



# DREAM Lab (Defence Resources, Exploring Alternatives to Militarism): 2023 Report

---





# Table of Contents

What is the DREAM Lab?.....	3
Who participated in the lab?.....	3
Executive Summary.....	4
Key Findings.....	7
Key Concepts: Reimagining Security, Risk, and Threat.....	7
Interrogating Militarized Spending and Costs.....	8
What do Military, and Militarized, Spending Look Like in Canada?.....	9
Militarized Spending: The Auxiliary Costs of Military Operations and War.....	10
Environmental Impacts of Military Operations:.....	10
Health and Social Costs of Service.....	11
Reimagining spending: alternative risk prevention.....	12
Environmental Risks and Spending.....	13
Wildfires.....	13
Extreme Weather Events.....	14
Cost Comparison: Fighting wildfires vs CAF Sexual misconduct case settlements.....	15
Health Risks and Spending.....	16
Food Insecurity Among Indigenous Communities in Canada.....	16
Cost Comparison: Indigenous Health Security versus RCMP Resource Extraction Support.....	17
Social Risks and Spending.....	18
Gender Based Violence.....	18
Cost Comparison: MMIWG Funding versus 1 Fighter Jet.....	19
Illicit Drug Toxicity Deaths in BC.....	20
Cost Comparison: Overdose Crisis vs F-35 fighter jets.....	21
Conclusion.....	21
References.....	21



## What is the DREAM Lab?

The DREAM lab was a product of Dr. Megan MacKenzie's vision to support students in reimagining alternative ways that defence funds could be spent and allocated. The aim of the lab is to adopt a critical lens in considering what current defence spending protects against and compare this to how funds might be used differently to address pressing human security threats. The purpose of the inquiry was to demystify and make defence budgets more tangible by treating these funds as zero-sum, comparing losses against other social and public spending, demonstrating the types of projects which could be funded by cutting traditional military spending. We use Canada as a case study, but the lab allowed for more expansive discussion in which participants could research and bring forward cases from different country contexts. We also believe, therefore, that the findings are applicable in contexts beyond Canada. The contents of this report is multifaceted, it seeks to illustrate the difference between military spending and militarized spending; to expand our conceptions of risk, threat, and security; to highlight risks under the thematic lenses of the environment security risks, health security risks, and social security risks; identify costs of not addressing these security threats; and to DREAM of alternative ways to spend militarized funds.

## Who participated in the lab?

A group of 11 students- both undergraduate and masters students- from both Simon Fraser University and the University of British Columbia, were invited to participate in the DREAM lab. The students worked virtually with the DREAM lab coordinators for the first week, meeting via Zoom for seminars, collaboration sessions, and guest speaker presentations. The second week saw the DREAM lab team come together in person at the School for International Studies at Simon Fraser University in Vancouver, Canada to join in face-to-face discussions, collaborate on idea development, internally peer-review, and finalize project components. We were also privileged to host six expert guest speakers throughout the lab who spoke with our team about military spending, peace activism, environmental issues, public engagement, and creating effective visuals. We would like to thank Jennifer Welsh of



the Research Network on Women, Peace and Security; Xiao Liang and Lorenzo Scarazzato of the Stockholm International Peace Research Institute (SIPRI); Heidi Peltier of the Costs of War Project; Nelly Leo of Embark Sustainability; Edwina Hughes of Peace Movement Aotearoa; Maya Hibbeln of Narrative Research; and Sally Sharif of the SFU School of International Studies for sharing their knowledge with the DREAM lab. The final report was drafted by Megan MacKenzie, Maya Hibbeln, Talia Ferris and Imogen Fraser with support from some student participants.

#### Student participants

Elena Burnham	Nellie Kamau	Carolina Santos
Rina Cakrani	Thayane Nascimento de Sá	Arjun Shahi
Raj Deol	Jonathan Northam	Gustavo Villela
Talia Ferris	Jasmine Parmar	Emily Yip

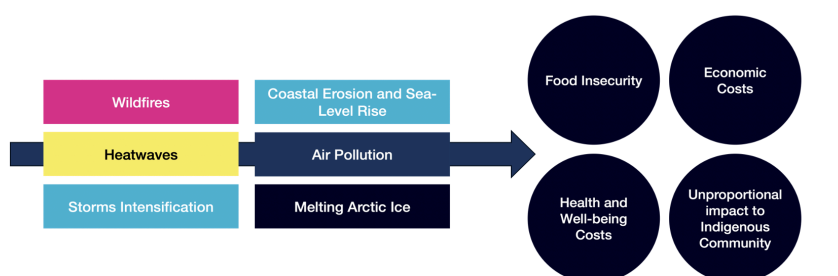
## Executive Summary

The DREAM Lab invites people to re-imagine what a safe and secure world could look like and how we can get there. We started the lab by putting people at the centre of our analysis and shifting our understanding of security from abstract ideas of the protection of sovereignty and borders to considering how to create communities where people are free from fear and want and have a sense of collective responsibility for one another. The ethos of the DREAM lab is to explore these possibilities by undertaking a gender curious investigation of security, and advocating for a different kind of thinking about global politics and the ways we engage in policy.

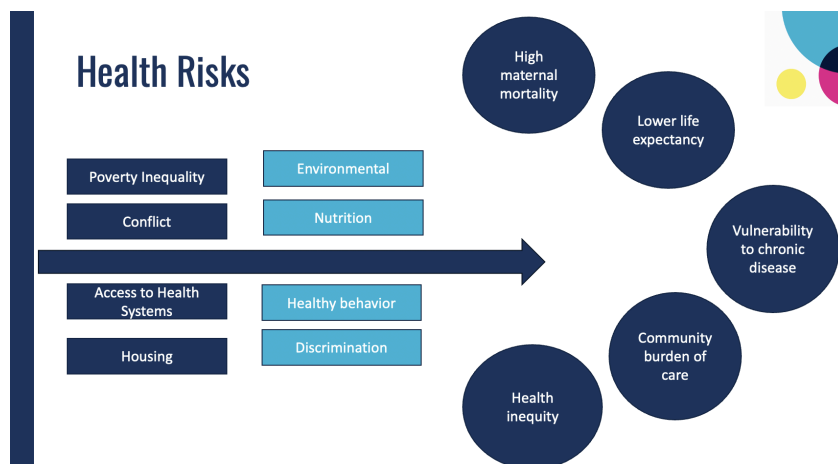
We began the lab by rethinking what 'defence' spending is, and developed 'militarized spending' as a term that captured the auxiliary costs of military and militarized spending. We then chose to focus on three broad categories of insecurity and threats that Canadians, and individuals around the world face: health insecurity, social and domestic insecurity, and environmental risks. We worked to try to show the comparative cost of traditional militarized spending compared to the funds needed to address the various threats and forms of insecurity within these categories.

The graphics below encapsulate the DREAM lab's main findings on the three broad categories of insecurity Canadians face and some of the related issues within each category.

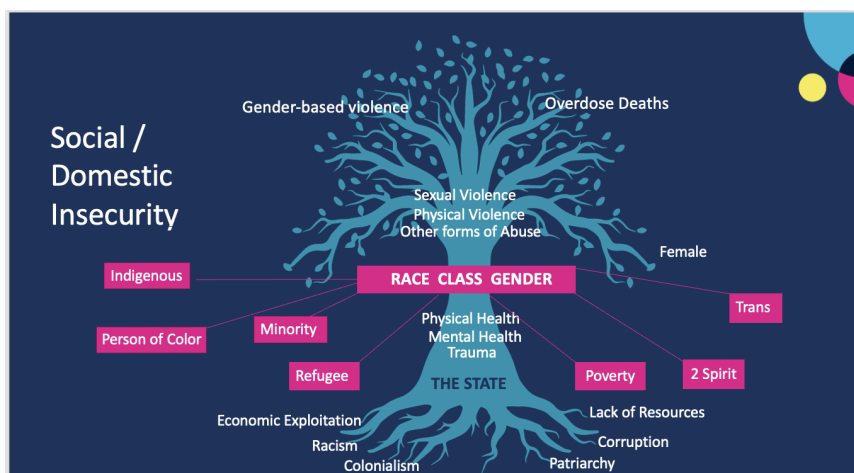
## Environment Risk Summary in Canada



## Health Risks



## Social / Domestic Insecurity





## Key Findings

- *Traditional security overlooks threats like environmental degradation, health risks, and social insecurities. The DREAM Lab advocates for a human-centered definition of security, addressing alternative forms of violence.*
- *Military operations contribute significantly to environmental degradation. Redirecting funds from military spending to environmental risk mitigation could offer significant public health and economic benefits.*
- *Military expenditures ignore the long-term social and health impacts of conflict. Reallocating military funds to health and social services could mitigate these crises more effectively.*
- *Current military spending ignores risk prevention and crisis mitigation in areas like health, social welfare, and environmental protection. The DREAM Lab suggests redirecting a portion of military funds to address urgent issues like food insecurity and climate change.*
- ***Traditional threats are not the primary concerns for Canadians and security policy must account for the gap between domestic human insecurity and foreign policy obligations, focusing on the effective use of funds to address pressing social injustices.***

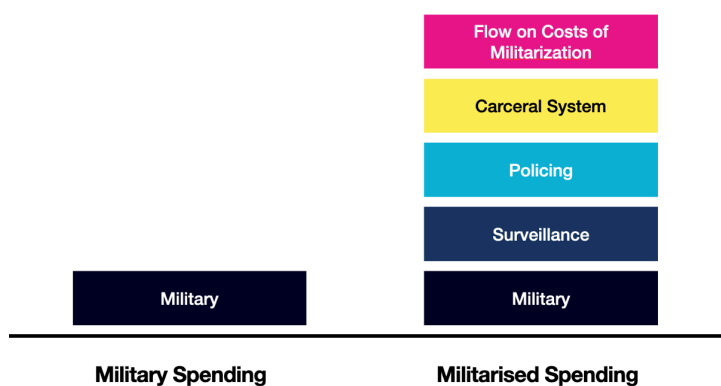
## Interrogating Militarized Spending and Costs

One of the foundational activities of the research lab was engaging in conversation about key terms associated with security studies. The lab group sought to rethink both the key terms like 'defence' spending and security and to challenge the logics often associated with them. While we spent significant time exploring 'security', 'threat' and 'risk' in the lab, we chose in this report to focus on our development of the term 'militarized spending.' Defence spending, both in Canada and other countries, is one of the least transparent forms of government spending and yet it is often the largest portion of budgetary spending in nations around the world. The public tends to take for granted that defence spending is a critical component to combatting threats to global, national and individual security. We began by shifting from 'defence' spending to developing the concept of 'militarized' spending.



'Militarized' spending describes more than simply direct funding for the military. We realized that while significant, disclosed military expenditure only really represents a small proportion of the true costs of military activity. **A key contribution of the lab is therefore the expansion of the term 'militarized' to also consider the auxiliary costs of the military and conflict.** It also allows us to look at the opportunity cost of not spending on risk prevention, and how spending choices about, and the prioritizing of, certain risks leads to an overlooking of other crises faced by populations. Viewing spending and cost in this way reveals hundreds of millions of dollars in excess beyond that covered as simple defence budgets and military funding. These auxiliary, or hidden, costs range from environmental impacts, to the health and social costs of war and military operations.

We visualise these auxiliary costs here, some of which we discuss in more detail later in this report.



## What do Military, and Militarized, Spending Look Like in Canada?

In order to answer the more critical questions, we must first examine what conventional military spending entails. The allocation of funding towards the National Defence Budget, and the resources purchased with these funds, has been a much discussed topic in Canada. A recent poll by leading market research company, IPSOS, found mixed public opinion on current military spending. While 75% of respondents believe an increase of funding is needed to ensure protection, 56% view the institution as 'old' and 'antiquated.'<sup>1</sup> This comes in the context of Canada facing continued internal and external criticism for its inability to meet the expected 2% contribution to NATO. Where the Government currently only provides an

<sup>1</sup> D. Bricker, "More Than Half (56%) of Canadians Consider Canada's Armed Forces to Be Old and Antiquated," IPSOS, August 4, 2023, <https://www.ipsos.com/en-ca/half-of-canadians-consider-armed-forces-antiquated>.

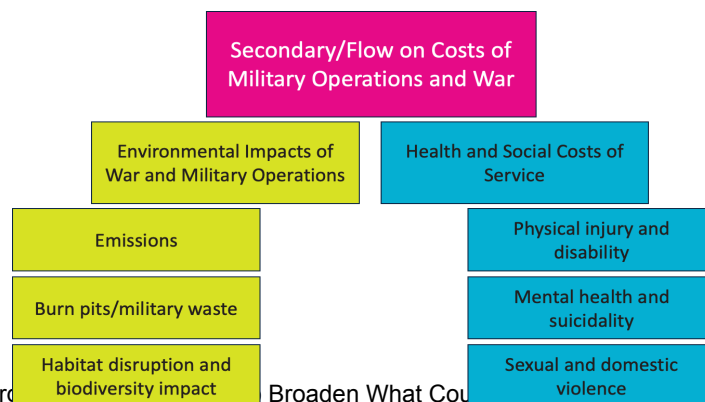


estimated 1.29%<sup>2</sup>, it has pledged to work to meet the 2% threshold by 2032 – which would result in an estimated additional \$75.3 billion over the next five years. This shows that Canada is committed to continuing to increase spending in areas of traditional military in order to attend to conventional, state security threats.

In regards to spending on its own military, in the 2021-22 fiscal year Canada spent 1.32% of its GDP on defence with 13.7% of this being allocated to major equipment.<sup>3</sup> In the same year, the Government committed \$8 billion to spending in multiple military avenues over the next five years.<sup>45</sup> The largest allocation is towards Continental Defence, which includes \$6.1 billion for the purchase of equipment, increased defense capabilities and to provide assistance to Canada's allies. In addition, the budget outlines \$100.5 million towards efforts to modernize the military justice system, with an emphasis on cultural change, while \$144.3 million is included to expand the Canadian Armed Forces' health services and physical fitness programs. An additional \$500 million was allocated in 2022-23 to provide further military aid to Ukraine.<sup>6</sup> These spending priorities indicate a continued desire to improve the functioning of the military, and maintain its status as a global fighting force.

## Militarized Spending: The Auxiliary Costs of Military Operations and War

In order to understand the full scope of militarized spending, we must interrogate the negative impact of military activity on other areas of society. The associated graphic summarizes our findings.



<sup>2</sup> M. Brewster, "As NATO Firms Up Military Spending Targets, Canada's Role Becomes More Complex," *CBC News*, July 10, 2023, <https://www.cbc.ca/news/politics/canada-nato-spending-definition-1.6901473>.

<sup>3</sup> Government of Canada, "Defence Spending," October 18, 2022, <https://www.canada.ca/en/departement-national-defence/corporate/reports-publications/proactive-disclosure/nddn-18-october-2022/defence-spending.html>.

<sup>4</sup> Government of Canada, "Defence Spending," 2022.

<sup>5</sup> CTV News, "Defence Minister Insists \$1B Spending Reduction Is Not a Budget Cut," September 9, 2023, <https://www.ctvnews.ca/politics/defence-minister-insists-1b-spending-reduction-is-not-a-budget-cut-1.6583538>.

<sup>6</sup> Government of Canada, "Defence Spending," 2022

### Environmental Impacts of Military Operations:

Canadian Armed Forces (CAF) emissions currently make up 61% of all federal government emissions.<sup>7</sup> A large funding effort is being made to achieve net zero emissions from the military by 2050 and reduce overall emissions by 40% by 2025.<sup>8</sup> However, the Department of Defence (DND) National Safety and Security (NSS) fleet is exempt from the 2025 net zero plan.<sup>9</sup> The DND currently spends over \$500 million annually on petroleum products to power the military vehicle fleet and infrastructure. The narrative espoused here presents a greener military than is the reality in Canada.

The Royal Canadian Air Force (RCAF) has a significant ecological footprint. Flying a CF-18 fighter jet consumes hundreds of litres of fuel per hour, and during the 2011 Libya bombings, six jets used 8.5 million litres.<sup>10</sup> The actions of the RCAF have also resulted in immense environmental hazards. During the war in Afghanistan, the lack of environmental protection measures in the agreement between the NATO-led Security Assistance Force, the UN and the Afghan government allowed the Canadian and US forces to employ white phosphorus munitions resulting in the destruction of crops, on which local populations were reliant, and long term toxic damage to the land and civilian population.<sup>11</sup> Canada was also responsible for damage left at the Kandahar airfield. A vast body of human and hazardous waste accumulated at the airfield following reckless dumping of the substances by the RCAF.<sup>12</sup> The CAF has also damaged oceans, dumping toxins, chemicals, and derelict ships for over 80 years.<sup>13</sup> Naval operations pollute Canadian and international waters, including the 1946 dumping of 2,800 tons of mustard gas off the coast of Halifax, which continues to harm local ecosystems and fisheries.<sup>14</sup> These examples make clear that focusing on CAF's promises of

---

<sup>7</sup> "Military Emissions and Military Expenditures Fact Sheet," WILPF Canada, 2021, [https://wilpfcanada.ca/wp-content/uploads/2021/11/01-Military-Emissions-and-MilitaryExpenditures\\_Fact-Sheet.pdf](https://wilpfcanada.ca/wp-content/uploads/2021/11/01-Military-Emissions-and-MilitaryExpenditures_Fact-Sheet.pdf)

<sup>8</sup> *ibid.*

<sup>9</sup> *ibid.*

<sup>10</sup> Yves Engler, *Stand on Guard for Whom?: A People's History of the Canadian Military* (Montreal: Black Rose Books, 2021).

<sup>11</sup> *ibid.*

<sup>12</sup> *Ibid.*

<sup>13</sup> "How the Canadian Military Is Fueling the Climate Crisis," *Canadian Dimension*, 2021, <https://canadiandimension.com/articles/view/how-the-canadian-military-is-fueling-the-climate-crisis>.

<sup>14</sup> *ibid.*



'net-zero' emissions obscures the extent of environmental degradation as a result of military activity. The gravity of this issue cannot be overstated. These damages seem to be an unavoidable consequence of military activity.

### Health and Social Costs of Service

The impacts of military activity continue to be a reality long after conflict or deployment has ended. The impacts of military activity can be physically and emotionally significant and while it is impossible to capture the full impact or 'costs' of these activities in concrete terms, below we signal three of the main auxiliary impacts and costs of military activity:

**Physical Injury and Disability:** Advances in warfare continue to result in serious injuries and disabilities for both military personnel and civilians. One in ten veterans suffers serious long-term effects injuries, including burns, broken bones, spinal cord or nerve damage, and paralysis.<sup>15</sup> These injuries present ongoing challenges for reintegration into society and bring financial burdens due to necessary lifestyle adaptations and reduced employment opportunities, exacerbated by insufficient government support.

#### Mental and Psychological Health:

Psychological trauma, particularly post-traumatic stress disorder (PTSD), is a major consequence of war. Veterans Affairs Canada estimates that up to 10% of war zone veterans develop chronic PTSD, with rates higher among those who experience combat or conflict-related sexual violence (CRSV).<sup>16</sup> PTSD symptoms include flashbacks, avoidant thoughts, negative moods, and heightened irritability, all of which severely affect quality of life.

#### Sexual and Domestic Violence:

---

<sup>15</sup> Watson Institute, "US and Allied Wounded," Cost of War, 2021, <https://watson.brown.edu/costsofwar/costs/human/military/wounded>.

<sup>16</sup> Veterans Affairs, "Post-Traumatic Stress Disorder (PTSD) and War-Related Stress," 2019, <https://www.veterans.gc.ca/eng/health-support/mental-health-and-wellness/understanding-mental-health/ptsd-war-stress>.



Conflict-related sexual violence (CRSV) remains a widespread yet underreported issue during and after war, affecting both civilians and military personnel. While international law prohibits sexual violence as a weapon of war, rape and other forms of sexual violence occur at staggering rates in times in conflict.<sup>17</sup> Stigma, trauma, and institutionalized patriarchy make it challenging for survivors to seek justice. This issue is further compounded by the complexity of military justice systems, which often keep these crimes separate from civil legal processes.

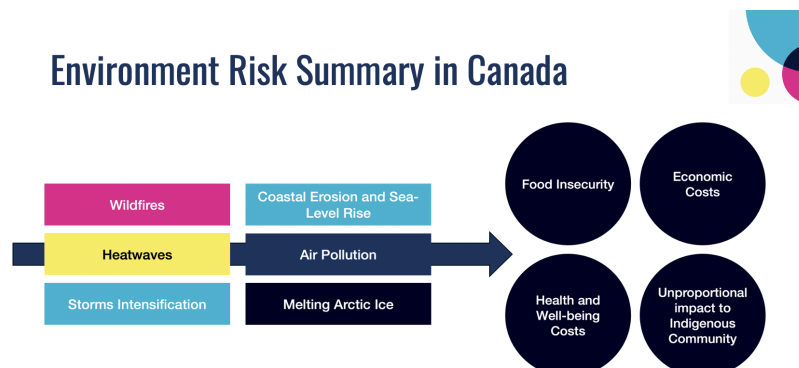
## Reimagining spending: alternative risk prevention

The DREAM lab was tasked with reimagining spending by identifying more pressing human security risks and rationalizing the ways these issues might be prioritized, looking directly at how diverting spending from the military creates opportunity for alternative investment. The result of this work is twofold. We first created three core visuals for each category - environmental, health and social - which summarize our findings on risk. We also created cost comparison visuals - a product of a zero-sum thought exercise we carried out - to see how costs spent on the traditional military activity could be directly diverted elsewhere, to help overcome human security threats. Below, we present these various visual representations alongside brief explanations of some of our findings.

---

<sup>17</sup> International Committee of the Red Cross (ICRC), "Five Things to Know About Sexual Violence in Conflict Zones," 2024, <https://www.icrc.org/en/document/five-things-know-about-sexual-violence-conflict-zones>.

## Environmental Risks and Spending



The above flowchart shows the main environmental threats we believe Canada faces, and the human security risks that they directly impact. The threat of wildfires and extreme weather events are particularly topical, as we explain in more detail here.

### Wildfires

Increasing wildfire emissions are one of the most significant climate-related risks to air quality and human health in Canada. These conditions are in part caused by Canada's heavily forested regions but, really these natural conditions only exacerbate the primary cause: increased wildfire severity as a result of human-induced global warming. Canadian wildfires have severely impacted local air quality in Canada. At an increasing rate, air quality ratings are reaching levels of 'very high risk' and forcing closures of outdoor events.<sup>18</sup> In the 2023 fire season, forest fires were reported across almost every Canadian province and territory, with nearly 200,000 Canadians being placed under evacuation orders as a result.<sup>19</sup> Premature deaths attributed to smoke inhalation have also nearly doubled in British Columbia and Ontario every year since 2019.<sup>20</sup>

<sup>18</sup> "Climate Change More Than Doubled the Likelihood of Extreme Fire Weather Conditions in Eastern Canada," *World Weather Attribution*, 2023,, <https://www.worldweatherattribution.org/climate-change-more-than-doubled-the-likelihood-of-extreme-fire-weather-conditions-in-eastern-canada/>.

<sup>19</sup> Canada Wildfires: Crews Battle to Stop Blaze as Yellowknife Evacuates," *Reuters*, August 17, 2023, <https://www.reuters.com/world/americas/canada-wildfires-crews-battle-stop-blaze-yellowknife-evacuates-2023-08-17/>.

<sup>20</sup> "Public Health Update on the Health Effects of Wildfires," *Health Canada*, June 20, 2023, <https://www.canada.ca/en/health-canada/news/2023/06/public-health-update-on-the-health-effects-of-wildfires.html>.



The annual economic valuation for the health impacts of wildfires in Canada over the last decade is estimated to be between \$410 million and \$1.8 billion. And yet, the funds allocated federally to fighting wildfires only increased for the first time in 2023, with \$256 million given to the 'Fighting and Managing Wildfires in a Changing Climate' program to support provinces and territories in strengthening their wild firefighting capacities.<sup>21</sup> In response to the country's most devastating wildfire season on record, investments such as these are as important as ever if a tangible difference in mitigating this risk is to be made.

### Extreme Weather Events

The incidence of extreme weather events across Canada creates an exponentially increasing risk to human life. The average annual temperature is increasing at a rate of almost double the global average, resulting in more frequent volatile weather events. 2021 was the worst recorded year for extreme weather changes in 26 years.<sup>22</sup> The impacts ranged from multi-million dollar damages in the Western Canada from rain and flooding, the warmest spring in 75 years which foresaw the start of an early wildfire season, and tropical storms ravaging Atlantic Canada in late Summer.<sup>23</sup> Extreme heat events are the deadliest form of climate-related disasters however the lack of the same tangible costs as other climate-driven events like floods or forest fires means mitigation is often not a priority.<sup>24</sup> The 2021 heat wave in British Columbia history saw over 600 deaths. Healthcare costs associated with this were estimated to be \$12 million.<sup>[xvi]</sup> In fact, preliminary estimates for the cost of the 13 most extreme weather events in 2022 resulted in insured losses of at least \$30 million and aggregated losses approaching \$3 billion.

---

<sup>21</sup> "Fighting and Managing Wildfires: Changing Climate Program," *Natural Resources Canada*, 2022, <https://natural-resources.canada.ca/our-natural-resources/forests/wildland-fires-insects-disturbances/fighting-and-managing-wildfires-changing-climate-program-training-fund/fighting-and-managing-wildfires-changing-climate-program>.

<sup>22</sup> "Top Ten Weather Stories of 2022," *Environment and Climate Change Canada*, 2022, <https://www.canada.ca/en/environment-climate-change/services/top-ten-weather-stories/2022.html>.

<sup>23</sup> *ibid.*

<sup>24</sup> "The Case for Adapting to Extreme Heat: Costs of the BC Heat Wave," *Climate Institute*, 2023, <https://climateinstitute.ca/wp-content/uploads/2023/06/The-case-for-adapting-to-extreme-heat-costs-of-the-BC-heat-wave.pdf>.

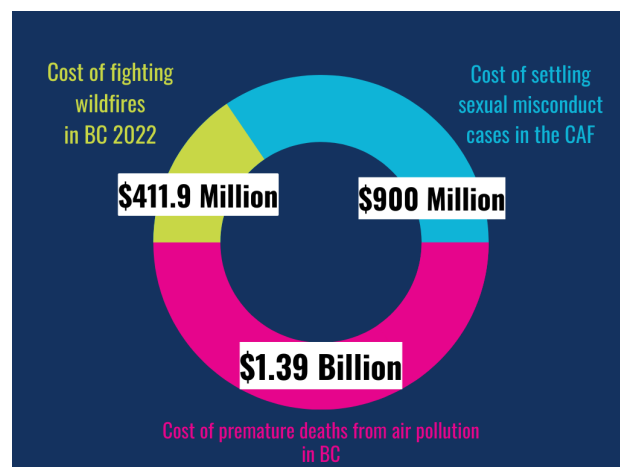
The Canadian government is making an effort to help communities increase their resiliency against the effects of climate change and extreme weather events through the establishment of the Disaster Mitigation and Adaptation Fund (DMAF), with \$2 billion dollars committed over 10 years to the fund in 2018 and a top up of \$1.375 billion over 12 years in 2021, but we have yet to see substantial on the ground changes as a result of these funds for Canadian people.<sup>25</sup>

### Cost Comparison: Fighting wildfires vs CAF Sexual misconduct case settlements

How, then, could military costs be diverted to help overcome these environmental risks. As the associated visuals show, the money spent between 2021 and 2022 on paying the salaries of 8 senior members of the CAF, who were put on leave while awaiting decisions on cases of sexual misconduct, could fund the salaries of over 10 full time wild firefighters in Canada. Furthermore, the overall costs of fighting wildfires alongside the overall costs of settling these CAF sexual misconduct cases matched the overall cost of premature deaths from air pollution in BC due to smoke. This provides a perfect example of how channeling money into preventing a crisis is more cost effective than working to recoup losses.

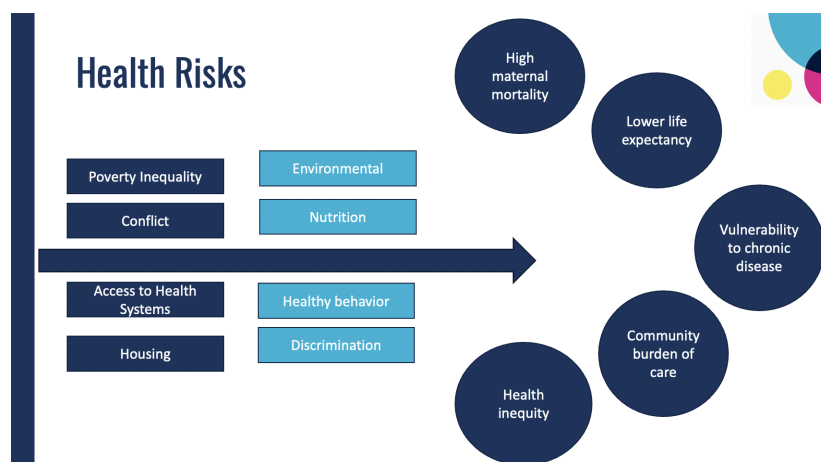


Cost of paying salaries for Senior CAF members on leave during sexual misconduct cases (2021-22) = Cost of yearly salaries for 10 wildfire fighters



<sup>25</sup> "The Case for Adapting to Extreme Heat." *Climate Institute*, 2023.

## Health Risks and Spending



We next looked at the health risks faced by Canadians, what human security threats these create, and what can be done to overcome them. The flow chart above, again, shows the product of our discussion. Much of this discussion centred around the structural factors that create health inequities, affecting the extent to which a person is impacted by a given risk. We recognise that the ability to live with good health is not equally enjoyed, both intra- and international. The root causes of these health inequities are often found in areas of life beyond what is typically considered 'healthcare'. These social determinants of health include personal, economic, social, and environmental factors such as education, housing and working conditions. When these foundations of health are absent, infectious and chronic disease, lower life expectancy, disability, reduced mental or physical health, and higher mortality rates are more likely to occur. A lack of these social determinants of health therefore produce and reproduce insecurity, putting vulnerable populations at highest risk during crises.

### Food Insecurity Among Indigenous Communities in Canada

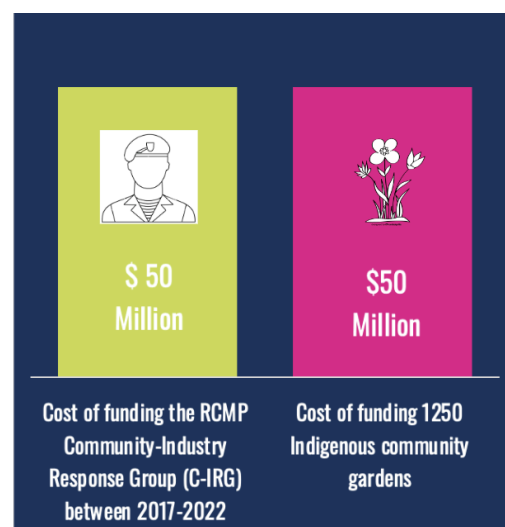
The UN Food and Agriculture Organization defines food security as “when all people, at all times, have physical, social and economic access to sufficient, safe and nutritious food to



meet their dietary needs and food preferences for an active and healthy life".<sup>26</sup> Indigenous communities in Canada experience higher rates of food insecurity compared to non-Indigenous Canadians.<sup>27</sup> Almost half of all First Nation families – particularly those with children - report not having sufficient access to food. The higher prevalence rate of food insecurity among Indigenous peoples is a direct result of the dismantling of traditional food systems by colonial institutions. Various genocidal policies have resulted in: disconnection from the land, coerced relocation to reserves and the intentional decimation of bison and beaver. These conditions have led to an increased reliance on energy-dense settler market foods. Traditional harvesting practices are generally still safe, indeed, research by the First Nations Food, Nutrition, and Environment Study found that traditional foods are both preferred and more nutritious than food purchased in markets.<sup>28</sup> However, the impacts of extractive industry have produced structural barriers which limit the scale at which this is possible.<sup>29</sup> A return to food security for Indigenous communities necessitates food sovereignty.<sup>30</sup> This means that providing communities with the agency to control what they eat and how it is sourced can function to improve security across many domains.

### Cost Comparison: Indigenous Health Security versus RCMP Resource Extraction Support

In order to look at how money might be diverted towards spending on health insecurity, we focused on military spending in indigenous communities. The militarization of Canadian resource extraction is significant. In 2017 the RCMP formed the Community-Industry Response Group (C-IRG); officers who would survey organizations against resource-extraction projects and enforce injunctions sought by the industry. In all, the C-IRG has spent almost \$50 million on committing these violations.



<sup>26</sup> M. Batal et al., "First Nations Households Living On-Reserve Experience Food Insecurity: Prevalence and Predictors Among Ninety-Two First Nations Communities Across Canada," *Canadian Journal of Public Health* 112, no. Suppl 1 (2021): 52-63, 53.

<sup>27</sup> *ibid.*

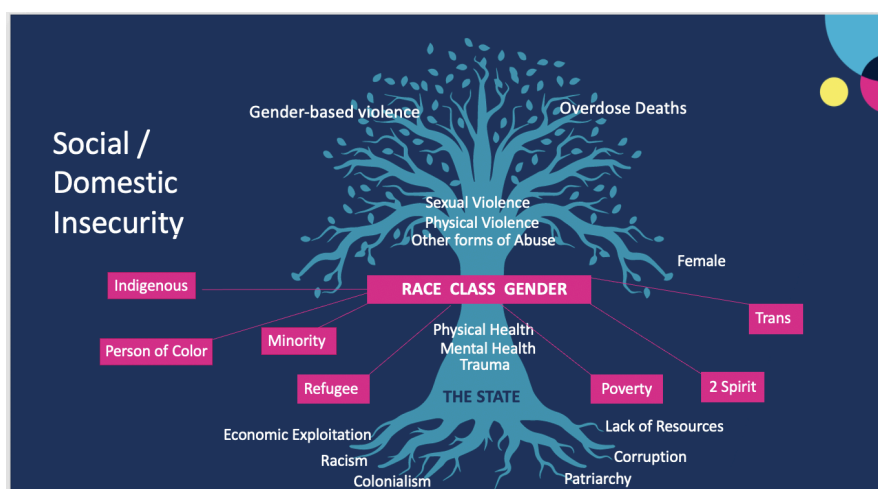
<sup>28</sup> *ibid.*

<sup>29</sup> A. Domingo et al., "Predictors of Household Food Insecurity and Relationship with Obesity in First Nations Communities in British Columbia, Manitoba, Alberta, and Ontario," *Public Health Nutrition* 24, no. 5 (2021): 1021-33.

<sup>30</sup> Batal et al., "First Nations Households Living On-Reserve Experience Food Insecurity," 53.

This money could be used very differently in the same areas of Canada with investment in grassroots alternatives to overcoming food security. The Meechim Project, run by indigenous owned social enterprise AKI solutions, works to support start-up garden projects that overcome food insecurity by providing healthy, affordable, fresh food and supporting communities in building back their own food systems. The cost of start-up for one of these gardens is \$40,000, which is intended to support the community until the garden becomes self financing. This provision of fresh, healthy foods is seen as the best way to both prevent the onset and lessen the consequences of diabetes, particularly in rural and Northern communities.<sup>31</sup>

## Social Risks and Spending



Finally, we discussed the various social risks faced by Canadians, looking at both the root causes of these risks and the insecurities that they create. We explore two of the most prominent issues in more detail below.

## Gender Based Violence

Rates of GBV have increased since the COVID-19 pandemic, with approximately 68% of women in Canada reporting that physical or verbal abuse from a partner has become more

<sup>31</sup> "About Aki Foods," *AKI Energy*, <https://www.akienergy.com/about-aki-foods>.



common.<sup>32</sup> Though GBV can affect all people, certain populations are at a higher risk of experiencing GBV, such as young women and girls in particular Indigenous women and girls and women of colour; LGBTQIA+ people and those, women in particular, living with disabilities.<sup>33</sup> When understanding risk as the potential for loss or damage, GBV puts these groups of people at risk, jeopardising their physical, mental, and emotional wellbeing and creating negative health, social and economic consequences that span generations and leads to cycles of violence and abuse within families and communities.<sup>34</sup>

The proportion of Indigenous female victims continues to be significantly higher than their representation in the population with at least one in five victims of GBV being an Indigenous woman or girl.<sup>35</sup> This Missing and Murdered Indigenous Women and Girls (MMIWG) crisis confronts all of Canada, demanding collective responsibility to bring urgent and meaningful attention to the issue. In 2015, the Canadian government announced the creation and funding of a National Inquiry into MMIWG.<sup>36</sup> In 2021, they created the MMIWG National Action Plan (NAP), which detailed a roadmap to implementing the Calls for Justice. This included \$2.2 billion to be disbursed over 5 years. However, advocacy organizations such as Native Women's Association of Canada (NWAC) have expressed dissatisfaction with a lack of detail, transparency and accountability in both the NAP and budget.<sup>37</sup>

---

<sup>32</sup> UN Women, "Explainer: Sustainable Development Goal 5," 2022, [https://www.unwomen.org/en/news-stories/explainer/2022/09/explainer-sustainable-development-goal-five?gclid=Cj0KCQjwldKmBhCCARIsAP-0rfx8BebAH240Vfc-eRmZz872zSsfbARy4cjmB3Km1qCuV-SlqiXwggcaApKQEALw\\_wcB](https://www.unwomen.org/en/news-stories/explainer/2022/09/explainer-sustainable-development-goal-five?gclid=Cj0KCQjwldKmBhCCARIsAP-0rfx8BebAH240Vfc-eRmZz872zSsfbARy4cjmB3Km1qCuV-SlqiXwggcaApKQEALw_wcB).

<sup>33</sup> "About Gender-Based Violence," *Women and Gender Equality Canada*, <https://women-gender-equality.canada.ca/en/gender-based-violence/about-gender-based-violence.html#what>.

<sup>34</sup> <https://canadianwomen.org/the-facts/gender-based-violence/>

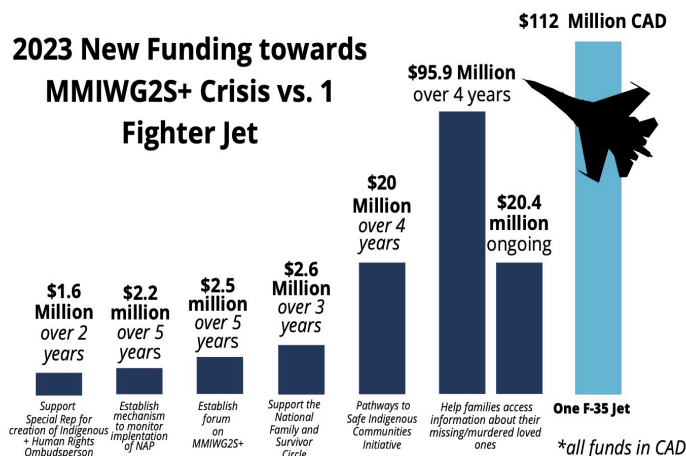
<sup>35</sup> Statistics Canada, "Criminal Victimization of First Nations, Métis, and Inuit People in Canada, 2018-2020," July 19, 2022, <https://www150.statcan.gc.ca/n1/daily-quotidien/220719/dq220719c-eng.htm>.

<sup>36</sup> National Inquiry into Missing and Murdered Indigenous Women and Girls, *Reclaiming Power and Place: The Final Report of the National Inquiry into Missing and Murdered Indigenous Women and Girls* (2019), <https://www.mmiwg-ffada.ca/final-report/>.

<sup>37</sup> Native Women's Association of Canada, *Federal MMIWG2S Action Plan: Annual ScoreCard* (2023), [https://nwac.ca/assets-knowledge-centre/FEDERAL\\_ANNUAL\\_SCORECARD\\_ACTIONPLAN\\_2022-23\\_2023-06-01-034802\\_mfqp.pdf](https://nwac.ca/assets-knowledge-centre/FEDERAL_ANNUAL_SCORECARD_ACTIONPLAN_2022-23_2023-06-01-034802_mfqp.pdf).

## Cost Comparison: MMIWG Funding versus 1 Fighter Jet

While Budget 2023 introduced new funding towards implementing NAP for MMIWG, the federal government has also chosen to update its fleet of fighter jets, purchasing 88 new F-35 fighter jets over various phases.<sup>38</sup> One of these jets costs only slightly less than the entire MMIWG NAP budget. This comparison demonstrates that Canada is significantly more willing to defend against hypothetical threats abroad than to combat real risks faced by the most vulnerable communities in their population.



## Illicit Drug Toxicity Deaths in BC

Another social crisis facing Canada is the rising rates of Illicit drug toxicity deaths. In 2013 in British Columbia, 334 people died by overdose. By 2022, this number rose to 2272.<sup>39</sup> Opioid fentanyl and its analogues has been the primary driver of these increased deaths; in 2005 fentanyl was detected in just 5% of examined overdose deaths, but between 2017 and 2021 that grew to around 85%.<sup>40</sup> Border closures and supply chain disruptions resulting from the COVID-19 pandemic further deteriorated the safety of the illicit drug supply. First Nations peoples in British Columbia have been especially impacted by this drug crisis, with mortality rates five times higher than in the non-Indigenous population. People without housing are disproportionately affected by this issue. A 2017 study found that 30% of those who experienced an overdose in British Columbia reported unstable housing, and that those who lacked a fixed address were more likely to overdose repeatedly.<sup>41</sup>

<sup>38</sup> Department of Finance Canada, *Budget 2023: A Made In Canada Plan* (2023), <https://www.budget.canada.ca/2023/home-accueil-en.html>.

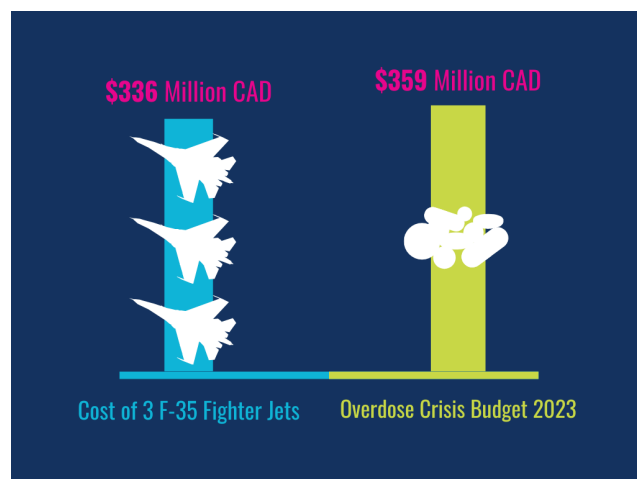
<sup>39</sup> BC Coroners Service, *Unregulated Drugs Deaths - Summary* (n.d.), <https://www2.gov.bc.ca/gov/content/life-events/death/coroners-service/statistical-reports>.

<sup>40</sup> *ibid.*

<sup>41</sup> British Columbia Observatory, Population and Public Health (BCOPPH) and BC Centre for Disease Control (BCCDC), *The BC Public Health Opioid Overdose Emergency: March 2017 Update* (Vancouver, BC: BCOPPH/BCCDC, 2017),

### Cost Comparison: Overdose Crisis vs F-35 fighter jets

If the federal government redirected the cost of 3 of the 88 F-35 fighter jets it is in the process of purchasing towards Canada's overdose crisis budget, the budget for 2023 would double. This sheds light on how funding to support conflict prevention abroad outweighs what is spent to address the imminent risks threatening the lives of Canadians.



## Conclusion

The DREAM Lab report advocates for a fundamental shift in how Canada approaches security, moving beyond traditional military defense towards prioritizing human and environmental well-being. By broadening the concept of security, risk and threat and rethinking the idea of militarized spending, the report highlights how redirecting military funds toward preventative measures and crisis mitigation can better protect and empower communities. While military operations are often justified as necessary for national security, they come with significant hidden costs. The report emphasizes that these costs are not only financial but also environmental and societal. Recognising this, our exercise in comparison exposes how diverting spending away from the military could release significant public funds for the prevention of human insecurity. Through this, Canada can achieve greater security and resilience in the face of modern threats, and better serve its most vulnerable populations.

## References

Batal, M., H. M. Chan, K. Fediuk, A. Ing, P. R. Berti, G. Mercille, ... & L. Johnson-Down. "First Nations Households Living On-Reserve Experience Food Insecurity: Prevalence and Predictors Among Ninety-Two First Nations Communities Across Canada." *Canadian Journal of Public Health* 112, no. Suppl 1 (2021): 52-63.

[http://www.bccdc.ca/resource-gallery/Documents/Educational%20Materials/Epid/Other/Public%20Surveillance%20Report\\_2017\\_03\\_17.pdf](http://www.bccdc.ca/resource-gallery/Documents/Educational%20Materials/Epid/Other/Public%20Surveillance%20Report_2017_03_17.pdf).



BC Coroners Service. *Unregulated Drugs Deaths - Summary*. n.d.

<https://www2.gov.bc.ca/gov/content/life-events/death/coroners-service/statistical-reports>.

Brewster, M. "As NATO Firms Up Military Spending Target, Canada Is Trying to Broaden What Counts: Sources." *CBC News*, July 10, 2023.

<https://www.cbc.ca/news/politics/canada-nato-spending-definition-1.6901473>.

Bricker, D. "More Than Half (56%) of Canadians Consider Canada's Armed Forces to Be Old and Antiquated." *IPSOS*, August 4, 2023.

<https://www.ipsos.com/en-ca/half-of-canadians-consider-armed-forces-antiquated>.

British Columbia Observatory, Population and Public Health (BCOPPH) and BC Centre for Disease Control (BCCDC). *The BC Public Health Opioid Overdose Emergency: March 2017 Update*. Vancouver, BC: BCOPPH/BCCDC, 2017.

[http://www.bccdc.ca/resource-gallery/Documents/Educational%20Materials/Epid/Other/Public%20Surveillance%20Report\\_2017\\_03\\_17.pdf](http://www.bccdc.ca/resource-gallery/Documents/Educational%20Materials/Epid/Other/Public%20Surveillance%20Report_2017_03_17.pdf).

CTV News. "Defence Minister Insists \$1B Spending Reduction Is Not a Budget Cut." September 9, 2023.

<https://www.ctvnews.ca/politics/defence-minister-insists-1b-spending-reduction-is-not-a-budget-cut-1.6583538>.

Department of Finance Canada. *Budget 2023: A Made In Canada Plan*. 2023.

<https://www.budget.canada.ca/2023/home-accueil-en.html>.

Dijkstra, H.M., P. Petrov, and E. Versluis. "Governing Risks in International Security." *Contemporary Security Policy* 39, no. 4 (2018): 537-543. <https://doi.org/10.1080/13523260.2018.1503776>.

Domingo, A., J. Spiegel, M. Guhn, H. Wittman, A. Ing, T. Sadik, ... & M. Batal. "Predictors of Household Food Insecurity and Relationship with Obesity in First Nations Communities in British Columbia, Manitoba, Alberta, and Ontario." *Public Health Nutrition* 24, no. 5 (2021): 1021-33.

Engler, Yves. *Stand on Guard for Whom?: A People's History of the Canadian Military*. Montreal: Black Rose Books, 2021.

Government of Canada. "Defence Spending." October 18, 2022.

<https://www.canada.ca/en/department-national-defence/corporate/reports-publications/proactive-disclosure/nddn-18-october-2022/defence-spending.html>.

Heath, J.B. "Making Sense of Security." *The American Society of International Law* 116, no. 2 (2022): 289-339. <https://doi.org/10.1017/ajil.2021.63>.

International Committee of the Red Cross (ICRC). "Five Things to Know About Sexual Violence in Conflict Zones." 2024.

<https://www.icrc.org/en/document/five-things-know-about-sexual-violence-conflict-zones>.

Malik, Sadia Mariam, Amy Barlow, and Benjamin Johnson. "Reconceptualising Health Security in Post-COVID-19 World." *BMJ Global Health* 6, no. 7 (2021): e006520.23.



National Inquiry into Missing and Murdered Indigenous Women and Girls. *Reclaiming Power and Place: The Final Report of the National Inquiry into Missing and Murdered Indigenous Women and Girls*. 2019. <https://www.mmiwg-ffada.ca/final-report/>.

Native Women's Association of Canada. *Federal MMIWG2S Action Plan: Annual ScoreCard*. 2023. [https://nwac.ca/assets-knowledge-centre/FEDERAL\\_ANNUAL\\_SCORECARD\\_ACTIONPLAN\\_2022-23\\_2023-06-01-034802\\_mfgp.pdf](https://nwac.ca/assets-knowledge-centre/FEDERAL_ANNUAL_SCORECARD_ACTIONPLAN_2022-23_2023-06-01-034802_mfgp.pdf).

Sinai, J. "Applying Risk Management in International Security Studies." *Capitol Technology University*, 2022. <https://www.capttechu.edu/blog/applying-risk-management-international-security-studies>.

Statistics Canada. "Criminal Victimization of First Nations, Métis, and Inuit People in Canada, 2018-2020." July 19, 2022. <https://www150.statcan.gc.ca/n1/daily-quotidien/220719/dq220719c-eng.htm>.

Tickner, J. "You Just Don't Understand: Troubled Engagement Between Feminists and IR Theorists." *International Studies Quarterly* 41, no. 4 (1997): 611-632.

UN Women. "Explainer: Sustainable Development Goal 5." 2022. [https://www.unwomen.org/en/news-stories/explainer/2022/09/explainer-sustainable-development-goal-five?qclid=Cj0KCQjwldKmBhCCARIsAP-0rfx8BebAH240Vfc-eRmZz872zSsfBARY4cjmB3Km1qCuV-SIqiXwgqcaApKQEALw\\_wcB](https://www.unwomen.org/en/news-stories/explainer/2022/09/explainer-sustainable-development-goal-five?qclid=Cj0KCQjwldKmBhCCARIsAP-0rfx8BebAH240Vfc-eRmZz872zSsfBARY4cjmB3Km1qCuV-SIqiXwgqcaApKQEALw_wcB).

Veterans Affairs. "Post-Traumatic Stress Disorder (PTSD) and War-Related Stress." 2019. <https://www.veterans.gc.ca/eng/health-support/mental-health-and-wellness/understanding-mental-health/ptsd-warstress>.

Watson Institute. "US and Allied Wounded." *Cost of War*. 2021. <https://watson.brown.edu/costsofwar/costs/human/military/wounded>.

"About Gender-Based Violence." *Women and Gender Equality Canada*. <https://women-gender-equality.canada.ca/en/gender-based-violence/about-gender-based-violence.html#what>.

"About Aki Foods." *AKI Energy*. <https://www.akienergy.com/about-aki-foods>.

"Canada Wildfires: Crews Battle to Stop Blaze as Yellowknife Evacuates." *Reuters*, August 17, 2023. <https://www.reuters.com/world/americas/canada-wildfires-crews-battle-stop-blaze-yellowknife-evacuates-2023-08-17/>.

"Climate Change More Than Doubled the Likelihood of Extreme Fire Weather Conditions in Eastern Canada." *World Weather Attribution*. 2023. <https://www.worldweatherattribution.org/climate-change-more-than-doubled-the-likelihood-of-extreme-fire-weather-conditions-in-eastern-canada/>.

"Fighting and Managing Wildfires: Changing Climate Program." *Natural Resources Canada*. 2022. <https://natural-resources.canada.ca/our-natural-resources/forests/wildland-fires-insects-disturbances/fighting-and-managing-wildfires-changing-climate-program-training-fund/fighting-and-managing-wildfires-changing-climate-program>.

"How the Canadian Military Is Fueling the Climate Crisis." *Canadian Dimension*. 2021. <https://canadiandimension.com/articles/view/how-the-canadian-military-is-fueling-the-climate-crisis>.



"Military Emissions and Military Expenditures Fact Sheet." WILPF Canada. 2021.  
[https://wilpfcanada.ca/wp-content/uploads/2021/11/01-Military-Emissions-and-MilitaryExpenditures\\_Fact-Sheet.pdf](https://wilpfcanada.ca/wp-content/uploads/2021/11/01-Military-Emissions-and-MilitaryExpenditures_Fact-Sheet.pdf).

"Public Health Update on the Health Effects of Wildfires." *Health Canada*. June 20, 2023.  
<https://www.canada.ca/en/health-canada/news/2023/06/public-health-update-on-the-health-effects-of-wildfires.html>.

"The Case for Adapting to Extreme Heat: Costs of the BC Heat Wave." Climate Institute. 2023.  
<https://climateinstitute.ca/wp-content/uploads/2023/06/The-case-for-adapting-to-extreme-heat-costs-of-the-BC-heat-wave.pdf>.

"Top Ten Weather Stories of 2022." *Environment and Climate Change Canada*. [publication date if available].  
<https://www.canada.ca/en/environment-climate-change/services/top-ten-weather-stories/2022.html>.