

Overview: The international group for indigenous health measurement and COVID-19

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Abstract. The International Group for Indigenous Health Measurement (IGIHM) is a 4-country group established to promote improvements in the collection, analysis, interpretation and dissemination of Indigenous health data, including the impact of COVID-19. This overview provides data on cases and deaths for the total population as well as the Indigenous populations of each country. Brief summaries of the impact are provided for Canada and New Zealand. The Overview is followed by separate articles in this edition with more detailed discussion of the COVID-19 experience in Australia and the US.

Keywords: Indigenous, health data, SARS-CoV-2, health inequities, cultural traditions

1. Introduction

The March 2019 issue (Volume 35) of the SJAOS was dedicated to the International Group for Indigenous Health Measurement (IGIHM), specifically identification issues in its four member nations of Australia, Canada, New Zealand and the United States, along with Brazil [1–5]. Other papers were included on the history of IGIHM [6], an overview of identification in general [7] and other matters. This edition contains papers on the impact of and efforts to tackle COVID-19 in two

of the four IGIHM countries (Australia and the United States).

Although each country contains Indigenous populations, there are more similarities than differences. One year after the SJAOS publication, IGIHM confronted a new reality: the COVID-19 pandemic. IGIHM members held weekly, rather than monthly meetings over several months about COVID in their respective countries. Since members include Indigenous and non-Indigenous researchers, physicians, academics and community members, these meetings were a source of both solidarity and information.

While Indigenous populations in all four countries have health disparities, these communities are working to keep cultural traditions, and thus, communities strong. Statistics are part of this effort, because statis-

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tics and data enable people to tell their stories and address concerns. When statistics are limited, either due to invisibility (not being able to break out Indigenous groups) or lack of data sovereignty, statistical analyses prevent Indigenous people from being included in policy, program and medical efforts. This general lack, along with health disparities, could lead to Indigenous peoples being overlooked in tracking, treating and overcoming COVID-19.

2. Background

Indigenous peoples have always collected, represented, held, stored and shared data and information in a variety of forms. Issues with the collection of data and disaggregation of Indigenous peoples' data within nations were identified in the first and second sessions of the United Nations Permanent Forum on Indigenous Issues [8,9]. These issues impact the official statistics capabilities within nations, including the ability to provide accurate population level surveillance during global pandemics. Further discussion on the topics occurred at the United Nations Expert Workshop on Data Collection and Disaggregation for Indigenous Peoples in January 2004.

The workshop brought together 36 experts from the United Nations and around the world to examine challenges and make recommendations concerning data collection and disaggregation of Indigenous peoples in official reporting [10]. This moment represents early, expert international discussions by Indigenous peoples on the principles and frameworks of rights-based participation in the collection and use of Indigenous data.

3. International Group for Indigenous Health Measurement (IGIHM)

Building on these international discussions and global Indigenous community discussions on Indigenous data, the IGIHM was founded in 2005 [6]. The purpose of the group is to facilitate multi-national partnerships as well as to improve methods in the collection, analysis, interpretation and dissemination of data and information specific to the health of Indigenous populations [6]. The group has evolved to further global discussions on Indigenous data and data rights as well as enhance health knowledge and data pertaining to Indigenous peoples to work towards the elimination of health disparities. Wellness and resiliency have also

Table 1
COVID-19 cases and deaths in four countries, early January 2021

	Cases	Cases per million	Deaths	Deaths per million
Australia	28,536	1,112	909	35
Canada	624,553	16,474	16,317	430
New Zealand	2,186	437	25	5
United States	21,680,270	65,301	367,196	1,108

Source: Worldometer. Accessed online on 1/6/2021 at https://www.worldometers.info/coronavirus/?utm_campaign=homeAdUOA?Si#countries.

become a focus of IGIHM. It is important to note that epidemics and pandemics are not new to Indigenous peoples in the four countries and throughout the world. Nor is this the first pandemic studied by IGIHM. A session was held about the effects of the 2009 H1N1 pandemic in the four countries, which adversely affected Indigenous people. For example, an analysis of deaths among American Indians and Alaska Natives in the US found that mortality rates were four times higher than other Americans for H1N1 [11].

4. COVID-19 in the four IGIHM countries

The impact of the COVID-19 pandemic has varied enormously across the four countries. This variation appears to be affected by the speed and national coordination capabilities of the initial pandemic policy response of the nations. The availability of preventative public health measures and accessibility to health care are key features in lessening the impact of incident cases and the number of deaths from COVID-19. It is worth noting that three of the four countries have universal health care available to its citizens, while the United States does not.

The size and populations of these countries vary, as does the number and proportion of Indigenous peoples. The prevalence of COVID-19 cases and deaths, as of early January 2021 is shown in Table 1 [12]. Although figures are not separately listed for Indigenous and non-Indigenous peoples, the differences in impact among the four countries can be seen. Cases per million population range from 437 in New Zealand to 65,301 in the US. Death rates per million also varied from a low of 5 in New Zealand to a high of 1,108 in the US. Actual numbers of cases and deaths may vary slightly due to variability in the accuracy and timeliness of disease reporting. Differences in variants of the viruses may have been present but differences in prevention efforts and geographical features (i.e., islands versus land masses) are evident [12].

Table 2
COVID-19 indigenous cases and deaths in four countries – all ages

	Cases	Deaths
Australia	147	0
Canada	11,502	107
New Zealand	194	25
United States	107,025	3,704

Sources: Australia – Department of Health, as of December 6, 2020. Canada – Government of Canada, as of January 2021. New Zealand – Ministry of Health Manatu Haurora, as of January 13, 2021. United States, Centers for Disease Control and Prevention. Cases and deaths, as of January 2021. NOTE: US cases and deaths refer to American Indians and Alaska Natives, but exclude Native Hawaiians.

5. Summary of experiences of indigenous peoples by country

Most Indigenous peoples experience health inequities through reduced access to health care, health promotion and preventative services, as well as reduced access to basic sanitation and clean water. Additionally, Indigenous peoples may also experience a greater burden and impact of both communicable and non-communicable diseases and their social determinants. Based on these known inequities, the extent of the impact of COVID-19 upon Indigenous peoples across the globe is anticipated to highlight these known inequities, but will not be known for some time. However, a summary of the experiences to date across four nations is described in Table 1. The number of Indigenous COVID-19 cases and deaths is provided in Table 2 [13–16]. As mentioned previously, experiences from Australia and the US are presented in separate papers in this issue.

6. Canada

First Nation, Métis and Inuit communities in Canada responded variably to COVID-19. For the first eight months into the pandemic, most communities continued to thrive, safe from the coronavirus. Yet some communities were hard hit. For example, in northern Saskatchewan, where approximately 80 percent of the 40,000 residents identify as First Nations or Métis, COVID-19 infection rates were significantly greater than in the rest of the province. However, in late 2020 when Canada experienced its second wave, serious outbreaks began to occur in a number of communities previously free of COVID-19. Two examples are the Inuit community of Arviat, Nunavut and the northern Manitoba community of Shamattawa First Nation. In both cases, and in most others, the spikes in transmission were associated with the underlying health determinants

– overcrowded housing, lack of human and material resources, poverty.

In Nunavut Territory, with its greater than 90 percent Inuit population, COVID-19 infections had remained at zero for eight months, but between November 4 and December 7, the number of infections exploded to 219 in a territorial population of 36,000 [17,18]. Alarming, as of December 6, the majority (46/51) of the active cases in Nunavut were in a single isolated community – Arviat, pop. 2,500 [18].

First Nations in Manitoba were successful in keeping COVID-19 out of their communities until late 2020. In Shamattawa, Manitoba, a single externally introduced infection quickly exploded to 144 in a population of about 1300 as of December 5, 2020; this included a test-positivity rate of 68 percent [19]. On December 12, military aid began arriving in the community, but not before a quarter of the community of 1300 had tested positive [20].

On a larger scale, some 86 percent of on-reserve COVID-19 infections have occurred in the provinces of Alberta, Saskatchewan and Manitoba [21], despite having less than 40 percent of the First Nation population in Canada [18]. This serves as an indication of the unevenness of the susceptibility of our Indigenous communities, and that vigorous, coordinated emergency response measures are vital to prevent more outbreaks and protect population health [22].

7. New Zealand

On February 28, 2020, the first case of Covid-19 was reported, and the first death was reported on March 29 in Aotearoa-New Zealand, population 5,109,280 (estimate from January 2021) [23]. To date there have been 25 deaths and 2186 cases diagnosed, of which 2100 have recovered. In March 2020, the Aotearoa-New Zealand Government instructed the Ministry of Health to inform [24] a rapid response to the WHO declaration of a pandemic, closing borders to all non-residents on March 19 and ordering all returning to Aotearoa-New Zealand to self-isolate for two weeks. Formal managed isolation and quarantine (MIQ) was instituted April 10 [25]. Aotearoa-New Zealand's government introduced a four level Covid-19 alert system [26] March 21, and a nation-wide lockdown begun March 25, ended and April 27 with restrictions on maintaining physical distancing and the size of group gathering ending June 8. At present border control restrictions remain in place.

Māori, the Indigenous people of Aotearoa New Zealand (16.7 percent of the total population), ex-

pressed concern about the impact of a pandemic on Māori [27] that was consistent with historical data [28]. The response by Māori communities and public health champions was effective and a COVID-19 Māori Health Response Plan [29] was developed and implemented. Rates of infection in Māori were predominantly related to imported cases [30,31] suggesting fears of poorer outcomes for Māori were justified. The response of Māori communities has been positive and one where community-based organisations and Māori health leaders acted and led to support the vulnerable who would be otherwise isolated during the nation-wide lock down [32–40].

8. Future concerns

At this point in time of early January 2021, there is good news about vaccines. Vaccines, many of which require two doses, have been administered in many countries to front line medical workers, those residing in congregate settings such as nursing homes and some of the elderly. Two dose vaccines require extensive planning, logistics and educational campaigns to encourage participation. Vaccine type and availability vary by nation with different vaccines having variable efficacy in both prevention and transmission. It is therefore important that there is transparency within nations to ensure that timely, relevant information is available to people. Of particular interest are the decision-making processes regarding who receives which vaccine and when they receive it. Further, it is critical to ensure that nations use existing registry systems or develop systems to collect the data on the administration of the COVID-19 vaccines so further research and accurate national reporting can occur. On the other hand, more contagious variants of COVID-19 have begun to spread, such as the so-called UK and South Africa strains, the latter of which may not be prevented by current approved vaccines [41,42]. Although it is unclear at the moment, these variants may increase contagion as much 50 to 70 percent. This would nonetheless result in drastic changes to the number of cases.

The effects of COVID on Indigenous communities are not limited to the burden of disease and loss of life. Since COVID-19 adversely affects the elderly, the culture and traditions of Indigenous communities themselves may be in danger. Indigenous languages, a touchstone of culture, are of particular concern. Many Indigenous languages are endangered and when elders who are among the last fluent native speakers of their lan-

guage die from COVID the loss of the elders and their language is irreplaceable [43]. One Tribe in the United States, the Standing Rock Sioux, are deeming native speakers to be those who receive the vaccine early [44]. Besides languages, culture is in peril when Indigenous elders die. As Jason Salsman (Creek Tribe US) stated “... It’s like we’re having a cultural bookburning” [43]. Traditional healing practices are also in peril due to COVID-19. Although exact figures for elders who died from COVID are not available, the Navajo Nation in the US estimated that 65 percent of the COVID deaths were for persons over 60 and that this included traditional healers [43]. The continuity and evolving nature of Indigenous cultures and languages, which are reliant upon elders, may be in peril. This has not only happened in the US, but worldwide [45,46].

We should not assume that COVID-19 is the last pandemic that the world and Indigenous people will face. What we learn from COVID-19 will, hopefully, help with this next pandemic. This will be easier if nations invest in systems and processes that will provide for complete and accurate policy and direct required resources. Additionally, international progress may occur if the UN’s Sustainable Development goals (SDGs) include disaggregation for Indigenous people.

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