Yukon Data Sources

Table of Contents

Introduction **2**

Overview of Yukon data sources **3**

Council of Yukon First Nations *3*

Department of Health and Social Services *3*

Statistics Canada *4*

Education *6*

Summary of Yukon data sources **7**

INTRODUCTION

This document describes health and education data sources for SGIGs in Yukon. The data sources were identified based on their applicability to early childhood development (ECD) as part of the Early Childhood Development Case Study; however, they contain data on a broad range of health and education areas.

The main sources of data examined in the Early Childhood Development Case Study that are common across Canadian jurisdictions include:

- ***First Nations surveys:*** Children are a focus in a number of Indigenous-led surveys, resulting in a broad range of indicators and available data across health and social domains. Initially, a combined First Nations and Inuit-controlled health survey was carried out across the provinces in 1997. Subsequently, the First Nations Regional Health Survey (RHS) was designed by the First Nations information Governance Centre (FNIGC), and to date has been implemented three times (Phases 1 through 3) at five-year intervals. The main themes are: language; culture; injury; health and health care access; immunization; dental care; breastfeeding; food and nutrition; physical activity; education; personal wellness; household and living environment; child care arrangements; and, residential schools.

  FNIGC has also designed and administered First Nations Regional Early Childhood, Education and Employment (FNREEES) and First Nations Labour and Economic Development (FNLED) surveys across the provinces, and have a selection of indicators and data which may be relevant to ECD. There is overlap with some of the survey questions between these surveys and RHS (for example, the FNREES includes indicators on cultural programs, Aboriginal Head Start, health conditions, and alcohol consumption during pregnancy). To date, these surveys have each had one cycle of data collection.

- ***Hospitalization data:*** In Canada, hospitalization data is sent by provincial and territorial governments to the Canadian Institute for Health Information (CIHI), and is returned to each in a standard format in a database referred to as the Discharge Abstract Database (DAD). Therefore, similar hospital indicators are achievable across all jurisdictions, whether or not they are consistently reported.

- ***Physician fee-for-service (FFS) data:*** FFS is the dominant method of reimbursing physicians in Canada. Physician fee codes are largely similar in the provinces and territories, meaning that the same indicators are possible across jurisdictions. Note: these physician databases do not include physician services that are provided through non-FFS mechanisms (salaries, contracts), unless the jurisdiction has a process of accepting physician 'shadow billing'. Shadow billing is when a physician sends in fee codes for their services even though they are being reimbursed through other non-FFS mechanisms.

- ***Specialty provincial and territorial databases:*** There are some health sectors, such as perinatal care, where data is pulled into a common dataset from diverse areas including hospital and physician services. Other customized aggregations are the Health System Matrix (HSM) in BC, a population-based compilation of health service utilization data, and a relatively new database, the Population Grouper (PG), which is a database tool available from CIHI and provided to all provinces and territories. It summarizes all health conditions identified from inpatient, day surgery, emergency

department, continuing care, home care and physician claim administrative data into individual patient clinical profiles, and is useful in providing a macro level view of population health trends.

- ***Non-Insured Health Benefits (NIHB):*** This federally funded and administered program covers pharmacy, dental, vision, mental health and transportation benefits which are provided to eligible First Nations and Inuit. Indigenous Services Canada administers this program in Yukon.
- ***Canadian Chronic Disease Surveillance System:*** Incidence rates, prevalence rates and all-cause mortality are monitored nationally for approximately 30 chronic health conditions, clinical events and interventions.
- ***Education:*** The attendance of First Nation children in kindergarten and/or Aboriginal Head Start may be reported in the First Nations surveys mentioned above. Other education data sources found in the ministries of education or affiliated organizations in Yukon include:
    - Foundational skill assessment: students in Grades 3 or 4: reading, writing, numeracy (evaluated as not meeting, meeting, exceeding).

OVERVIEW OF YUKON DATA SOURCES

In Yukon, ECD data is held within the Council of Yukon First Nations (CYFN), Department of Health and Social Services (HSS), Statistics Canada (survey data), and the Department of Education. Only a general summary of this information is outlined here, as a formal data request process has not been initiated in Yukon.

Council of Yukon First Nations

CYFN is the regional representative for Yukon at the FNIGC, and acts as the data steward for the RHS, FNREEES and FNLED survey. Most YFN communities have participated in these surveys since they began in about 2003. The strong participation of the communities has resulted in a valuable source of data and indicators to track for YFNs. In addition to facilitating the survey work, CYFN also disseminates the survey results to each YFN.[1]

Department of Health and Social Services

The HSS receives administrative health data from the Yukon Hospital Corporation. The Hospital Corporation is part of the Yukon Health Information Network which is enabled through the territorial Health Information and Privacy Management Act (HIPMA) and allows data sharing with HSS.

The Hospital Corporation's emergency department collects Indigenous identifiers through self-identification, which transfers over to an inpatient admission, should this be necessary. This Indigenous identifier has a question about Indigeneity, followed by a question on registered Indian status.

To date, First Nations specific data stored at the HSS which results from self-identification processes may not be accessed by Yukon SGIGs. The YG cites HIPMA which prohibits such sharing, even for aggregate First Nations data across all governments and communities. There are no current regulatory authorities within

[1] Survey data is stripped of personal information as per the privacy agreement with survey participants.

SGIGs which cover data collection, access, analysis, distribution and storage, which could be used to provide a counter argument to the regulatory restrictions posed by HIPMA.

Any release of aggregate YFN data for the territory as a whole would require the development of a process and ISA among HSS, CYFN, each individual SGIG and the three non-self governing Nations. This has not yet been accomplished due in part to the current mistrust by Indigenous people over the historical use of their data. As well, the YG is in a learning mode in the practical application of OCAP®, as it represents a higher standard for data sharing than has been undertaken before.

Statistics Canada

Statistics Canada provides two sources of health data for Yukon SGIGs. Both are survey based and include questions on Aboriginal identity, using Statistics Canada's questions on Aboriginality and sub populations: first, whether the person identifies as North American Indian, Metis and Inuit, with further questions on whether the person is a treaty Indian or Registered Indian as per the *Indian Act*, and if yes, if the person is a member of an Indian band/First Nation.

The surveys do not include young children, and are variable with respect to the age of youth which are sampled.

1. The *Canadian Community Health Survey* (CCHS), now conducted annually by Statistics Canada, is a cross-sectional survey of Canadians aged 12 and above with sample size large enough for comparisons at the health region level. Even though it does not survey on reserve in the provinces, the territories are included, with sampling across 94% of the population of Yukon and 96% of the NWT in the 2020 version.[2] The territories historically, however, have not been included in the "special" CCHS surveys, such as those on mental health and nutrition.

   The CCHS is composed of a *common* content and an *optional* content. Individual provinces and territories can choose to opt in or out of a variety of optional modules, over and above the core variables that are subscribed to by all jurisdictions. This is to enable provincial/territorial/regional health authorities to focus on issues that are of particular significance to them. Since 2007, a *rapid response* content has been added, which is offered to special-interest groups on a cost-recovery basis to obtain national estimates of specific health issues.

   Selected measures of health status in the CCHS include self-rated health, health utility index, activity index, chronic conditions (e.g., diabetes, arthritis/rheumatism, back pain/problem, respiratory, cardiovascular, cancer), injuries and dental health, with optional content including mental health and suicidation.

   With respect to health determinants, the CCHS covers socio-economic status (education, employment, income, housing), obesity, diet/nutrition (fruit and vegetables), behaviors (physical activity, smoking, alcohol use) and social supports.

   Yukon Aboriginal participants are comparatively low in the CCHS and, as noted, exclude children less than 12 years of age. The remoteness of communities in the territories has impacted survey

[2] https://www23.statcan.gc.ca/imdb/p2SV.pl?Function=getSurvey&SDDS=3226

coverage. Statistics Canada splits the data collection in sampled communities (apart from the Territorial capitals) into halves for each component of the two-year cycles. The total number of First Nations respondents is averaging about 150 per cycle.

TABLE 1: CCHS YUKON RESPONDENTS

	First Nations	All Aboriginal	All Respondents
2015-2016	152	181	973
2017-2018	155	205	956

Data received from Statistical Information Service, Statistics Canada, February 22, 2021

2. The *Aboriginal Peoples Survey* (APS) has had five survey cycles, the most recent being in 2017. Although the APS did survey both on and off reserve First Nations in its inaugural cycle, the participation of on-reserve respondents was poor (15% of reserves), and thereafter, the focus narrowed to the off-reserve populations. Because FNIGC surveys are deployed in communities where First Nations are the majority population and on reserves, APS targets other communities and settlements. In the North, the 2012 APS excluded sampling within primarily First Nations communities, instead focusing on large cities, towns and unorganized settlements with mixed populations. Most recently in 2017, the APS only covered fourteen of the 36 census subdivisions (CSDs) in Yukon.

TABLE 2: 2017 APS COVERAGE IN YUKON BY CSD

CSD No.	Name of CSD
6001003	Watson Lake
6001004	Faro
6001009	Whitehorse
6001029	Dawson
6001044	Mt. Lorne
6001045	Yukon, Unorganized
6001046	Swift River
6001049	Destruction Bay
6001050	Stewart Crossing
6001052	Keno Hill
6001055	Ibex Valley
6001058	Marsh Lake

6001059	Macpherson-Grizzly Valley
6001060	Whitehorse, Unorganized

Since the 2006 APS survey, young children are no longer surveyed, and in the latest 2017 APS, the survey population started at 15 years of age. The participation of Yukon First Nations is slightly better than the CCHS, with 541 in the 2012 APS, down from a high of 1,716 a decade earlier.

The APS has evolved to include themes, and in the 2017 version, included transferable skills, practical training, use of information technology, Aboriginal language attainment, and participation in the Canadian economy, as well as the core indicators in the areas of labour, health and education. The themes of the 2017 APS are:

- Demographics
- Labour
- Education
- Skills
- Health
- Economic well-being
- Aboriginal-specific questions (e.g., residential school attendance, community involvement, Aboriginal languages).

In contrast, the Yukon RHS surveys in excess of 1,500 people. By content, the RHS has been the most inclusive of indicators addressing health status and social determinants of health.

Education

The Yukon school system uses voluntary self-identification to identify Indigeneity. The self-identification categories used by Education in its public reporting are: YFN, Other Aboriginal, and Non-First Nation. The public reporting of education data uses these categories. Cell suppression (population segment numbers less than 10) has been used to protect the personal and private information of the student, and is employed selectively, related to the total population being analyzed (i.e., some data is reported that is less than 10). For the data described below, results are published by YFNs (in aggregate), other Aboriginal and non-First Nations in the Yukon publication prepared annually: *How Are We Doing? Yukon First Nations Report.*[3]

This reporting is made possible via a data working group composed of Education and YFN representatives and under a comprehensive education data sharing agreement negotiated with the YFNs. This agreement may be customized to each SGIG – some SGIGs have data sharing agreements; for those that do not, Education works closely with them to handle their requests for data.

There are two kindergarten assessments that are routinely carried out and reported in Yukon. It should be noted that Education has received feedback from YFNs that these assessment instruments are not culturally sensitive.

[3] https://yukon.ca/sites/yukon.ca/files/edu/edu-how-are-we-doing-yfn-2018-19.pdf

1. *The Boehm Test of Basic Concepts Third Edition* (Boehm-3) is a comprehensive assessment for Kindergarten students that contains 50 basic concepts. The test can be used to identify students at risk for academic delays and to monitor progress. This test is administered twice a year: once in the fall, between October to November; and once in the spring, from April to May. There are three categories of assessment: no concern, needs investigation, and classroom intervention. Referrals to speech and language services are also noted as is child development centre attendance.

2. *The Early Years Evaluation – Teacher Assessment* (EYE-TA) provides a systematic framework that teachers can use to structure their frequent observations and informal assessments. The skills assessed by the EYE-TA are instructionally relevant and are a snapshot of the students at that time. The EYE-TA assesses the following five aspects of early child development that are closely related to school preparedness and emergent literacy skills: awareness of self and environment; social skills and approaches to learning; cognitive skills; language and communication; and physical development. The assessment has three levels: Tier 1 - can achieve the tasks in the developmental area; Tier 2 - experiencing some difficulty; Tier 3 - experiencing significant difficulty.

Foundational assessments

In addition to the kindergarten indicators, the YG uses the same Foundational Assessment for Grades 4 and 7 as for BC – assessment of reading, writing and numeracy. The assessment levels are: on track or extending; emerging; and unknown.

Graduation rates

The Grade 12 Graduation Rate is the percentage of students who were active grade 12 fulltime / halftime in (1) Dogwood[4] and (2) Adult graduation programs, enrolled at Yukon public schools, and who successfully graduated. It does not include students on the School Completion (Evergreen Certificate) Program, which is a special program that does not follow the Dogwood model.

Other databases

YG partnered with the Canadian Index of Wellbeing project (based at the University of Waterloo) and the Office of the Chief Medical Officer of Health to undertake a comprehensive study of wellbeing in Yukon in 2020, based on a core set of indicators with Yukon regional adaptations. This report will be available in early 2021.[5]

SUMMARY OF YUKON DATA SOURCES

Table 3 provides a summary of the holdings discussed above, their strengths and limitations, as well as data stewardship and data access considerations.

[4] The Dogwood diploma is the standard high school Certificate of Graduation in Yukon, following the BC system.
[5] https://yukon.ca/en/news/territory-wide-community-wellbeing-survey-launched-week

TABLE 3: OVERVIEW OF YUKON DATABASES WITH FIRST NATIONS ECD HEALTH & EDUCATION DATA

Data set	Method & Population	Strengths	Limitations	Data steward & data access considerations
Discharge abstract database	• Collection of Indigenous self identification data at point of hospital contact (e.g., emergency department and inpatient admissions)	• High reliability • Ability to compare against non-First Nation population • Potential for First Nations specific analyses	• Indigenous self identification is voluntary • Currently, data not available to Yukon IGs, either in aggregate (territory wide) or as separate IGs/Nations.	• Yukon Hospital Corporation is the data steward • Data access will require the development of a process and ISA among HSS, CYFN, each individual IG and the three non-self-governing Nations.
Population Grouper	• Summarizes 227 health conditions identified from inpatient, day surgery, emergency department, continuing care, home care and physician claims administrative data	• High reliability • Ability to compare against non-First Nation population • Potential for First Nations specific analyses	• Indigenous self identification is voluntary • Data not available to Yukon IGs, either in aggregate (territory wide) or as separate IGs/Nations.	• Yukon Hospital Corporation is the data steward • Data access will require the development of a process and ISA among HSS, CYFN, each individual IG and the three non-self-governing Nations.

Canadian Community Health Survey	• Cross-sectional survey of Canadians 12+ yrs. Includes Yukon First Nations • Self-rated health, health utility index, activity index, chronic conditions, injuries and dental health, with optional content, e.g., mental health and addictions. • Also socio-economic indicators, obesity, diet, lifestyle behaviours and social supports	• Longitudinal survey with an annual cycle • High reliability • Ability to identify Yukon First Nations in aggregate • Direct comparison with non-Indigenous respondents	• Low sampling of Yukon First Nations, approximately 150 per cycle • Excludes children to age 11 • Territories surveyed over two years for each cycle • Low number of Indigenous territorial survey respondents impacts accuracy/reliability of results, reproducibility, and ability to stratify by geography.	• Statistics Canada is the data steward • Data access via: Research Data Centres Program, post-secondary Data Liberation Initiative, custom data tabulations, YG extracts.
Aboriginal Peoples Survey	• National survey of social and economic conditions of First Nations living off reserve, Inuit and Métis 15+ years. • Themes (2017): demographics, labour, education, skills, health, economic wellbeing, residential school experience, Aboriginal languages	• Longitudinal • Indigenous-specific with breakout by First Nations, Inuit and Métis • Broad range of covered topics	• Low sampling of Yukon First Nations, approximately 540 in 2017 • 2017 cycle covered fourteen of the 36 census subdivisions (omitted most First Nations communities) • Excludes children to age 14 • Low number of Indigenous territorial survey respondents impacts accuracy/reliability of results,	• Statistics Canada is the data steward • Data access via: Research Data Centres Program, post-secondary Data Liberation Initiative, custom data tabulations.

			reproducibility, and ability to stratify by geography.	
Health Benefits Program: dental care, pharmacy use, vision care and mental health	• Administrative data covering clients, claims and expenditures	• High reliability • Longitudinal data • Comprehensive, reliable • Timely analysis available • Can provide First Nations community specific analyses	• Excludes First Nations individuals who have third party extended health coverage	• First Nations and Inuit Health Branch is the data steward.
RHS (Regional Health Survey) **FNREEES (First Nations Regional Early Childhood, Education, and Employment Survey)**	• First Nations survey with randomly selected participants • Sub-set of First Nations with status living in community • Wide range of health, social determinants, traditional/cultural, economic, education and employment indicators	• Strengths-based focus • Community-specific information available for participating Nations • All YFNs participated in latest RHS • Some (quasi) longitudinal information available • Higher regional reliability from most recent round of RHS	• Survey based, therefore not complete coverage of population • Excludes First Nations living outside of communities • Low data reliability at more local levels, particularly for FNREEES and FNLED • Issues with access due to small cell size for certain data points and/or	• CYFN is the data steward

FNLED (First Nations Labour and Employment Development Survey)			geographies of interest • Limited opportunities to compare to non-First Nations population • Cell size suppression issues at local / community level • RHS only survey with longitudinal data: comparability issues (in different sampling approaches)	
Kindergarten Assessments: Boehm Test of Basic Concepts & Early Years Evaluation	• Indigenous self identification: reporting as YFN, Other Aboriginal and Non-YFN. • Boehm: 50 concepts allowing assessment of progress and/or academic delays • EYE: five aspects of ECD closely related to school preparedness	• Longitudinal • YFN comparison with non-First Nations and Other Aboriginal	• Some selected cell suppression <10 (e.g. rural; Other Aboriginal categories). • Concerns re: lack of cultural sensitivity • Not all IGs have data sharing agreements allowing access to data on their kindergarten children • Low numbers of children can result in rate variability from year to year.	• Yukon Dept Education is the data steward • Comprehensive data sharing agreement is available for all YFNs (some IGs have these agreements) • Results for YFN in aggregate published annually

Foundational Skills	• Foundational skills assessment within schools (grades 4 and 7) • Indigenous self identification: reporting as YFN, Other Aboriginal and Non-YFN.	• Longitudinal • High reliability • YFN comparison with non-First Nations and Other Aboriginal	• Some selected cell suppression <10 (e.g. rural; Other Aboriginal categories). • Not all IGs have data sharing agreements	• Yukon Dept Education is the data steward • Comprehensive data sharing agreement is available for all YFNs (some IGs have these agreements) • Results for YFN in aggregate published annually
High School Completion	• Indigenous self identification: reporting as YFN, Other Aboriginal and Non-YFN. • Graduation rates (provincial graduation requirements/dogwood diploma)	• Longitudinal • High reliability • YFN comparison with non-First Nations and Other Aboriginal	• Some selected cell suppression <10 (e.g. rural; Other Aboriginal categories). • Not all IGs have data sharing agreements	• Yukon Dept Education is the data steward • Comprehensive data sharing agreement is available for all YFNs (some IGs have these agreements) • Results for YFN in aggregate published annually
Post Secondary Education	• Indigenous Services Canada (ISC) First Nations profiles with special tabulations from the 2006 and 2016 census: Trades/ apprenticeship or other non-university certificate; University certificate below bachelor level; University certificate bachelor or higher	• First Nations specific • Readily available	• Values rounded to the nearest five • Only two years available • Completions only, not participation in post secondary programs • Subject to general census limitations on participation by First Nations	• Publicly available on ISC website