Paradox of Wealth and Health: Resource Development & Social Determinants of Health

National Collaborating Centre for Environmental Health—April 18th, 2019
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Goal of Today’s Presentation

1. Some background and context
2. Sharing our learnings on:
   - the social health impacts of resource development and impacts
   - leading and promising practices for assessment and monitoring
3. Examples of our application of these learnings into practice
4. Where do we go from here

Speakers

Barb Oke
Regional Manager

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Technical Advisor
Northern Health Context

Rural Health Authority
~ 300,000 people
~ 600,000 km²
- Small service centres
- Large indigenous population
NH Context

Northern Health Communities

Photo credit: Cole Thorne

EA Projects

Source:www.projects.eao.gov.bc.ca/map

Photo credit: The Cumulative Impacts Research Consortium

Legend
- Town
- First Nation community
- Mines and Major projects
- Roads
- Agriculture
- Industrial activity 2006 to present
- Industrial activity pre-2006
- Intact forest loss since 2013
- Intact forest loss 2006-2013
- Intact forest 2016
- Parks and protected areas
- Regional district boundaries
- Watersheds

Northern British Columbia Overview

Change in Industrial land-use
"A disproportionate and inequitable burden of disease, illness, injury, and mortality is experienced in rural areas of BC."

Office of Health and Resource Development
Pipeline explosion near Prince George forces about 100 evacuations from First Nation community

Affordable housing at crisis level: City of Prince Rupert
By MARTINA PERRY
October 15, 2014 - Updated 11:15 AM

Fort St. John school enrolment booming along with economic activity
The city is in need of three new schools to satisfy demand, according to the school district

Pollution spill at Yellow Giant gold mine sparks investigation by Environment Canada

As LNG promise fades, property assessments decline in B.C.'s north
Fort Nelson 'praying for a miracle' as foreclosures stack up, realtor says

Should we trust polluters to protect our health and environment?
Will it be "the cleanest LNG in the world" or will there be acid rain and serious health impacts?

2017 officially B.C.'s worst ever wildfire season

Mine closures contribute to 60-70% jobless rate in Tumbler Ridge, says deputy mayor
Hundreds of people in the district of Tumbler Ridge lost their jobs in a rash of mine closures this year. But the town's exact rate...
What are the impacts?

Where’s the evidence?

Why does health care about housing, poverty, etc.

How do we assess these impacts?

What are leading practices?

What indicators should be used?

What data sources should we use?

How do we collect data?
Northern First Nations Caucus of Sub-regional Engagement:

Health and Resource Development Impacts

Fall 2015 Full Report

First Nations Health Authority
Health through wellness

ABSTRACT

Purpose: This report presents the results of a study examining the health and resource development impacts of resource extraction activities on northern communities in British Columbia. The study aimed to identify social determinants of health related to resource extraction and development across Northern BC.

Methodology: The study was conducted through a literature review, interviews with community members, and focus group discussions. The research was supported by the ECHO Network/Réseau ECHO.

Results: The study identified several social determinants of health related to resource extraction, including environmental degradation, economic instability, and cultural erosion. The research also highlighted the importance of community engagement and participatory decision-making in mitigating negative impacts of resource extraction.

Conclusion: The study concludes that increased community engagement and participatory decision-making are crucial in addressing the social determinants of health related to resource extraction and development across Northern BC.

Prepared by Melissa A. Zito
Prepared for Northern Provincial Health Services Authority
Version 1.0
January 2018

Towards more robust and locally meaningful indicators for monitoring health and the social determinants of health related to resource extraction and development across Northern BC.
SDOH Impacts Report: Methods

Phase 1
Hired consultant to conduct literature scan (grey & peer-reviewed articles)
- Commonly identified SDoH impacts of resource development in rural/remote communities
- Processes & measures to assess & monitor these

Phase 2
Report summarizing relevant findings
- Shorter report intended as a practical resource for impact assessment
- Provides background on population health & impact assessment processes in Canada
- Target audience: communities, industry, impact assessors and government representatives
Findings: SDoH Impacts

- Impact pathways can be direct/indirect; both positive & negative
- Affects individuals and communities in diverse ways
- Evidence of a wide range of social impacts w/ implications for health
  - Cumulative adverse social impacts occurring in rural/remote Canada (and around the world) & contributing to health inequities

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<th>Employment, income and income equities</th>
<th>Cultural practices &amp; connections to culture</th>
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<td>Life control, self determination and self governance</td>
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<td>Housing and cost of living</td>
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<td>Connections to lands and waters</td>
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Other Findings

- Predicting, measuring & monitoring SDoH impacts is complex and challenging
- Impacts materialize differently in different contexts – no “one-size-fits-all” approach or generalized list of indicators
- Numerous frameworks, tools, processes and guidance available to support the assessment of social-related health impacts
- Many knowledge gaps in this area
  - Lots of work is needed to better understand impacts, apply leading practices & develop guidelines for BC/Canada
Large Project Moves to Town
Brings Large Workforce
Provides Jobs
Long Shifts Away From Home
Increased Cost of Living
Financial Security
Training/Skills
Positive Health Outcomes
Poverty
Less Poverty
Less Stress
Stress/Isolation
Homelessness
Family Violence
Problematic Substance Use
Negative Health Outcomes
Poverty
Community Funding
Recreational Opportunities
Social Capital
Positive Health Outcomes
Project Leaves Town

Loss of Jobs & Unemployment

Reduced Community Investment

Demographic Changes

Closure of Civic Facilities & Services

Stress

Poverty

Negative Health Outcomes

Problematic Substance Use

Family Violence

Reduced Cost of Living

Affordable Housing

Positive Health Outcomes

Demographic Changes
Leading Practices for Assessments & Monitoring

- Meaningfully engage communities & incorporate local/traditional knowledge
- Capture positive & negative impacts
- Comprehensive baseline reflecting regional context over time
- Equity-based approach
  - Considering vulnerable populations, different genders & life stages, etc.
- Standardized indicators & indicators that reflect what is relevant/important to communities and subpopulations
- Consider Indigenous rights & human rights
- FPIC & OCAP principles
- Consider needs of future generations
  - Sustainable development principles
- Include both quantitative & qualitative information
- Iterative mechanisms
Socioeconomic & Health Indicators

Review of EA documents for selected major projects in the NH region (n=9) and grey literature (n=6)

- Considerable variability
- Limited transparency and clarity
- Strong reliance on desktop reviews
- Strong reliance on quantitative publicly available data

Many areas for future research, surveillance & guideline development, such as:
- Clear guidelines and criteria for selecting indicators
- Guidance on robust community engagement practices & social science methodologies for identifying indicators and collecting primary data
- Address gaps in available data (& improve granularity/frequency)
How we are using the learnings

Projects
- Individual project assessments (e.g. EAs, permitting)

Health In All Policies
- Government policies, regulations & initiatives, such as:
  - Local land use planning
  - Provincial initiatives
  - Federal initiatives

Building Awareness
- Newsletters and presentations
- Materials for communities
Summary of Impacts

Health Outcomes

- Mental health
- Injuries
- Communicable diseases
- Substance use and related harms
- Sexual health
- Personal health practices
- Chronic and acute illnesses
- Health equity

Ecological DOH
- Air Quality
- Water Quantity/Quality
- Food Quality/Quantity
- Soil and Sediment
- Climate Change/Adaptation
- Natural landscapes
- Biodiversity
- Ecosystem Services
- Geomorphology
- Noise

Social DOH
- Infrastructure/services
- Demographics
- Social relationships
- Crime and safety
- Family dynamics
- Education/training
- Lifestyles
- Displacement
- Traffic
- Racial/ethnic impacts
- Gender impacts
- Food security

Cultural DOH
- Cultural Practices
- Connection to culture
- Self determination
- Local and traditional foods and medicines
- Connections to lands/waters
- Traditional and local languages
- Intergenerational impacts

Economic DOH
- Income and distribution
- Economic systems
- Cost of living
- Poverty
- Housing
- Community investments
Leading Principles and Practices for Assessments & Monitoring

- Ongoing Evaluation
- Meaningful Community Participation
- Broad Range of Health Determinants
- Local & Traditional Knowledge
- Comprehensive Baseline
- Positive & Negative Impacts
- Qualitative & Quantitative Information
- Equity & Differential Impacts
- Standardized & Local Values/Indicators
- FPIC and OCAP Principles
- Indigenous Rights & Human Rights
- Cumulative, Contextual & Intergenerational
Impact Assessment Families and Protocols

Impact Areas
- ENVIRONMENT
  (Ecosystem integrity and function; biodiversity; non-human species)
- SOCIAL/COMMUNITY
  (Culture, Demography, Economy, Infrastructure and Services)
- HEALTH
  (Health + determinants for individuals and communities)

Assessment Families
- Environmental Impact Assessment
- Social Impact Assessment
- Health Impact Assessment

Example Protocols
- Regional Strategic Environmental Assessment; Cumulative Effects Assessment
- Hazard Assessment; Risk Assessment; Economic Impact Assessment; Sex and Gender Based Analysis
- Community Health Risk Assessment; Health Equity Impact Assessment; Public Health Assessment
• EA process, management plans and conditions
• Increased recognition of issues by industry, agencies and decision makers
• Themes increasingly being incorporated into policy
• Work being referenced
• Strong agency and research partnerships and collaborations
Some Challenges

- Limited understanding of impacts to the social, cultural and economic determinants of health
- Social impacts are very complex; affect individuals and communities in diverse ways
- Requires expertise and approaches that work across sectors
- Time/capacity
- Large variability in practice
- Limited standardization and guidance
- No professional body for health impact assessors
- Complex political climates
Next Steps & Linkages

- Related work: Environment Community Health Observatory (ECHO) Network
  - Strengthening intersectoral capacity to understand and respond to health impacts of resource development (4 regional cases across Canada)
  - Northern BC Regional Case research on intersectoral action (challenges and successes)

- Opportunities with BC EA Revitalization and federal CEAA review and other provincial and federal initiatives

- Need help from other influencers, policy makers, researchers, health and knowledge translation organizations, industry
Questions?

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