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# **Live Birth User Guide Documentation 2021**

#### **Document Control Record**

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## 1. NLCHI Live Birth System Introduction

#### 1.10verview

This document has been prepared to inform users of the NLCHI Live Birth System about the data, the system, and known data quality issues which may impact the use or interpretation of the data.

This document is reviewed annually and revised as needed to ensure it remains current and useful. Feedback from readers is welcomed. Suggestions for future updates can be sent to:

Manager, Clinical and Administrative Standards Newfoundland and Labrador Centre for Health Information 70 O'Leary Avenue St. John's, NL A1B 2C7 Phone 709 752-6000

#### 1.2 Purpose of Dataset

This dataset is used primarily for information requests and health system planning. It is also used to cross reference other datasets for quality assurance and verification purposes.

The Data and Information Services (DaIS) Department at the Centre provides live birth statistical information and reports to government agencies, health care managers, clinicians, etc. to assist in making evidence-based decisions.

### 1.3 Population Reference Coverage

Under the Vital Statistics Act (2009) all live births occurring within the province of Newfoundland and Labrador must be reported to Vital Statistics within a 48-hour period. All health care facilities and midwives in private practice in Newfoundland and Labrador submit completed LBN forms to Vital Statistics in compliance with the Act.

### 1.4 Reporting Period

The reporting period for live births is the calendar year, January 1st to December 31st.

#### 1.5 Years Available

Data is available for the years 1992-2021.

# 2. Description of Dataset

# 2.1 Data Dictionary/Elements

Data elements collected on the LBN form are those identified by the Live Birth/Mortality Systems Advisory Committee as required data by one or more stakeholders. Of the total elements on the LBN form, a select number of fields are entered into the dataset. The Live Birth System Data Dictionary contains the list of data elements, element details and the reference years, and can be found in Appendix 1.

Appendix 2 contains a list of active data elements available in the de-identified live birth file.

In 2021, two new data elements were added to the data dictionary: c\_mcp and CW\_PAT\_ID. The MCP number for the infant (c\_mcp) is used to create a unique patient identifier for the infant (CW\_PAT\_ID). From 1996 onwards, the child's MCP is pulled from the Provincial Discharge Abstract Database (PDAD) and is updated annually to add the child's MCP number to the identifiable data file.

#### 2.2 Reference Material

Reference materials available from the DaIS include:

- Copies of the LBN form(s), 1994-2021.
- 2002-2021 annual NLCHI Live Birth Notification Form Reference Manual, which is a reference document for those responsible for completing the notification.
- Live birth edit information.

# 3. Data Quality Processes

#### 3.1 Edit and Correction Process

The NLCHI Live Birth System edit process consists of a series of checks which have been designed to automatically flag data elements that are incomplete, illegible or contain incorrect data.

External edits are designed to detect where entered data is potentially incorrect, inaccurate, or incomplete; and are returned to the reporting facility for resolution (correction and/or completion) and resubmitted to the Centre. These edits are processed quarterly (after every 1,200 records are data entered) and after year-end data is received (March).

Further internal edits are processed annually after the external edits have been corrected. The internal edits consist of logic and derived fields; steps such as sorting facilities within the applicable regional health authority and reviewing the validity of the mother's age.

Adjustments to element values may be required during the edit process, for example, changing the previous year to current year, to calculate mother's age at date of delivery. This type of adjustment ensures accuracy when sorting data into age categories.

After both external and internal edits are completed a validation of MCP numbers is performed including a recheck for duplicated MCP numbers.

The correction process is scheduled to be completed by mid-April to allow for the longitudinal file to be available by May 1<sup>st</sup> for the previous year's data. If a facility has not returned edit corrections in a timely manner, there may be a delay in meeting the target.

Due to the COVID-19 pandemic, and the 2021 Cyber Outage, edits for 2021 data were not sent to the RHAs for correction. This resulted in a higher-than-normal number of "unknown" responses.

Most fields were not impacted; the following table shows those fields that saw an increase in unknown values of more than 1%.

Fields with more than 1% increase in "Unknown" values from previous year

Variable Name	Field Name	Percent Increase in Unknown Values from previous year (%)
lstyle1	Substance Use During Pregnancy	3.6
support1	Support Available – Husband / Partner	7.0
support2	Support Available -Living With Parents / Other Supports	7.0
support3	Support Available -Lives Alone	7.0
pncbegan	Prenatal Care Began At (# Weeks)	3.5
mr_none	Medical Risk Factors	3.4
anemia	Anemia (< 100G/L)	3.4
hyper_c	Hypertension (Chronic)	3.4
hyper_p	Hypertension (Associated with Pregnancy)	3.4
uti	UTI (Urinary Tract Infection)	3.4
iugr	IUGR (Intrauterine Growth Restriction)	3.4
iddm	Pre-existing Diabetes	3.4
violence	Violence During Pregnancy	3.4
depress	Depression	3.4
isoimmun	Isoimmunization	3.4
gestdiab	Gestational Diabetes	3.4
hemmorr	Antepartum Hemorrhage	3.4
mr_other	Other Medical Risk Factor	3.4
delpres	Delivery Presentation	1.6
gestaged	Gestational Age Completed - Days	3.2
apgar1	Apgar Score 1	1.3
apgar5	Apgar Score 5	1.3
attend	Designation of Attendant	4.1

# 3.2 Data Quality Results

The table below displays the annual results of data quality measures for the NLCHI Live Birth database (based on total number of errors):

	Results of Data Quality Measures for the NLCHI Live Birth System											
Year	Total #	Total #	Total #	Total #	Total #	Outstanding	Number of					
	Records	Errors	Corrections	Corrections	Outstanding	Error Rate	Records with					
	Edited	Identified	Using	Using	Errors After		one or more					
			Internal	External	Facility		outstanding					
			Resources	Resources	Corrections		errors					
2011	4499	1000	354	589	57	1%	19					
2012	4409	1851	549	1245	57	1%	48					
2013	4573	1098	418	665	15	1.3%	15					

		Results of D	ata Quality Mea	asures for the N	LCHI Live Birth	System	
Year	Total #	Total #	Total #	Total #	Total #	Outstanding	Number of
	Records	Errors	Corrections	Corrections	Outstanding	Error Rate	Records with
	Edited	Identified	Using	Using	Errors After		one or more
			Internal	External	Facility		outstanding
			Resources	Resources	Corrections		errors
2014	4615	N/A	N/A	N/A	N/A	N/A	N/A
2015	4496	1694	397	1022	275	16.2%	169
2016	4489	1641	484	935	222	13.5%	197
2017	4125	1607	867	740	2	0.05%	2
2018	4022	1047	108	938	1	0.03%	1
2019	3768	2798	115	2683	1	0.4%	1
2020	3646	2771	126	2645	5	0.2%	5
2021	3915	3025	3018	0	7	0.23%	7

# 4 Significant Data Quality History

#### 4.1 Methodological/Revision History

It is acknowledged that the data elements collected and entered in the dataset may not have been updated since the late 1980s. From 1992 to 2002 there is little documentation available to identify revision history.

From 1991 to 1999 Vital Statistics began their registration numbers with 1001; since 2000 the numbering system was changed to begin with the Fiscal Year.

Since 2002, the LBN form has undergone significant changes to data elements collected and the minimum dataset entered in the NLCHI Live Birth System.

The following versions of Statistics Canada SGC codes were used for social coding:

1991 to 2007 SGC version 1991 was used. 2007 to 2009 SGC version 2001 was used. 2007 to 2011 SGC version 2006 was used. 2012 to 2016 SGC version 2011 was used. 2017 to 2021 SGC version 2016 was used.

Appendix 1 lists all new, mandatory, revised, and inactive data elements for each year and accepted values from 1992 onwards.

# 5. Data Quality Limitations

## 5.1 Contributors Impact on Data Quality

Whenever it is discovered that Vital Statistics inadvertently omitted a form, or a health care facility failed to report a birth, revisions are retrospectively added to the longitudinal file.

Historically, the only reference source available to assist with quality assurance activities was the Vital Statistics paper form, which is also the source of origin. Since 2009, DalS staff has been

authorized to access the provincial Client Registry and the MCP Beneficiary Registration Database to cross reference key administrative and demographic data elements to improve data quality.

A significant limitation is the incomplete edit corrections submitted by facilities. Edits are returned in which some elements have several data fields marked as unknown. The Centre does not challenge resubmissions, consequently, edit returns with unknown values are accepted; therefore, some data elements may have a higher than expected 'unknown' result.

Rarely will a facility refuse to comply with edit corrections; however, it is not uncommon for a late response thus delaying the completion time frame of mid-April.

From 2004-2006 the number of data elements keyed into the NLCHI Live Birth System was significantly reduced. By 2007 this was reversed, and a more comprehensive minimum dataset was entered into the system.

Due to significant investments in quality assurance processes in recent years, the file years of 2002-current are more accurate than those of previous years.

In 2014-15 there were significant reductions in the number of staff resources in Data Quality and Standards. This resulted in significant delays in coding, data entry and editing of the Live Birth System. Additionally, it became increasingly difficult to obtain responses from some facilities with the editing process. These combined challenges resulted in a higher-than-normal outstanding error rate. Process changes were undertaken and many of these challenges have been mitigated, which will result in improved outstanding error rates in the future.

# 6. Data Access, Storage, Retrieval and Privacy

#### 6.1 Privacy

The Centre's Secondary Uses Committee reviews applications for the use of record level live birth data for research and data quality purposes. A strong component of this committee is adherence to privacy and confidentiality legislation.

It is the responsibility of all users of live birth data to ensure complete confidentiality of the information. It is expected that all users adhere to polices outlined by the Centre.

Researchers are granted access to de-identified data only unless their research specifically requires identifiable data.

# 7. Comparisons to Other Holdings

# 7.1 NLCHI Holdings

Comparability across years in the Live Birth System and with other Centre datasets is possible using common data elements such as the mother's MCP number. In the Provincial Discharge Abstract Database (PDAD), the mother's MCP number provides access to other identifiers such as chart number that can be used to link to the infant.

# 7.2 Other Holdings Comparability between Statistics Canada and Vital Statistics live birth databases is possible using the live birth registration number.

# Appendix 1: NLCHI Live Birth System Data Dictionary

**Note:** Items in grey are variables which are no longer collected and/or valid. Variable Names preceded by an asterisk (\*) are identifiable fields and have been removed from the de-identified dataset.

		NLCHI LIVE BIRTH SYSTEM			1	T
Variable Name	Label	Value/Example	Туре	Length	Applicable Year	Comments
Year	Year of Birth	Value: YYYY	Numeric	8	1992-2021	Derived from Registration # up to 2016
W_PAT_ID	DW Mother's Unique Patient Identifier		Numeric	8	1992-2021	
CW_PAT_ID	DW Infant's Unique Patient Identifier		Numeric	8	1996-2021	Added in 2021
DID_KEY	De-identified Unique Patient Identifier		Numeric	8	1992-2021	
reg_num	Infant's Registration Number	Year-Province - Accession Number YYYY/NL/1234 NL = 10 for Newfoundland and Labrador	Numeric	8	1992-2021	
*c_name	Infant's Surname, Full Given Name(s)	Full name of infant, if available	String	765	1992-2021	No punctuation used e.g.; O'Leary is entered as OLeary
c_sex	Infant's Sex	1 = Male 2 = Female 98 = Unknown 99= System Missing	Numeric	8	1992-2021	
c_dob	Infant's Date of Birth (MM/DD/YYYY)	MM/DD/YYYY	Date	8	1992-2021	
*c_mcp	Child's HCN Number	None	String	12	1996-2021	This variable is kept in Master File, but not in the de-identified Longitudinal file.
c_locbir	Locality of Birth	1 = Hospital 2 = Private Home 3 = Other Health Care Facility (Clinical) 4 = Other (e.g., Ambulance) 98 = Unknown 99= System Missing	Numeric	8	2001-2021	
c_locoth	Other Location (Specify)	Specify other location of birth	String	60	2002-2021	
hospital	Hospital Name	Name of Facility where birth occurred.	String	765	1992-2021	Hospital name auto- populated on data entry.
hospcode	Hospital Code	Institution number assigned to the facility with appropriate alpha accompaniment e.g., H60 = born at Carbonear General Hospital e.g., R01=Born at home but admitted to HSC.	String	18	1992-2021	C Clinic E En Route H Hospital R Residence
c_locat	Place of Occurrence – City / Town	City/Town where birth occurred	String	120	1992-2021	Derived from hospital code birthtown in 3M
c_plccde	SGC code for Place of Occurrence	SGC for city/town of occurrence	String	21	1992-2021	Derived from hospital code

		NLCHI LIVE BIRTH SYSTEM	DATA DICTION	NARY	•	
Variable Name	Label	Value/Example	Туре	Length	Applicable Year	Comments
*c_admnum	Infant's Hospital Admit Number	Admission # assigned by facility	String	33	1996 2002-2006	Removed from De-ID file
*c_chanum	Infant's Hospital Chart Number	Chart number as recorded on LBN form – format is facility-driven.	String	36	2002-2021	Removed from De-ID file
crelcode	Infant's Religious Denomination	0 = None 1= Anglican 2 = Roman Catholic 3 = United Church 4 = Pentecostal 5=Salvation Army 6=Seventh Day Adventist 7=Mormon 8=Jewish 9=Apostolic Faith 10=Plymouth Brethren 11=Baptist 12=Jehovah Witness 13=East Indian 14=Moravian 15=Christian Scientist 16=Other 98= Unknown 99=System Missing	Numeric	8	1992-2001	
*m_name	Mother's Surname, Full Given Name(s)	Mother's full name	String	135	1992-2021	No punctuation used e.g.; O'Leary is entered: OLeary Removed from De-ID file
*m_maiden	Mother's Maiden Name	Mother's maiden name	String	180	1992-2021	No punctuation used e.g. O'Leary is entered: OLeary Removed from De-ID file
*m_mcp	HCN Number	None	String	12	1991-2021	This variable is kept in Master File, but not in the de-identified Longitudinal file.
*mcp_validated	Validated MCP Number	MCP # checked and verified by NLCHI	Numeric	12	2009-2021	New for 2009, but all MCP #s in Longitudinal File validated also. Removed from De-ID file.
*m_admnum	Mother's Hospital Admission Number	Admission number generated by health care facility	String	36	1992-2006	Removed from De-ID file
*m_chanum	Mother's Hospital Chart Number	Chart number as recorded on LBN form.	String	36	1994-2021	Removed from De-ID file
m_dob_derived	Mother's DOB Derived from MCP (MM/DD/YYYY)	Mother's Date of Birth from validated MCP	Date	10	1992-2021	Derived from validated MCP
m_age_derived	Mother's Age Derived from MCP		Numeric	8	1992-2021	Derived from validated MCP
m_age_derived1	Mother's age derived from validated MCP # (to 1 decimal)		Numeric	8 +1 decimal	1992-2021	Derived from validated MCP
m_age_derived2	Mother's age derived from validated MCP # (to 1 decimal)		Numeric	8 +1 decimal	1992-2021	Derived from validated MCP
m_age_text	Mother's Age (Text)	Mother's age stored as a String	String	8	2017 - 2021	
m_brcode	Mother's Birthplace Residence Code	Code used to identify Mother's birthplace	String	9	1992-2002	
*maddres1 *maddres2 maddres3	Mother's Address	Completed if permanent residence is different than mailing address.	String	75 75 150	1992 - 2002	

	_	NLCHI LIVE BIRTH SYSTEM	1 DATA DICTION	IARY		
Variable Name	Label	Value/Example	Туре	Length	Applicable Year	Comments
maddres4				75		
m_pcode	Postal Code	Mother's postal code for place of residence	String	21	1992-2021	
m_addcod	Mother's Address Code	Mother's current home residence code (7-digit SGC code)	Numeric	8	1992-2021	
sgc	SGC Code	Shortened SGC code for Mother's residence 4-5 digits.	Numeric	8	1992-2021	Derived from mother's residence code.
hth_auth	Regional Health Authority	1 = Eastern 2 = Central 3 = Western 4 = Lab/Grenfell 9 = Out/Province 98 = Unknown 99= System Missing	Numeric	8	1992-2021	Derived from SGC
commbrd	Health & Community Services Board	1=St. John's 2=Eastern 3=Central 4=Western 5=Labrador 6=Grenfell 9=Out of Province 98=Unknown 99=System Missing	Numeric	8	1991-2016	Derived from SGC Removed from De-ID file
instbrd	Institutional Health Board	1=St. John's 2=Avalon 3=Central East 4=Central West 5=Grenfell 6=Labrador 7=Peninsulas 8=Western 9=Out of Province 98=Unknown 99=System Missing	Numeric	8	1991-2016	Derived from SGC Removed from De-ID file
m_marsta	Legal Marital Status of Birth Mother	1 = Never Married 2 = Legally Married and Not Separated 3 = Legally Married but Separated 4 = Divorced 5 = Widowed 98= Unknown 99= System Missing	Numeric	8	1992-2021	
laparent	Living Arrangements of Birth Parents	1 = Living Together as a Couple 2 = Not Living Together as a Couple 98 = Unknown 99= System Missing	Numeric	8	2001-2021	
mrparent	Birth Parents Legally Married to Each Other	1=Yes 2=No 98=Unknown 99=System Missing	Numeric	8	2002-2003 2006	

		NLCHI LIVE BIRTH SYSTEM			1	1
Variable Name	Label	Value/Example	Туре	Length	Applicable Year	Comments
m_educ	Mother's Education	1 = Has not Graduated High School 2 = Graduated High School 3 = Beyond High School 4 = College/University Degree 98 = Unknown 99= System Missing	Numeric	8	2002-2021	
meduc	Mother's Education (Actual number of years)	Mother's education – Actual number of years	Numeric	8	1992-2001	
*f_name	Father's Name	See comment	String	135	1996-2002	No punctuation used e.g. O'Leary is entered: OLeary Removed from De-ID file
f_dob	Other Parent's Date of Birth (MM/DD/YYYY)	MM/DD/YYYY	Date	8	1992-2002 2006-2021	*in 2009, variable label changed to "Other Parent"
f_age	Other Parent's Age	Other Parent's Age as recorded on LBN	Numeric	8	1992-2002 2006-2021	Derived from f_dob
f_age1	Other Parent's Age (+ 2 decimal places)	Other Parent's Age to one decimal place	Numeric	8 +1 decimal	1992-2002 2006-2021	Derived from f_dob
f_age2	Other Parent's Age (+ 1 decimal place)	Other Parent's Age to one decimal place	Numeric	8 +1 decimal	1992-2002 2006-2021	Derived from f_dob
f_brcode	Father's Birth Residence Code	Code used to identify Father's birthplace	String	9	1992-2002	
feduc	Father's education (Actual number of years)	Father's education – actual number of years.	Numeric	8	1992-2001	
live	Number of children born to this mother (including this delivery) Live born	Enter numeric value for number of live born children ever born to this mother, which includes current delivery	Numeric	8	1992-2021	
still	Number of children born to this mother (including this delivery) Stillborn	Enter numeric value for number of stillborn children ever born to this mother, which includes current delivery	Numeric	8	1992-2021	
lastdate	Date of Last Delivery	MM/DD/YYYY	Date	8	1992-2021	
livestil	Last Delivery Live or Still Birth	1=Live 2=Still	Numeric	8	1992-2001	
prevcsec	Prior C-Section	1 = Yes 2 = No 98= Unknown 99= System Missing	Numeric	8	2002-2021	
lstyle1	Substance Use During Pregnancy	1 = Substance Use 2 = None 98 = Unknown 99= System Missing	Numeric	8	2002-2021	
Istyle2	Substance Use During Pregnancy: DRUGS	1 = Yes 2 = No 98 = Unknown 99= System Missing	Numeric	8	2002-2021	
Istyle3	Substance Use During Pregnancy: UNKNOWN	1 = Yes 2 = No 98 = Unknown 99= System Missing	Numeric	8	2002-2021	
Istyle4	Substance Use During Pregnancy: ALCOHOL	1 = Yes 2 = No 98 = Unknown 99= System Missing	Numeric	8	2002-2021	
lstyle5	Substance Use During Pregnancy: SMOKING	1 = Yes 2 = No 98 = Unknown 99= System Missing	Numeric	8	2002-2021	

		NLCHI LIVE BIRTH SYSTE	M DATA DICTION	IARY	_	
Variable Name	Label	Value/Example	Туре	Length	Applicable Year	Comments
lstyle6	Number of Cigarettes / Day	Enter numeric value 98 = Unknown 99= System Missing	Numeric	8	2002-2018	
support1	Support Available – Husband / Partner	1 = Yes 2 = No 98 = Unknown 99 = System Missing	Numeric	8	2002-2021	
support2	Support Available - Living With Parents / Other Supports	1 = Yes 2 = No 98 = Unknown 99= System Missing	Numeric	8	2002-2021	
support3	Support Available - Lives Alone	1 = Yes 2 = No 98 = Unknown 99= System Missing	Numeric	8	2002-2021	
pncspec	Prenatal Care Provider	1 = None 2 = OB/GYN 3 = Other Specialty 4 = Family Doctor/GP 5 = RN 6 = Midwife 7 = NP 98 = Unknown 99 = System Missing	Numeric	8	2002 2006-2019	In 2020, new fields were added to support the selection multiple choices for this field (see pnc_famdoc_gp, pnc_rn, pnc_midwife, pnc_obsgyn, pnc_np, pnc_none, pnc_other)
other1 other2 other3	Specialist for Prenatal Care  – Other	Specify "Other"	String	60	2002, 2006 -2021	
pnc_famdoc_gp	Prenatal Care Provider – Family Doctor/GP	1 = Yes 98 = Unknown 99 = System Missing	Numeric	8	2020-2021	Added in 2020 to allow for multiple selections
pnc_rn	Prenatal Care Provider – RN	1 = Yes 98 = Unknown 99 = System Missing	Numeric	8	2020-2021	Added in 2020 to allow for multiple selections
pnc_midwife	Prenatal Care Provider – Midwife	1 = Yes 98 = Unknown 99 = System Missing	Numeric	8	2020-2021	Added in 2020 to allow for multiple selections
pnc_obsgyn	Prenatal Care Provider – OBS/GYN	1 = Yes 98 = Unknown 99 = System Missing	Numeric	8	2020-2021	Added in 2020 to allow for multiple selections
pnc_np	Prenatal Care Provider – NP	1 = Yes 98 = Unknown 99 = System Missing	Numeric	8	2020-2021	Added in 2020 to allow for multiple selections
pnc_none	Prenatal Care Provider – None	1 = Yes 98 = Unknown 99 = System Missing	Numeric	8	2020-2021	Added in 2020 to allow for multiple selections
pnc_other	Prenatal Care Provider – Other (specify)	- cyclem massing	String	75	2020-2021	Added in 2020 to allow for multiple selections
speccare	Specialist for Prenatal Care	1 = Yes 2 = No 98 = Unknown 99 = System Missing	Numeric	8	1992-2001	
trimest1	Trimester 1	1 = Yes 2 = No 98 = Unknown 99 = System Missing	Numeric	8	1992-2001	
trimest2	Trimester 2	1 = Yes 2 = No 98 = Unknown 99 = System Missing	Numeric	8	1992-2001	

		NLCHI LIVE BIRTH SYSTEN	I DATA DICTION	IARY		
Variable Name	Label	Value/Example	Туре	Length	Applicable Year	Comments
trimest3	Trimester 3	1 = Yes 2 = No 98 = Unknown 99 = System Missing	Numeric	8	1992-2001	
pncbegan	Prenatal Care Began At (# Weeks)	01-43	Numeric	8	2002 2006-2021	
pnctrime	Prenatal Care Began At (Trimester)	1 = None 2= First Trimester 3= Second Trimester 4= Third Trimester 98= Unknown 99= System Missing	Numeric	8	1992-2001	
provnum	Physician Provider Number	6 digit Provider number	Numeric	8	1992-2001	
famdis1	Familial Diseases - YES/NO	1= None 2= Yes 98 = Unknown 99 = System Missing	Numeric	8	1992-2001	
famdis2	Familial Diseases - Deafness	1 = Yes 2 = No 98 = Unknown 99 = System Missing	Numeric	8	1992-2001	
famdis3	- Other	1 = Yes 2 = No 98 = Unknown 99 = System Missing	Numeric	8	1992-2001	
famicd1 famicd2 famicd3 famicd4 famicd5 famicd6	Familial Diseases ICD Code(s)	Code used to identify familial disease	String	12	1992-2001	
numdeliv	Total Number of Infants in THIS Delivery	1 = Single Birth 2 = Twins 3 = Triplets 4 = Quadruplets 5 = Quintuplets 99 = System Missing	Numeric	8	1992-2021	
numstill	Number of Stillborn in <u>this</u> delivery	Left blank if none; or populated with numeric value if stillbirth occurred during this delivery.	Numeric	8	1992-2003 2006-2021	
multiple	Multiple Birth - Order	0 = Not a multiple birth 1=1st 2=2 <sup>nd</sup> 3=3 <sup>rd</sup> 4=4 <sup>th</sup> 98 = Unknown 99 = System Missing	Numeric	8	1992-2002 2006-2021	
medterm	Was this birth due to medical termination?	1 = Yes 2 = No 98 = Unknown 99 = System Missing	Numeric	8	2001 2008 - 2021	
mr_none	Medical Risk Factors	1 = Medical Risk Factors- Existed 2 = No Medical Risk Factors 98 = Unknown 99 = System Missing	Numeric	8	1992-2021	Checkbox for "None" – if checked, it means no medical risk factor existed.
anemia	Anemia (< 100G/L)	1= Yes 2 = No 98 = Unknown	Numeric	8	1992-2021	

Variable Name	Label	Value/Example	Туре	Length	Applicable	Comments
					Year	
		99 = Systems Missing				
hyper_c	Hypertension (Chronic)	1= Yes				
		2 = No	Numeric	8	2002 -2021	
		98 = Unknown	Numeric	Ö	2002 2021	
		99 = Systems Missing				
hyper_p	Hypertension (Associated	1= Yes				
	with Pregnancy)	2 = No 98 = Unknown	Numeric	8	2002 -2021	
		99 = Systems Missing				
uti	UTI (Urinary Tract Infection)	1= Yes				
	(0,	2 = No				
		98 = Unknown	Numeric	8	2002 -2021	
		99 = Systems Missing				
iugr	IUGR (Intrauterine Growth	1= Yes				
· ·	Restriction)	2 = No	Niconarda	0	1002 2021	
		98 = Unknown	Numeric	8	1992 -2021	
		99 = Systems Missing				
iddm	Pre-existing Diabetes	1= Yes				
		2 = No	Numeric	8	1992 -2021	
		98 = Unknown				
	\". \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	99 = Systems Missing			1	
violence	Violence During Pregnancy	1= Yes 2 = No				
		98 = Unknown	Numeric	8	2002 -2021	
		99 = Systems Missing				
depress	Depression	1= Yes				
GCP. C00	2 cp. css.c	2 = No				
		98 = Unknown	Numeric	8	2002 -2021	
		99 = Systems Missing				
isoimmun	Isoimmunization	0 = No				
		1= Yes	Numeric	8	1992 -2021	
		2 = Unknown	Numeric	G	1332 2021	
		99 = Systems Missing			-	
gestdiab	Gestational Diabetes	1= Yes 2 = No				
		98 = Unknown	Numeric	8	2003 -2021	
		99 = Systems Missing				
hemmorr	Antepartum Hemorrhage	1= Yes				
		2 = No	Niconarda		8 1992 -2021	
		98 = Unknown	Numeric	8		
		99 = Systems Missing				
mr_other	Other Medical Risk Factor	1= Yes				
		2 = No	Numeric	8	1992 -2021	
		98 = Unknown				
mrficd1	Medical Risk Factors	99 = Systems Missing ICD Codes to identify risk	+		+	mrficd5 added in 2016
mrficd2	(Other): ICD code(s)	factor			1	mineus added in 2010
mrficd3	( = 3 )	· · · · ·	String	24	1992 -2021	
mrficd4					1	
mrficd5						
mrficd1txt	Medical Risk Factors				2017-2021	
mrficd2txt	(Other): ICD code(s) text		6	70	1	
mrficd3txt mrficd4txt			String	78	1	
mrficd4txt mrficd5txt					1	
mr_clari	Medical Risk Factors (Other)	C = Clarification Required	+		†	Variable deleted after edit
0.011	CLARIFY	2 S.a cation nequired	C+vin =	า	1	process.
			String	3	1	
					1	
		4 1/				
infect	Infectious Disease	1= Yes 2 = No	Numeric	8	2002	

		NLCHI LIVE BIRTH SYSTEM	DATA DICTION	IARY		
Variable Name	Label	Value/Example	Туре	Length	Applicable Year	Comments
		99 = Systems Missing				
tox_hyp	Toxaemia or Hypertension	1= Yes 2 = No 98 = Unknown 99 = Systems Missing	Numeric	8	1992-2001	
labtype	Labour Type	1= Spontaneous Labor 2 = Induced Labour 98 = Unknown 99 = Systems Missing	Numeric	8	2012 - 2016	Removed From De-ID file
labour	Labour Onset	1= Yes 2 = No 3 = Induction 98 = Unknown 99 = Systems Missing	Numeric	8	1995-2021	
spontan	Spontaneous Labour	1= Yes 2 = No 98 = Unknown 99 = Systems Missing	Numeric	8	1994-2021	Derived from 'labour onset'
augment	Labour Augmented After Onset	1= Yes 2 = No 98 = Unknown 99 = Systems Missing	Numeric	8	2003-2007	
induced	Induced Labour	1= Yes 2 = No 98 = Unknown 99 = Systems Missing	Numeric	8	1992-2021	Derived from 'labour onset'
vbac	Vaginal Birth After C/Section Offered	1= Yes 2 = No 98 = Unknown 99 = Systems Missing	Numeric	8	1994-2001	
labcomp	Complications of Labour YES/NO	1=Yes 2=No 98 = Unknown 99=System Missing	Numeric	8	1992-2001	
compicd1 compicd2 compicd3 compicd4	Complications of Labour ICD	ICD Codes to identify complications of labour	String	15	1992-2001	
delpres	Delivery Presentation	1 = Vertex 2 = Breech 3 = Other 98 = Unknown 99 = System Missing	Numeric	8	1994-2021	
dpresoth	Delivery Presentation Other (Specify)	Specify other type of delivery presentation	String	90	2002-2005	
dpresicd	Delivery Presentation (Other): ICD	ICD code for "Other" type of delivery presentation	String	6	2002-2021	
dpresicdtxt	Delivery Presentation (Other): ICD text		String	78	2017-2021	
dprescla	Delivery Presentation 'Other" clarify	C = Clarification Required	String	3		Variable deleted after edit process.
dmethod	Method of Delivery	1= Vaginal Spontaneous 2= Vaginal Assisted 3= C/Section 98 = Unknown 99 = System Missing	Numeric	8	1992-2021	
csecicd1 csecicd2 csecicd3 csecicd4	C / S Indications: ICD	ICD code to provide reason for C/Section	String	24	1994-2021	

Variable Name	Label	NLCHI LIVE BIRTH SYSTEN Value/Example		Length	Applicable	Comments
variable Name		value/Example	Туре	Length	Year	Comments
csecicd1txt csecicd2txt csecicd3txt csecicd4txt	C / S Indications: ICD Text		String	78	2017-2021	
dmethcla	Delivery Method "Other" - Clarify	C = Clarification Required	String	3		Variable deleted after edit process.
interven	Interventions During Delivery	1= Yes 2 = No 98 = Unknown 99 = Systems Missing	Numeric	8	2002-2021	
lowforcp	Interventions - Low Forceps	1= Yes 2 = No 98 = Unknown 99 = Systems Missing	Numeric	8	2002-2011 2017 -2021	
midforcp	Interventions - Mid Forceps	1= Yes 2 = No 98 = Unknown 99 = Systems Missing	Numeric	8	2002-2011 2017 -2021	
vacuum	Interventions - Vacuum Extraction	1= Yes 2 = No 98 = Unknown 99 = Systems Missing	Numeric	8	2002-2021	
episiot	Interventions - Episiotomy	1= Yes 2 = No 98 = Unknown 99 = Systems Missing	Numeric	8	2002-2021	
medicat	Interventions - Medications	1= Yes 2 = No 98 = Unknown 99 = Systems Missing	Numeric	8	2002-2009	
ic_other	Other Interventions	1= Yes 2 = No 98 = Unknown 99 = Systems Missing	Numeric	8	2008 - 2011 2014 - 2021	In 2010, this field used for Other Interventions only.
icicd1 icicd2 icicd3 icicd4	Complication (Other): ICD Code	ICD code to identify 'Other' Complication(s).	String	24	2008-2021	
icicd1txt icicd2txt icicd3txt icicd4txt	Complication (Other): ICD Text	ICD code to identify 'Other' Complication(s).	String	78	2017 - 2021	
comp	Complications of Delivery	1= Yes 2 = No 98 = Unknown 99 = Systems Missing	Numeric	8	2010 -2021	
tear	Interventions - Tear	1= Yes 2 = No 98 = Unknown 99 = Systems Missing	Numeric	8	2002-2021	
teardeg	Tear (Specify degree)	1=1 <sup>st</sup> 2=2 <sup>nd</sup> 3=3 <sup>rd</sup> 4=4 <sup>th</sup> 98 = Unknown 99=System Missing	Numeric	8	2003-2021	2010 onwards, only 3 <sup>rd</sup> & 4 <sup>th</sup> degree tears are collected.
tearicd	Tear (Specify degree): ICD	None	String	18	2002	
postpart	Post-partum Hemorrhage	1= Yes 2 = No 98 = Unknown 99 = Systems Missing	Numeric	8	2010 -2021	

Variable Name	Label	NLCHI LIVE BIRTH SYSTEM			Applicable	Commonto
variable Name	Labei	Value/Example	Туре	Length	Applicable Year	Comments
comp_oth	Complication of Delivery- Other	1= Yes 2 = No 98 = Unknown 99 = Systems Missing	Numeric	8	2010 -2021	
shoulder_dystoci a	Complication of Delivery – Shoulder Dystocia	1= Yes 2 = No 98 = Unknown 99 = Systems Missing	Numeric	8	2021	
ic_clari	Intervention – Complication 'Other' –clarify	C = Clarification Required	String	3		Variable deleted after edit process.
gestagew	Gestational Age Completed - Weeks	Value 01-43 98 = Unknown 99 = Systems Missing	Numeric	8	1992-2021	
gestaged	Gestational Age Completed - Days	Value 1-6 98 = Unknown 99 = Systems Missing	Numeric	8	2002 2007-2021	
gaconfrm	G/A confirmed by antenatal U/S?	1=Yes 2=No	Numeric	8	2002	
gagew_us	Gestation Age - Weeks (based on U/S)	Value 01-43	Numeric	8	2003-2006	
gaged_us	Gestation Age - Days (based on U/S)	Value 1-6	Numeric	8	2003-2006	
gagew_lp	Gestation Age - Weeks (based on LMP)	Value 01-43	Numeric	8	2003-2006	
gaged_lp	Gestation Age - Days (based on LMP)	Value 1-6	Numeric	8	2003-2006	
gestbase	Gestational Age Based on US or LMP	1=U/S 2=LMP 98=Unknown 99=System Missing	Numeric	8	2002-2013	
birthwgt	Birth Weight (grams)	Weight in Grams	Numeric	8	1992-2021	9999 default value for missing birth weight
AGA	Appropriate size for Gestational Age	1= Yes 2 = No 98 = Unknown 99 = Systems Missing	Numeric	8	1992-2021	Derived from Gestational Age & Birth Weight
SGA	Small for Gestational Age	1= Yes 2 = No 98 = Unknown 99 = Systems Missing	Numeric	8	1992-2021	Derived from Gestational Age & Birth Weight
LGA	Large for Gestational Age	1= Yes 2 = No 98 = Unknown 99 = Systems Missing	Numeric	8	1992-2021	Derived from Gestational Age & Birth Weight
SFGA	Size for Gestational Age	1 = Appropriate for GA 2 = Small For GA 3 = Large for GA 98 = Unknown 99 = Systems Missing	Numeric	8	1992-2021	Derived from Gestational Age & Birth Weight
apgar1	Apgar Score 1	Value 01-10 98 = Unknown 99 = Systems Missing	Numeric	8	1992-2021	
apgar5	Apgar Score 5	Value 01-10 98 = Unknown 99 = Systems Missing	Numeric	8	1992-2021	
apgar10	Apgar Score 10	Value 01-10	Numeric	8	1992-2001	
apgar15	Apgar Score 15	Value 01-10	Numeric	8	1992-2001	
neocond	Neonatal Conditions / Birth Injuries noted at Birth	1 = Yes 2 = No 98 = Unknown	Numeric	8	1992-2001	

		NLCHI LIVE BIRTH SYSTE	M DATA DICTION	IARY		
Variable Name	Label	Value/Example	Туре	Length	Applicable Year	Comments
		99 = System Missing				
neoicd1	Neonatal Conditions-ICD	ICD code to identify condition	String	4	1992-2001	
neoicd2	Neonatal Conditions: ICD	ICD code to identify condition	String	4	1992-2001	
anomaly	Congenital Anomalies - Yes/No	1 = Yes 2 = No 98 = Unknown 99 = System Missing	Numeric	8	1992-2003, 2008-2018	
cephalus	Anencephalus	1= Yes	Numeric	8	1992-2001	
spinabif	Spina Bifida	1= Yes	Numeric	8	1992-2001	
hydrocef	Hydrocephalus	1= Yes	Numeric	8	1992-2001	
cranio	Craniofacial	1 = Yes 2 = No 98 = Unknown 99 = System Missing	Numeric	8	1992-2001 2017-2018	This was changed in 2013 to add variables 1, 2, and 98
fetalalc	Fetal Alcohol Syndrome	1= Yes	Numeric	8	1992-2001	
fistula	T E Fistula	1= Yes	Numeric	8	1992-2001	
hypospad	Hypospadis-Epispadias	1= Yes	Numeric	8	1992-2001	
reducdef	Reduction Deformity	1= Yes	Numeric	8	1992-2001	
atresia	Rectal/Anal Atresia/Stenosis	1= Yes	Numeric	8	1992-2001	
omphal	Omphalocele-Gastroschisis	1= Yes	Numeric	8	1992-2001	
chromo	Chromosomal Anomalies	1= Yes	Numeric	8	1992-2001	
chromo1	Chromosomal Anomalies ICD-9	ICD code to identify condition	String	6	1992-2001	
chromo2	Chromosomal Anomalies ICD-9	ICD code to identify condition	String	6	1992-2001	
chromo3	Chromosomal Anomalies ICD-9	ICD code to identify condition	String	6	1992-2001	
otherca	Other Congenital Anomalies	1= Yes	Numeric	8	1992-2001	
anomicd1 anomicd2 anomicd3	Other Congenital Anomalies ICD codes	ICD codes to identify conditions	String	18	1992-2001	
ntd	NTD (Neural Tube Defect)	1=Yes 2=No 4= Diagnosed Prenatally 5= Suspected at Birth 98=Unknown 99 = System Missing	Numeric	8	2002 2008-2018	This was changed in 2013 to add variables 1, 2, and 98
ntd_sp	NTD (Neural Tube Defect) (Specify)	Specify condition	string	120	2009	
heart	Congenital Heart Defect	1=Yes 2=No 4= Diagnosed Prenatally 5= Suspected at Birth 98=Unknown 99 = System Missing	Numeric	8	2002 2008-2016	This was changed in 2013 to add variables 1, 2, and 3.
hearticd	Congenital Heart Defect - ICD-10	ICD code to identify condition	String	18	2002	
heart_sp	Congenital Heart Defect (Specify)	Specify condition	String	120	2008-2009	
cran	Craniofacial	1=Yes 2=No 4= Diagnosed Prenatally 5= Suspected at Birth 98=Unknown 99 = System Missing	Numeric	8	2002 2008-2016	This was changed in 2013 to add variables 1, 2, and 3.
cranicd	Craniofacial - ICD-10	ICD code to identify condition	String	8	2002	
	Craniofacial (Specify)	Specify condition				

Madable No.	1,-1,-1	NLCHI LIVE BIRTH SYSTEM			Amalianti	Cam
Variable Name	Label	Value/Example	Туре	Length	Applicable Year	Comments
gi	Gastrointestinal	1=Yes 2=No 4= Diagnosed Prenatally 5= Suspected at Birth 98=Unknown 99 = System Missing	Numeric	8	2008-2018	This was changed in 2013 to add variables 1, 2, and 98
chd	Congenital Heart Defect	1 = Yes 2 = No 98 = Unknown 99 = System Missing	Numeric	8	2016-2018	This was changed in 2013 to add variables 1, 2, and 98
gi_sp	Gastrointestinal (Specify)	Specify condition	String	120	2008-2009	
msk	Musculoskeletal	1=Yes 2=No 4= Diagnosed Prenatally 5= Suspected at Birth 98=Unknown 99 = System Missing	Numeric	8	2002 2008-2018	This was changed in 2013 to add variables 1, 2, and 98
mskicd	Musculoskeletal - ICD-10	ICD code to identify condition	String	18	2002	
msk_sp	Musculoskeletal (Specify)	Specify condition	String	1180	2008-2009	
gu	Genitourinary	1=Yes 2=No 4= Diagnosed Prenatally 5= Suspected at Birth 98=Unknown 99 = System Missing	Numeric	8	2002 2008-2018	This was changed in 2013 to add variables 1, 2, and 98
guicd	Genitourinary - ICD-10	ICD code to identify condition	String	6	2002	
gu_sp	Genitourinary (Specify)	Specify condition	String	40	2009	
chrom	Chromosomal	1=Yes 2=No 4= Diagnosed Prenatally 5= Suspected at Birth 98=Unknown 99 = System Missing	Numeric	8	2002 2008	This was changed in 2013 to add variables 1, 2, and 98.
chromicd	Chromosomal - ICD-10	ICD code to identify condition	String	18	2002	
chrom_sp	Chromosomal (Specify)	Specify condition	String	120	2008-2009	
othcong	Other Congenital Anomalies	1= Diagnosed Prenatally 2= Suspected at Birth	Numeric	8	2002	
othicd1	Other Congenital Anomalies ICD-10	ICD code to identify condition	String	18	2002	
anomcon1	Other Congenital Anomaly Confirmed (Specify)	ICD codes to identify conditions	String	120	2008	
provider	Delivered By (Provider Code)	Physician's provider number	String	18	1992-2002	
attend	Designation of Attendant	1= Medical Doctor 2= Nurse 3= Midwife 5= Other 98=Unknown 99= System Missing	Numeric	8	2001-2021	
attendot	Designation of Attendant Other (Specify)	Completed if "Other" selected for Designation of Attendant	String	765	2001-2021	
forceps	Interventions – Forceps	0=No 1=Yes 98=Unknown 99=System Missing	Numeric	8	2002-2021	New field for 2012 to replace mid and low forceps
comments	Comments	Comments/Clarifications by HRA or DBA	String	765	1994 1997-2000 2011-2021	Free text Removed from DeID file

		NLCHI LIVE BIRTH SYSTEM	DATA DICTION	NARY		
Variable Name	Label	Value/Example	Туре	Length	Applicable Year	Comments
m_mcp2	Mother's corrected MCP Number	Mother's Health Care Number if corrected or revised	Numeric	8	1999-2001	If at time of delivery or if a revised MCP number was issued since delivery. Removed from De-ID file
m_dob	Date of Birth	Mother's Date of Birth MM/DD/YYYY	Date	8	1992-2020	This variable is kept in Master File, but no longer appears in Longitudinal File.
m_age	Mother's Age at Delivery	Age of Mother at time of delivery	Numeric	8	1992-2021	In 2010: auto-calculated on data entry. Not in De-ID file
m_age1	Mother's age truncated		Numeric	8	2012-2021	Not in De-ID file
m_age2	Mother's age To 1 decimal place	Mother's age to 1 decimal	Numeric	8 +1 decimal	1992-2021	Not in De-ID file
ntdicd	NTD - ICD-10	ICD code to identify condition	String	18	2002	
town	Mother's Town of Residence	GANDER	String	45	2017-2021	
province	Mother's Province of Residence	NEWFOUNDLAND AND LABRADOR	String	26	2017-2021	
country	Mother's Country of Residence	CANADA	String	44	2017-2021	
BMI_25_29	Maternal Risk Factor – Pre- pregnancy Body Mass Index 25-29	1 = Yes 2 = No 98 = Unknown 99 = Missing	Numeric	8	2017-2021	
BMI_30	Maternal Risk Factor – Pre- pregnancy Body Mass Index 30	1 = Yes 2 = No 98 = Unknown 99 = Missing	Numeric	8	2017-2021	
OOP_HCN	Out of Province Indicator	1 = OOP	Numeric	8	2017-2021	

# Appendix 2: Active Fields for 2021 De-identified Live Birth File

Variable Name	Label
DID_KEY	De-identified Unique Patient Identifier
W_PAT_ID	DW Mother's Unique Patient Identifier
CW_PAT_ID	DW Infant's Unique Patient Identifier
reg_num	Infant's Registration Number
year	Year of Birth
birthwgt	Birth Weight (grams)
c_sex	Infant's Sex
c_dob	Infant's Date of Birth (MM/DD/YYYY)
c_locbir	Locality of Birth
c_locoth	Other Location (Specify)
hospital	Hospital Name
hospcode	Hospital Code
c_locat	Place of Occurrence – City / Town
c_plccde	SGC code for Place of Occurrence
m_dob_derived	Mother's DOB Derived from MCP (MM/DD/YYYY)
m_age_derived	Mother's Age Derived from MCP
m_age_derived1	Mother's age derived from validated MCP # (to 1 decimal)
m_age_derived2	Mother's age derived from validated MCP # (to 1 decimal)
m_pcode	Postal Code
m_addcod	Mother's Address Code
sgc	SGC Code
hth auth	Regional Health Authority
m_marsta	Legal Marital Status of Birth Mother
laparent	Living Arrangements of Birth Parents
m educ	Mother's Education
f dob	Other Parent's Date of Birth (MM/DD/YYYY)
<del>_</del> f_age	Other Parent's Age
f age2	Other Parent's Age (+ 1 decimal place)
live	Number of children born to this mother (including this delivery) Live born
still	Number of children born to this mother (including this delivery) Stillborn
lastdate	Date of Last Delivery
prevcsec	Prior C-Section
lstyle1	Substance Use During Pregnancy
lstyle2	Substance Use During Pregnancy: DRUGS
Istyle3	Substance Use During Pregnancy: UNKNOWN
Istyle4	Substance Use During Pregnancy: ALCOHOL
•	
lstyle5	Substance Use During Pregnancy: SMOKING

Variable Name	Label
support2	Support Available -Living With Parents / Other Supports
support3	Support Available -Lives Alone
other1	Specialist for Prenatal Care – Other
other2	Specialist for Prenatal Care – Other
other3	Specialist for Prenatal Care – Other
pncbegan	Prenatal Care Began At (# Weeks)
numdeliv	Total Number of Infants in <u>THIS Delivery</u>
numstill	Number of Stillborn in <i>this</i> delivery
multiple	Multiple Birth – Order
medterm	Was this birth due to medical termination?
mr_none	Medical Risk Factors
anemia	Anemia (< 100G/L)
hyper_c	Hypertension (Chronic)
hyper_p	Hypertension (Associated with Pregnancy)
uti	UTI (Urinary Tract Infection)
iugr	IUGR (Intrauterine Growth Restriction)
iddm	Pre-existing Diabetes
violence	Violence During Pregnancy
depress	Depression
isoimmun	Isoimmunization
gestdiab	Gestational Diabetes
hemmorr	Antepartum Hemorrhage
mr_other	Other Medical Risk Factor
mrficd1	Medical Risk Factors (Other): ICD code(s)
mrficd2	Medical Risk Factors (Other): ICD code(s)
mrficd3	Medical Risk Factors (Other): ICD code(s)
mrficd4	Medical Risk Factors (Other): ICD code(s)
mrficd5	Medical Risk Factors (Other): ICD code(s)
labour	Labour Onset
spontan	Spontaneous Labour
induced	Induced Labour
delpres	Delivery Presentation
dpresicd	Delivery Presentation (Other): ICD
dmethod	Method of Delivery
csecicd1	C / S Indications: ICD
csecicd2	C / S Indications: ICD
csecicd3	C / S Indications: ICD
csecicd4	C / S Indications: ICD
interven	Interventions During Delivery
lowforcp	Interventions - Low Forceps

Variable Name	Label
midforcp	Interventions - Mid Forceps
vacuum	Interventions - Vacuum Extraction
episiot	Interventions – Episiotomy
ic_other	Other Interventions
icicd1	Complication (Other): ICD Code
icicd2	Complication (Other): ICD Code
comp	Complications of Delivery
tear	Interventions – Tear
teardeg	Tear (Specify degree)
shoulder_dystocia	Complication of Delivery – Shoulder Dystocia
postpart	Post-partum Hemorrhage
comp_oth	Complication of Delivery-Other
icicd3	Complication (Other): ICD Code
icicd4	Complication (Other): ICD Code
gestagew	Gestational Age Completed – Weeks
gestaged	Gestational Age Completed – Days
AGA	Appropriate size for Gestational Age
SGA	Small for Gestational Age
LGA	Large for Gestational Age
SFGA	Size for Gestational Age
apgar1	Apgar Score 1
apgar5	Apgar Score 5
attend	Designation of Attendant
attendot	Designation of Attendant Other (Specify)
forceps	Interventions – Forceps
f_age1	Other Parent's Age (+ 2 decimal places)
town	Mother's Town of Residence
province	Mother's Province of Residence
country	Mother's Country of Residence
mrficd1txt	Medical Risk Factors (Other): ICD code(s) text
mrficd2txt	Medical Risk Factors (Other): ICD code(s) text
mrficd3txt	Medical Risk Factors (Other): ICD code(s) text
dpresicdtxt	Delivery Presentation (Other): ICD text
csecicd1txt	C / S Indications: ICD Text
csecicd2txt	C / S Indications: ICD Text
csecicd3txt	C / S Indications: ICD Text
csecicd4txt	C / S Indications: ICD Text
icicd1txt	Complication (Other): ICD Text
icicd2txt	Complication (Other): ICD Text
icicd3txt	Complication (Other): ICD Text

Variable Name	Label
icicd4txt	Complication (Other): ICD Text
mrficd4txt	Medical Risk Factors (Other): ICD code(s) text
mrficd5txt	Medical Risk Factors (Other): ICD code(s) text
m_age_Text	Mother's Age (Text)
OOP_HCN	Out of Province Indicator
BMI_25_29	Maternal Risk Factor – Pre-pregnancy Body Mass Index 25-29
BMI_30	Maternal Risk Factor – Pre-pregnancy Body Mass Index 30
pnc_famdoc_gp	Prenatal Care Provider – Family Doctor/GP
pnc_rn	Prenatal Care Provider – RN
pnc_midwife	Prenatal Care Provider – Midwife
pnc_obsgyn	Prenatal Care Provider – OBS/GYN
pnc_np	Prenatal Care Provider – NP
pnc_none	Prenatal Care Provider – None
pnc_other	Prenatal Care Provider – Other (specify)

# Appendix 3: 2021 Form

	abredon	rvice NL, Vital Statistics Division	1. Registration	on number	10	1 1	ı	1
L	abrador LIVE BIRTH NOT	IFICATION 2021		De	partment U	Jse Only		_
Priva	icy Notice					Vita	Statistics I	
	onal Information contained on this form is collected under the author of the vital event records, and provide extracts or search notice				ı	Digital Governr	P.O. B	ox 8
	have any questions about the collection or use of this information					St. John 8,	NL Canada / T (709) 7	29-
		or Registration of Birth (Required w	vithin 48 ho	urs of de				
	2. Surname	Full Given Name(s)			3. Sex		Unkno	0140
Ł	Date of Birth MMDDYYYY 5. Locality of Birth					IVI L	Понин	UWI
INFANT	Hospital Privat	te Home Other Health Care Facility U	nknown 🔲 0	Other (Spec	ify) <table-cell-rows></table-cell-rows>			
_	6. Hospital Hospital C	7. Place of Occurrence City / Town	8. Infant's	Admit#	9	9. Infant's Ho	spital Char	t #
	10. Surname, Full Given Name(s)		on Name and In	itiala				
	To. Surname, Full Given Name(s)	11. Maide	en Name and In	ittais				
	12. Health Care Number 13. Date of	of Birth MMDDYYYY 14. Age at Delivery 15. Birth	Place (Provinc	e/Territory	-Country i	f Outside Ca	anada)	
				1				
	16. Usual Home Address	SGC Code Pos	stal Code	Telepho	one Numbe	er 		
œ	17. Complete Mailing Address				/	Post	tal Code	_
MOTHER								
MO	18. Legal Marital Status of Birth Mother							
	☐ Never Married ☐ Legally Married and Not		Divorce		dowed	Unknow	n	
	19. Living Arrangements Living Together as a Co of Birth Parents		lationship of Bir larried to Each		of this deliv	ery Yes	5	
	□ Not Living Together as a		larried to Laur	Other		☐ No	Unk	nav
			ge or University	Degree	Unk	nourn		
		School ☐ High School ☐ (inclu	iding trade)		L OIK	ilowii		
뿞	22. Surname, Full Given Name(s)		23	B. Date of B	rth MMDDY	YYY 24.	Age	
OTHE PAREN	25. Birth Place (Province/Territory-Country if Outside	de Canada)						
-4								
		•						
27 7	Total Newsberg (Obliders Error Dess to	HISTORY AND MEDICAL CERTIFIC			this deliv	ery) MMDDV	vvv	
	Total Number of Children Ever Born to this Mother (Including this delivery)  Number Liveborn	HISTORY AND MEDICAL CERTIFIC  Number 28. Complete Date	e of Last Delive	ry (prior to		ery) MMDDY	YYY	
1	Total Number of Children Ever Born to Number	Number 28. Complete Date Stillborn	e of Last Delive	ry (prior to		ery) MMDDY	YYY	
29.1	Total Number of Children Ever Born to his Mother (Including this delivery) Number Liveborn	HISTORY AND MEDICAL CERTIFIC  Number 28. Complete Date Stillborn 30. Number of Stil	e of Last Delive	ry (prior to		ery) MMDDY	YYY	
29. T [ 31. I	Total Number of Children Ever Born to this Mother (Including this delivery)  Total Number of Infants in this Delivery (Including Live  Single birth Twin Triplet Quadrup Multiple Birth-Birth Order:	HISTORY AND MEDICAL CERTIFIC  Number 28. Complete Date Stillborn 30. Number of Stil	e of Last Delive	ry (prior to		ery) MMDDY	YYY	
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29. 1 [ 31. I [ 33. V	Total Number of Children Ever Born to this Mother (Including this delivery)  Total Number of Infants in this Delivery (Including Live Single birth Twin Triplet Quadrup Multiple Birth-Birth Order:    1st   2st   Other (Specify)    Was this Birth due to Medical 34. Bi	Number 28. Complete Date Stillborn) 30. Number of Stillborn 30. Number of Stillborn Stillborn 30. Stillborn Stillborn Stillborn 30. Number of Stillborn Stil	e of Last Delive	ry (prior to				
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29. 1 [ [ ] 31. [ ] [ ] 333. V	Total Number of Children Ever Born to this Mother (Including this delivery)  Total Number of Infants in this Delivery (Including Live   Single birth   Twin   Triplet   Quadrup   Multiple Birth-Birth Order:	Number 28. CertiFit  Number 28. Complete Date Stillborn 30. Number of Stil bote	e of Last Delive	in Name) -	identify O	38. Date M	son  MMDDYYYY  re began a  eks ->	
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# Appendix 4: Glossary

#### **Client Registry**

The Client Registry is maintained at the Centre and contains data including resident demographic information such as name, address, date of birth and administrative information such as date of birth registration, MCP number, etc. It is the first foundational registry of the Newfoundland and Labrador Electronic Heath Record (EHR). The Client Registry enables the accurate identification of individuals in the provincial EHR by linking person-specific information form clinical information systems to the correct person. It is currently used throughout the health care system to accurately identify clients.

#### **Hospital Code**

This code identifies a Newfoundland and Labrador health care facility. A hospital code in the Live Birth System consists of a four characters, starting with an alpha followed by three numbers. This code identifies a Newfoundland and Labrador health care facility.

#### **MCP Number**

A 12 digit number issued to residents of the province by Newfoundland and Labrador Medical Care Plan.

#### **Medical Coding**

The International Statistical Classification of Diseases, Injuries, and Causes of Death, Ninth Revision (ICD-9) and the International Classification of Diseases and Related Health Problems, Tenth Revision, Canada (ICD-10-CA), this system consists of codes to classify diseases and health problems.

#### Office of the Chief Information Officer (OCIO)

The OCIO provides Information Technology and Information Management capability aligned to support the business of government and the citizens of Newfoundland and Labrador.

#### **Secondary Uses Committee**

This Committee provides advice to the Chief Privacy Officer, who is accountable for the approval of new uses and disclosures of personal health information. Any committee member who has requested the new uses or is a party to the request for disclosure of data/information shall state the conflict of interest at the beginning of the discussion on the request. There shall be between three and seven members. Membership shall include expertise in research, data quality, and privacy

#### **Geographic Coding**

This is a code that identifies a place of residence. The Standard Geographical Classification (SGC) is Statistics Canada's official classification of geographic areas in Canada. The SGC provides unique numeric codes for three types of geographic areas: provinces and territories, census divisions (counties, regional municipalities), and census subdivisions (municipalities).