately leading to a de-policing effect in certain neighbourhoods (e.g., predominately Black neighbourhoods). Additionally, Lawrence and Petersen (2020) found that BWCs had no impact on the total amount of officer-initiated activities, traffic stops, or business checks in their study of Milwaukee police officers. The authors conclude by suggesting that "BWC-wearing officers may be less likely to engage in proactive activities that are highly discretionary and that could potentially lead to confrontations with community members" (Lawrence & Petersen, 2020, p. 1).

Moreover, police use of BWCs are expected to produce more compliant behaviour by citizens (White, 2014). White et al., (2017a) found no relationship between officer injuries and the use of BWCs. Moreover, Ready and Young (2015) found that officers wearing cameras were more risk averse and cautious, and conducted significantly fewer stop-and-frisks and arrests than officers not wearing cameras. Ready and Young (2015) claim that "officers are more self-aware when the camera is on because the video may be reviewed internally by supervisors, or by public request via the Freedom of Information Act" (p. 454). Likewise, Owens and Finn (2018) found that officers were more aware of their interactions with the public when captured on BWCs and that officers would provide a verbal narrative of the situation for the recording. Headley et al. (2017) found that officers wearing BWCs performed less intrusive methods to resolve incidents and had a reduction in arrests despite an increase in citizen contacts. Headley et al. (2017, p. 104) argue that officers continued to be active rather than abstaining from community interaction after BWC deployment and this may explain the increase in field contacts (see also Ready & Young, 2015). This lends support to the notion that BWCs are not leading to decreased police activity in some jurisdictions and may result in proactive policing and increased self-initiated contact (see Wallace et al., 2018).

Several studies have examined police and community perceptions of BWCs. For example, Gaub et al. (2016) found that officers differed in their perceptions of BWC deployment across three jurisdictions. Officers in Tempe [Arizona] had positive perceptions whereas officers in Phoenix [Arizona] had negative perceptions. Spokane [Washington] officers had both positive and negative perceptions of BWC deployment (Gaub et al., 2016). However, all three departments were skeptical about the impact BWCs would have on citizen behaviour. Conversely, Jennings et al. (2015) found that officers in Orlando perceived that BWCs would improve citizen behaviour; however, officers were skeptical that cameras would have any influence on their decisions to use force.

In another study, Gramagila and Phillips (2018) found officers in both Rochester and Buffalo [New York] believed that BWCs would affect their decisions in using force, but the use of cameras would not improve citizen attitudes toward police. Alternatively, Crow et al. (2017) found that public perceptions of BWCs were mostly positive in their survey of community members in Florida. Particularly, community members believed that BWCs would improve police and citizen behaviour, and enhance the collection of evidence (Crow et al., 2017; see also Williams, 2021; White et al., 2017b). Likewise, Demir and Kule (2020) found that BWCs improved citizens' perceptions of police encounters following traffic stops (see also Saulnier et al., 2020). However, Wright and Headley (2021) conducted 40 in-depth interviews with citizens in Washington, DC and asked them their perceptions of police wearing BWCs. The researchers found that "the interviews revealed that citizens do think that BWC may improve transparency, accountability, and officer behavior; however, … interview respondents held consistent views that BWC are not trust-building tools (Wright and Headley, 2021, p. 23).

Evidence from police agencies suggest that BWC video can improve and ensure evidentiary benefits. For example, the Phoenix Police Department examined the impact of BWCs on domestic violence case processing and found that "cases were significantly more likely to be initiated, result in charges filed, and result in a guilty plea or guilty verdict" (Katz et al., 2014, p.

3). It was also reported that cases were completed faster after body camera implementation, but this may be the result of additional court liaison officers employed who facilitated the case processing between Phoenix police and the prosecution office (see Morrow et al., 2016). Additionally, Morrow et al. (2016) found that officers wearing BWCs in cases of intimate partner violence were more likely to have cases result in an arrest, have charges filed, have cases furthered, result in a guilty plea, and result in a guilty verdict at trial than officers not wearing cameras.

Research in the U.K. suggests that BWC technology improves evidence and secures criminal convictions (White, 2014). Results from several U.K. studies reveal that video from BWCs produce quicker resolution of cases, resolve significantly more cases through guilty pleas rather than criminal trials, and increase officer efficiency and time spent on patrol (ODS Consulting, 2011; White, 2014). Further, Owens et al. (2014) found support for prosecutorial utility of BWCs in that the officers wearing cameras had a higher proportion of intimate partner violence cases that resulted in a criminal charge compared to officers not wearing cameras.

In an Australian study, Clare et al. (2021) found that BWCs did result in benefits for officers in terms of evidence-gathering and cost/time efficiencies. However, the authors found that BWCs had little impact on court processes and outcomes. Although BWC evidence encouraged earlier guilty pleas, Clare et al. (2021) reported that there was no corresponding increase in the rate of guilty pleas or convictions.

Moreover, it has been widely argued that BWC technology will produce cost-savings for law enforcement agencies and the wider criminal justice system. However, most of these claims have come from manufacturers who have a significant stake in selling their products. For example, the CEO of Axon made claims in 2012 by stating that "our technology can resolve issues of false complaints, improve officer training and provide communities enhanced transparency. At less than one-third the cost of in-car video systems and through its ability to help reduce litigation costs, this system ultimately saves taxpayer dollars while also providing protection to officers" (Axon, 2012, para 5). These claims were being communicated publicly even though there had been no published scientific evidence on the efficacy or cost-benefits of BWC technology at that point. The company has continued to make similar claims throughout the years to push their products (e.g., see Laming & Schneider, 2021).

Despite the claims by BWC manufacturers about the cost saving potential, there have been very few academic studies that have examined the cost-benefit analysis of BWCs on law enforcement agencies, and the criminal justice system more broadly. One study conducted by Braga et al. (2017) found that the Las Vegas Metropolitan Police Department could generate approximately $4 million in savings annually associated with investigating less complaints. Although this study suggests the utility BWCs may have with cost-savings, it only reports projected savings and not actual monetary benefits. Cost-benefit analyses will likely become more prominent and valuable in the years ahead since law enforcement agencies will be able to accurately quantify the impact BWCs have on the organization with long-term trends and budget reports. Though, Williams et al. (2021) conducted a cost-benefit analysis of available experimental BWC studies and claim that the technology can produce cost benefits and savings because of reduced complaints against officers and fewer use of force incidents that would typically result in costly investigations.

Although the research in this area is limited, the findings are important and may be more applicable to larger police services in the U.S. where complaints against police as well as use of force are prevalent concerns. The same cost-benefit savings based on U.S. agencies may not transfer appropriately to police services in Canada who do not have the same complaints and use of force issues as their American counterparts.

Mixed Results from the BWC Literature

The use of force and complaints against officers have been measured in several studies to test the impact BWCs has on those variables. Some studies provide evidence that use of force by police and complaints against officers decreased significantly post-BWC deployment for multiple law enforcement agencies. However, there have been multiple studies that have found no evidence that BWCs lead to a reduction in use of force by police or complaints against officers. It is important to briefly highlight some of these findings here.

In one of the largest randomized-controlled trial of BWCs, Yokum et al. (2019) found very small effects across all measured outcomes, including the use of force and complaints in their study with the Metropolitan Police Department [Washington, D.C.]. Notably, the outcome measures failed to reach statistical significance meaning there were no detectable, meaningful effects on use of force or complaints. Similarly, Peterson and Lawrence (2021) reported that BWCs had no effect on whether officers used force during their study period in Milwaukee, Wisconsin. Additionally, Ariel et al's (2016) meta-analysis of ten BWC experiments found that the cameras had no effect on police use of force, and that the use of cameras led to an increased rate of assaults against officers. Further, some research suggests that use of force increased for officers wearing BWCs compared to those not wearing cameras (Clare et al., 2021). However, it is important to note that in these settings the use of force was already considered a low-frequency event which may help explain why force increased despite the intervention of BWCs (see Clare et al., 2021).

Moreover, the Edmonton Police Service piloted BWCs between 2012-14 and tested the impact the technology had on several measures including use of force and complaints. The methodology employed was a quasi-experimental which uses a non-randomized approach—meaning that cameras were not randomly assigned to officers participating in the study (most other research discussed here employed randomized-controlled designs which are often hailed as stronger studies methodologically). The study found that there was no statistically significant evidence that the presence of body cameras reduced use of force (Edmonton Police Service, 2015). Further, officers reported that the presence of body cameras could cause them to hesitate to use appropriate levels of force which could create dangerous situations between the police and the public. Also, there was no evidence that BWCs had an impact on the number of complaints made (Edmonton Police Service, 2015). The results show that there were no statistically significant differences in the number of complaints pre- and post-implementation as well as between camera users and non-camera users.

The research findings are quite mixed and inconclusive on whether BWCs decrease the use of force by police. Lum et al. (2020) conducted a meta-analysis on all available experimental BWC studies and found wide variability in the underlying effects across studies on the use of force.

The authors claims that this finding suggests that there is doubt regarding BWC effectiveness in reducing the use of force. Moreover, the majority of empirical evidence on whether BWCs decrease complaints against officers is overwhelmingly positive. In Lum et al.'s (2020) meta-analysis, it was found that there was relatively little variability across studies indicating that officers wearing BWCs have significantly fewer complaints filed against them compared to officers not wearing cameras. It is important to note that although most research has shown a decrease in complaints against police post-BWC deployment, there is no definitive explanation for why this has occurred. Lum et al. (2019) explain that there may be many reasons why complaints against the police decrease after BWC deployment but offer that this measurement is problematic in understanding the true effects of BWCs on officer and/or citizen behaviour and interaction. Lum et al. (2019) claim that citizen complaints are rare compared to the number of police-citizen interactions and solely may not be the best measurement to determine the impact of BWCs on complaints. Rather, other types of methodologies such as ethnographies, social observations and analysis of BWC footage may be better in understanding the impact body cameras have on citizen complaints (Lum et al., 2019; see also Lum et al., 2020). Also, Lum et al. (2019) claim that perhaps the overall anticipated effects of BWCs may be overestimated. In general, we need more research and evidence, notably in areas that have not been examined (or thoroughly examined) to determine the true effectiveness and utility of BWC technology. Regardless, the implementation of a BWC program is solely dependent on the expectations, needs, and goals of the law enforcement agency and that community looking to adopt the technology. These expectations, needs, and goals will differ across jurisdictions which makes BWC adoption a localized matter.

Body-Worn Camera Use in Canada

The majority of empirical and academic research on BWCs have been conducted in the U.S. and elsewhere. Therefore, most of our knowledge and evidentiary support of the technology is limited to outside of Canada. Several police departments around the world have tested the technology and are continuously choosing to roll-out BWCs to its officers. Despite the widespread implementation of BWCs in several nations, the deployment of this technology has been slow throughout Canada.

Prior to mid-2020, only a handful of agencies in Canada had tested body camera technology. However, the murder of George Floyd by police in Minnesota in May 2020 and the officer-involved shooting deaths of Indigenous citizens Chantel Moore and Rodney Levi in New Brunswick in June 2020 ignited calls for police to be equipped with BWCs. Since the summer of 2020, nearly one-fifth of municipal police services in the country have committed to piloting BWCs or fully adopting the technology. For example, two of the largest municipal services in Canada—Toronto and Peel Region—have committed to a full roll-out of cameras to all front-line police officers. Likewise, several medium-sized police services have piloted the cameras and/or decided to adopt cameras after testing the technology (e.g., Durham Region, Barrie, Guelph, St. Thomas, Waterloo Region). The largest Canadian police service—the Royal Canadian Mounted Police (RCMP)—tested the technology in the early 2010s and decided to suspend any plans to adopt body cameras. However, renewed calls from politicians and leaders as well as external pressure resulted in the federal government announcing plans to equip RCMP officers with cameras. In 2021, the government earmarked over $130 million for five years to begin the

nationwide implementation of BWCs for RCMP officers. Further, RCMP in Nunavut conducted a pilot in 2020-21 to further understand the efficacy and limitations of the technology in the far North. Also, the provincial police in Quebec—the Sûreté du Québec—announced that it would pilot BWCs in four regions throughout 2021. Likewise, the Ontario Provincial Police (OPP) announced plans to pilot the technology in Southwestern Ontario between 2021-2022 to determine the efficacy for a potential provincial-wide rollout in the future.

The Calgary Police Service has been using BWCs longer than most police services in Canada. The agency first piloted the technology in 2012 and committed to full adoption in the late 2010s. By 2019, all front-line officers in the city were equipped with a BWC. The service released its 2020 BWC evaluation and claimed that the program had yielded positive results. Although the evaluation was not experimental in nature, the service reported that use of force incidents decreased in the year after BWC deployment, community members perceived that BWCs improve trust and confidence in the police, officers believed BWCs improve professionalism and communication while also acting as a de-escalation tool, and that there was anecdotal evidence of evidentiary benefits with crown prosecutors and police oversight (Budd, 2021). However, the evaluation also found that complaints against officers increased in the year after BWC implementation which is inconsistent with the majority of empirical research in this area. Despite the increase in complaints, the service reported that complaint resolution time was reduced by nearly fifty percent pre-BWC implementation (Budd, 2021). Lastly, there were issues reported in the evaluation that ranged from inconsistencies around training and policy, officers' perceptions that BWC video would be used unfairly to discipline members, and most importantly, there were no clearly defined mechanisms in place to measure and determine how BWCs impact transparency or accountability (Budd, 2021).

Besides the Calgary Police Service's BWC evaluation, the BWC literature in Canada has been limited. Other agencies' have published reports on its BWC pilots including Edmonton, Toronto, and the RCMP. There is a dearth of academic literature on BWCs in the Canadian context with only a handful examining the technology and its use and efficacy for police (e.g., see Boivin et al., 2020, 2021; Brown, 2020; Glasbeek et al., 2020; Laming, 2019; Saulnier et al., 2020); however, no Canadian academic research has independently examined the relationship between BWCs and the use of force. It is important to note that one under-researched area in the BWC field is the impact on marginalized communities. For example, little to no academic or evaluative research exists on the disparate impacts of BWCs on different groups of people (i.e., Indigenous or Black). This is one area of future research that is critical and necessary. Despite the lack of research in Canada, the academic literature on BWCs is a greatly expanding area. With more police services in Canada choosing to test and adopt BWCs, there appears to be a great deal of opportunity for researchers and practitioners to further understand the efficacy of this technology on a number of performance and organizational variables.

Dashboard Cameras

In-car video (also known as dash cameras) are cameras placed within a vehicle that continuously record the view through the windshield (Westphal, 2004). Dash cameras record interactions between the police and public which has the capacity to increase public confidence and make

police action subject to accountability (Maghan et al., 2002). Dash camera footage has also been widely introduced as evidence in court (Mackey & Courtney, 2016).

According to Mackey and Courtney (2016), in-car or dash cameras first gained popularity in response to a rise in allegations of racial profiling by police officers during traffic stops in the late 1990s. By 2003 the U.S. Department of Justice's Office of Community-Oriented Policing Services had dispersed $21 million toward the purchase of dash cameras at multiple levels of policing. According to U.S. Bureau of Justice Statistics (2015) almost 90% of municipal police services used a video recording technology of some form in 2013. Dash cameras increased from 61% of local police departments in the U.S. relying on them in 2007 to 68% in 2013. Again, such data is not available in Canada.

Mackey and Courtney (2016) cite a number of benefits such as improving public confidence in police, improved police behavior upon reviewing conduct captured on camera, proof of probable (or not) cause during a search, and evidentiary purposes in court proceedings. Although BWCs have become the dominant video technology employed by police services in the U.S., dash camera technology is still often utilized and typically work in tandem alongside BWC technology amongst agencies. Less information is known about the use of dash cameras in the Canadian context. Sytsma and Laming (2019) reported that only 15% (eight total) of police services in Ontario were using dash camera technology in 2016. Beyond Ontario police services, it is unknown how many agencies utilize the technology and there is limited empirical research on the efficacy of dash camera use by Canadian police generally.

Police Oversight

There are several different types and levels of police oversight. Police oversight may involve investigating officers who cause the death or serious injury of civilians. It may involve investigating officers who engage in misconduct (e.g., sexual assault, corruption, use of force, etc.). Or police oversight may involve investigating and/or reviewing public complaints made against officers. The importance of police oversight is to ensure officers and agencies are accountable to the public they serve. Police oversight bodies can range from dependent to independent models. Dependent police oversight models are typically police investigating other police; semi-independent models generally consist of a mixture of police and civilian oversight; while independent models involve non-police civilian oversight. Within these types of models, there may be wide variations in the types of mandates and investigations required.

Further, police oversight may also be categorized into three main types: internal affairs model, civilian review model, and civilian control model (see Prenzler & Ronken, 2001). Internal affairs normally refers to police investigating other police—whether its within or across agencies. Civilian review may encapsulate different variations, but this model generally sees inter-dependence between police and an external body. The police are tasked with investigating themselves while the external body oversees and reviews the investigation (Prenzler & Ronken, 2001). This model is evident with many police complaints agencies and systems in several nations (e.g., Canada, United Kingdom, Australia, New Zealand). The civilian control model articulates that police should not be involved in investigating themselves but rather an independent set of civilians should retain this responsibility. This model has received significant media attention with advocates calling for this system to be the dominant model going forward

while critics argue that those with no police experience are unqualified to lead investigations into police-related incidents. Essentially, only those with police experience can truly understand the complexities of the job and the most competent to undertake investigations into police-involved matters (see Prenzler & Ronken, 2001). Although this debate has been present for multiple decades, the civilian control model is currently in place in many Canadian jurisdictions. However, all police watchdogs in Canada (i.e., those mandated to investigate serious incidents between police and the public) comprise a mixture of former police officers and civilians (with no police experience) as investigators. Some agencies even employ current police officers as investigators. Therefore, these oversight systems and models are complex and vary throughout jurisdictions.

Police oversight bodies exist in many countries. Some nations may have multiple oversight bodies who are responsible for different police-related matters whereas other countries may only have one police oversight body. For example, Australia has many police oversight bodies working throughout the country. Almost all Australian states have a specific police oversight body (Den Heyer & Beckley, 2013). The police oversight body in some states have responsibility to investigate complaints against the police whereas others only have a mandate to investigate corruption or the conduct of officers. However, each state has an Ombudsperson office and some of those bodies have the responsibility to oversee police complaints investigations (e.g., New South Wales; Den Heyer & Beckley, 2013). Conversely, New Zealand only has one official police oversight body which is the Independent Police Conduct Authority (IPCA). This agency investigates and resolves complaints against the police and may also investigate incidents where police have caused death or serious injury. It is important to note that New Zealand has a unitary police service which corresponds to having only one police oversight body. Elsewhere, all complaints against police in England and Wales are reviewed by the Office for Police Misconduct. This body generally receives 30,000-35,000 complaints annually, but most of the complaints are sent back to the local police service to investigate—a similar practice found in most complaints agencies throughout Canada. This paradigm follows the civilian review oversight model.

Elsewhere, the New York City Complaint Review Board independently investigates complaints made against New York City police. Though, if the oversight board substantiates a complaint against an officer, they refer any disciplinary decisions to the police commissioner—which is consistent with most complaints agencies. The New York City oversight body receives approximately 4,000 complaints annually and over 40% of those complaints are for improper use of force by police. There is no standardization of police oversight across U.S. jurisdictions. Each state is different in how police oversight is administered. In most states, complaints against the police are investigated by internal affairs (e.g., police investigating police). However, some larger cities may have a police oversight body that independently oversees police complaints and/or police officer conduct (e.g., Chicago, New Orleans, Nashville). Further, there is no standard or consistently deployed police oversight body across jurisdictions when an officer causes the death or serious injury of a civilian. In these cases, there may be an external body that is responsible for the investigation or the local police may investigate the matter themselves. For example, the Georgia Bureau of Investigation—a state law enforcement agency—often investigates police shooting incidents involving local police agencies within the state. High-profile officer-involved fatalities in U.S. jurisdictions are often investigated by an independent

external body (e.g., state police, district attorneys/prosecutors, federal officials, etc.). In Canada, police oversight bodies share similarities and differences with its counterparts in Australia, New Zealand, the U.K., and the U.S.

Academic literature on police oversight bodies varies throughout jurisdictions. Research on police oversight bodies in Australia and New Zealand has received considerable attention for more than two decades (see Den Heyer & Beckley, 2013; Lewis & Prenzler, 1999; Porter & Prenzler, 2012; Prenzler, 2011; Prenzler & Lewis, 2005; Prenzler & Ronken, 2001; Ransley et al., 2007). Much of this research has examined different types of police oversight and models in these jurisdictions as well as performance indicators and the effectiveness of the agencies. There has also been substantial research into police oversight bodies in the U.K (see Mawby & Smith, 2017; Porter & Prenzler, 2012; Savage, 2013; Seneviratne, 2004; Smith, 2006, 2013). Many of these studies have also examined the efficacy of civilian oversight of police as well as performance indicators of agency-level effectiveness. Given the wide variability of police oversight in the U.S., there has been disparate empirical research on the topic (e.g., see Ali & Nicholson-Crotty, 2020; Briggs, 2017; De Angelis et al., 2016; De Angelis & Kupchik, 2007; Ferdik et al., 2013; Greene, 2007; Rosenthal, 2018; Walker, 2006; Walker & Bumphus, 1992). Academic research on police oversight in Canada has received less attention compared to other jurisdictions. Older research explored civilian oversight of police particularly by examining complaints processes (see Landau, 1996, 2000; Watt, 1991). Though, more recent scholarship has explored civilian oversight of police through a variety of perspectives involving citizen and officer perceptions and attitudes on the topic (e.g., see Campeau, 2015; Kwon & Wortley, 2020; Stelkia, 2020).

Very little research has explored police watchdog agencies in Canada—those agencies mandated to investigate cases where police cause the death or serious injury to civilians. Only a handful of research has examined police watchdog data (see Puddister & McNabb, 2021; Wortley, 2006; Wortley et al., 2020). For example, Puddister and McNabb (2021) examined Ontario SIU data on charges and convictions against police officers. The authors found that between 2005 and 2020, the SIU laid charges against 180 officers with over 25 percent of cases being withdrawn by the Crown. Further, the cases that proceed to trial often resulted in acquittals against the officer (Puddister & McNabb, 2021). Although this is only one of the few studies that has examined police watchdog data, it does shed light on civilian oversight and police accountability in Canada.

Like other nations discussed here, police oversight in Canada is also varied. Each province and territory may have multiple police oversight bodies operating within each location, or there may be only one agency. There are also different types of police oversight agencies operating throughout Canada. There are generally two main types of oversight agencies in Canada who govern police (mis)conduct (see Table 14 for a list of police oversight bodies in Canada). The first are serious incident response teams. The mandates for these agencies differ across jurisdictions, but they all investigate cases where police cause the death or serious injury of a civilian (some also investigate allegations of sexual assault, domestic violence, corruption, and other types of criminal offenses).

Currently, there are seven provinces with serious incident response teams. The seven agencies include: The Independent Investigations Office in British Columbia (IIO BC), the Alberta Serious Incident Response Team (ASIRT), the Independent Investigations Unit (IIU) in Manitoba, the Special Investigations Unit (SIU) in Ontario, the Bureau des enquêtes indépendantes (BEI) in Quebec, the Serious Incident Response Team of Nova Scotia (SiRT-NS), and the Serious Incident Response Team of Newfoundland and Labrador (SIRT-NL). As of 2021, Saskatchewan is going through the process of creating a serious incident response team that is modelled after some of the other agencies listed above. The province is set to launch its serious incident response team in the fall of 2021. In the jurisdictions where no serious incident response team operates, typically an outside police service or a police watchdog agency from another province is requested to investigate cases where police kill or seriously injure a civilian. For example, the Nunavut government has historically contracted the Ottawa Police Service to investigate cases where an RCMP officer in the territory causes the death or serious injury of a civilian there. However, the territory recently passed a legislative bill that allows the government to appoint either a civilian oversight body, a police service, or both for the purposes of investigating serious incidents between the police and the public in Nunavut.

In other locations such as New Brunswick, the provincial government may ask an outside police watchdog (e.g., BEI) or another police service in the province to investigate serious incidents. All of the provincial serious incident response teams are led by a civilian director; these individuals cannot have any police officer experience). Each provincial police watchdog agency slightly differs in its investigator composition. The IIO BC, SIU, and BEI do not allow current police officers to serve as investigators. Rather, investigators for these agencies are a mix between civilian (no police officer experience) and former police officers. Approximately half of the investigators for each agency have some type of police experience.

Moreover, the ASIRT, IIU, SiRT-NS, and SIRT-NL employ former and seconded police officers. For example, Nova Scotia's SiRT currently enlists two civilian investigators who are former police officers and two seconded police officers (current sworn officers)—one from the Halifax Regional Police and one from the RCMP in the province. Although these police watchdog agencies are considered civilian/independent oversight bodies, they are not completely absent police involvement in investigations. Also, the ASIRT and BEI are both considered law enforcement agencies with police powers under their respective legislation. It is important to note that the directors for five of serious incident response teams (ASIRT, IIU, SIU, SiRT-NS, SIRT-NL) have the power to lay criminal charges against officers. The remaining two (IIO BC, BEI) do not have charge powers. In these provinces, the director of the watchdog agency refers cases that they believe meets the threshold for criminal charges to provincial crown who then ultimately decides whether to charge an officer or withdraw the case.

The second type of police oversight that is consistent across Canada are police complaints agencies. Each province/territory except Alberta have a complaints agency that oversees, investigates and/or reviews complaints made about the police in those jurisdictions. Most provincial agencies oversee the complaint process whereby they screen the initial complaint and refer it back to the local police service to complete the investigation. The complaints agency will then review the completed investigation and determine if the complaint is substantiated or unsubstantiated. If a complainant is dissatisfied with the investigation, they can appeal the

decision to the oversight agency who will then review the case. In some cases, the complaints agency may retain the complaint and conduct the investigation independently of the police. In the territories (Nunavut, Northwest Territories, Yukon) and for all other complaints made against RCMP officers across Canada, the Civilian Review Complaints Commission for the RCMP (CRCC) is the oversight body responsible to oversee those complaints. The CRCC operates in a similar fashion as most other provincial police complaints agencies in that the oversight body refers complaints to the local RCMP detachment to conduct the investigation. The CRCC will then review the investigation and make a determination on the outcome. The CRCC is responsible for complainant appeals. In Alberta, the local police service is the body initially responsible for investigating complaints made against the police. If a civilian is unhappy with the investigation, they can appeal to the Law Enforcement Review Board (a provincial non-police body) who then determines the appeal process.

In addition to serious incident response teams and complaints agencies, another type of police governance that is evident in Canadian jurisdictions are police services board/commissions. These bodies operate in several provinces and are primarily responsible for the effective delivery of policing in local municipalities. These boards/commissions provide municipal oversight of police and typically have no responsibility or mandate to investigate police misconduct or use of force incidents. However, these police oversight bodies are important to the administration of policing across local jurisdictions.

Moreover, there are other types of police oversight agencies that operate across Canada, though they do not have any responsibility to investigate police officers for misconduct or incidents where an officer causes the death or serious injury to a civilian (e.g., see Ontario Civilian Police Commission; Inspector General of Ontario). Even though there is not complete uniformity concerning police oversight agencies across Canada, there is a considerable number of accountability mechanisms in place for police officers in the country. Compared to other similar policing jurisdictions discussed here (e.g., Australia, New Zealand, the U.K., the U.S.) it appears that police oversight in Canada is among the most thorough and systematic. Although there are areas that can be improved (e.g., uniformity and standardization of police oversight as well as transparency related concerns), Canadian law enforcement officers are held to high standards of independent/civilian police oversight and scrutiny.

TABLE 14: Serious Incident Response Teams and Complaints Agencies in Canada

Jurisdiction	Serious Incident Response Team	Police Complaints Agency
British Columbia	Independent Investigations Office of British Columbia	Office of the Police Complaint Commissioner
Alberta	Alberta Serious Incident Response Team	None
Saskatchewan	Saskatchewan Serious Incident Response Team*	Saskatchewan Public Complaints Commission
Manitoba	Independent Investigations Unit	Law Enforcement Review Agency
Ontario	Special Investigations Unit	Office of the Independent Police Review Director
Quebec	Bureau des enquêtes indépendantes	Commissaire à la déontologie policière
New Brunswick	None	New Brunswick Police Commission

Nova Scotia	Serious Incident Response Team of Nova Scotia	Office of the Police Complaints Commissioner
Prince Edward Island	None	Office of the Police Commissioner
Newfoundland and Labrador	Serious Incident Response Team of Newfoundland and Labrador	Royal Newfoundland Constabulary Public Complaints Commission
Nunavut	None	Civilian Review and Complaints Commission for the RCMP**
Northwest Territories	None	Civilian Review and Complaints Commission for the RCMP**
Yukon	None	Civilian Review and Complaints Commission for the RCMP**
Military	None	Military Police Complaints Commission

* The Saskatchewan Serious Incident Response Team is set to become operational in late 2021.
** The Civilian Review and Complaints Commission for the RCMP (CRCC) manages all complaints made against RCMP officers throughout Canada. For example, if a civilian complains about an RCMP officer in British Columbia, it is the CRCC who oversees the complaint and not the Office of the Police Complaint Commissioner in the province.

Summary

The large body of literature related to police use of force has produced mixed results and findings concerning civilian, officer, and encounter characteristics. Early research in this area primarily focused on police lethal force and it was not until the creation and advancement of less-lethal options that research expanded to examine police decision-making during situations that required forceful intervention. Research expanded greatly when law enforcement agencies began using OC spray and CEWs. The literature has covered these force options extensively and with a variety of methodological approaches. Important areas such as training and policies have received attention by researchers, but the empirical work is still limited, especially in the Canadian context. Despite the lack of Canadian research in these areas, all law enforcement agencies in the country follow the same use of force model in training and practice. In contrast, there is no standardized model used for law enforcement agencies across the U.S. This standardized model for Canadian police services ensures that there is some consistency during use of force training for officers. However, less is known about de-escalation training within use of force. This is a topic that will undoubtedly receive considerable interest going forward.

Moreover, new technology additions such as body-worn cameras provide an added layer to use of force discussions. Although empirical research on the efficacy of BWCs has greatly expanded in recent years, there is no strong evidence-based foundation on the topic in Canada. Many police services are in the process of adopting BWCs, but it will take time to understand the benefits of this technology. Available research suggests that the technology may not provide the benefits that were initially expected (see Lum et al., 2019). Finally, police oversight is a growing area of interest and one that is widely established throughout Canadian jurisdictions. Although there is very little empirical research on police oversight in Canada, especially concerning the efficacy of these disparate bodies, Canadian police officers are held to high standards and scrutiny from external agencies. Police use of force is a topic that has presented challenges for

researchers over the past half-century. The result is a body of research that has included different methodological and statistical techniques, including data and analyses from ethnographic research, systematic social observations, officer surveys, citizen surveys, and official and unofficial data sources (Engel, 2008). The study of police use of force is as vibrant as ever (Paoline & Terrill, 2011), and the prospects of research in this area are encouraging. Most importantly, more research and understanding on police use of force in Canada is necessary.

PART F: RECOMMENDATIONS

In this, the final section of the report, we provide recommendations for the improvement of research on police use of force data in Canada. We also provide recommendations with respect to decreasing use of force incidents—especially the frequency of deadly force encounters. We base these recommendations on our above review of available Canadian use of force data (Section C), interviews with Canadian police experts on use of force (Section D), and a review of the international research literature on use of force and best practices (Section E).

Recommendations

1) ***Police services and their governing bodies should, on a continuing basis, review the policing research literature to identify emerging best practices with respect to use of force.*** Experts agree that the policing landscape is constantly evolving, and that new policies, practices and technologies frequently emerge. Canadian policing institutions should be aware of promising practices and consider them for adoption.

2) ***Police services must develop strong use of policies that express the value of both police and civilian lives and restrict the conditions under which force can be used***. Research suggests that police services with restrictive use of force policies have lower use of force rates than services with more lenient or unclear policies. Critics maintain that lenient use of force policies tend to emphasize the safety of officers over the safety of civilians. More restrictive policies emphasize the value and safety of both police officers and civilians. A focus on the safety and wellbeing of civilians can increase the institutional importance of de-escalation tactics and reduce the likelihood that physical force will be used.

3) ***All police officers in Canada should be given high quality training on de-escalation tactics***. Preliminary research suggests that officers trained in de-escalation tactics and alternative forms of conflict resolution are less likely to use physical force than officers without such training. Police officers must come to accept de-escalation tactics may take longer to resolve crises than use of force options.

4) ***Canadian police services should continue to examine the impact of video technologies and their impact on use of force***. Advocates maintain that dashboard cameras, body-worn cameras, and interrogation room cameras may reduce use of force incidents. The argument is that police officers are less likely to engage in illegitimate force if they know their actions will be captured on video. Preliminary evidence suggests that civilians may also act less aggressively towards officers when they are aware that they are being filmed. Reduced civilian aggressiveness may further reduce the need to resort to use of force. The availability and release of video footage could also increase police transparency and improve public confidence in law enforcement. To date, evaluation research on cameras has produced mixed results: some studies have found that cameras reduce use of force, others have found that they have little impact. Nonetheless, cameras have been identified as a promising technology that deserve further investigation.

5) ***Policing services and their governing bodies should adopt less-than-lethal use of force options. Firearms should only be used as a last resort***. Although research results are mixed, most experts believe that the availability of less than lethal force options, including Conducted Energy Weapons, can reduce the use of firearms and ultimately reduce civilian death caused by police activity. However, strong policies are required to ensure that less-than-lethal options are used responsibly and not as a replacement for de-escalation tactics.

6) ***Policing services should develop specific use of force strategies for armed civilians not in the possession of a firearm***. Research suggests that approximately half of all use of force incidents involve unarmed civilians. When armed, civilians are most likely to be in possession of a knife, scissors, bat, brick or other blunt-force object. Very few use of force incidents involve civilians in possession of a firearm. Several experts have thus stated that significant decreases in use of force incidents, including lethal force incidents, can be achieved by policies that call for disengagement, de-escalation and negotiation with civilians who are not armed with a firearm. De-escalation may be more difficult when a civilian is armed with a gun and the safety of officers and/or bystanders is immediately compromised.

7) ***Policing services should engage in cultural transformation efforts that de-emphasize hyper-masculine, para-military traditions***. Several scholars have observed that police officers are often rewarded for demonstrating courage and a willingness to use violence to deal with disrespectful, non-compliant civilians. Some have observed that traditional police values promote a "stand your ground" strategy for dealing with civilian conflicts. For example, officers are taught to give authoritative commands to civilians (i.e., stop, put your hands up, drop the weapon, etc.) and to use force if civilians are non-compliant. Indeed, non-compliance is often viewed as a sign of potential danger and thus a justification for the use of force. Unfortunately, this perspective is inconsistent with the spirt of de-escalation. Under certain circumstances, officers must be taught to back away from confrontation in order to avoid the use of force and prevent civilian injury. Officers must subsequently be rewarded for their de-escalation efforts.

8) ***Policing services must establish strategies for reducing the over-representation, in use of force cases, of civilians in mental health crises***. Such strategies should include mental health training for all officers and the establishments of mental health intervention teams (involving both police and mental health experts). Emphasis must be placed on reducing officer fear that may contribute to use of force decisions. Emphasis must also be placed on the development for strategies to defuse situations involving people in crisis without resorting to force.

9) ***Police services should increase the recruitment of female officers***. Studies suggest that female officers are less likely to resort to serious use of force options. Furthermore,

police services with higher proportions of female officers have lower use of force rates. Female recruitment may also challenge hyper-masculine traditions within police culture that may further reduce the frequency of use of force.

10) ***Police services should increase the recruitment of Black, Indigenous and other racialized officers***. Research demonstrates that Black and Indigenous peoples are grossly over-represented in police use of force statistics. The recruitment of racialized officers may reduce conscious bias, unconscious bias and racialized fears that may contribute to police use of force decisions.

11) ***All police recruits should be screened for racial sensitivity and cultural competency***. Proper screening for the presence for exposure to diverse populations, racial tolerance, and racial stereotypes may reduce conscious bias, unconscious bias and racialized fears that may contribute to use of force decisions.

12) ***All police officers should receive periodic cultural competency, anti-bias training***. High quality training might further reduce conscious bias, unconscious bias, and racialized fears that may contribute to use of force decisions.[16]

13) ***All police reforms with respect to use of force policies, training, technologies, and tactics should be subject to high quality evaluation research***. The reforms described in the above recommendations have not yet been proven effective in the Canadian context. Rather, these recommendations are based on "promising" findings located within the international research literature. One should not assume that promising findings from the United States or other countries would be replicated in Canada. Canada needs to establish its own police evaluation record. Thus, it is recommended that all major use of force initiatives be subject to high quality evaluations. Evaluations should involve a pre-test/post-test/control group design. This is the only way to ensure that changes in use of force trends and patterns can be attributed to a particular use of form initiative.

14) ***To ensure high quality research and evaluation, a federal-provincial-territorial task force should be established with the goal of developing a standardized method for recording data on Canadian use of force incidents.*** The collection and reporting of use of force should be standardized across all Canadian jurisdictions. Currently, Canadian police services employ a variety of different data collection standards and record different types of information. Ideally, a standardized process would develop common definitions and enable researchers to clearly distinguish between use of force incidents, use of force reports, and use of force applications.

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[16] Proper recruit screening and training could have significant impacts beyond use of force. Proper screening and training could reduce racial bias with respect to other police practices (stop and search, arrest decisions, community outreach, etc.) and ultimately improve the relationship between the police and racialized communities.

15) ***The federal-provincial-territorial task force should consult with academics and quantitative research experts in the development of the standardized use of force data collection process***. The develop of the standardized use of force data collection process should not be the exclusive responsibility of police or government officials. Although police and government officials should be an important part of the consultation process, experts on data collection, retention and analysis need to be a central part of the development process.

16) ***A standardized use of force data collection process should ensure the collection of important variables identified in the research literature. Important information includes situational variables, civilian characteristics, and officer characteristics***. Research suggests that situational factors, civilian characteristics, and officer characteristics may independently impact use of force decision-making. Thus, any standardized data collection program must include information on these three factors. *Situational factors* include the time and date of the incident, the location of the incident, neighbourhood crime rate, environmental conditions, the type of police deployment, number of subjects, number of officers, subject behaviour at the time of the incident, subject weapons possession, reason for use of force, types of force employed, and injuries to both subjects and officers. Important *civilian characteristics* include age, gender, race, criminal history, level of intoxication at the time of the incident, and mental health at the time of the incident. Finally, important officer characteristics include age, gender, education, length of service, rank, and type of assignment (i.e., regular patrol, special investigative unit or task force, etc.). As described in Section C of this report, many police services already collected this type of information. A sample template, that captures most important use of force information, is provided in Appendix C.

17) ***Racialized communities should be consulted with respect to the collection, retention, analysis, and dissemination of race-based use of force data***. As discussed above, racialized people are significantly over-represented in police use of force statistics. Racial over-representation increases with the seriousness of the use of force incident. Thus, we have recommended the collection of race-based data to help determine if use of force reforms can reduce racial disparities in use of force statistics. However, race-based data collection is a sensitive issue and racial minorities should be consulted with respect to how such data will be collected, used and disseminated.

18) ***On an annual basis, each police service in Canada should submit data on police use of force to an independent research body***. ***This would enable the creation of a Canadian national police use of force dataset***. To ensure proper collection, storage, and analysis, use of force data from all police services in Canada should be submitted, on an annual basis, to an independent research body. The submission model should follow the standard set by the Uniform Crime Reporting (UCR) system. The UCR system entails that all police services submit information, on each confirmed criminal incident that occurred within their jurisdiction, on an annual basis. In our opinion, the same reporting model

should be used for police use of force incidents. Currently UCR crime data are sent to the Canadian Centre for Justice Statistics (CCJS), a branch of Statistics Canada. We suggest that the CCJS may be an obvious agency to consider when establishing a national repository of police use of force data.

19) ***Police services, their governing bodies, and the independent research body should release use of force data to the public on an annual basis***. Each municipal police board or council (or municipal body tasked with governing local law enforcement) should release detailed police use of force statistics annually (by detail, we mean disaggregated and incident level data that are de-identified and anonymized). The current Canadian landscape is riddled with inconsistencies in how use of force data and information is publicly disseminated. For example, some police services provide very basic summary level use of force data in annual reports that are made available to the public—these data are often briefly reported in little detail at the end of an annual report. In other cases, police services present an annual use of force report to the local police board or commission. This information may be found in police board meeting minutes for that specific date that the report was presented. This information is often difficult to locate, especially for the layperson. Further, some police services and/or boards do not publicly report use of force data. Police boards or the local police governing body should make use of force data available to the public and easily accessible (e.g., name the document "XPOLICESERVICE XYEAR Use of Force Annual Data" and make it easy to find online). A step to improving transparency in policing is for the widespread and consistent reporting of use of force data and the accessibility of locating such information. If the Canadian Centre of Justice Statistics is ultimately tasked with establishing a national police use of force dataset, the CCJS should release an annual report to the public. The CCJS should also release the raw, de-identified data to researchers who would like to conduct their own, independent analysis.

20) ***Continuous review and updates to use of force reports.*** Use of force reports should be continuously reviewed and updated to reflect new tools or practices. Although all police officers in Ontario had wider access to CEWs after 2014, the provincially mandated use of force report was not overhauled to reflect this until 2019 (and even now CEWs are listed under "other" despite being among the most applied force option by police). Newer types of technology are also increasingly being adopted by police services across the country such as body-worn cameras. Use of force reports should include documentation for this. For example, there could be a section on the use of force form that states at the minimum: "Body-Worn Camera Used: Yes No"; "Body-Worn Camera Activated During Intervention: Yes No"; "Officer Notes." Moreover, provinces should require police services to use the supplementary CEW form when a deployment/use of the weapon occurs. This type of form is often used by several police services as a supplementary use of force form, but is not required by provinces (e.g., Ontario), particularly in reporting annual use of force data. The supplementary use of force form is useful for capturing more information related to the deployment of a CEW. For example, officers can

document the application type (i.e., displayed, probe, stun, three-point contact). Officers are also able to document if the CEW deployment was a full or partial cycle as well as whether the weapon was effective. This added information provides a nuanced perspective on use of force incidents and allows for a more robust analysis by researchers and practitioners. Provincial authorities should require police services to 1) use supplementary use of force reports, and 2) send these reports to the government as part of the use of force data collection annually.

We hope that the research and recommendations, provided above, offer some guidance on how police services and their governing bodies can reduce police use of force in Canada. It is clear that many of the above recommendations face formidable obstacles—from research funding to methodological challenges, to possible resistance from individual police services and police unions. Nonetheless, we strongly believe that action is required if Canadian police services are going to increase transparency and public confidence.

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APPENDIX A:
INTERVIEW QUESTIONS FOR POLICE OFFICERS – USE OF FORCE STUDY

Thank you for agreeing to participate in our study of police use of force in Canada. We will start the interview by asking questions about your policing background and your experiences with police use of force issues. We will then ask questions about trends and patterns with respect to police use of force in Canada and whether, in your opinion, police use of force policies and practices have changed over the course of your career. We will conclude the interview by asking questions related to use of force initiatives that might reduce use of force incidents, reduce the number of illegitimate use of force incidents, reduce the level of force used in individual incidents, and increase public confidence in Canadian law enforcement.

Before we start the interview, do you have any questions about our study that you would like to ask?

We want to stress that this interview is designed as a confidential exercise—unless the respondent would like to be identified in our report. Would you like to be identified in our final report or would you like to remain anonymous?

I am also wondering if you would consent to having a audio-recording of this interview. It would help us capture your exact words and concentrate on the conversation rather than on writing down your answers. I can promise that the interview will be fully transcribed within a week of the interview. After transcription is complete the recording will be destroyed.

INTERVIEWER: If the individual would like to be identified ask the following questions: 1) What is your name; 2) What police service or organization do you currently work for? What is your rank or position?

Q1.   How long have you worked in the policing field? What types of positions have you held?

Q2.   You have been identified—and selected for an interview—as an individual who has special knowledge or expertise in police use of force issues. Can you describe the nature of your expertise or knowledge? What types of experiences or training do you have with respect to police use of force issues?

Q3.   Have police use of force policies and practices changed during your career? How have things changed? Do you think police use of force has increased or decreased over the past decade? In your opinion, has the illegitimate use of force by police—increased or decreased over the past decade?

Q4.   INTERVIEWER: Next questions will depend on the nature of the respondent's answers to Q3. IF the respondent feels that use of force has decreased ask: Why do you think police use of force has decreased over the past decade? What caused it to decrease? If the respondent feels that use of force has increased, ask why it has increased or what factors have contributed to this issue.

Q5.   In your opinion, what type of training do police officers require in order to ensure that they use force in a professional and legitimate manner? In other words, what are best practices with respect to use of force training? Has use of force training changed significantly over the past decade?

Q6.   Over the past two decades, new technologies have given police officers a number of new use of force options—including tasers. In your opinion, have CEWs and other use of force technologies changed police use of force practices in Canada? Have these new technologies reduced civilian deaths or cases in which civilians are seriously injured by police activity?

Q7.   Many experts believe that both dashboard and body cameras increase police accountability and reduce both the frequency and intensity of police use of force incidents. Do you think this is true? What impact do cameras have on police officer behaviour? In your opinion, do cameras impact how civilians treat or engage with police officers?

Q8.   Many jurisdictions in Canada and abroad have established civilian oversight agencies that monitor or investigate police use of force of incidents. In your opinion, have civilian oversight agencies impacted policing? Have they increased police accountability and reduced illegitimate use of force incidents? Overall, do civilian oversight agencies have a positive or negative impact on policing?

Q9.   In your opinion, does local police culture impact police use of force practices? For example, some have argued that a hyper-masculine police culture can promote the use of police violence as a form of street justice: as a strategy for punishing criminals or dealing with unruly or uncooperative civilians. Others have argued that the police "code of silence" serves to protect officers who have violent tendencies. In your opinion, does police culture contribute to police use of force practices in any way?

Q10.   Previous research suggests that female police officers are less likely to use force when dealing with civilians than male officers. Canadian research also shows that police services with a high proportion of female officers have lower use of force rates than services with relatively few female officers? How can we explain this pattern? Are female police officers more skilled at non-violent conflict resolution?

Q11.   As evidenced by the rise of the Black Lives Matter social movement, the relationship between race and police use of force has become an important social issue in both the United States and Canada. Canadian research reveals that most people believe that the police are more likely to unfairly shoot a Black or Indigenous person than a White person. In your opinion, why have these beliefs developed in Canada? What causes this perception of police bias?

Q12.   Official data on police use of force in Canada does show that Black and Indigenous people are more likely to be shot and killed by the police than White people or people

from other racial backgrounds? In your opinion, what is the cause of these racial disparities? How can we explain these patterns?

Q13. In your opinion, can anything be done to reduce racial disparities in police use of force and increase Black and Indigenous confidence in the Canadian police?

Q14. Canadian research also shows that a high proportion of police use of force incidents involve people who were experiencing a mental health crisis at the time of their interaction with law enforcement. In your opinion, what factors explain why people in mental health crisis are so over-represented in police use of force statistics?

Q15. In your opinion, can anything be done to reduce the frequency of police use of force incidents that involve civilians in mental distress?

Q16. In your opinion, are there any other policies or practices or technology that could reduce police use of force incidents in Canada? Are there any policies or practices that could reduce the perception that the police often use force for illegitimate reasons?

Q17. Experts and academics often agree that important police initiatives—including use of force initiatives—should be subject to independent evaluation. Do you agree with this assessment? In your opinion, how can police use of force policies be evaluated for effectiveness?

Q18. During our investigation, we discovered that most Canadian police services do not collect information on the personal characteristics of civilians involved in police use of force incidents. For example, while use of force forms often collect information on weather and lighting conditions, they do not collect information on civilian age, gender, race, sexual orientation, immigration status or mental health status. In your opinion, why have police services in Canada been reluctant to collect information on the personal characteristics of individuals?

Q19. In your opinion, what are the potential benefits and challenges of developing a national strategy for collecting and disseminating data on police use of force incidents?

Q20. We have now come to the end of the interview. Do you have any final comments or observations that you would like to make?

THANK YOU SO MUCH FOR YOUR COOPERATION AND YOUR WILLINGNESS TO SPEAK WITH ME TODAY. WOULD YOU BE INTERESTED IN RECEIVING A COPY OF OUR FINAL REPORT ONE COMPLETED?

Interviewer: If the answer is YES – record contact information.

END OF INTERVIEW

APPENDIX B:
INTERVIEW QUESTIONS FOR POLICE OVERSIGHT AGENCIES – USE OF FORCE STUDY

Thank you for agreeing to participate in our study of police use of force in Canada. We will ask questions about trends and patterns with respect to police use of force in Canada and whether, in your opinion, police use of force policies and practices have changed over the course of your career. We will also ask questions that seek your opinion and experiences with police oversight across Canada. We will conclude the interview by asking questions related to use of force initiatives that might reduce use of force incidents, reduce the number of illegitimate use of force incidents, reduce the level of force used in individual incidents, and increase public confidence in Canadian law enforcement.

Before we start the interview, do you have any questions about our study that you would like to ask?

We want to stress that this interview is designed as a confidential exercise—unless the respondent would like to be identified in our report. Would you like to be identified in our final report or would you like to remain anonymous?

I am also wondering if you would consent to having an audio-recording of this interview. It would help us capture your exact words and concentrate on the conversation rather than on writing down your answers. The interview will be fully transcribed within a week, and after transcription the recording will be destroyed.

INTERVIEWER: IF the individual would like to be identified ask the following questions: 1) What is your name; 2) What police service or organization do you currently work for? What is your rank or position?

Q1.   How long have you worked in the police oversight field?

Q2.   Do you think police use of force has increased or decreased over the past decade?

Q3.   Over the past two decades, new technologies have given police officers a number of new use of force options—including tasers. In your opinion, have CEWs and other use of force technologies changed police use of force practices in Canada? Have these new technologies reduced civilian deaths or cases in which civilians are seriously injured by police activity?

Q4.   Many experts believe that both dashboard and body cameras increase police accountability and reduce both the frequency and intensity of police use of force incidents. Do you think this is true? What impact do cameras have on police officer behaviour? How useful is video evidence for investigations of incidents when someone is seriously injured or killed by police?

Q5.   Many jurisdictions in Canada and abroad have established civilian oversight agencies that monitor or investigate police use of force of incidents. In your opinion, have civilian oversight agencies impacted policing? Have they increased police accountability and

reduced illegitimate use of force incidents? Overall, do civilian oversight agencies have a positive or negative impact on policing?

Q6.   In your opinion, are there any limitations to civilian oversight agencies? If so, what limitations exist?

Q7.   What is your opinion on the current landscape of civilian oversight of police across Canada? Do you believe each province and territory should have a civilian police watchdog that investigates incidents where civilians are seriously injured or killed by police?

Q8.   In your opinion, should all use of force incidents that do not result in serious injury or death be investigated by a civilian agency (e.g., police board or other municipal body)? Do you think this type of system is feasible? Would a system like this improve accountability and transparency and increase public trust and confidence in the police and oversight system?

Q9.   As evidenced by the rise of the Black Lives Matter social movement, the relationship between race and police use of force has become an important social issue in both the United States and Canada. Canadian research reveals that most people believe that the police are more likely to unfairly shoot a Black or Indigenous person than a White person. In your opinion, why have these beliefs developed in Canada? What causes this perception of police bias?

Q10.   Official data on police use of force in Canada does show that Black and Indigenous people are more likely to be shot and killed by the police than White people or people from other racial backgrounds? In your opinion, what is the cause of these racial disparities? How can we explain these patterns?

Q11.   Canadian research also shows that a high proportion of police use of force incidents involve people who were experiencing a mental health crisis at the time of their interaction with law enforcement. In your opinion, what factors explain why people in mental health crisis are so over-represented in police use of force statistics?

Q12.   Experts and academics often agree that important police initiatives – including use of force initiatives—should be subject to independent evaluation. Do you agree with this assessment? In your opinion, how can police use of force policies be evaluated for effectiveness?

Q13.   During our investigation, we discovered that most Canadian police services do not collect information on the personal characteristics of civilians involved in police use of force incidents. For example, while use of force forms often collect information on weather and lighting conditions, they do not collect information on civilian age, gender, race, sexual orientation, immigration status or mental health status. In your opinion, why have police services in Canada not collected information on the personal characteristics of individuals?

Q14. During our investigation, we also discovered that there is no Canadian data standard for documenting police use of incidents. Different services collect different types of data and release different types of statistics. In your opinion, do you think that the government should develop a national strategy for collecting and disseminating police use of force data? This strategy could, for example, model the national UCR strategy for collecting information on crime incidents?

Q15. In your opinion, what are the potential benefits and challenges of developing a national strategy for collecting and disseminating data on police use of force incidents?

Q16. In your opinion, are there any improvements that can be made to the police oversight system throughout Canada? What would you like to see changed?

Q17. We have now come to the end of the interview. Do you have any final comments or observations that you would like to make?

THANK YOU SO MUCH FOR YOUR COOPERATION AND YOUR WILLINGNESS TO SPEAK WITH ME TODAY. WOULD YOU BE INTERESTED IN RECEIVING A COPY OF OUR FINAL REPORT ONE COMPLETED?

Interviewer: If the answer is YES – record contact information.

END OF INTERVIEW

APPENDIX C:
SAMPLE USE OF FORCE DATA COLLECTION TEMPLATE

STUDY NUMBER: _____ ;

GO (OCCURRENCE) NUMBER: _____ ;

NAME OF POLICE SERVICE: _____ ;

INCIDENT DETAILS

A1. Date of Incident (Occurrence Date): _____ ;

A2. Time of Incident: _____ ;

A3a. Location of Incident (DISTRICT): _____ ;

A3b. Location of Incident (ZONE): _____ ;

A4. Location of Incident (ATOM): _____ ;

A5. Location of Incident (POSTAL CODE):

A6. Location of Incident (X-Y Coordinates):

      X- Coordinate: _____ ;

      Y-Coordinate: _____ ;

A7. Description of Incident Location:
1. Private Residence -- house;
2. Private Residence – apartment or condo;
3. Hotel (public area)
4. Hotel Room
5. Shelter
6. Rooming House
7. On the Street (vehicle-involved)
8. On the Street (no vehicle involved)
9. In the public area of a mall
10. Store in mall
11. Store outside mall
12. Restaurant or Cafe
13. Nightclub or Bar
14. In a park
15. At a school, college or university
16. At a bank or other financial institution
17. In a government building
18. Other (specify): _____ ;

A8. Incident Synopsis:

A9. Type of Force Used by Police? Circle all that apply.
1. No force used
2. Police discharged firearm – did not hit civilian
3. Police discharged firearm – hit civilian
4. Police pointed firearm at civilian
5. Police drew firearm but did not point it at civilian
6. Police used Taser (conducted energy weapon)
7. Police used pepper spray
8. Police used baton
9. Police engaged in empty-hand techniques (hard)
10. Police engaged in empty-hand techniques (soft)
11. Police vehicle used as a weapon
12. Police used canine – canine bites
13. Less than lethal shotgun
14. Other (specify): _____;
15. Information not provided

A10. Did the police attempt verbal resolution prior to use of force?
1. Yes
2. No
3. No information provided
4. NA

A11. Did the officers warn the civilian that they would use force?
1. Yes
2. No
3. No information provided
4. NA

A12. How was police contact with civilian initiated?
1. Call for service from member of the public (reactive)
2. Follow-up investigation (reactive)
3. Traffic stop (proactive)
4. Pedestrian stop (proactive)
5. Police witnessed crime in progress (proactive)
6. Police search warrant (proactive)
7. Police raid/sting operation (proactive)
8. Other (Specify): _____
9. Missing

A13. **What were the actions of the civilian(s) during the encounter?**
1. Civilian did not threaten or attack the police
2. Civilian threatened police (no weapon)
3. Civilian threatened police with a firearm
4. Civilian threatened police with another weapon
5. Civilian assaulted officers (no weapon)
6. Civilian discharged firearm at police
7. Civilian assaulted officers with another weapon
8. Other (specify): _____ ;

A14. **Flee Police Custody:**
1. The civilian did not try to flee police or escape police custody
2. The civilian tried to flee police to avoid apprehension
3. The civilian tried to escape police custody
4. No information provided

A15. **Was the civilian charged with a crime as a result of this incident?**
1. Yes
2. No
3. No information provided

A16. **Was the civilian charged with Resisting Arrest?**
1. Yes
2. No
3. No information provided
4. NA

A17. **CRIMINAL CHARGES. Please list all the charges against the civilian that emerged from this incident.**

A18.   Was the civilian in the possession of a weapon at the time of this incident?
1. No weapons involved
2. Handgun
3. Shotgun
4. Rifle
5. Knife or another edged weapon
6. Bat or Club
7. Other (specify): _____ ;

A19.   When was the weapon or weapons identified (when did it emerge)?
1. No weapon associated with this case
2. Gun used to threaten police
3. Gunshots fired at police
4. Gun used to threaten civilians
5. Gunshots fired at civilians
6. Civilian suspected of firearm possession (did not view before arrest)
7. Presence of firearm only identified after arrest
8. Other weapon used to threaten police
9. Other weapon used to threaten civilians
10. Other weapon used to attack police
11. Other weapon used to attack civilians
12. Civilian suspected of "other" weapon possession
13. Weapon only identified after arrest
14. Other (specify): _____

DETAILS OF CIVILIAN INJURY

B1. Was the civilian injured as a result of Police Use of Force?
1. YES
2. NO
3. Not determined/Not Clear

B2. Type of Injury
1. Death
2. Injury

B3. Description of Injury/Illness:

B4. Cause of Injury (circle all that apply):
1. Firearm Discharge
2. Conducted Energy Weapon
3. Impact Weapon
4. Handcuffs
5. OC
6. Other Use of Force (specify): _____;
7. Self-inflicted injury
8. Accidental injury (specify): _____;
9. Other (specify): _____;

B5. Description of Medical Treatment Received:

B6. Location of Treatment (review synopsis for details):
1. Treatment at scene by officers
2. Treatment at scene by paramedics
3. Other Treatment at scene (specify): _____;
4. Taken to hospital by officers
5. Taken to hospital by ambulance/EMS
6. Taken to hospital by other party (specify): _____;
7. Visited hospital on own
8. Visited doctors office or medical clinic
9. Civilian refused medical treatment
10. Other treatment (specify):_____;

OFFICER INJURY

C1. Were police officers injured during the incident?
1. YES
2. NO
3. Not determined/Not Clear

C2. Type of Injury
1. Death
2. Injury

C3. Description of Injury/Illness:

C4. Cause of Injury (circle all that apply):

C5. Description of Medical Treatment Received:

C6. Location of Treatment):
1. Treatment at scene by officers
2. Treatment at scene by paramedics
3. Other Treatment at scene (specify): _____ ;
4. Taken to hospital by officers
5. Taken to hospital by ambulance/EMS
6. Taken to hospital by other party (specify): _____ ;
7. Visited hospital on own
8. Visited doctors office or medical clinic
9. Officer refused medical treatment
10. Other treatment (specify):_____ ;

CIVILIAN CHARACTERISTICS

D1. Civilian Gender
1. Female
2. Male
3. Other (specify): _____ ;
4. Not provided

D2. Civilian Age: _____ ;

D3. Civilian Race/Ethnicity
1. White
2. Black
3. South Asian
4. Asian
5. Indigenous
6. West Asian/Arab
7. Other (specify): _____ ;
8. Not provided

D4. Civilian Postal Code:

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D5. CRIMINAL HISTORY: Did the civilian have a criminal record prior to this incident?
1. Yes
2. No
3. Information not provided

D6. Details of Prior Criminal Record:

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D7. Prior to this incident, had the civilian ever been convicted of the following types of offences. Check all that apply:
1. Homicide, Manslaughter or Attempted Murder
2. Armed Robbery
3. Extortion
4. Aggravated Assault
5. Domestic Assault
6. Firearms Offences
7. Sexual Assault
8. Assault Police
9. Drug Trafficking
10. Gang or Organized Crime-related Offences

D8. According to the file is the civilian a suspected gang member?
1. Yes
2. No
3. No information provided

D9. How was gang membership determined by the Coder?

D10. According to the file, does the civilian have a history of mental illness?
1. Yes
2. No
3. Information not provided

D11. How was mental health history determined by the Coder?

D12. According to the file, was the civilian experiencing a mental health crisis at the time of the incident?
1. Yes
2. No
3. No information provided

D13. How was "mental heath crisis" determined by the Coder?

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[                                                                    ]
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D14. According to the file, was the civilian drunk or intoxicated on alcohol at the time of the incident?
1. Yes
2. No
3. No information provided

D15. How was intoxication on alcohol determined by the Coder?

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[                                                                    ]
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D16. According to the file, does the civilian have a history of alcohol abuse?
1. Yes
2. No
3. Information not provided

D17. How was alcohol/drinking history determined by the Coder?

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[                                                                    ]
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D18. According to the file, was the civilian intoxicated or high on drugs at the time of the incident?
1. Yes
2. No
3. No information provided

D19. **How was drug-related intoxication determined by the Coder?**

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D20. **According to the file, what types of drugs had the civilian been using?** *Skip if no drugs used. Indicate "drug not listed" if file says drugs were used but does not specify the types of drugs used.*

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D21. **According to the file, does the civilian have a history of drug abuse?**
1. Yes
2. No
3. Information not provided

D22. **How was drug abuse history determined by the Coder?**

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OFFICER CHARACTERISTICS

E1.   Number of officers involved in use of force incident: _____ **;**

E2.   *Officer Information (please see section of the General Occurrence Report on Police Role Involvement):*

Officer Characteristics	Officer 1	Officer 2	Officer 3	Officer 4
a) Age				
b) Gender: *(derive from name):* ***1. Male; 2. Female 3. Can't Tell***				
c) Racial Identity				
d) Education				
e) Years of Service:				
f) Rank:				
g) Was Officer Deemed a Victim in this Incident:				
h) UNIT				

E3. CODER'S COMMENTS REGARDING INCIDENT: