International Journal for Equity in Health

COMMENT

Open Access

# We cannot repeat history again: a call to action to centre indigenous leadership as we prepare for the next pandemic

Kristy Crooks[1,3*], Fatima Ahmed[4,5], Eric N. Liberda[4], Peter D. Massey[1,6], Kylie Taylor[2], Elizabeth Harwood[1], Celine Sutherland[7], Gisele Kataquapit[7], Katrina Clark[1], Nicholas D. Spence[5,8], Robert J. Moriarity[4], Hannah Briggs[2], Leonard J.S. Tsuji[8] and Nadia A. Charania[9]

**Abstract**

Indigenous communities worldwide continue to disproportionately bear the burden during pandemics due to ongoing health inequities and systemic exclusion from pandemic decision-making processes. As the global community prepares for the next pandemic, it is critical to prioritise Indigenous leadership and governance within public health responses. This commentary highlights successful models of Indigenous-led pandemic responses during COVID-19 in Canada and Australia. It introduces the EPIC (Equity, Partnerships, Intelligences, and Change) framework, that emphasises equity, leadership and local and cultural intelligence as critical components to improve pandemic preparedness and response for Indigenous communities. This international collaboration calls on governments and health authorities to uphold Indigenous sovereignty, self-determination, and leadership in pandemic planning and response efforts.

## Introduction

A concerning recurrent pattern is that Indigenous[1] communities globally likely bear a disproportionate burden during pandemics, though the lack of empiric data, testing and access to services means that the true burden remains unknown [1, 2]. More than four years have passed since the World Health Organization declared the COVID-19 pandemic, bringing us closer to the inevitability of the next global health crisis. As we prepare for the next pandemic, it is imperative to reduce the inequitable burden of pandemics on Indigenous peoples. This requires the public health approach to pandemic prevention, mitigation, preparedness, response, and recovery to fundamentally shift to fully embed Indigenous

[1] We respectfully use the term Indigenous to be inclusive to the First Peoples around the world who have shared experiences of historical and ongoing colonisation and marginalisation with the recognition of distinct cultural identities and experiences across different nations.

*Correspondence:
Kristy Crooks
kristy.crooks@health.nsw.gov.au
[1]Population Health, Hunter New England Local Health District, Wallsend, New South Wales, Australia
[2]Population Health, Hunter New England Local Health District, Tamworth, New South Wales, Australia
[3]Menzies School of Health Research, Charles Darwin University, Casuarina, NT, Australia
[4]School of Occupational and Public Health, Toronto Metropolitan University, Toronto, Canada
[5]Department of Sociology, University of Toronto, Toronto, Canada
[6]College of Medicine & Dentistry, James Cook University, Cairns, Australia
[7]Fort Albany First Nation, Ontario, Canada
[8]Department of Health and Society, University of Toronto, Toronto, Canada
[9]Department of Public Health, Auckland University of Technology, Auckland, New Zealand

leadership, elevate the importance of Indigenous governance, and value local and cultural intelligence.

Public health emergencies, such as pandemics, are well known to exacerbate pre-existing social, economic, and cultural inequities among Indigenous communities [3]. Calls for change have been prominent for many years [4]. Moreover, there have been many examples of Indigenous-led initiatives and frameworks to support equitable pandemic responses [5–9]. However, progress toward meaningful change has been slow.

Excluding Indigenous communities from previous pandemic plans meant that disease prevention and control strategies did not reflect the sociocultural realities Indigenous communities can face [10, 11]. Moreover, traditional emergency management structures and responses have not intentionally and respectfully included Indigenous peoples. The perspective of Indigenous communities are often considered an afterthought during pandemics, and reactive, inadequate, and inappropriate 'one size fits all' approaches are implemented [3, 12]. Lack of appropriate acknowledgement and utilization of Indigenous leadership points to deep-rooted systemic racism and long-standing colonial practices in public health and emergency management.

To improve health and wellbeing outcomes for Indigenous communities during future pandemics, we must learn from our past mistakes and implement substantial changes now. This must involve prioritizing equity and access, building meaningful and respectful relationships based on trust and respect, and allocating resources according to risk. Central to this approach is the prioritisation of Indigenous sovereignty and self-determination.

As Indigenous and non-Indigenous researchers and practitioners with almost 20 years of pandemic planning experience, we have created a long-standing international, interdisciplinary collaboration across Canada, Australia, and Aotearoa New Zealand. Our most recent endeavour was to highlight successful models of Indigenous leadership and self-governance during the roll-out of COVID-19 vaccination programmes in Canada and Australia [13]. For this collective work, we were inspired by the term 'epic', meaning grand and extending beyond the usual, to refer to our efforts to evaluate the appropriateness of pandemic interventions in Indigenous communities and advocate for improvements. In this call for action, we now recommend actions and transformational shifts based on the culmination of our collective work to improve health and wellbeing outcomes among Indigenous communities during future pandemics. These recommendations are guided by the EPIC framework to pandemic preparedness and response that centres Indigenous leadership, strengths, and knowledge systems to prioritize equity, partnership, intelligence (local and cultural), and change (Table 1).

## The EPIC (Equity, Partnerships, Intelligences, and Change) framework to pandemic preparedness and response

### Equity

*Improve the social determinants of Indigenous health* before the next pandemic. It is imperative to address the root causes of health inequities experienced by Indigenous peoples. Significant efforts must be made to address unfair and persistent inequities in this space. Indigenous communities experience poorer health outcomes compared to non-Indigenous communities due to complex interrelated factors that influence health outcomes. That being said, it is important to recognise the heterogeneity present within and between Indigenous communities that contribute to health and wellbeing outcomes. Also, Indigenous peoples live in diverse settings, including rural and urban areas, which influences available resources and service provision. Considering this context, pandemics exacerbate pre-existing vulnerabilities, making it essential to address social determinants of health to achieve equitable health and wellbeing outcomes for Indigenous peoples. Urgent action is needed to improve issues like safe and adequate housing and infrastructure, food security, education, healthcare access, along with addressing systemic racism and discrimination among Indigenous communities.

### Partnerships and Indigenous leadership

*Promote inclusive public health and emergency management approaches* to support and improve health outcomes among Indigenous communities during the next pandemic. Public health and emergency management needs to be more participatory, transdisciplinary, and proactive. Importantly, Indigenous communities possess valuable traditional knowledge and practices that must be included and honoured in preparedness and response efforts. This new approach can only effectively happen when there are governance structures and strong partnerships in place to privilege Indigenous voices.

*Embed Indigenous governance into all pandemic responses* it is imperative that structures are in place to support Indigenous leadership in which Indigenous peoples have power and decision-making control. At the core of this is Indigenous sovereignty and autonomy. Indigenous sovereignty has different meanings. In this context, we refer to it as Indigenous peoples freely exercising control of all aspects of their lives and being able to determine and lead pandemic responses as they see fit. Principles of self-determination, empowerment, and leadership should underpin the foundation of any governance structure to privilege Indigenous peoples to have autonomy before, during, and after pandemic responses. Indigenous governance will also support mechanisms and pathways to build and strengthen the Indigenous

**Table 1** The EPIC framework encapsulating a holistic approach to pandemic preparedness and response that centres Indigenous leadership

| Concept | Strategies by phase | Examples from case study communities |
|---|---|---|
| **Equity**: Promoting equity in health governance involves prioritizing Indigenous sovereignty and self-determination, ensuring fair access to health resources, and fostering a healthcare system that respects and addresses the unique needs and priorities of Indigenous peoples and communities | **In Preparedness**<br>- Address inequities prior to pandemics to build resilience by strengthening the Indigenous public health workforce at all levels<br>- Embed cultural governance models in health emergency management<br>- Cultural safety of the health workforce | - Decolonisation of health services<br>- Food security<br>- Police and other government liaison partnerships<br>- Housing (e.g., reducing crowded housing)<br>- Maintaining on-the-land programs |
| | **In Response**<br>- Prioritise Indigenous populations' access to medical care, personal protective equipment (PPE), testing, vaccines<br>- Allocate adequate risk-based funding to Indigenous controlled health services proportionate to the risk.<br>- Develop and distribute culturally appropriate communications<br>- Recording and reporting Indigenous status across all datasets through data-linkage<br>- Mechanisms to support Indigenous staff | - Routine vaccination outreach with Indigenous communities<br>- Hunter New England Local Health District (HNELHD) Aboriginal Cultural Support Team supporting confirmed COVID-19 cases and contacts<br>o Establishment of an Indigenous public health team<br>o Accountability framework embedded across all teams to ensure all cases and contacts were asked their Indigenous status. Replaced "not stated" response option with "not asked" and achieved 99.7% Indigenous status completeness.<br>o Employed Indigenous wellbeing officer and prioritised support, networking, connection and debriefing.<br>- FAFN community nurses led contact tracing<br>- Community-led response in FAFN helped to establish trust amongst the community when measures were being implemented |
| **Partnerships and Indigenous Leadership** Strengthening partnerships in health systems to align rhetoric with effective action and resource allocation that prioritizes Indigenous leadership. | **In Preparedness**<br>- Strengthen relationships and partnerships with key Indigenous health government services and Indigenous community-controlled health services and organisations<br>- Embed Indigenous health leads in local health emergency management processes and committees | - Inclusion of senior Indigenous health leads (Indigenous Health Unit, Public Health Unit, Clinical Lead) on the local HNELHD Health Service Functional Area Committee<br>- HNELHD Public Health Aboriginal Team actively involved in the development of Community Action Plans for discrete Indigenous communities<br>- FAFN has annual meetings to review the pandemic plan<br>- Coordination of response services with local health authorities (Weeneebayko Area Health Authority, Porcupine Health Unit, and Indigenous Services Canada) |
| | **In Response**<br>Indigenous Public health leaders convene local Indigenous Governance Groups to oversee the response | - HNELHD Indigenous Governance Group on COVID-19<br>- HNELHD Indigenous Vaccination Steering Committee<br>- Partnered with Indigenous Health Unit to provide on-ground community support and distribution of personal and household hygiene packs<br>- FAFN had a pandemic committee and easing community restrictions group to help lead the response<br>- Food and PPE deliveries were done with support from the Canadian rangers and local businesses |
| **Intelligences (*local and cultural*)**: Respecting and incorporating community and cultural intelligence in health strategies and public health decision-making. | **In Preparedness**<br>- Embed principles of data sovereignty and cultural intelligence in routine and emergency public health surveillance<br>- Develop an Indigenous employment strategy and surge plan that includes Indigenous people at all levels and stages of the response | - Activated HNELHD Indigenous Data Governance Group<br>- Representation on Local, Regional and State Emergency Management Committees<br>- Surge plan included Indigenous focused positions for HNELHD COVID-19 response<br>- FAFN used community-level data from local organizations to deliver services and advocate for more funding to mitigate community challenges (e.g., crowded housing, opioid addictions) |
| | **In Response**<br>- Cultural oversight and insight applied to distribution and determinants of disease<br>- Sharing and discussing data with Indigenous governance groups<br>- Develop strengths-based Indigenous focussed surveillance reporting | - Accessing local contact and exposure networks and kinship networks to activate local support services<br>- After-action reviews through Indigenous lens<br>- Presented data at weekly Indigenous governance groups<br>- FAFN committee was meeting a minimum of 3 times a week to review the situation within the community and discuss any new data |
| **Change**: Committing to informed systemic change that aligns actions with equity, partnerships, and intelligence (local and cultural). | **In preparedness**:<br>- Embed cultural governance processes and practices in a health organisation<br>- Cultural safety training | - Having HNELHD Population Health Joint Governance Group (health organisational governance) established since 2017 enabled cultural governance processes to be embedded within the public health emergency management<br>- FAFN has had their pandemic plan since the H1N1 pandemic in 2009. This plan is reviewed every year to ensure staff are familiar with it. |
| | **In response**:<br>- Public health ethics and minimum standards and Indigenous health | - Recruitment and training delivered to all surge staff<br>- Meetings held regularly to ensure that all measures, clinics and services being delivered were running as efficiently as possible. |

workforce to provide culturally safe and appropriate care and create supportive and inclusive environments.

#### Intelligences (local and cultural)

*Elevate local and cultural intelligences.* Indigenous peoples know their communities the best. However, all too often Indigenous practitioners and community members are not heard, or their knowledge is not valued by public health leaders and health authorities. To support improved health and wellbeing outcomes, we must implement mechanisms to listen to and value local and community-level cultural intelligence. For a response to be successful, it is vital to identify the affected community, how they might react after getting sick with the disease, the complex transit pathways, and local economic and cultural dynamics. Local and cultural intelligences are the type of understanding, knowledge, and tools needed for a safe and appropriate public health response that addresses what is important for Indigenous communities. Only Indigenous peoples can do this. Elevating the importance of cultural intelligences will help develop and implement targeted public health approaches and improve communication and trust within Indigenous communities.

#### Change

*Aligning rhetoric with action.* Governments and health authorities often emphasise the importance of supporting Indigenous-led strategies and autonomy. However, these commitments have often lacked the corresponding action that is required to effect meaningful change. It is imperative for government and health authorities to take immediate action and implement the solutions proposed by Indigenous peoples, ensuring the allocation of promised resources. Without tangible action, future pandemics are likely to result in the same inequitable outcomes that have persisted since colonization.

## Case studies

Using a strengths-based approach, we highlight two case studies that demonstrate successful Indigenous leadership and governance during the COVID-19 pandemic that bring to life the concepts of the presented EPIC framework.

#### Hunter New England region (northern New South Wales, Australia)

Hunter New England (HNE) is a geographically large local health district in New South Wales, Australia, with approximately 80,000 Aboriginal and Torres Strait Islander people. During the COVID-19 pandemic response, the local public health unit implemented culturally responsive strategies, which exemplify the principles of the EPIC framework.

**Equity** The establishment of the Public Health Aboriginal Team (PHAT) and embedding an accountability framework in the incident command system (ICS) ensured equitable access to holistic cultural care, support, and follow-up. PHAT received over 7,000 referrals, and provided cultural support to more than 3,500 COVID-19 cases and contacts, addressing barriers and challenges to care that Indigenous peoples often face. In addition to healthcare-related support, PHAT ensured that holistic care addressed the broader social determinants of health, including coordinating access to food, isolation accommodation, medication and referrals to support services.

**Partnerships and Indigenous leadership** Indigenous governance was established and activated within the local public health ICS. The overarching cultural governance model enabled the development and implementation of culturally-informed and responsive, appropriate, and effective public health measures, where Indigenous peoples actively participated in shared strategic decision-making in the local pandemic response. The cultural governance model elevated and advanced Indigenous leadership and capacity through the implementation of targeted and tailored strategies [14]. PHAT formed local Indigenous COVID-19 Governance Groups that strengthened community and partner engagement with a formal mechanism for Indigenous leaders to guide, inform, and evaluate local public health measures and services. These groups played a pivotal role worked in guiding public health measures such as vaccinating almost 30,000 Indigenous peoples within a 5-week period. This collaborative approach highlights the importance of culturally-inclusive governance structures that privilege Indigenous voices and ways of doing in public health emergencies.

**Intelligences (local and cultural)** Local knowledge and cultural intelligence was central to the local HNE COVID-19 response. Indigenous team leaders constructed and embedded Indigenous-led disease surveillance strategies in the local pandemic response that identified links between cases, contacts and households and communities. This approach allowed early identification of local outbreaks thereby enabling health and non-health agencies to activate support services and resources for the community. To complement these efforts, an Indigenous data governance group was established to provide cultural oversight and insight into local COVID-19 data needs from the Indigenous community. This group also identified data and research priorities, guided by Indigenous data sovereignty principles. This detailed understanding supported the development of strategies such as culturally appropriate public health messaging, which was disseminated through a variety of mediums.

**Change** The inclusion of Indigenous leadership within the local ICS marked a fundamental shift in pandemic response governance. Embedding a number of Indigenous governance groups further cemented change, ensuring ongoing cultural oversight and prioritisation of community needs and sharing information together. This approach represents a shift from traditional, top-down public health emergency management and response models, paving the way for sustainable improvements in public health systems that is inclusive of Indigenous knowledges and ways of doing.

#### Fort Albany First Nation (Ontario, Canada)

Fort Albany First Nation (FAFN) is a remote Cree community on the western coast of James Bay, Ontario, Canada. With a population of approximately 900 people, FAFN is accessible by air year-round and by water or winter-ice roads seasonally. During the COVID-19 pandemic, FAFN activated its local pandemic plan, demonstrating leadership and innovation, aligned with the principles of the EPIC framework.

**Equity** *FAFN prioritised equitable access to healthcare and resources during the pandemic.* The Weeneebayko Area Health Authority, in collaboration with Fort Albany Hospital and Peetabeck Health Services, coordinated patient appointments and arranged travel for those needing specialized medical services that were not available within the community. Given the community's remote location, logistics and supply chain management were collaboratively addressed among stakeholders to ensure community member's needs were addressed. For instance, funding was secured to support robust food supply chains and plans were developed to ensure year-round access to nutritious foods. Additionally, community leaders had long advocated for funding to address issues like opioid addiction. When the pandemic exacerbated these challenges—such as restricted travel which limited drug supply and access to rehabilitation programs—they successfully secured funding to establish the FAFN Suboxone Program [15].

**Partnerships and Indigenous leadership** Strong collaborative partnerships were established between organisations at various government levels, including the Health Centre, Band Council, and businesses at the local level, and Porcupine Health Unit, Weeneebayko Area Health Authority, and Indigenous Services Canada at the provincial and federal levels. These groups worked together to utilize community-level data to address challenges enabling a more efficient and effective response. Toward the end of the pandemic, the local Easing Community Restrictions (ECR) team assisted with implementing travel-related measures, whether for individuals entering the community via the winter road or by air.

**Intelligences (local and cultural)** FAFN relied on local and cultural knowledge to guide its pandemic response. To protect community members, FAFN imposed travel restrictions and safety protocols at entry points (by air and road) ahead of regional, provincial, and federal orders which were enforced by local police. Local organizations also collaborated with the community to ensure compliance with implemented mitigation measures, including masking, and maintaining traditional practices on the land. Peetabeck Health Services translated resources and widely disseminated public health information in the community, so communications were informative and appropriate. Moreover, translators were present during vaccine clinics to facilitate communication and informed decision-making.

**Change** FAFN demonstrated an adaptive and innovative approach, enabling a focused and community-specific response that leveraged the community's strengths and addressed its unique needs. The community has long advocated for their equity issues to be addressed at the provincial and federal levels. The COVID-19 pandemic demonstrated how building relationships across government organisations and valuing local knowledge can support crucial and sustainable change.

Through the application of the EPIC framework, both HNE and FAFN navigated the COVID-19 pandemic, providing a model of Indigenous-led and locally informed pandemic response strategies that addressed health inequities, strengthened collaboration and partnerships, elevated local and cultural intelligence and delivered meaningful change that privileges Indigenous communities.

## Conclusion

The need for transformative change in the approach to public health emergency management has never been more evident. It is crucial to move beyond the traditional military (command-and-control) approaches that continue to dominate emergency management to truly address and prevent the widespread impact of pandemics among Indigenous populations. Pandemics are not simply biological events; they are complex socio-cultural phenomena deeply intertwined with the lives of individuals, families, and communities and span the continuum of time between the past, present, and future generations. At the core of this urgency is social justice, whereby we must acknowledge and address existing structural inequities that amplify disparities among Indigenous communities, such as mental health, food security, and healthcare access, to name a few. Emergency management models

typically aim to benefit the greatest number of people; however, because current systems continue to perpetuate inequities, our focus must shift to prioritise those who need the most help and support. The level of priority or risk has yet to match the available resources for Indigenous communities.

A fundamental shift is needed and must emphasize trust, participation, and Indigenous leadership. Indigenous sovereignty needs to be prioritized, recognizing that sharing power and providing resources is a pathway towards more inclusive and effective public health emergency preparedness. The benefits of the approach would extend beyond public health emergencies. Partnering and sharing knowledge with Indigenous peoples can pave the way for more equitable and effective public health strategies that benefit the whole-of-society. Indeed, strategies that work for Indigenous communities can also be beneficial for the rest of the population.

This call for action emphasises the need for a just and inclusive society that prioritizes the needs of those who are most likely to bear the burden during pandemics. Change is achievable, but the responsibility rests on the shoulders of governments and health authorities to act immediately - Indigenous communities are ready. Delaying action will perpetuate current challenges faced by Indigenous peoples and likely to result in the recurrence of inequitable outcomes. We call for action now.

**Author contributions**
KC, FA, NC, KT, EH drafted the initial manuscript. KC, KT, EH, CS and GK contributed to writing the case studies. NS, PM, KC, and NC reviewed and refined the manuscript. All authors read and approved the final version of the manuscript.

**Funding**
Funding for this study was provided by CIHR (FRN 179413).

**Data availability**
No datasets were generated or analysed during the current study.

## Declarations

**Ethics approval and consent to participate**
Not applicable.

**Competing interests**
The authors declare no competing interests.

Received: 25 October 2024 / Accepted: 10 January 2025
Published online: 22 January 2025

**References**

1. Lovell W. Pandemic precedent: indigenous demise in the wake of Columbus. In: Spence N, Sekercioglu F, editors. Indigenous health and well-being in the COVID-19 pandemic. New York Routledge Taylor and Francis Group 2023;26–43.
2. Pickering K, Galappaththi EK, Ford JD, Singh C, Zavaleta-Cortijo C, Hyams K, et al. Indigenous peoples and the COVID-19 pandemic: a systematic scoping review. Environ Res Lett. 2023;18(3):033001.
3. Spence ND, Sekercioglu F. Indigenous health and well-being in the COVID-19 pandemic. New York: Rouledge Taylor & Francis Group. 2023.
4. Crooks K, Massey P, Taylor K, Miller A, Campbell S, Andrews R. Planning for and responding to pandemic influenza emergencies: it's time to listen to, prioritize and privilege Aboriginal perspectives. Western Pac Surveillance Response J. 2018;9(5 Suppl 1):5–7.
5. Graham S, Kamitsis I, Kennedy M, Heris C, Bright T, Bennetts SK et al. A Culturally Responsive Trauma-Informed Public Health Emergency Framework for Aboriginal and Torres Strait Islander communities in Australia, developed during COVID-19. Int J Environ Res Public Health. 2022;19(23).
6. Crooks K, Taylor K, Burns K, Campbell S, Degeling C, Williams J, et al. Having a real say: findings from first nations community panels on pandemic influenza vaccine distribution. BMC Public Health. 2023;23(1):2377.
7. Crooks K, Taylor K, Law C, Campbell S, Miller A. Engage, understand, listen and act: evaluation of community panels to privilege First Nations voices in pandemic planning and response in Australia. BMJ Glob Health. 2022;7(8).
8. Fredricks K. Immigrants can help improve immunization rates in the United States. J Appl Res Child. 2019;10(2).
9. Clark T, Best O, Wilson D, Power T, Phillips-Beck W, Graham H, et al. COVID-19 among Indigenous communities: case studies on Indigenous nursing responses in Australia, Canada, New Zealand, and the United States. Nurs Prax Aotearoa N. Z. 2021;37(3):71–83.
10. Miller A, Durrheim DN, the Aboriginal and Torres Strait Islander Community Influenza Study Group. Aboriginal and Torres Strait Islander communities forgotten in new Australian National Action Plan for Human Influenza Pandemic: ask us, listen to us, share with us. Med J Australia. 2010;193(6):316–7.
11. Charania NA, Tsuji LJS. A community-based participatory approach and engagement process creates culturally appropriate and community informed pandemic plans after the 2009 H1N1 influenza pandemic: remote and isolated First Nations communities of sub-arctic Ontario, Canada. BMC Public Health. 2012;12.
12. Massey PD, Miller A, Saggers S, Durrheim DN, Speare R, Taylor K, et al. Australian Aboriginal and Torres Strait Islander communities and the development of pandemic influenza containment strategies: community voices and community control. Health Policy. 2011;103(2–3):184–90.
13. Clark K, Crooks K, Jeyanathan B, Ahmed F, Kataquapit G, Sutherland C, et al. Highlighting models of Indigenous leadership and self-governance for COVID-19 vaccination programmes. AlterNative: An International Journal Of Indigenous Peoples. 2024;20(1):250–8.
14. Crooks K, Law C, Taylor K, Brett K, Murray P, Kohlhagen J et al. Embedding Aboriginal cultural governance, capacity, perspectives and leadership into a local Public Health Unit Incident Command System during COVID-19 in New South Wales, Australia. BMJ Glob Health. 2023;8(7).
15. Zuka A, Ahmed F, Charania N, Sutherland C, Kataquapit G, Moriarity R et al. An indigenous-led buprenorphine-naloxone treatment program to address opioid use in remote Northern Canada. Dialogues Health. 2024;5.

## Publisher's note