

## **Decolonizing Risk Communication: Indigenous Responses to COVID-19 using Social Media**

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**Keywords:** American Indian and Alaska Native • AIAN • Native American • Indigenous • Coronavirus Disease 2019 • COVID-19 • pandemic • social media • risk communication • culturally adapted communication • Facebook • Tribal communities

### **Abstract**

In this exploratory study, we examine how American Indian and Alaska Native (AIAN) governments and organizations are using social media to share critical health information about coronavirus disease 2019 (COVID-19) with their citizens. Through a thematic analysis of 119 public Facebook posts made by Tribal governments and organizations, we identified three broad categories and 13 subthemes. Tribal governments and organizations created risk communication material for their respective communities that fell under (1) risk reduction, (2) meeting community members' needs, and (3) staying connected to community and culture. Our findings suggest that through social media AIAN communities and organizations played a crucial role in disseminating reliable culturally adapted risk communication and vital community information to Tribal citizens during the COVID-19 pandemic. Such communication included clear illustrations, posts and messages about the importance of masking up, social distancing and washing one's hands; mandated border closures; and suggestions for maintaining a sense of connectedness with community. By doing so they are filling a gap that ensures their communities receive the relevant information they need to mitigate and manage risks. In order to understand how to better meet community needs, more work is needed to improve the wellbeing and visibility of AIAN people in the areas of health disparities, technology, social media, and the many impacts of COVID-19.

## **Introduction**

As the novel coronavirus disease 2019 (COVID-19) outbreak expands, American Indian and Alaska Native (AIAN) communities are experiencing some of the highest rates of infection, hospitalization, and morbidity among all racial groups in the US (Centers for Disease Control and Prevention, 2020). Many of these increased health risks are rooted in the significant ongoing health disparities faced by AIAN peoples (Castor et al., 2006; Jones, 2006) and amplified by persistent lack of adequate and timely support from the US government (Nagle, 2020; O'Neill, 2020; Pickner et al., 2018). These risks are further compounded by the barriers Tribal citizens face when seeking current and relevant health information. Furthermore, AIANs experience invisibility in America (Fryberg & Townsend, 2008; Hammack et al., n.d.), that is perpetuated during the pandemic through the omission of AIANs as a distinct population in critical health data such as national COVID-19 risk assessments and risk communication (Godoy & Wood, 2020; Nagle, 2020). Risk communication refers to “the exchange of real-time information, advice and opinions between experts and people facing threats to their health, economic or social well-being.” (Abrams & Greenhawt, 2020; World Health Organization, n.d.).

To circumvent these shortcomings, and to effectively mitigate COVID-19 within Tribal communities, access to culturally relevant and timely risk communication from reliable sources who understand the culture, behaviors and values of these communities is critical (Driedger et al., 2013; Hilleary, 2020). Social media plays an influential role in many communities (Pew Research Center, 2019), including Indigenous communities (Morris & Meinrath, 2009; Rushing & Stephens, 2011; Vigil et al., 2015) where it is being used to transmit health information (Rice et al., 2016; Sweet, 2013).. In this exploratory study, we aimed to shed light on how AIAN governments and organizations are using Facebook to share critical health information with their citizens.

## **Method**

### **Criteria and Dataset**

Our inclusion criteria in this qualitative study were national, regional, and local Tribal governments or organizations in the US with a publicly accessible social media presence and with messaging on COVID-19 risk communication directed at a Tribal community audience. We collected data from January 20, 2020, the date of the first reported COVID-19 case in the US (World Health Organization, 2020), through May 28, 2020. During our data collection window,

early exposures and cases were first identified and quickly spread in the Western US near Pacific Northwestern and Southwestern tribes (Holshue et al., 2020; Gamio et al., 2020). Our data collection was driven by three broad categories of communication important to Tribal communities during the COVID-19 pandemic: risk reduction, meeting community members' needs, and staying connected to community and culture. These categories were informed by our own personal and professional experiences as AIANs connected to tribes and non-Indigenous researchers, as well as Indigenous social media and relevant literature (Belton, 2010; Duarte, 2017; Duarte & Vigil-Hayes, 2017; Molyneaux et al., 2014; Monroe, 2002; Sweet, 2013). We generated our dataset by gathering and enumerating Facebook posts, messages and dates from each of these organizations, agencies or governments.

### **Thematic Analysis**

We employed thematic analysis (Braun & Clarke, 2006; Crowe et al., 2015), guided by principles in decolonizing and critical Indigenous methodologies (Denzin et al., 2008; Kovach, 2010; Smith, 2013; Wilson, 2008). After familiarizing ourselves with the dataset, our analysis began by reviewing and writing about each post, then discussing with our research team the emerging patterns and subthemes that materialized within the three main categories listed above. This was an iterative process that led to the refinement of each category and subtheme in order to accurately define and describe each of them.

### **Results and Discussion**

Our dataset included 119 public Facebook posts from 11 Tribal governments and nine Tribal organizations distributed across three broad categories (Table 1): Risk Reduction (26), Meeting Community Needs (78), and Staying Culturally Connected (15). Additionally, 13 distinct subthemes emerged from our analysis (Table 2). We describe how Tribal governments and organizations used social media messaging in two broad communication types: culturally adapted risk communication and community-based responses relating to Tribally focused services or culture.

**Table 1.**

*Total Facebook Posts per category made by Local, Regional and National Tribal Organizations and Tribal Governments.*

Category	Source of post					Total
	Tribal organization				Tribal government	
	Local	Regional	National	Total		
Risk reduction	1	7	0	8	18	26
Meeting community needs	1	8	23	32	46	78
Staying culturally connected	0	4	5	9	6	15
<b>Total</b>	2	19	28	49	70	119

Note: Tribal government includes governments and their services specific to their citizens, including localized Tribal community governments, health departments, and media services.

**Table 2.**

*Total Facebook posts per Category and Subtheme.*

Category & subtheme	Total posts
<b>Risk reduction</b>	<b>26</b>
CDC guidelines*	6
Face coverings	9
Social distancing	5
Handwashing	3
Family and Community	3
<b>Meeting community needs</b>	<b>78</b>
Health and wellness	24
Elder care	13

Food and water access	10
Education	15
Tribal government services	10
Curfews and border closures	6
<b>Staying culturally connected</b>	<b>15</b>
Cultural activities	11
Resilience and resistance	4
<b>Total</b>	<b>119</b>

\*Note: This subtheme is not discussed in the body of this paper; however, it reflects our data of re-posted CDC recommendations or similar posts made by Tribal nations.

**Risk Reduction**

At the start of the outbreak, Tribal governments and organizations used their Facebook pages to repost notices from the Centers for Disease Control and Prevention (CDC) and county public health departments that focused on reducing risks due to the spread of COVID-19, understanding its symptoms, and treating infections. Subsequent posts included culturally adapted and community-specific messaging by Tribal nations and their health departments that incorporated images, graphics, videos and infographics representing AIAN peoples and cultures. Additionally, some Tribal health organizations referenced AIAN-specific, COVID-19 resource webpages such as the Northwest Portland Indian Health Board’s (NPAIHB) (Northwest Portland Area Indian Health Board, n.d.), with Tribally focused information on CDC guidance, funding, telehealth, policy and legislative information and tips for creating community messaging (Table 3). Among NPAIHB’s posts, one character stood out: Bigfoot. Indigenous communities across the nation have similar cultural and spiritual beliefs of Bigfoot as a helpful partner, messenger or protector (Lokosh & Hinson, 2016; Todd, 2012) and the spiritual connection is foundational as they share messages of community tradition and history (C. Jimenez, personal communication, July 25, 2020). Bigfoot resonates with the Pacific Northwest Tribes as a relative that wanders in the mountains and thick forest — sustaining oral traditional stories (C. Jimenez, personal communication, July 25, 2020; Meldrum, 2019). NPAIHB’s Bigfoot post for social distancing

states, “*They’ve been staying 6 feet away from others and avoiding groups their entire lives*” (Figure 1). Below we discuss additional examples across four subthemes related to risk reduction.



Figure 1. Post about social distancing by Northwest Portland Area Indian Health Board (NPAIHB) on April 21, 2020.

**Face coverings.** Tribal governments involved youth in displaying the importance of wearing masks with photos of them holding signs that asked, “Why do you mask up?” along “MaskUp” hashtags. They shared YouTube videos of their youth expressing how COVID-19 affected them and their desire to mask up to keep themselves, their moms (posted on Mother’s Day), families, elders, friends, and communities safe. In other posts, they highlighted Tribal members making masks for others and Tribal communities distributing cloth masks to their citizens. Lastly, they shared posts of Native artists who created face coverings using Indigenous imagery, skills including beadwork and weaving, and materials like cedar bark.

**Social distancing.** Tribal governments and organizations incorporated AIAN culture into their social distancing messages in many ways, adapting CDC recommendations (CDC, n.d.) to be more meaningful to their community members. For instance, one Tribal government re-posted a list of indigenized self-quarantine recommendations that focused on Indigenous values and culture such as safely protecting elders, utilizing traditional medicines and connecting with their traditions, crafts and languages. One Tribal health organization, the Urban Indian Health Institute (UIHI), shared posts incorporating AIAN culture through humor (Urban Indian Health Institute, n.d.). For

example, sharing an Indigenous comedian’s alternative handshaking tips such as “Sing an honor song” and “Dance southern plains traditional style,” along with using an Indigenous hashtag (#ndnhumor) (Echohawk, 2020). Others embedded familiar AIAN cultural concepts into graphics to illustrate what six feet of social distancing resembles such as the length of canoe paddles (Figure 2) and an adult eagle’s wingspan (Figure 3).



Figure 2. Post about social distancing by Johns Hopkins Center for American Indian Health (JHU CAIH) on April 30, 2020.



Figure 3. Post about social distancing by Johns Hopkins Center for American Indian Health (JHU CAIH) on May 06, 2020.

**Hand washing.** One tribe posted a video demonstrating proper handwashing and incorporated traditional language narrations and on-screen text. Another tribe's post connected handwashing with reducing risk to others, specifically essential Tribal health care workers. NPAIHB continued using Bigfoot images in its risk communication strategy, illustrating Bigfoot washing their hands for 20 seconds at the river (Figure 4), followed by consistent use of Indigenous hashtags and links to CDC information.



*Figure 4.* Post about hand washing by Northwest Portland Area Indian Health Board (NPAIHB) on May 15, 2020.

**Family and Community.** Extended and intergenerational family relationships, including aunts and uncles, are an integral part of many AIAN cultures, so they play a vital role in risk communication in Tribal communities (Martin & Yurkovich, 2014; Weaver & White, 1997). The NPAIHB supported the engagement of youth in risk reduction conversations by re-posting a YouTube video from “Ask Auntie” of WeRNative.org (WeRNative, 2020). The UIHI posted a visual resource representing Indigenous adults and children talking about COVID-19, along with consistent use of Indigenous hashtags (e.g., #WarriorUp, #Resilient, #COVIDinIndianCountry, #Covid\_19Indigenous\_World) (Urban Indian Health Institute, n.d.). One Tribal nation communicated risk reduction protocols on mourning and honoring loved ones during funerals, an important consideration for Indigenous communities during pandemics (Massey et al., 2009). These family and community posts highlighted the use of face coverings, social distancing and



hand washing, consistent with CDC suggestions but with culturally adapted messaging for Tribal communities.

### Meeting Community Needs

Facebook postings consistently conveyed community-specific and culturally adapted resources that incorporated traditional ways of knowing, cultural practices, indigenized strategies, and community-driven programming to meet varying community needs, such as health and wellness, elder care, food and water access, education, Tribal government services, and curfews and border closures.

**Health and wellness.** Tribal governments and organizations posted recommendations on exercise, healthy eating, and healthy lifestyle choices to build and maintain physical health along with telehealth options. As mental health needs emerged from the stress, fear, and anxiety associated with the pandemic, social media provided active and collaborative digital spaces for sharing culturally adapted mental health resources, traditional healing practices, and personal and social stories. NPAIHB continued using Bigfoot in their posts, showing them stretching on a yoga mat, encouraging Tribal members to exercise and offering a strategy for reducing stress and anxiety (Figure 5). Finally, several national-level AIAN advocacy organizations chose social media to generate meaningful discussions about changing a healthcare system with significant health disparities amplified by the pandemic (Júnior et al., 2020; van Dorn, et al., 2020).



*Figure 5.* Post about health and wellness by Northwest Portland Area Indian Health Board (NPAIHB) on May 26, 2020.

**Elder care.** Given the special place elders have among Indigenous communities (Conte et al., 2015; Martin & Yurkovich, 2014; Weaver & White, 1997) and their increased vulnerability during the pandemic, Tribal organizations used their Facebook pages to advocate broadly for elders' protection and offer specific recommendations for ways to support them. Messages also provided strategies to strengthen elder mental health during the stress and challenges of the pandemic. Figure 6 shows how Tribal nations adopted CDC's guidelines and integrated them for community-specific contexts by adding short storylines suggesting ways to care for elders, such as checking up on those at a higher risk while taking extra precaution to stay at least six feet away.



*Figure 6.* Post about elder care by Northwest Portland Area Indian Health Board (NPAIHB) on April 28, 2020.

**Food and water access.** Tribal governments and organizations turned to Facebook to announce local food banks and water distribution services, funding resources for food sovereignty projects, guidance on safe shopping practices, traditional knowledge of food to support healthy eating, and the centrality of food as a cultural and relational community practice to foster well-being and resilience in difficult times.

**Education.** AIAN governments and organizations employed social media to support and implement online learning structures, maintain a sense of community, and address students' holistic needs as the pandemic disrupted educational services and learning communities. Several

Native education organizations created social media posts to connect teachers and students with innovative and culturally relevant lessons and supplemental learning activities.

**Tribal government service.** There were numerous Facebook conversations around the closure of non-essential services and businesses within and outside Tribal communities and its significant economic impact on Tribal communities, families, and individuals. National Tribal organizations posted informational support and webinar training for Native-owned businesses to help them expand their online services and strategies for continuing operations. On the community level, Tribal governments used social media to broadcast information on accessing unemployment benefits.

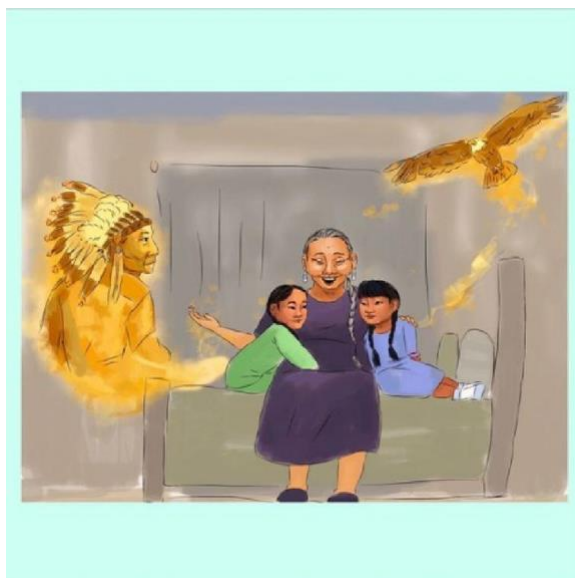
**Curfews and border closures:** Although there is an ever-growing body of evidence for the most effective interventions for reducing COVID-19 transmission, such as social distancing (CDC, n.d.), the use of laws to encourage these behaviors has become contentious (Doshi et al., 2020) and tribes have been marginalized from state and federal decision-making on these matters (Collman, 2020; Nagle, 2020; Tahir & Cancryn, 2020). Notwithstanding, to keep transmission rates at bay, many sovereign tribes enacted Tribal laws mandating curfews and border closures within their jurisdictions (Doshi et al., 2020), using social media to communicate these decisions to their Tribal citizens.

### **Staying Culturally Connected**

Tribal community gatherings and shared cultural practices strengthen interdependence and identity, which are vital to health and well-being for Indigenous Peoples (Walters et al., 2020; Walters & Simoni 2002). While pandemic mitigation strategies that promote physical distancing between people effectively reduce viral transmission, they present tradeoffs such as limited in-person activities which may threaten connectedness to community-wide cultural practices. Below we discuss some of the strategies utilized by tribes to provide opportunities to connect.

**Cultural activities.** With lockdowns, border closures, and curfews in effect, Tribal governments and organizations sought ways to reduce social and cultural isolation by engaging their communities through Facebook. In particular, larger Tribal communities and organizations used social media, including Facebook Live, as a platform for storytelling, songs, language lessons, sharing recipes, honoring the wisdom of elders, and facilitating remote activities and gatherings. Figure 7 is a post by John Hopkins Center for American Indian Health (JHU CAIH)

about their children's storybook on Indigenous peoples, their values, and their strength and hope in the face of COVID-19 (JHU CAIH, n.d.).



*Figure 7.* Post about cultural activities by Johns Hopkins Center for American Indian Health (JHU CAIH) on May 21, 2020.

**Resilience and resistance.** Indigenous health agencies, Tribal members, and grassroots activist groups also used Facebook to offer messages of strength, resilience, and resistance. Tribal communities described anecdotes about their collective historical trauma and struggles against prior pandemics and colonial germ warfare. They reminded their citizens about strength that comes from within their communities and the wisdom of their ancestors. Furthermore, Indigenous activist groups organized aid for affected communities and provided online resources for political action and resistance to continued colonial exploitation in the face of the pandemic.

### Conclusion

Through a qualitative analysis of Facebook posts from several Tribal governments and organizations, this study highlights social media as an essential and effective strategy for providing culturally relevant risk communication and community-focused information. The COVID-19 pandemic has exacerbated the existing health disparities Tribal communities face. Targeted and culturally specific risk communication are important supports for Tribal members seeking to mitigate the health, educational, economic, and social challenges wrought by the pandemic.

Recognizing the vital need to connect and share cultural experiences, Tribal organizations and communities rapidly adapted, creating new online spaces and events as an alternative to in-person gatherings. This appeared to encourage adherence to strict social distancing guidelines while reducing the negative effects of isolation.

### **Limitations**

We acknowledge that the scope of this exploratory study is limited to one social media platform, Facebook, and a small dataset of Tribal communities and organizations, often larger ones with a social media presence. Although all included posts were public, we chose to acknowledge the privacy of Tribal governments and not include their names or use images of their posts, in the interest of building trust and respect with these Tribal communities (Hinzo & Clark, 2019). We obtained permission for the use of graphics, such as from NPAIHB, or chose to publish images of public posts made by regional or national organizations who sought to disseminate information broadly.

### **Future Work**

There is much more work to be done to improve the visibility of AIAN people in the areas of health disparities, technology, social media, and the many impacts of COVID-19. While conducting this study, we identified several additional resources that support Tribal communities and organizations with the creation of culturally relevant social media messages, providing templates for posts and graphics and links to relevant health guidelines (Table 3). Consistent with Indigenous research methodologies (Smith, 2013; Kovach, 2010; Denzin et al., 2008), our team is disseminating our research findings for this study directly to Tribal communities in the form of a user-friendly Social Media Toolkit, as well as providing additional resources for creating culturally adapted risk communications (Applied Indigenous Research Methods Social Media Group, 2020).

**Table 3.**

*Online Resources for Creating Indigenous Social Media Posts related to COVID-19.*

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**Center for Disease Control and Prevention**

Toolkit for creating social media posts for local efforts to address COVID-19, Facebook and Twitter post templates for Tribal communities, and CDC guidelines for Tribal communities.

<https://www.cdc.gov/coronavirus/2019-ncov/communication/social-media-toolkit.html#Tribal-communities>

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**Johns Hopkins University Center for American Indian Health**

Provides audio-visual materials to share information in both digital and offline formats.

<https://caih.jhu.edu/news/covid19>

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**Northwest Portland Area Indian Health Board**

This resource offers social media campaign videos, social media posts, links to additional resources, and tips for community messaging about COVID-19.

<http://www.npaihb.org/tips-resources-for-community-messaging/>

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**Indigenous Responses to COVID-19: A Social Media Toolkit**

A social media toolkit that provides examples of social media posts relating to risk reduction, meeting community needs and staying culturally connected created by Tribal nations and organizations for Tribal communities.

[https://claritalb.org/student\\_projects/toolkit-social-media/](https://claritalb.org/student_projects/toolkit-social-media/)

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### **Acknowledgments**

The inception of this project was formed in a University of Washington graduate course on Indigenous Research Methodologies. We thank our classmates, in particular Alayna Eagle Shield and other students, for their contributions to the conception of our research question and their efforts in data collection.

We are thankful to the NPAIHB for their collaboration and for allowing us to share their Facebook posts relating to COVID-19 and to Roger Peterson (Siletz), We R Native Text Messaging Specialist, for the creation of all NPAIHB Bigfoot imagery. We also appreciate UIHI

for granting us permission to reference their work in this manuscript. We honor their work that supports Tribal communities, along with the many Tribal governments and organizations who continue to provide essential support and services to Tribal citizens during this global health crisis and whose social media posts have inspired this study

We are grateful to the University of Washington Information School's Native North American Indigenous Knowledge Initiative for creating the space for this intellectual work. We are thankful to the Graduate Opportunities and Minority Achievement Program (GO-MAP), University of Washington, for supporting Nicole S. Kuhn's research with the Ronald E. McNair Fellowship. Finally, we wish to acknowledge the Lushootseed speaking Peoples; the Duwamish, Muckleshoot, Suquamish, and Tulalip and the Three Fires People who are the Ojibwe, Odawa, and Potawatomi, and other tribes on whose traditional lands we study and work.