

ClimateHealth Adaptation Planning: **Two Approaches,** **One Shared Learning Journey**



**simcoe
muskoka**
DISTRICT HEALTH UNIT

Financial contribution from



Public Health
Agency of Canada

Agence de la santé
publique du Canada



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Today's Presentation

- Module 1: Scoping Review
- Module 2: Indigenous Lens

1



Extreme Weather



Vector-borne Disease



Extreme Temperature



Food and Water
Safety and Security



Air Quality



Ultraviolet Radiation

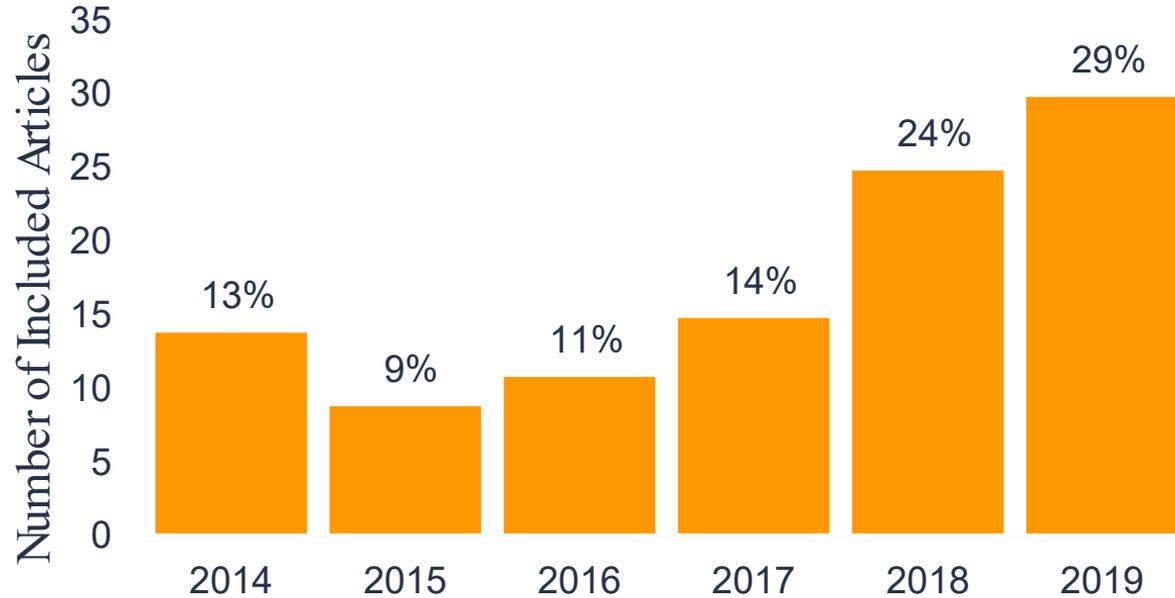
Characteristics of Climatehealth Adaptation Interventions

A Scoping Review



Time Trends

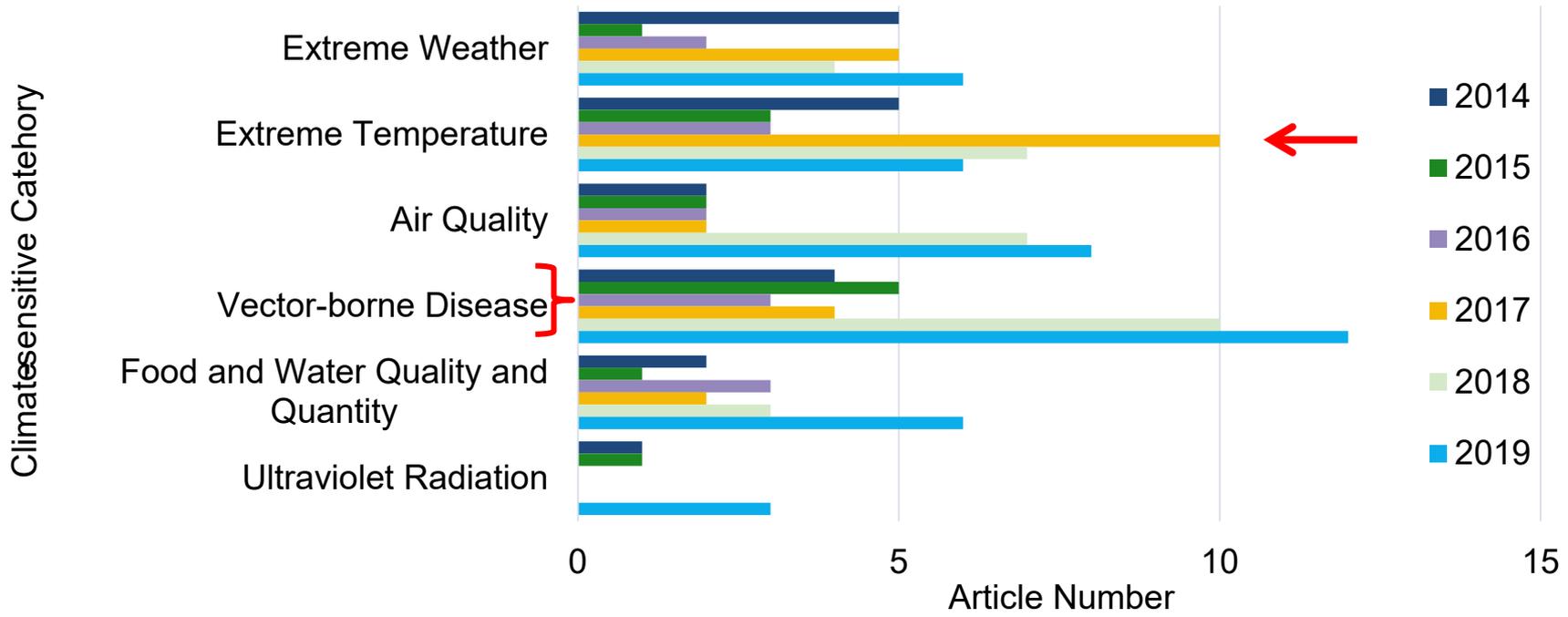
Distribution of Articles by Publication Year





Time Trends

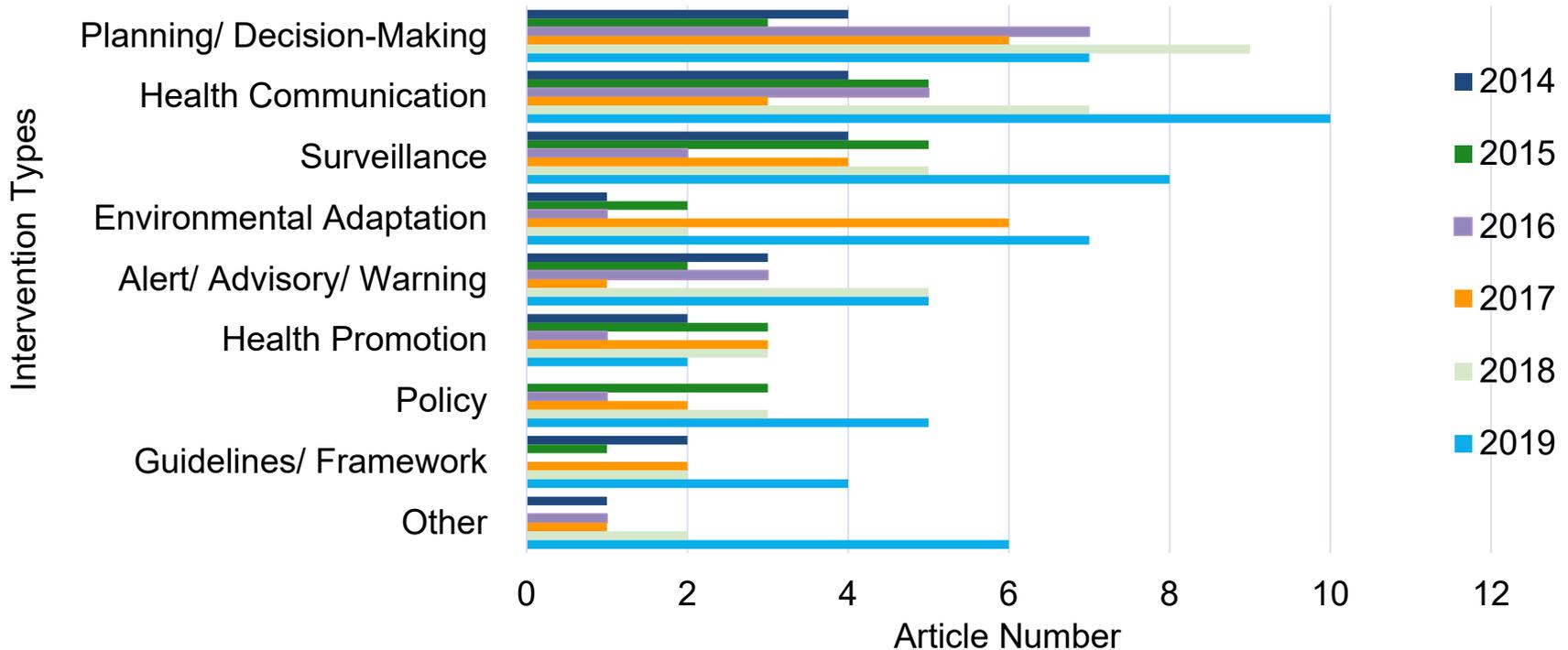
Distribution of Climate-sensitive Categories by Publication Year





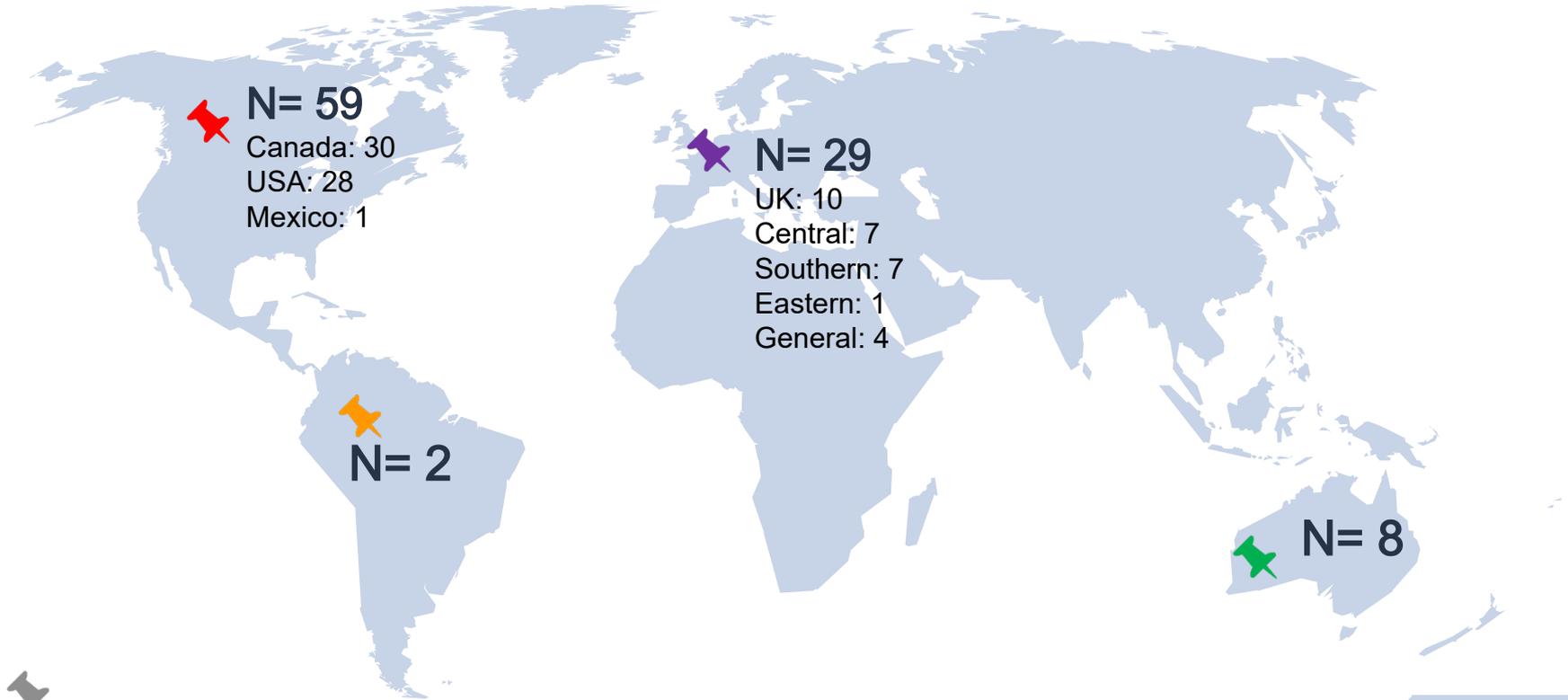
Time Trends

Distribution of Intervention Types by Publication Year





Geographic Distribution

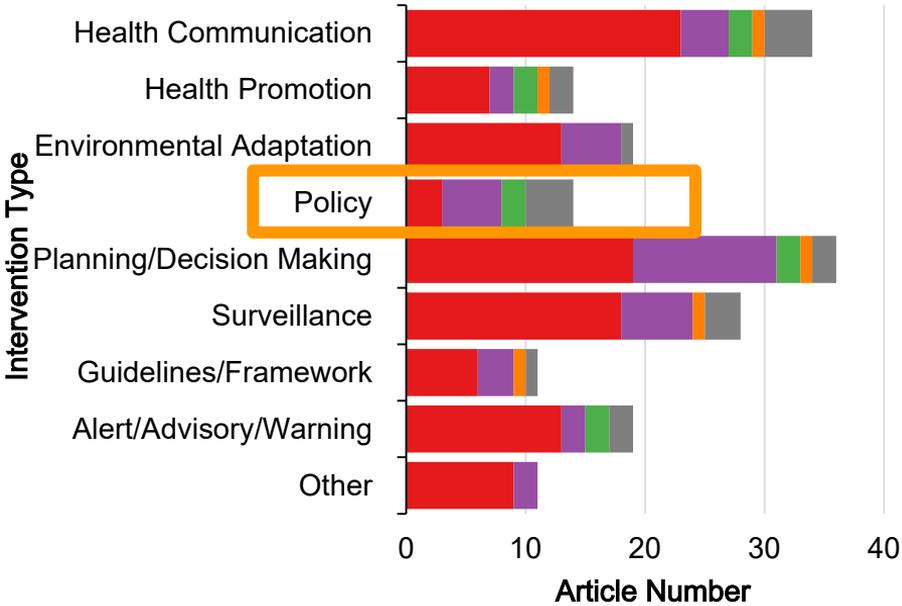


Non-Defined Geographic Location N= 6

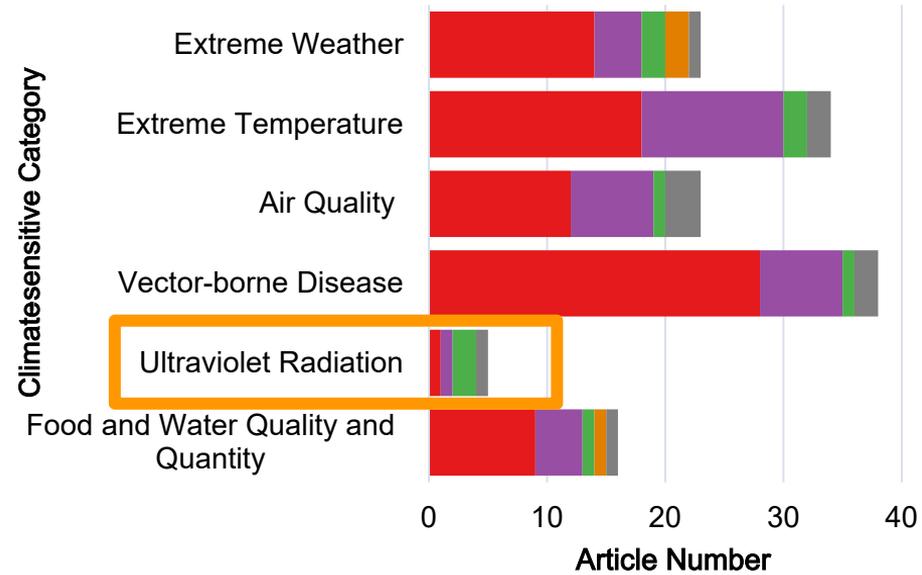


Geographic Distribution

Distribution of Articles by Main Geographic Regions and Intervention Type



Distribution of Articles by Main Geographic Region and Climate-sensitive Category

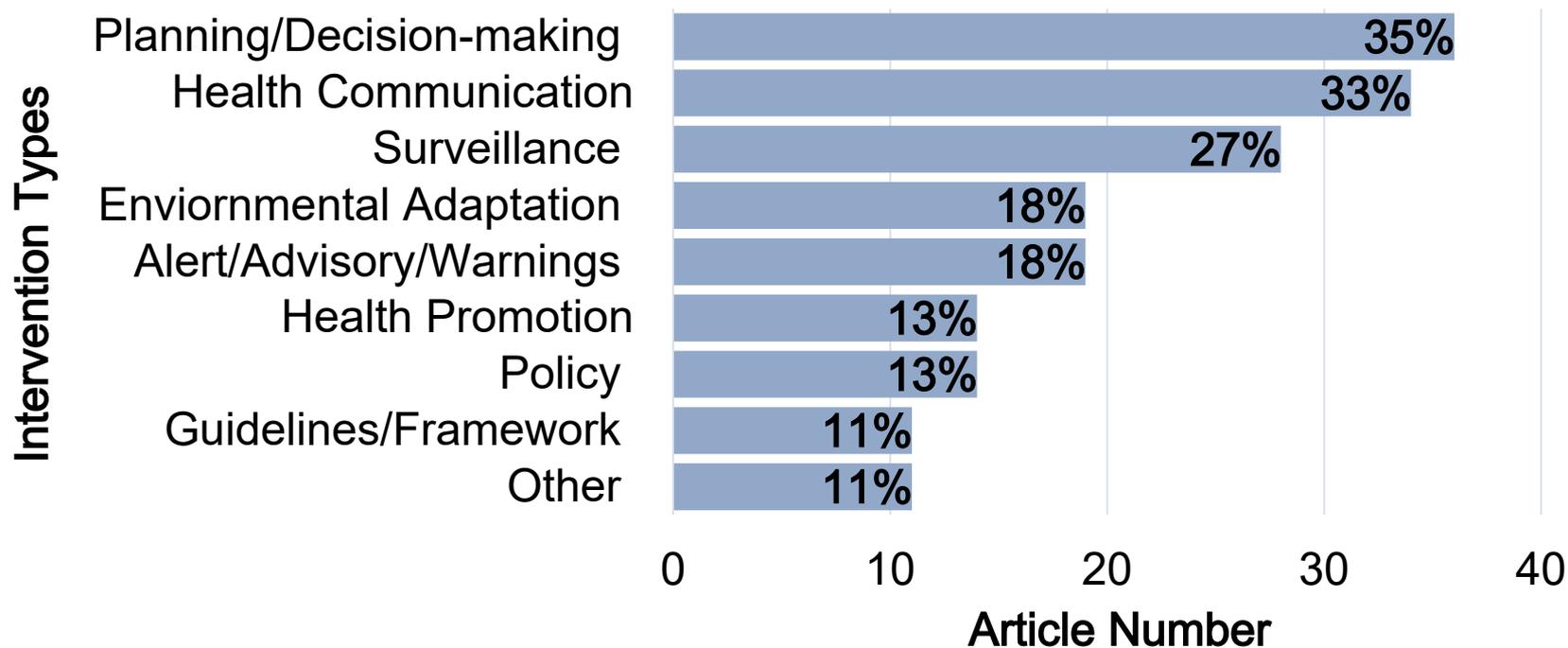


■ North America ■ Europe ■ Australia and New Zealand ■ South America ■ Non-defined



Characteristics: Intervention Type

Distribution of Articles by Intervention Type

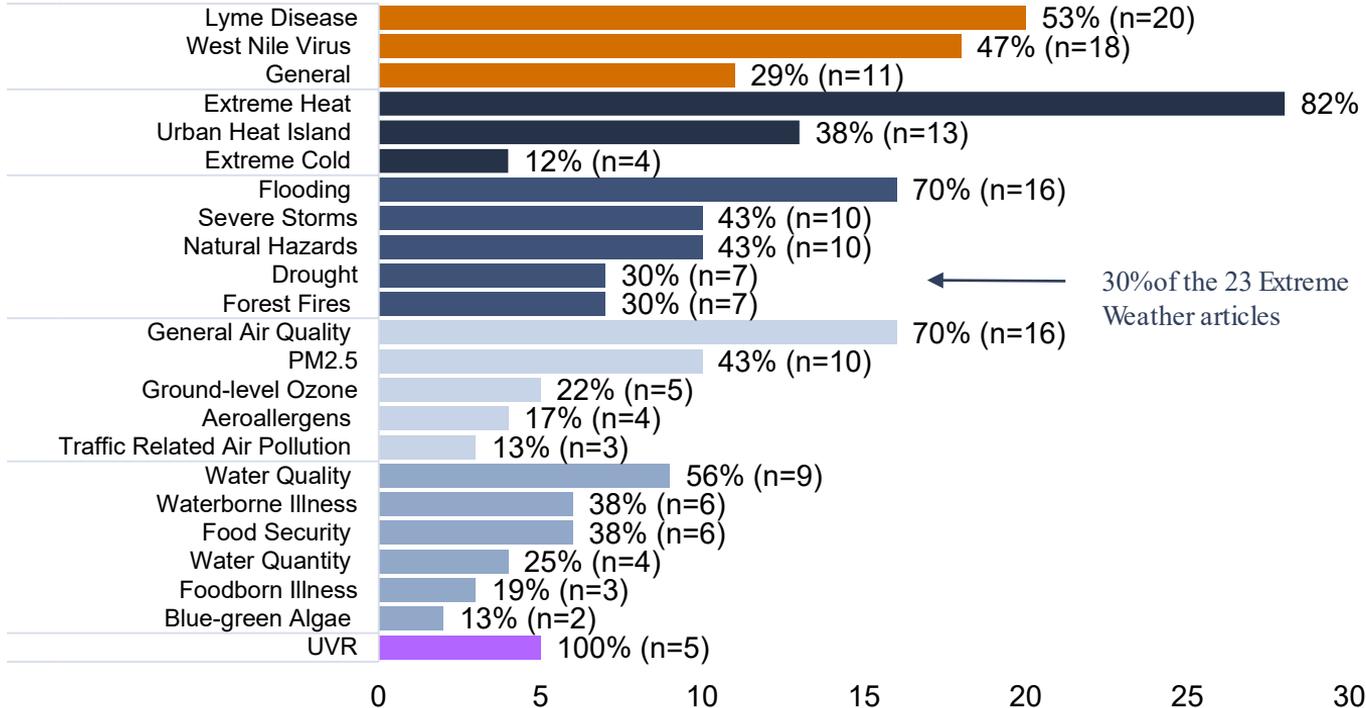




Characteristics: Climate Sensitive Category

Trends by Climate Sensitive Category

Specific Climate Sensitive Categories



Vectorborne Disease
N=38

Extreme Temperature
N=34

Extreme Weather
N=23

Air Quality
N=23

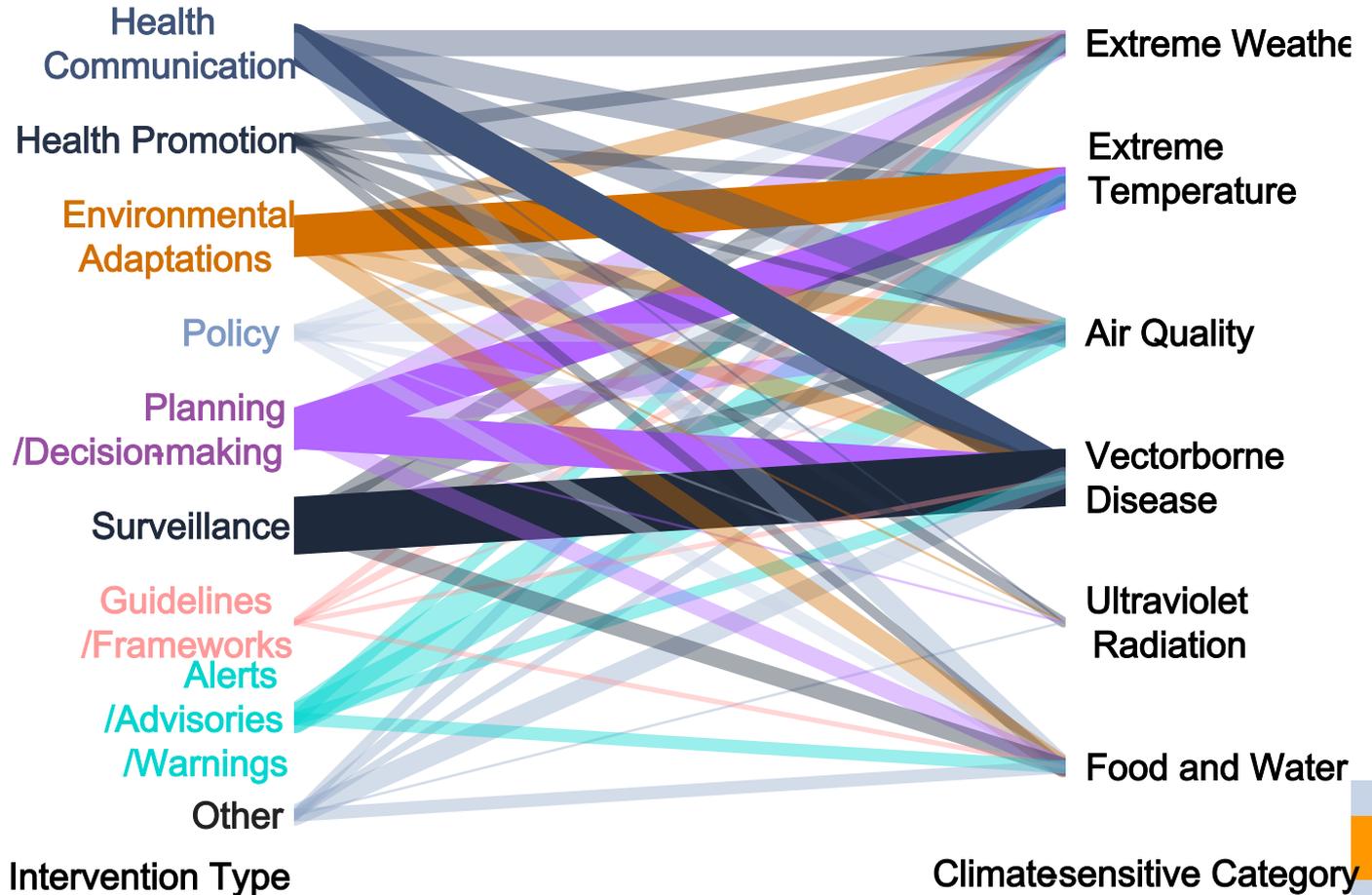
Food and Water
N=16

Ultraviolet Radiation
N=5

← 30% of the 23 Extreme Weather articles

Article Number

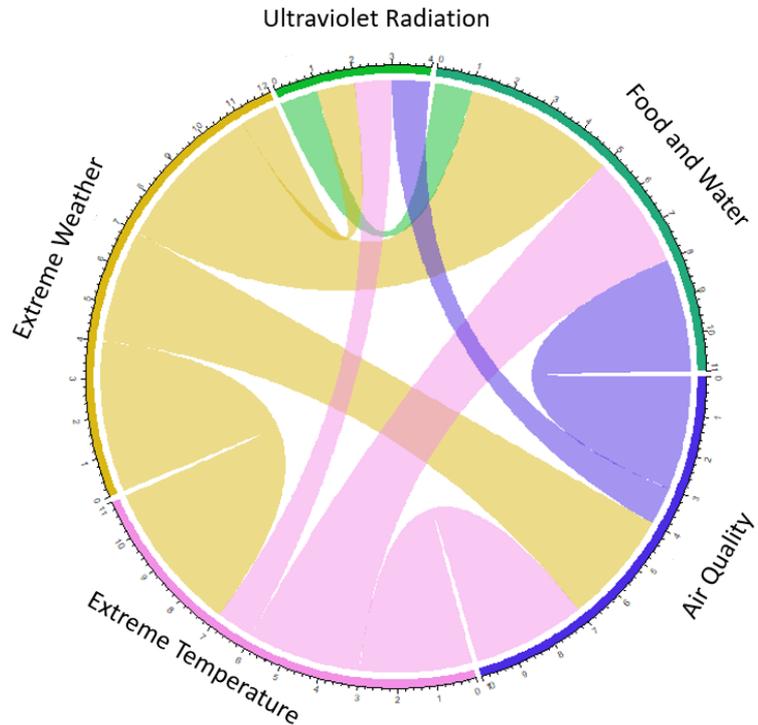
Intervention Types by Climate Sensitive Category




**Characteristics
Cross Analysis**
- Interventions used to
address climate
sensitive categories



Addressing Multiple Main CSC



Intervention Types Most Common

- ▶ Environmental Adaptations (Green Space)
- ▶ Planning/Decision Making



Lessons Learned and Their Application





Applying Results to Climate Health Adaptation Planning

GEOGRAPHIC DISTRIBUTION

Source relevant examples



INTERVENTION THAT ADDRESS MULTIPLE CLIMATE SENSITIVE CATEGORIES

May provide greater return on investment



CHARACTERISTICS OF EXISTING CLIMATE HEALTH INTERVENTIONS

Inventory of possible interventions that can be adopted to implement locally



INTERPRETATIONS

Offer key considerations to support adaptation planning





Gaps in Knowledge & Practice

- Some public health intervention types may be underutilized:
 - EX: Policy; health promotion; guidelines
- Some main and specific climate-sensitive categories may warrant greater attention
 - Ex: UVR; Blue-green Algae; Foodborne illness, Winter Storms, Extreme Cold.
- Climate mental health outcomes are insufficiently addressed
- Climate health lens may not be regularly applied to all interventions that address climate risks and implementation experiences may not be regularly published
- Stronger efforts to include Indigenous Voices in climate health adaptation strategies are required



A Missing Piece : Indigenous Lens

■ Observation & Reflection

- Methodological Omission
- Western Lens will not Capture Indigenous Lens
- Strength of Collaboration

■ Gap in Knowledge & Practice

- Not from an Indigenous Context
- Interpretation Aligns with Literature on Indigenous and Decolonizing Methods/Approaches

OUTCOME

Capture Critical Concepts of Indigenous Perspectives and Knowledge

- Lead by **Cambium Indigenous Professional Services**



Applying Results to Advance Public Health Practice and Knowledge

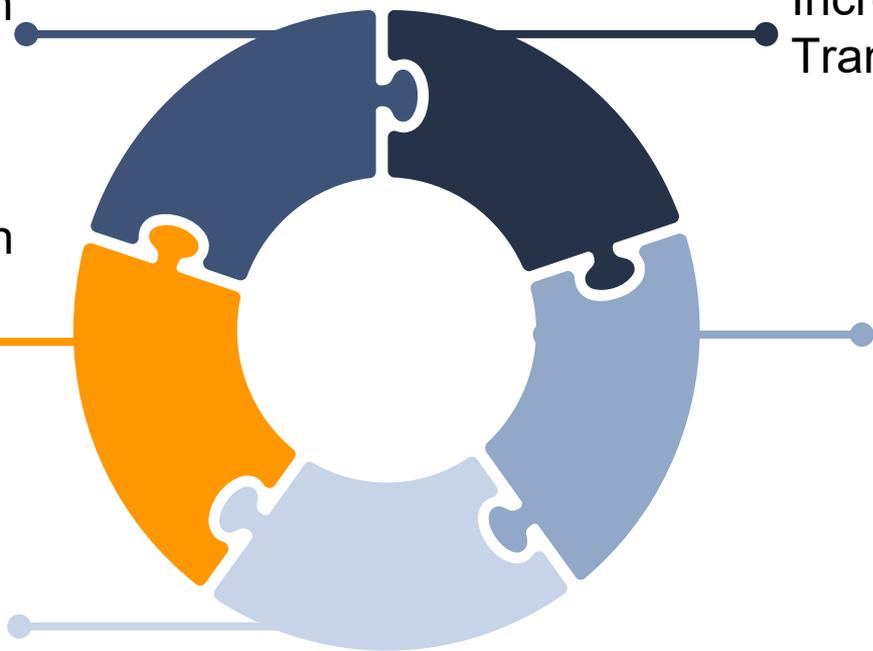
Invest in climate health interventions

Increase Knowledge Translation Activities

Become educated on how to support Indigenous climate health adaptation

Explicitly Integrate a climate health lens

Continue to build understanding of climate health risks





Future Research



Implementation Bodies



Specific Health Outcomes



Populations Targeted



Capacity Building Strategies



Barriers & Facilitators



Range & Characteristics of Indigenous Led Climate-Health Adaptation Interventions



Empirical Evidence on Quality and Effectiveness of Interventions

2

Indigenous Lens on Climate Change Adaptation Planning

History

Pre Contact

- Relationship
 - ▷ Creators Law or Natural Law
- Seven Grandfather Teachings
 - ▷ Values
- Responsibility
 - ▷ Traditional Ecological Knowledge (TEK)
 - ▷ Seven Generations

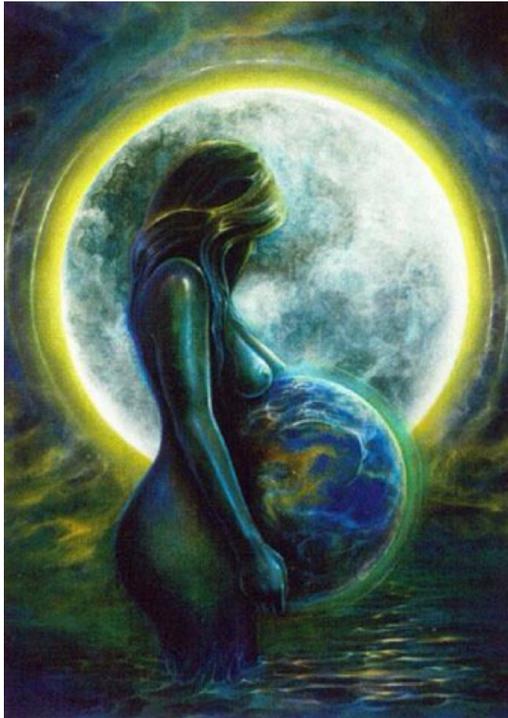
Contact

- Indian Act
 - ▷ Colonization
- Reserve systems
 - ▷ Environmental Racism
- Indian Hospitals and Residential Schools
 - ▷ Cultural Genocide

Present

- Truth and Reconciliation
- Climate Change Health Adaptation
- Two Eyed Seeing
- Ethical Space

Relationship



For many, land means property, the water, the air, and all that live within these ecosystems.

For Indigenous peoples, land means more than property and even ecosystems – it encompasses traditions, culture, relationships, social systems, spirituality, values, responsibility and Law.

Creators Law/Natural Law

Under the Creators “Law”

All things are regarded as “Beings”. Plants, trees, animals, insects, rocks, and the unseen forces of nature are all considered “Beings”. Indigenous Peoples regard for life is one that recognizes the value of ALL life of ALL “Beings”. We are all related to one another, as we all have the same Mother. Thus we are “ALL” responsible for maintaining good and harmonious relationships for our next seven generations.



Picture from Toronto Zoos Ways of Knowing Guide

Seven Grandfather Teachings



Humility
Dbaadendiziwin



Bravery
Aakwa'ode'ewin



Respect
Inaadendimowin



Love
Zaagidwin



Truth
Debwewin

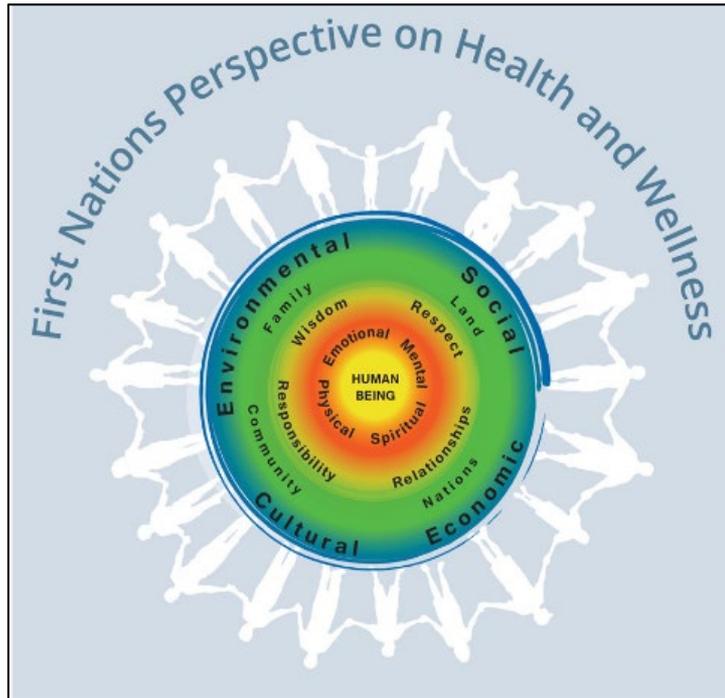


Honesty
Gwekwaadziwin



Wisdom
Nbwaakaawin

Traditional Ecological Knowledge



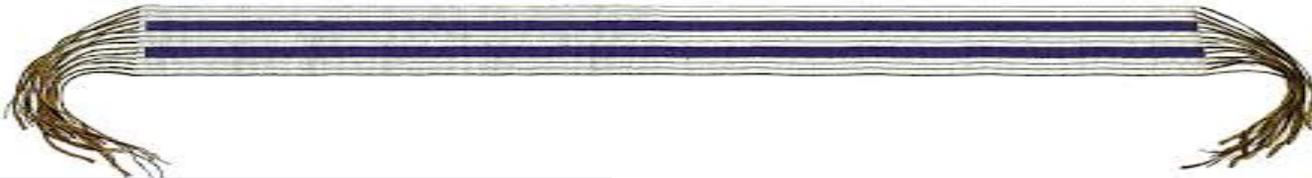
Traditional Ecological Knowledge (TEK) encompasses different ways of knowing which are culturally based, place specific, collective, holistic and also includes long periods of observation.

Western Science differs from TEK because there is a time limited observation process, science usually requires a quantitative validation, and it is often believed and considered valid once written down into textbooks whereas oral tradition is knowledge that is embedded within Indigenous ways of knowing.”

— The Ways of Knowing Guide

Seven Generations

GREAT GRANDMOTHER
GRANDMOTHER MOTHER
YOU
CHILD GRANDCHILD
GREAT GRANDCHILD

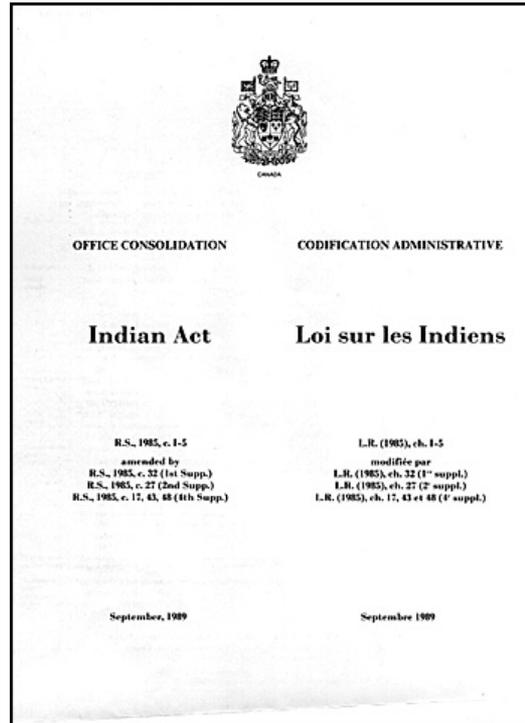


Indian Act

Indian Act - 1876

- *“The happiest future for the Indian race is absorption into the general population, and this is the object of the policy of our government. The great forces of intermarriage and education will finally overcome the lingering traces of native customs and traditions.”*

Duncan Campbell Scott
Department of Indian Affairs



The Indian Act (1876)

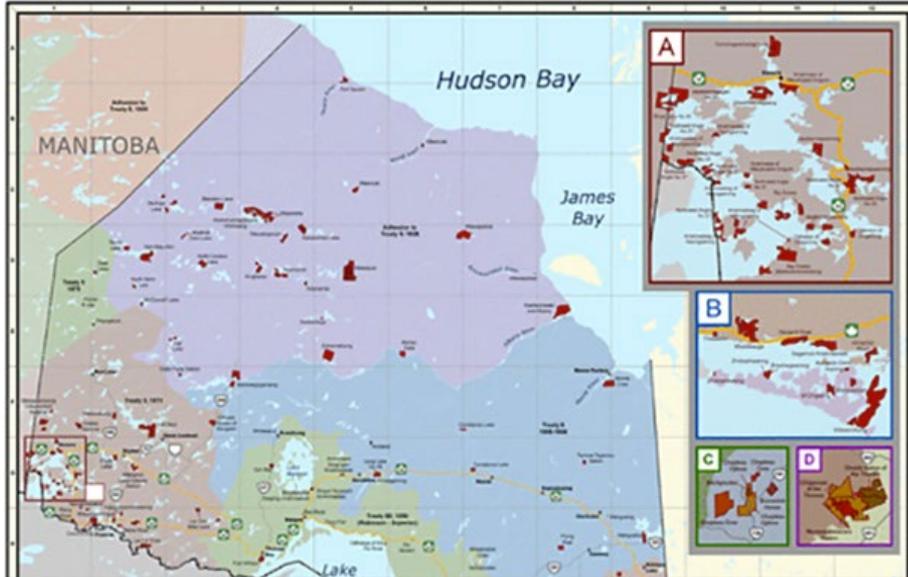
"A person means an individual other than an Indian."

➤ Section 12 of the Indian Act (1880).

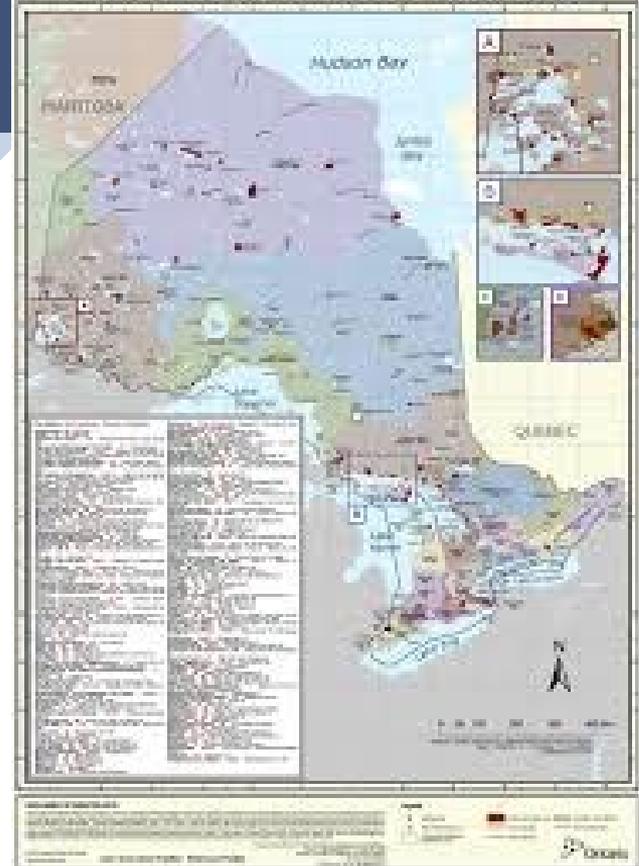


Reserve Systems
Indian Hospitals
Residential Schools

FIRST NATIONS AND TREATIES

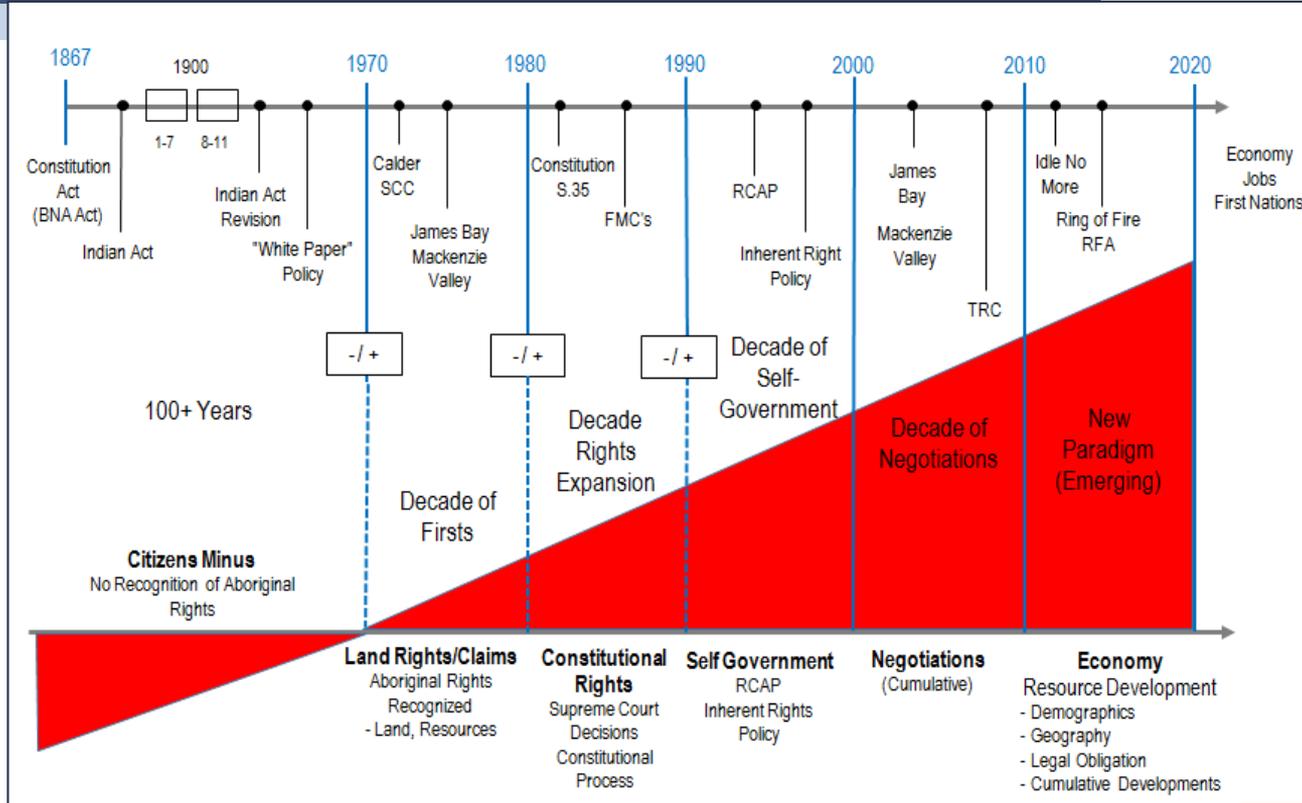


FIRST NATIONS AND TREATIES



Why is this Important in a Climate Change and Health Perspective ?

First Nations Are 'Trending'



Truth and Reconciliation



- **Heath 7 Calls to Action –**
- Including closing health gaps, recognizing the value of Aboriginal healing practices, solve jurisdictional disputes and educate and train all health care professionals in the True Histories

Climate Change Health Adaptation

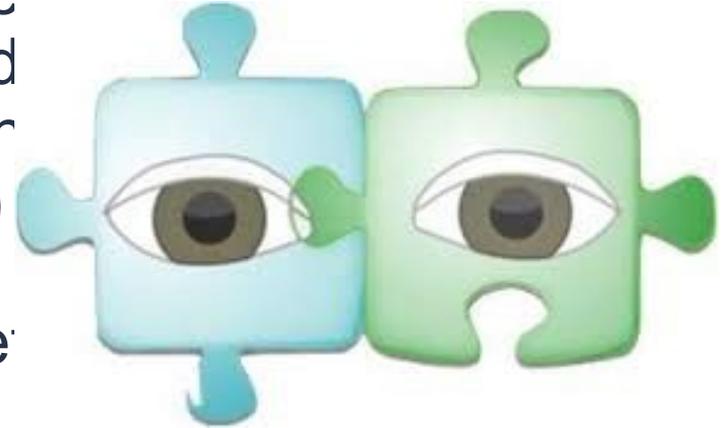


- *Beausoleil FN– Air Quality*
- *Curve Lake FN – Water Quality/Quantity*
- *Georgina Island FN – Vector Borne Diseases*
- *Rama FN - Extreme Temperatures*

Two Eyed Seeing

“TwoEyedSeeing”-

is learning to see from one eye with the strengths of Indigenous knowledge and of knowing, and from the other eye with strengths of Western (and/or scientific) knowledge and ways of knowing while learning to use both of these eyes together for the benefit of all”.



ETHICAL SPACE

Respecting the views of others and ensuring a cooperative spirit between Indigenous peoples and Western institutions



Best Practices

- **Trust-** is the foundation of meaningful engagement with Indigenous Peoples.
- **Research** is necessary to have an understanding of the community that public health authorities want to engage.
- **Respect** is vital to ensure that trust will be earned.
- **Recognition** of the rights of Indigenous Peoples and its representation in legislation.
- **Remember** colonialism has an impact and that it will take time for those impacts to be rectified.
- **Responsibility** is on the public health professionals to ensure that they are educated so that they can appropriately and adequately provide climate change adaptation health services to the Indigenous Peoples.

Take Home Message

It is IMPARATIVE

- IMPARITIVE to know the history of the Indigenous Peoples of Canada, understand the present situation and make impactful, meaningful decisions for the future.
- IMPARIVTIVE to include Traditional Ecological Knowledge into decisions and plans for the future in a meaningful way.
- IMPARITIVE that the legislation as well as programs that have been established be leveraged to move the inclusion of Indigenous voices forward and the concepts such as Two Eyed Seeing are being implemented when doing so.
- IMAPARITIVE the Public Health Practitioners take on the RESPONSIBILITY to ensure that they are educated on the history and culture of the Indigenous Peoples so that they can provide climate change adaptation health services appropriately and adequately now, and into the future.





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