



Webinar - What is distinctions-based health impact assessment?

Description

Health impact assessment (HIA) provides a systematic process to identify and analyze the potential effects of a proposed development project on the health and well-being of a population. For Indigenous Peoples in Canada, standardized HIAs are not able to adequately measure potential health impacts as these processes do not consider the full range of cultural, social, spiritual and economic determinants of Indigenous well-being. Instead, distinctions-based HIA approaches are required that begin from place-based, community-specific and holistic environmental health frameworks. In this webinar, join Drs. Diana Lewis and Elana Nightingale for a discussion of distinctions-based health impact assessment: what it is, what it could look like in Canada, and how it could transform HIA into a process that reflects Indigenous Peoples' diverse worldviews, knowledge systems and values. Drawing on more than a decade of Indigenous community-led health research experience, the presenters discuss what it means to meaningfully collaborate with Indigenous communities and develop impact assessment processes grounded in distinctions-based models of well-being.

Bios

Dr. Diana Lewis



Dr. Diana Lewis is a member of Sipekne'katik First Nation and Associate Professor/ Canada Research Chair (Tier II) in Indigenous Environmental Health Governance in the Department of Geography, Environment & Geomatics, University of Guelph. She is also Director of the IndigenERA Lab and a Member of the Royal Society of Canada (2025). Her research focuses on promoting understanding of Indigenous worldviews in environmental decision-making and advocating for Indigenous-led approaches to give communities baseline health data and sovereignty over the data in environmental decision-making. She is currently working with Indigenous communities across Canada to develop an Indigenous-led environmental health risk assessment approach.



Dr. Elana Nightingale



Dr. Elana Nightingale is a Postdoctoral Scholar in the IndigenERA lab at the University of Guelph where she works on Indigenous economic impact assessment. She holds a PhD in Geography from Western University, a MSc in Local Economic Development from the London School of Economics, and a BA in Economics from Carleton University. Elana aims to support community-led research as a means to advance health and social equity for First Nations, Inuit and Métis communities in Canada. Her research interests include the social determinants of Indigenous health, community economic development, community-based research methodologies and knowledge translation.

Transcript

X'staam Hana'ax (Nicole Halbauer): Hello, everyone. Welcome to the webinar, *What is distinction-based health impact assessment?* My name is X'staam Hana'ax, Nicole Halbauer, and I will be moderating today's webinar. We would like to acknowledge and thank Health Canada and the Public Health Agency of Canada for their financial contributions to this report and webinar.

I'm just going to introduce myself. [Introduction in Sm'algyax]. I just told you that my Sm'algyax name is X'staam Hana'ax, *Victorious Woman*. I'm from the Kitsumkalum Raven Clan of the House K'oom of the Ts'msyen Nation. So, I'd just like to really welcome everyone here today.

I'd like to start with a land acknowledgement. The NCCIH is located at the University of Northern British Columbia, Prince George Campus, situated in the unceded traditional territory of the Lheidli T'enneh First Nation of the Dakelh (Carrier) people's Territory.

And for those of you that are not familiar with the NCCIH, we are one of six National Collaborating Centres for Public Health that was established in 2005, with funding from the Public Health Agency of Canada. Our sister NCCs are focused on specific topic areas, including infectious disease, environmental health, healthy public policy, determinants of health, and methods and tools of knowledge translation. The NCCIH is unique in that it is the only NCC focused on the health of a population. Our Centre supports health equity for First Nations, Inuit, and Métis peoples by promoting the use of Indigenous-informed evidence to transform practice, policy, and program decision-making across all sectors of public health.

Here are a few webinar housekeeping notes: all questions for panelists, as well as technical questions, can be submitted into the Q&A window. The "raise hand" feature will not function and all attendees



will be muted. Links to resources mentioned by speakers will be posted in the chat window, and you can find this webinar after post-production on the NCCIH website in the publications section under “webinars” menu item. And just to note, there may be a brief pause while we switch between presenters.

In this webinar, we are joined by Drs. Diana Lewis and Dr. Elana Nightingale for a discussion of distinctions-based health impact assessment [HIA]. What is it, and what could it look like in Canada, and how it could transform HIA into a process that reflects Indigenous peoples' diverse worldviews, knowledge systems, and values. Drawing on more than a decade of Indigenous community-led health research experience, the presenters discuss what it means to meaningfully collaborate with Indigenous communities and develop impact assessment process[es] grounded in distinctions-based models of well-being.

And today's presenters are Dr. Diana Lewis of the Sipekne'katik First Nation, an Associate Professor, Canada Research Chair (Tier II) in Indigenous Environmental Health Governance in the Department of Geography, Environment, and Geomatics, University of Guelph. She is also director of the IndigenERA Lab and member of the Royal Society of Canada (2025). Her research focuses on promoting understanding of Indigenous worldviews in environmental decision-making, and advocating for Indigenous-led approaches to give communities baseline health data and sovereignty over the data in environmental decision-making. She is currently working with Indigenous communities across Canada to develop an Indigenous-led environmental health risk assessment approach.

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I'd like to thank everyone for joining us today, and there will now be a brief pause while we [...] switch presenters. [...]

Dr. Diana Lewis: Thank you, Nicole. We have launched a webinar series about Indigenous leadership in, and experiences of, health impact assessment in Canada. Welcome to the final webinar in our four-part series on Indigenous-specific, distinctions-based health impact assessment.

Currently, there are no Indigenous health impact assessment guidelines in Canada. This first webinar explores what an Indigenous-specific distinction-based health impact assessment process would look like in Canada. If Canada were to have guidelines or legislative standards, what might this look like? The second seminar explores what it means to meaningfully engage with Indigenous communities more broadly. It could be on any topic of interest. The third seminar explores how Indigenous values are considered in the final decision in impact assessment approvals to provide evidence how Indigenous values shared in impact assessment processes are interconnected to health and well-being. We can share the link to the first in the chat. The others are not available yet.

This final webinar builds on the first three to discuss distinctions-based health impact assessment: what it is, what it could look like, and how these community-specific processes can support impact assessment in Canada that reflects Indigenous peoples' diverse worldviews, cultures, and values and upholds their sovereignty over territory, health data, and local Indigenous knowledge. We have also completed a systematic review of the literature to see [...] what guidance, tools, and resources exist internationally to support Indigenous-specific health impact assessment processes. That link is provided in the chat as well.

Kwe', n'in teluisi Dr. Diana Lewis, tleyawi Sipekne'katik, aq Mi'kma'ki. Welalioq, tan teli pejitayoq. My name is Dr. Diana Lewis. People call me Dee. I am from Sipekne'katik First Nation in Mi'kma'ki, what you know as the Atlantic Provinces. Thank you for coming. I am an Associate Professor and Canada Research Chair in Indigenous Environmental Health Governance and Director of the IndigenERA Lab at the University of Guelph.

Dr. Elana Nightingale: And hello from very grey and rainy Ottawa. I am Elana Nightingale, and I am a settler postdoctoral scholar working with Dr. Lewis in the IndigenERA Lab at the University of Guelph. My academic training is in Indigenous health geography and economic development. So, really exploring how land and connections to land support the determinants of Indigenous well-being. And I come to this work on health impact assessment having spent the past decade partnering with Inuit and First Nations communities on research related to resource development, land reclamation, and health.



Dr. Diana Lewis: If you've joined our previous webinars, you know that we like to get a sense of who's here with us today before we get started. So, we have two questions for all of you: what best describes your current role? And we will wait while people answer the question.

[brief pause]

Dr. Diana Lewis: It takes about 30 seconds before we start to see the results.

[brief pause]

Dr. Diana Lewis: So, we have 41% government; 15% community; 10% Indigenous communities; students, researchers [are] 17%; and other [is] 16%; and private sector [is] 2%. Thank you.

So, the next question we're going to ask: how would you rate your knowledge about distinction-based health impact assessment? And again, it'll take about 30 seconds before the results start to show.

[brief pause]

Dr. Diana Lewis: So, we have [...] 65% who are not at all familiar or somewhat familiar. And 1% that are very familiar. Okay, so we'll hopefully increase your knowledge about this over the course of the webinar.

So, the goal of our webinar today is to continue advancing the national conversation on Indigenous-led health impact assessment. Our aim is not to teach attendees how to conduct health impact assessments because we are not practitioners and it is a complex process. Nor are we suggesting that this webinar series is the final word on Indigenous health impact assessment. Instead, what we are trying to do is start the discussion on why distinctions-based health impact assessment is essential. What distinctions-based actually means to many First Nations, Métis, and Inuit communities, and where we might decide to go from here. Recognizing the different legislative context across the provinces and territories, and differing communities' levels of experience with health impact assessment, like the leadership of the BC First Nations and the First Nations Health Authority. How do we have a national conversation on distinction-based health impact assessment that supports opportunities to share lessons learned between communities across the country?

And one final note before we get started: when you share your questions and comments in the chat, we receive copies of them. Even if we don't have time to address them all during the webinar, we will review them and draw on them to inform our future work. Next slide.

Over to you, Elana.



Dr. Elana Nightingale: Okay, so some quick background context for anyone who's new to this discussion. Today, we're talking about health impact assessment as a standalone component of the broader impact assessment process, specifically in the context of assessing major projects and resource developments. And the goal of HIA here is to provide a comprehensive, systematic, and transparent approach to identify and assess the potential health impacts of a proposed project, as well as the distribution of these potential impacts across potentially affected populations.

So, equity is a really important consideration here. And while [Canada's] *Impact Assessment Act* mandates that impact assessment processes consider any potential effects of proposed projects for Indigenous peoples' health, HIA as a distinct process and report is currently voluntary, and Health Canada does not have a regulatory role in assessment. At the same time, it also remains unclear how Indigenous health and community-specific priorities and values related to health are being considered and weighed in the government's decision-making process on proposed projects. And as a result, there seems to be limited published guidance for practitioners and proponents on what a distinctions-based, Indigenous community-specific HIA process should look like.

What we do have are well-established international principles and best practices from institutions such as the World Health Organization, the Asian Development Bank, and the International Finance Corporation. And these build consensus around the need for Indigenous communities to be directly involved in identifying and prioritizing the determinants of health and types of evidence that are considered in HIAs.

Of these, the most recent are from the International Association for Impact Assessment [IAIA]. And the IAIA, for anyone who's unfamiliar, is a really important benchmark because it brings together practitioners, government, academics, and communities. And there has been a stronger and stronger voice from Indigenous communities within the IAIA. And they now also have an Indigenous Peoples section that is in the process of updating its own best practice principles. And as you can see here, the IAIA principles really speak to the need for Indigenous community-led and controlled health impact assessment processes that are grounded in communities' own approaches to health, their own understandings of sustainability, prioritization of evidence, and concerns for equality.

So, as Dee mentioned earlier, this webinar is part of a bigger conversation on Indigenous community-specific health impact assessment. And given the lack of national standards or regulations in Canada, this work first started out with a systematic review of the international and national resources available that are specific to Indigenous health impact assessment processes. And this review can be found on the NCCIH website and has been shared in the chat. And the first webinar of our series really discussed this review in detail. But just to quickly recap, we ended up broadening our search to explore the existing base of evidence on Indigenous participation and impact assessment processes more generally, as the resources specific to Indigenous health impact assessment were quite limited. And



for this, our team assessed more than 400 abstracts and 200 full texts to include 114 sources in the final review.

But this is not to say that there are no Indigenous-specific HIA tools out there. There are a few key resources available in Canada, including the *Guideline to Health Impact Assessment for BC First Nations*, published in 2018, and the HIA appendix of the *Impact Assessment Standards* produced by the First Nations Major Projects Coalition. And then for communities attending today who are interested in learning more about the how-to process of HIA, there's also the *Guide to Indigenous-led Assessment*, published by the Firelight Group, and the virtual course produced by the National Collaborating Centre for Healthy Public Policy, though this resource [...] has no Indigenous-specific content. And these links are all being shared with you.

The other important thing to note is that while many of the sources in our literature review are academic, this doesn't mean that Indigenous communities are not already out there doing this work or that there aren't great practitioners out there meaningfully collaborating with Indigenous communities. So, we want to recognize that many examples of distinctions-based HIA, including from our own team, are not publicly available because of the sensitive community knowledge and health information and data that may be shared in an HIA report. And then finally, we also want to recognize that some resources may have been missed in our search if they were published under a specific nationhood or regional identity, or in an Indigenous language.

Dr. Diana Lewis: So based on our review of 114 sources from national and international literature, the systematic review suggests eight best practices for Indigenous health impact assessment and concludes that no standardized Indigenous process can be possible or relevant. Distinctions-based health impact assessment frameworks, guidance, and tools are needed to support individual communities in developing their own unique health impact assessment protocols, procedures, and methods. Next slide.

So, what are distinction-based health impact assessments? To answer the question, we need to start with distinction-based approaches to health and the community-specific determinants of well-being. What do we mean by health, and who gets to decide how it is defined or scoped for health impact assessment? Elana?

Dr. Elana Nightingale: Okay, so until recently, the human health risk assessment approach has really dominated health impact assessment. And this approach is focused on biomedical understandings of health and assessing how proposed projects may impact measures of physical health through key environmental risks, specifically, air quality, water quality, noise pollution, and food safety. And the human health risk assessment continues to be extremely important, but it is a narrow definition of health that can't capture the whole picture of how proposed projects may impact the well-being of Indigenous communities. And this really applies to health research in general, far beyond HIA.



When we define health based on biophysical and easily quantifiable measures, we miss many of the critical impact pathways for Indigenous communities as well as the interconnections between environmental risks and other determinants. We miss the upstream factors that really shape how and why people experience health differently, including the role of socioeconomic status, access to health services, discrimination, and public policy.

So, recognizing the complexity of health and the impact of intermediary and structural determinants in shaping both individual and population health, we've begun to emphasize social determinants of health models, such as the World Health Organization's model shown here. And these models can account for social, economic, and political factors as potential pathways through which projects can impact human health. And most importantly, these models draw attention to health equity across and within population groups, and they highlight how potential health impacts may be experienced differently based on gender, age, and Two-Spirit and LGBTQIA identity, among other factors. And social determinants of health models are now fairly widespread and they're regularly applied to Indigenous communities. So, for example, the proposed federal distinctions-based health legislation emphasizes the social determinants of health. But these models are missing some crucial determinants that shape Indigenous experiences of health in Canada, including experiences with colonization, relationships to and responsibilities for land, and spirituality, among others.

Dr. Diana Lewis: So Drs. Charlotte Loppie and Fred Wien adapted the social determinants of health model to the context of Indigenous peoples' health in Canada, first published in 2009 and updated in 2022, to include the role of environmental stewardship and cultural resurgence in shaping Indigenous experiences of health as well as the ongoing impacts of colonial governance structures and ideologies [see NCCIH report *Understanding Indigenous health inequalities through a social determinants model*]. The model reminds us that at the root of health and well-being is the opportunity for individual and collective self-determination that Indigenous peoples need control over their lives, environments, and health experiences.

And while this model is useful in outlining the broader categories of health determinants and potential impact pathways, it cannot tell us about a particular community and its context and culturally specific determinants of health. And that leads us to distinctions-based Indigenous health frameworks as the foundation for meaningful Indigenous health impact assessment. And distinctions-based is often used to refer to the three unique Indigenous peoples in Canada: First Nations peoples, Métis peoples, and Inuit. But within these groups, there is so much diversity. Each Nation, each Inuit and Métis region, all the way down to each individual community has its own worldview, culture, and relationship to its own territory that shapes its particular determinants of health, and thus, potential impact pathways. And that is what we mean by distinctions-based health because even communities side by side can have distinct determinants of health and well-being. Distinctions here also goes beyond Indigenous and community identity to include intersectionality with gender, Two-Spirit identity, diverse ability, status, and location in urban and rural locations outside of Indigenous homelands. Next slide.



Before we move on, we also need to add a footnote about the transferability or incommensurability of concepts. Determinants can take on different meanings in different cultural contexts. Standard Western measures of socioeconomic status and well-being are not necessarily transferrable to Indigenous communities. For example, the standard educational question in surveys asks, “What is the highest level of education completed?” and provides the options, such as “less than high school,” “high school,” “college or trade school,” “undergraduate or graduate degree,” for examples. These categories do not capture our community's experiences with education. Maybe the value is not on these Western measures of educational attainment as much as on the community values of traditional education. Do you know how to survive on the land? Do you know how to provide for your Elders? Do you know your traditions? It also does not account for the fact that Indigenous communities may not value the Western educational system as much due to the horrific history we have with that colonial system. Elana?

Dr. Elana Nightingale: Sure, I just was thinking how this reminds me – this idea of the transferability of concepts – reminds me of a good friend of mine who's an Inuk health researcher in Nunavut and she explained to me that learning how to make *Kamik's*, Inuit sealskin boots, was like doing her master's. It was a very lengthy process where she was working with Elders and other women in the community and it fostered skills, social connections, identity, and opportunities to practice language that were impossible through her Western schooling.

So, after years of living away from home to get her undergraduate degree, she felt like she had enough Western education to do her job, but she was missing core skills as an Inuk woman and missing her connection with her Elders. But this educational experience would never be measured in these standard categories of educational attainment. So, it's really important to keep in mind that each community's health framework will look different.

And now we're just going to quickly go through a few examples, just to show you how different these models can be. And our goal here is not to explain another community's health model. Especially for me, as a settler scholar, when I work with communities I only work on the processes and data and outputs that they deem are appropriate for me to share and for me to work on. So here we're showing a few examples, really with the goal of driving home the point of why it's so important to support communities in taking the lead and leading their own health models and the development of their own health frameworks. And these frameworks have all been published and they are all publicly available.

So, for example, Les Femmes Michif, the National Métis Women's Organization, has produced a model to emphasize the interconnections of GBA [Gender-Based Analysis] Plus factors and Métis-specific factors in shaping individual well-being as well as the importance of cultural strengths, such as intergenerational relationships with Elders and Knowledge Keepers, language, and then access to hunting and harvesting.



And then here we have another example. This is the IQI model [Ilusirsusiarniq, Qanuinnngisiarniq, and Inuuqatigiitsianiq] produced in Nunavik, in direct consultation with the 14 communities that make up the Inuit region of Northern Québec. And what's really important to note here – I know it's a little bit hard to read everything in the graphic design – but what's really important to note here are the three core concepts that this health model is grounded in. And these are core concepts that cannot be fully captured in English. So, the model is really grounded in Inuktitut language and culture in order to be meaningful for Nunavummiut. And then the determinants of this IQI model are linked to key sub-themes and then to specific items that allow each determinant to be evaluated. And building on Dee's note again about the transferability of concepts, if you notice here in the purple, they've defined a determinant, *knowledge*, to encompass all the diverse ways that people in Nunavik learn. So, they're including “learning how to be a good community member,” which they've defined as leadership, and then “learning for livelihood,” which they defined as education. And this includes Inuit knowledge and skills, formal schooling, and administrative knowledge.

Dr. Diana Lewis: Let me add another example from my own territory of Mi'kma'ki, comprised of seven traditional districts. Pictou Landing comes from the traditional district of Epekwitk aq Piktuk, with different landscapes and land uses than the other six districts. Depending on the importance of the features of the landscape and how development might impact those features, each district would experience those impacts differently or on the seasonal rounds in resource use that would result in very distinct health models.

For example – next slide – in Pictou Landing First Nation, on the North Shore of Nova Scotia, we have a body of water bordering the community that the community knew as *A'se'k*, a culturally significant space where communities and families enjoyed recreation, gathered berries and medicines, collected seafood, and so on. *A'se'k* translates in Mi'kmaw to ‘the other room,’ an extension of where people lived and what provided them with everything important to who they were. Next slide. *A'se'k* became the Boat Harbour Effluent Treatment Facility, where a pulp and paper mill dumped 85 million litres of wastewater every single day for over five decades.

What does this mean for community-specific health impact assessment models? We talked about this in the first webinar. The figure on the left is a depiction of the Piktukowaq framework to reflect the worldview around *A'se'k*. You will find this as Figure 4 in the article linking land displacement and environmental dispossession to Mi'kmaw health and well-being, *Culturally relevant, place-based, interpretive frameworks matter* in the Canadian Geographer, which was shared with you. What this figure tells us is that when our relationships [are] in a relational worldview, in Mi'kmaw, we call it *Msi't No'kmaq*, ‘all my relations.’ When our relationships are intact, strong, and thriving then the Piktukowaq are healthy, well, and thriving.



For example, *Kisu'lt melkiko'tin* is the Mi'kmaw word for the 'place of creation,' an ecological order or vantage point from which the Mi'kmaq construct their worldview, language, knowledge, and order. We have *Weji-sqalia'timk*, 'where we sprouted from.' We believe we are rooted in the landscape. *Tilnuo'li'k* is 'how we will be Mi'kmaw,' and *Netukulimk* is 'how we learn our values and norms by being on the land.' These are important aspects of the Piktukowaq worldview. The figure on the right depicts how disruptive putting the effluent into *A'se'k* became for the Piktukowaq. How they know to be, where they believe they sprouted from, where they take their younger members to teach them responsibilities and obligations to their lands gets disrupted, not ruptured. That's what colonialism hoped for. We can work to get those relationships back.

The standard steps of a HIA is colour-coded by who usually leads each step. Brown is government, yellow is proponent or practitioner, blue is community. If HIA is going to be distinction-based, communities need to lead the process. In screening, communities need to be involved in determining if a project should undergo a full impact assessment. This is also to avoid potential project splitting where proponents may split a large project into smaller phases or individual projects to avoid exceeding the threshold for an impact assessment. Community leadership and consent are required before the process begins. Specific determinants, valued components, and indicators of health must be established by each First Nation, Inuit, or Métis community based on their own priorities, values, and experience.

This is the work that the IndigenERA Lab is doing: determining baseline for communities.

Scoping. Communities know who will be impacted. Not only the community in closest proximity or the community whose land the proposed project is on. Let's think about drinking surface water when out on the land. Only the local communities know how they use the local environment, what the particular risks or impact pathways are, and whether available data is actually appropriate to their experience on the land. What are the appropriate methodologies that get to their experiences? To collect the baseline health data that reflects their experiences, we must use the appropriate methodologies. Where can you get readily available data to compare to other population levels? Is it available? What are the challenges of access to that data? And so on.

When we, Indigenous communities, are assessing magnitude, severity, duration, frequency, scope, likelihood, time period, equity, assessing significance, for example, it could look like what is in Volume 4 of the *Environmental Impact Statement for the Boat Harbour Remediation Project*, which contains the following Mi'kmaw of Nova Scotia Standards or Thresholds for Determination of Significance:

“A significant positive effect of the Boat Harbour Remediation Project is defined as returning *A'se'k* to a tidal estuary. A significant adverse effect from the project on Mi'kmaw of Nova Scotia is defined as an effect that is likely to cause permanent deterioration of the ecological health



of *A'se'k*. An adverse effect that does not cause a deterioration of the ecological health of *A'se'k* is considered to be not significant.”

The Pictou Landing First Nation Well-Being Baseline Study states the following regarding determining the threshold of significance of impacts: “Until *A'se'k* is reclaimed, impacts are considered significant.”

This determination is presented in the context of a worldview, recognizing the interconnectedness of all environmental and human elements as well as the interconnectedness of time with these elements in the long term. The study describes that these relationships have been severed by the contamination resulting from the Boat Harbour Effluent Treatment Facility, and that these relationships can be restored when the land, air, and water are healed.

Communities need to be directly involved in identifying appropriate mitigation measures, overseeing the implementation of these measures, and monitoring for ongoing issues. You would ask yourself, “How would a Western-trained scientist know when the Pictou Landing First Nation relationships to *A'se'k* are restored when they know that the land, air, and water are healed?” So, this is directed to practitioners and industry when working with communities in health impact assessment.

Now that Indigenous knowledge is specifically highlighted in the *Impact Assessment Act* of 2019, and Health Canada and other departments are working on Indigenous knowledge-related policies, there is a need for clear guidelines and new methodological approaches for the collection and analysis of Indigenous knowledge. Indigenous knowledge is highly sensitive, community-owned information, and we need to respect the principles of OCAP® and OCAS, which stand for ownership, control, access, and possession, or ownership control, access, and stewardship. And in Inuit communities and regions, we need to uphold IQ principles [Inuit Qaujimajatuqangit] that adhere to any research ethics protocols established by the community Land Claim Organization or the Nunavut Research Institute. Communities need to control how Indigenous knowledge is shared, used, and interpreted.

So, this is directed to communities. To look for health impact assessment examples, we've provided a link to the American Repository of HIA. You can search out the Firelight Research Group or look to the National Collaborating Centre for Health[y] Public Policy, Health Impact Assessment Modules. I work with three distinct communities in Fort Chipewyan for example. They share the same geography, industrial exposures, and so on, but each has their own worldview, knowledge system, responsibilities to the land, and therefore, each needs its own distinct and community-based health impact assessment process. But developing these approaches takes time and relationships. Remember the article we shared “*It's more than just drinking tea*”? We can post a link in the chat. These are long-term processes, with unique advisory groups, surveys, relevant data for each community, and so on. Moving forward, these might be recommendations to support practitioners, proponents, government, and communities in conducting distinction-based health impact assessment.



We hope that what you have learned today to inform how you move ahead in your respective roles. I'm sorry: we hope that you take what you have learned today to inform how you move ahead in your respective roles. In closing, we would like to mention that we are holding a Health Impact Assessment Workshop at the International Association for Impact Assessment Conference in Québec City in May. Look us up in the program. I want to highlight that the International Association for Impact Assessment, because the team involved in putting together this webinar series are active members of the association, and as part of the work, we'll be hosting another workshop at this conference on best practices of engaging with Indigenous communities in impact assessment more broadly. So, if anyone in the audience today plans to attend – community members, industry, practitioners, government – come and say hello and get involved in the discussions we are having. Welalioq, tan teli pejitayoq. Thank you for coming.

X'staam Hana'ax (Nicole Halbauer): Well, that was so informative, I forgot I was hosting. I was just busy taking notes. Thank you so much!

I know for myself, you've given me a lot of terms for concepts that I felt and then led me to some amazing research, or amazing work that I can utilize in my research while I'm doing my PhD. So, thank you, I feel like this was amazing.

Participants, this is your opportunity to ask the presenters questions. We'd like for you to put your questions into the Q&A chat, not into the regular chat, so that we can keep track of them.

There is one question right now, Dr. Lewis, and it says: so, it sounds like health impact assessment and environmental impact assessments go hand in hand, i.e., should be done for each project and perhaps even overlap or correlate in findings?

Dr. Diana Lewis: I would say so. So, they're not routinely done, health impact assessment isn't routinely done in environmental impact assessments and we say that if they impact Indigenous communities, they should be done. We need to have baseline health data so we can measure change going forward, which often our communities don't have. So, thank you for the question.

X'staam Hana'ax (Nicole Halbauer): I have another one here: in the example given, it looks like HIAs are used for non-health interventions and policies. Are HIAs used for health interventions policies as well?

Dr. Diana Lewis: Elana, maybe I'll let you take that one.

Dr. Elana Nightingale: Sure. So, that is a good question. We've focused today specifically on health impact assessment as it applies to major resource developments, but health impact assessment is also



regularly used for public policy and other forms of interventions that can have health impacts, but not usually for specific health policies or specific health services and access. But more to consider what health impacts and this particularly unintended or unexpected potential health impacts might be of non-health-focused projects, policies, and interventions. Does that make sense?

X'staam Hana'ax (Nicole Halbauer): It does to me, so I hope it answered the question.

Dr. Elana Nightingale: Feel free to ask a follow-up question. I think I said health many times.

X'staam Hana'ax (Nicole Halbauer): While we wait for – if there's a follow-up question to that – can you share about any experiences you have with distinctions-based approaches to Indigenous data sovereignty?

Dr. Diana Lewis: Yeah, so all of the work that I do, I respect that the community owns the data and the knowledge that's collected from the community processes. And my lab, the IndigenERA Lab, is set up so that we can securely store data on behalf of communities to the point that they're able to repatriate the data back to the community. And we sign very detailed research agreements with each of the communities that we work with that outlines our responsibilities for the data, the ownership of the data, obviously belonging to the community, and so on. And I work with Métis and First Nation communities – at the moment I don't work with any Inuit communities – but everything we do is to make sure that we are building the capacity as well in Indigenous data sovereignty.

So, for example, we held a training institute two years ago now, where we train community members how to use software for collecting data, how to use data, how to use NVivo. We're having community members come to the IndigenERA Lab to train on coding surveys themselves, so they can have ownership over that process. We'll show them how the storage of the data is secured here, so that when and if they established their own data centres, then they will have some experience to build on from what we've established here. So, I would say that we're guided consistently by Indigenous data sovereignty.

X'staam Hana'ax (Nicole Halbauer): That's exciting.

How does a practitioner/proponent start the whole HIA process?

Dr. Diana Lewis: So that's a really interesting question. I'll use the experience of Pictou Landing First Nation, which obviously has gone through an impact assessment process.

So, in 2019 the Impact Assessment Agency released guidance to the proponent to develop the environmental impact statement [EIS], and they received the guidance I think in April. You can go to the registry and see when all of these documents that I'm referring to were made publicly available,



but I think it was about October where they received the guidelines for developing the EIS. And they came to Pictou Landing towards the end of the summer, to say, “We need you to participate in the development of this environmental impact statement.” And Pictou Landing said, “We will, but you didn't give us a lot of time. And so, in order for us to do it and to do it well you will need to support our process.”

And the province did, as the proponent. And within three months, the leadership of Pictou Landing First Nation established a Community Advisory that included youth, Elders, men, women, land users, students, and so they had a really good representation on this Advisory. And they secured the services of data collection. And so, there were about four of us on the team that helped the Advisory develop a survey process, which took probably about four weekends. So, we did it very quickly [and] developed a very extensive survey instrument. And they decided to hold a blitz weekend to collect data. And so, the Advisory determined that on any given weekend out of, let's say, 450 community members, that about 300 community members would be home. And so, on this blitz weekend we set up stations around the community, promoting that we would be collecting data and by the end of the weekend we had collected 287 out of 300 surveys. That is unheard of, but the whole community was committed to the process because of the way the proponent allowed the community to structure the engagement process, and to design the process, and to lead the process.

So, I would say, to start you need to speak to the community to determine what's possible, what kind of resourcing is needed, what kind of capacity is needed. And allow them to lead the process. So, within three months we had started, designed, collected, analyzed, and presented the data back to the community.

X'staam Hana'ax (Nicole Halbauer): Three months!

Dr. Diana Lewis: Yeah, it was intense, but it can be done is what I'm trying to say. If a proponent provides the right amount of support, it can be done.

X'staam Hana'ax (Nicole Halbauer): That's incredible! And I think, for me, what makes my heart sing is that it was very much community-grounded, based, directed, and rooted. That three-month schedule was not somebody else's schedule; that was a community that said that. And I was like, “That's amazing.”

Sorry, I have to get back to what I'm doing here and ask you another question: is it appropriate for non-Indigenous people to lead distinctions-based approaches?

Dr. Diana Lewis: So, I would say not to lead. I would say that you could support.



So, I worked with Pictou Landing on the process, but they structured the Advisory and the Advisory instructed the few of us that were there to help with the data. I work with five other communities and in each case, I report to the Community Advisory, which is structured by the leadership to lead the processes. And so, to be there in support, to provide research that's needed to – you know, we help with coding, we help with storing and cleaning data. We help, but always at the guidance of the community.

X'staam Hana'ax (Nicole Halbauer): I think that that's really important, is that it's at the guidance of the community because even in the beginning of your presentation, even different communities within the same First Nation will want a different structure. And I find within my Nation that we are united on many things and we have very much the same cultural background and vision in certain areas, but we are individual communities in individual land spaces that have different concepts of how that land relationship works. So, I'm just fascinated by seeing this in this space.

Sorry, back to question four –

Dr. Diana Lewis: Before you go to that question, though, just what you said made me think: what we did in Pictou Landing First Nation was because they were under pressure to meet a deadline. But remember that Indigenous-led, distinctions-based, culturally relevant processes take time and you must be prepared to invest the time, to be flexible. So, each community progresses at its own rate. We're not all necessarily on the same timeline and we need to allow the flexibility for that to happen.

In Pictou Landing First Nation, when I worked with them in 20 – it was between 2012 and 2014 – it took us for the first survey we did in the community, about a year of meeting every month to develop a survey instrument. It took us from 2012 to 2014 before we had data. So, it doesn't always happen in a weekend. That's really ideal. But be prepared for any number of different approaches to get to the end goal, which is to get data for the community.

X'staam Hana'ax (Nicole Halbauer): Yeah, I like that you highlighted flexibility.

I have question four: have you worked on an HIA in a community where there was division among community members? If yes, how did you navigate this situation?

Dr. Diana Lewis: I don't know if there was necessarily division that this example would represent, but in Pictou Landing First Nation, the first time we worked with them it was with the women in the community. And we would – we've always been asked, “Well, where were the men?” Because all the pictures we have are all of the women. And the men were there; they were supporting the women to lead the process. It wasn't with the leadership, we kept the leadership informed, but it was the women who led the process. Because what happens with leadership under the *Indian Act*, is it sometimes



creates the division in the community, in that the elections are every two years. And if the leadership keeps changing, how do you keep advancing something, right? And so that's not necessarily deficient, but it's disruptive.

And then the work that we do in Oneida Nation of the Thames is with the Yukwanulha Yukwanikuhliyo, which is the Oneida Women's Group, who initially came together at the beginning of COVID to protect the health of their community. And when COVID was over, they felt empowered to continue their work towards protecting the health of the community and so we worked with them.

So, there's ways to work around situations. And I'm trying to think if there's division in any of the communities I've worked with. Not everybody in the community is necessarily supportive of – if there's one group that's in leadership, there's always another group that wishes they were in leadership, so they may not work necessarily with you. So, I think you just do the best you can in the situation that you're in and don't get involved in those sort of things.

X'staam Hana'ax (Nicole Halbauer): Yeah [...] my grandfather used to tell me, “Work with those that want to work with you, and the others will either follow or find their own way.” So, that's really, that's fantastic.

So, question number five: how would you approach an IA if there is no community capacity to be able to lead or direct a distinctions-based IA?

Dr. Diana Lewis: I feel like I want Elana to answer some questions, too. So, I'll – Elana, you take the lead and then I'll come in and answer as well.

Dr. Elana Nightingale: Sure. I think that's actually a better question for you. I was going to add a little bit on the previous question about division.

Dr. Diana Lewis: Okay, go to the previous one then.

Dr. Elana Nightingale: And especially as an outsider to community coming in where there may be divisions. And just to note, no community is ever uniform. Whether it's Indigenous communities or other communities, there's always differences of opinion. And I think the way that the health impact assessment process works is to gather everyone's feedback and to collect it in a way that can be presented back to the community for it to make its own decisions. And so regardless of potential divisions, our goal in doing this work is to inform the community and empower the community to make its own decisions. And so, it's divisions and differences of opinions will always be part of that process and will always be reflected in that process.



And then, how to approach IA if there's no community capacity. I think going back to what Dee said about this being a very long-term process and I think there is a role for proponents in industry, as well as for government, to support communities in building that local capacity. And there are programs that are available. I know some of the communities that we've worked with have accessed the BAPHE [First Nations Baseline Assessment Program for Health and the Environment] funding through ISC [Indigenous Services Canada], to start developing their own baseline data collection. And there's other resources out there to kind of really start with kickstarting the process and building some of that local capacity.

And then I think another important role is for funding support from industry for local HIA, and health research coordinators, and health research assistants, and even for academic research. A lot of the work we do with communities, we always look for opportunities to hire and train community research assistants. And that's such a big part of starting to build the capacity for communities to go on and do this really long-term work.

Dr. Diana Lewis: And what I would add to that question is the proponent and government, or practitioner, non-Indigenous practitioner likewise has no capacity. They have no capacity to work with Indigenous knowledges. They have no capacity, unless they're Indigenous themselves. And so, they will be depending on the community to build their capacity. And so, it's a two-way street in all aspects of health impact assessment and you have to look to the strengths of the community and the community will lead.

I had no capacity to work with the Dene, or the Cree, or the Métis. I'm Mi'kmaw. I don't know how to lead that process and I never would assert leadership because that's not my expertise. But I've been working with them for five, six, seven years, and I've built my capacity. So, I think don't look at things that way, that somebody doesn't have capacity. Because where you don't have capacity, somebody else does.

Dr. Elana Nightingale: And just to quickly add to that, it just reminded me, one of the big pieces of this work moving forward is how do we engage with proponents and practitioners to build that capacity. Even just thinking about who is in the Zoom room and attending today, it's a lot of community. It's people who are already actively working on this. They're engaged, they're working on it, they are building their capacity, so, like you said, how do we work on building the capacity of proponents and practitioners and how do we really reach them?

X'staam Hana'ax (Nicole Halbauer): Yeah, I really like that, that we all need to have some capacity built. We all have our strengths, but we also have knowledge gaps as well. And I think you talked a little bit about that, not that in particular, but the concept that I learned that you were talking about earlier, that really spoke to me was that transferability of concepts, like that idea and so just keeping that in mind is important for me.



Question six: can you describe how a community-led, distinctions-based HIA may lead to different outcomes than a conventional HIA, such as identifying different types of mitigation measures that could address impacts?

Dr. Diana Lewis: Yeah, so, I think about how land users are impacted. And when we're looking at distinct practices in a territory, they're not all the same practices. Like, in Northern Alberta, they don't have the same practices, the same food resources, the skillsets that they would have on the East Coast, where we're looking at seafoods, and in the north, they're looking at bison. And so we don't have comparable kinds of land and resource uses. And so, when we're looking at how someone might be impacted in their land or resource use in the north, compared to in an ocean coastal community, we have to understand how when access to resources is impacted, how that has distinct health and well-being impacts. And so, the kinds of mitigation measures that are needed are entirely different.

So, in Pictou Landing First Nation, for example, the mitigation measures have to have the final goal of getting that body of water back to what the community remembers. They remember collecting berries, they remember collecting medicines, they remember getting their food from the water, they remember families and communities. When you hear the communities talk about these things, they remember when the families and the communities gathered around *A'se'ke*, and they remember happy times and family gatherings that really strengthened family connections. The community was happy, they were cohesive. That's a different health outcome than when it becomes an effluent treatment facility. People get suspicious of each other. There's mental, emotional impacts.

So, I would say that, yeah, mitigation can be very distinct.

X'staam Hana'ax (Nicole Halbauer): Sorry, I'm so busy listening to you. How involved should industry proponents be in an Indigenous-led HIA about their proposed resource development project, given that the respective perspectives and interests of proponents and Indigenous communities are often divergent, if not in direct conflict?

Dr. Diana Lewis: I wouldn't necessarily say that's always the case.

X'staam Hana'ax (Nicole Halbauer): Yeah.

Dr. Diana Lewis: And there's very good examples that we've pointed you to. Where there are Indigenous-led examples, where the proponent and the community have worked very well together.

So, I don't think that the goals necessarily always have to be divergent or in conflict. And in these Indigenous-led processes, there's examples of where they really came together. So, look to those examples.



X'staam Hana'ax (Nicole Halbauer): Yes, there are so many. How do you determine – oh, go ahead.

Dr. Elana Nightingale: Just to add, if people are looking for an interesting, very recent example. There was just an article in CBC News Thunder Bay last week, I think. It was about Biigtigong Anishinaabe Nation in Ontario and the long-term relationship that they have developed with a mining company there to the point where they've worked on the HIAs and they've worked on impact assessment together, and that has allowed them to tell the company where and when certain land is appropriate for mining and others that are not. And through that relationship, the company has listened and has respected which land they have said is off-limits. And they've respected that and they've actually withdrawn some proposed permits for exploration on lands that the community has said is not appropriate.

And so, I think that's a really good example that people can look to for how, you know, when you have a proponent who is committed and wants to develop more of a long-term relationship, that there isn't always conflict, there's always ways to work together.

X'staam Hana'ax (Nicole Halbauer): Yeah, Elana, I think it's really important how you highlight that long-term relationship, being invested for generations rather than just as long as the resource extraction or the industry has viability, just becoming a part of.

So [...] how do you determine which communities may be affected and need to be consulted when impacts can be indirect, cumulative, or geographically distant?

Dr. Diana Lewis: So, I would say that there's several things that need to be taken into consideration, depending on the specific community. So, if it's in a Treaty area, there's going to be Treaty rights impacts. So, it doesn't necessarily have to be a community that's in the vicinity of a project. If their Treaty rights and their Treaty territory are impacted, then they should be considered.

In Nova Scotia, we have Aboriginal Title. In British Columbia, a lot of communities still hold Aboriginal Title. So, if a project is going to impact the exercise of your Aboriginal Title rights, then you should be consulted. You should be considered as impacted.

Cumulative impacts are not well considered in any impact assessment process and yet they're chipping away, – chip, chip, chip, chip – away at our rights, the exercise of our rights, our identities, our ability to enjoy our lands, our waters, our air. So, I think there's a number of considerations that proponents have to understand. Like you can't just say, “Here's my project, you're not within 20-mile radius, you're not impacted.”



I teach impact assessment at the University of Guelph and one of the things that I really stress in my courses is to understand those rights, is to understand UNDRIP [United Nations Declaration on the Rights of Indigenous Peoples], pre, prior, informed consent. I teach constitutional rights. I teach about all of our rights as Indigenous people. And the students resist me. But by the end of the course, they understand why I do it. And I'm very clear that if people don't understand those things, you are harming our communities.

X'staam Hana'ax (Nicole Halbauer): Yes, very clearly. And when I think about the geographical distance, that question just brings to me the sacred headwaters in the Tahltan Nation, that are three rivers that impact hundreds of kilometers away. So, when you're doing development in one area, it doesn't mean that that's the only area being impacted, because my Ts'msyen people down the river become impacted by anything that happens in the Tahltan Sacred Headwaters area.

But that's about me, and that's not why we're here. So –

Dr. Diana Lewis: But that's a really good example actually, because, I tried to – well, I didn't say I tried – I worked with a proponent to help them understand how Indigenous people have impacts from offshore oil and gas, and they said, “Well, it's not anywhere near a community, we're offshore, it doesn't impact anybody.” It does. And on the East Coast, if our eels can't get to the rivers and we can't culturally harvest the eels, we're harmed. And that's hundreds of miles offshore.

X'staam Hana'ax (Nicole Halbauer): Yes, and for us it's the oolichan. The oolichan are the foundation of our entire diet and it's just because you may not see the impact directly at that moment, we're all – anyway, I'm taking this over. I'm the moderator, sorry.

We have a few minutes left, so I'm going to ask just maybe two more questions. And question 10 is: are HIAs used for health interventions and policies as well?

Dr. Diana Lewis: I thought that was asked.

X'staam Hana'ax (Nicole Halbauer): Oh, okay. Did I ask that? I don't know, it says it's question 10.

Dr. Diana Lewis: Yeah, the beginning. But, yeah, it was more about policies, but yeah.

X'staam Hana'ax (Nicole Halbauer): I think so, too.

Okay, question 11: what do you think are the role of academic institutions in distinction-based HIA approaches versus HIA consultants and/or internal community capacities?



Dr. Diana Lewis: Elana, I'll let you start.

Dr. Elana Nightingale: Sure, that's a good one. I think, well generally, proponents are working with HIA consultants. And so, I think there's such an important role there, especially in terms of when an impact assessment is triggered and that full process is taking place. I think academic institutions are doing a lot of the longer-term work. I think – this is a point that we're going to drill home again and again – this is very long-term work to do it in the right way and I think academic institutions and academics that have access to different funding sources, more flexibility, longer research timeframes, can really step in and support with a lot of the groundwork here.

And so, when it comes to an impact assessment process that's triggered, there's a lot of that work that's already been done and so HIE consultants might come in at that stage, but the academic institutions have supported with a lot of the initial groundwork there.

Dr. Diana Lewis: And I would add that we're hoping to affect policy, so we can do a lot of the research that has to be done.

One of the things that an academic brings for the community are student resources. You know, when I'm here at the University of Guelph, I look at the funding I can access which is amazing. And I can set up equipment and structures. But the number of students who are looking for thesis topics, who are looking for research projects, looking for supervision on 4th year reading courses, or capstone courses – when you understand the needs of community, you can start to match up those.

And the energy that students bring – I'm older, I'm getting tired, getting worn out. These students are just starting, and they're really enthusiastic, and they have a lot of energy, they have a lot of skills, like, students teaching me the latest skills: how to code, about software I've not heard about, that is such a resource. So, I think that we have the luxury of having access to that which is free to the communities, right?

Dr. Elana Nightingale: And I was just going to add to, like, the other relationships across academic institutions based on community-identified needs. You're able to very quickly bring in a lot of technical expertise through relationships at the university. So, it can quickly bring in engineers, groundwater experts, whatever expertise the community is looking for, universities have such great networks to quickly loop that in.

X'staam Hana'ax (Nicole Halbauer): Yeah, I think that's really an important thing to consider because as an older student myself, I really appreciate all the support I get, but I do see a lot of opportunities for research in communities that can be very well funded. Do you guys want to – and long-term, Elana [...] for me, the long-term is really key.



Do you guys want to maybe make a couple final comments? We have five minutes left. We'll start with you, Elana.

Dr. Elana Nightingale: I'll just say thank you. Thank you to you, Nicole, and NCCIH for bringing us together today to talk a little bit more about the work that we've been doing. It's great to share it and it's great to see so many comments and questions, and people so engaged in this work. And hopefully we can continue this conversation and keep moving the good work forward.

Dr. Diana Lewis: And on that note, I would add, look us up at the International Association for Impact Assessment. So, the Indigenous People section is hopefully finalizing best practices, international best practices, and conducting impact assessment with Indigenous communities. And we are hosting two workshops with proponents – industry, government, community – to come and talk about how we can advance this process.

X'staam Hana'ax (Nicole Halbauer): Well, I want to thank both the presenters today. This has been really informative for me personally and I'm so glad I got this opportunity. Thank you NCCIH, for asking me to host this webinar because a lot of what we talked about is going into – well, it's going to add to my literature review, so I really appreciate that. I might be reaching out to you guys as well.

And I want to just really share gratitude as an Indigenous First Nations student that so much is happening and so many people have been leading this for so long while I was raising my family. And so I have so many resources and new students have so many resources to pull from, which was not the case in the 90s, so I appreciate that very much.

We encourage everyone to complete the webinar survey. The link is now in the chat and you will also receive an email with the link tomorrow. And I just really want to thank everyone for attending today. This has been a great seminar and this series will be featured on our upcoming NCCIH spring newsletter, so yay!

And everybody go out, do the good work, as Dr. Shawn Wilson says, “Good heart, good process, good outcome.” So, thank you, Dr. Lewis, Dr. Nightingale, I appreciate everything you had to say today. I could listen to you guys talk for hours! And so, I really appreciate that. Thank you. Ntoyuuksn.

Dr. Diana Lewis: Walaliak.



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© 2026 The National Collaborating Centre for Indigenous Health (NCCIH). This publication was funded by the NCCIH and made possible through a financial contribution from Health Canada and the Public Health Agency of Canada (PHAC). The views expressed herein do not necessarily represent the views of Health Canada or PHAC.