

**NLCHI Live Birth System
2020 User Guide
May 2022 v.1.1**

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Live Birth Data User Guide Documentation 2020

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v.1.1	Michele Bishop	July 31, 2012	Added: Item 4.2: Data Quality Results Table Updates: Appendix 6 revised. Deletion: No sections or significant text were deleted.
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V1.4	Beatrice Pittman	June 16, 2016	Added new field – medinjury
V1.5	Beatrice Pittman	June 30, 2016	Added new field – ICD4 and ICD5 associated with maternal risk factors
V1.0	Lisa McKenzie/Beatrice Pittman	August 2020	Annual Revision Added Medinjury, mrfcd5 fields
V1.0	Lisa McKenzie/Trevor Greeley	August 2020	Annual Revision and Normalization Added the results of the incomplete data fields (item non-response)
V1.1	Kaylah Mercer/Kerry Critch	May 2022	Annual Revision; Updated response options in the following fieldsL 1. Prenatal Care Provider, and 2. Delivery Complications

TABLE OF CONTENTS

1. NLCHI LIVE BIRTH SYSTEM INTRODUCTION	1
1.1 OVERVIEW.....	1
1.2 PURPOSE OF DATASET.....	1
1.3 POPULATION REFERENCE COVERAGE	1
1.4 REPORTING PERIOD.....	1
1.5 YEARS AVAILABLE.....	1
1.6 MANAGEMENT RESPONSIBILITY	1
2. DESCRIPTION OF DATASET.....	2
2.1 DESCRIPTION.....	2
2.2 DATA DICTIONARY/ELEMENTS.....	3
2.3 REFERENCE MATERIAL	3
3. DATA SOURCE(S)	3
3.1 ORIGIN OF DATA.....	3
3.2 FLOW OF DATA.....	3
3.3 DATA COLLECTION AND PROCESSING TIME LINES	4
4. DATA QUALITY PROCESSES	4
4.1 EDIT AND CORRECTION PROCESS.....	4
4.2 DATA QUALITY RESULTS	5
4.3 MAINTENANCE PROCESS	6
5. SIGNIFICANT DATA QUALITY HISTORY	6
5.1 METHODOLOGICAL/REVISION HISTORY	6
6. DATA QUALITY LIMITATIONS.....	7
6.1 CONTRIBUTORS IMPACT ON DATA QUALITY.....	7
7. DATA ACCESS, STORAGE, RETRIEVAL AND PRIVACY.....	8
7.1 ACCESS	8
7.2 STORAGE/RETRIEVAL.....	8
7.3 PRIVACY	8
8. COMPARISONS TO OTHER HOLDINGS.....	9
8.1 NLCHI HOLDINGS.....	9
8.2 OTHER HOLDINGS.....	9
APPENDIX 1.....	10
APPENDIX 2.....	25
2020 FORM	25
APPENDIX 3.....	26
GLOSSARY	26

1. NLCHI Live Birth System Introduction

1.1 Overview

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:

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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 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 1992-2020.

1.6 Management Responsibility

The NLCHI Live Birth/Mortality Systems Advisory Committee is comprised of internal and external stakeholders. This committee’s mandate is to advise the Manager, Clinical and Administrative Standards on stakeholder information needs data collection and other relevant issues. One of this committee’s responsibilities is to perform an annual review of the LBN form and make recommendations regarding data collection requirements.

The NLCHI Live Birth/Mortality Advisory Committee members are responsible for bringing forward issues or concerns from their respective organizations, providing key expertise, seeking input and circulating decisions made by the committee.

The following organizations, facilities or agencies have representatives on the NLCHI Live Birth/Mortality Systems Advisory Committee:

- Vital Statistics, Service NL
- Newfoundland and Labrador Provincial Perinatal Program
- Women's Health Program, Eastern Health
- Department of Health and Community Services
- Newfoundland and Labrador Funeral Services Association
- Newfoundland and Labrador Centre for Health Information
- Regional Health Authorities

2. Description of Dataset

2.1 Description

This dataset contains demographic, administrative and clinical data related to all live births that occur in the province, both resident and non-resident. The Centre's Live Birth System is populated with data from 1992 to 2020.

There are 226 data elements in the longitudinal file, which include information about the infant, mother and other parent. The Live Birth Notification (LBN) form consists of two parts, A and B. Part A data is used to populate the NLCHI Live Birth System. Part B is forwarded from the health care facility to the Public Health Nursing services of the Regional Health Authorities for clinical follow-up of the mother/infant. The Centre's Live Birth Dataset does not contain information collected on Part B.

The Live Birth Notification form (part A) contains multiple sections. Responsibility for completion of the sections varies as noted in the table below:

Section	Responsibility for Completion
Registration	Vital Statistics
Infant	Health Care Professional
Mother	Health Care Professional
Other Parent	Health Care Professional
Certification	Vital Statistics
Health History and Medical Certification of Birth	Health Care Professional
Office Use	Vital Statistics

Data in the NLCHI Live Birth System are retained in a longitudinal file to facilitate efficient retrieval and creation of statistical data and research reports. The longitudinal file is updated annually with previous year's data.

2.2 Data Dictionary/Elements

Data elements on the LBN form are those identified by the Live Birth/Mortality Systems Advisory Committee as required data by one or more of the stakeholders. Of all the 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.

2.3 Reference Material

Reference materials available from the DAIS include:

- Copies of the LBN form(s), 1994-2020.
- 2002-2020 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 Source(s)

3.1 Origin of Data

Data originates at the facility where the birth has taken place. For live births that occur at home or enroute to hospital, the forms are completed by either a midwife or the hospital staff attending to the infant immediately after birth. A list of facilities in Newfoundland and Labrador that submit live birth data is documented in Appendix 2.

3.2 Flow of Data

Information on the LBN form is completed at the facility where the live birth occurs, the original and the Centre's copy are sent to Vital Statistics. When attended by a midwife, the midwife is responsible for sending the original and the Centre's copy to Vital Statistics. In the case of live births that occur enroute to hospital the LBN is completed by the facility attending to the infant, the original and the Centre's copy are sent to Vital Statistics.

Vital Statistics adds administrative data before forwarding a copy to the Centre's DAIS Department.

Live Birth Notification forms are received from Vital Statistics, via courier¹, on a monthly basis. Accompanying the forms is a Records Transfer Sheet, on which Vital Statistics indicates which type of form is enclosed (Live Birth, Registration of Death, Registration of Stillbirth, Revisions, etc.) as well as the forms registration numbers. Upon receipt of the documents, the HIM analyst or Data Entry Operator will check each batch of forms to ensure all registration numbers recorded on the transfer sheet have been received. Once verified, the transfer sheet is dated and signed by the HIM analyst and emailed to Vital Statistics as confirmation of receipt of the documents.

¹ During the 2020-2022 COVID-19 pandemic, forms were scanned and sent to the Centre via SFTP.

Beginning in 2017, demographic and administrative data elements that are captured electronically at Vital Statistics from the paper forms are securely transmitted to the Centre via the Office of the Chief Information Officer (OCIO), into the Centre's Cloverleaf interface. The files are received business-daily and are stored in the NLCHI Information Management Solution (NIMS) environment. Once received, the Data Entry Operator loads the files into the Centre's Vital Events 3M HDM platform. Once loaded, the data is verified against the paper forms, and any missing or incorrect information is updated.

The Centre's Health Information Management (HIM) analysts assign the medical codes. As of January 1, 2003, medical coding is based upon the ICD-10-CA/CCI classifications; prior to 2003, the ICD-9/CCI classification system was used. The demographic coding includes Standard Geographical Code (SGC) and institution code for location of birth.

An edit and correction process is completed by DAIS staff quarterly, and at year-end prior to closure of the annual file. Once closed, the file is appended to the longitudinal dataset and is ready for use by stakeholders.

3.3 Data Collection and Processing Time Lines

- Daily: facilities are legally required to report live births to Vital Statistics within 48 hours of birth.
- Daily: electronic transfer of data elements captured by Vital Statistics.
- Monthly: Vital Statistics completes the administrative section of the form and forwards a copy to the Centre.
- Quarterly: Edits are sent to facilities for correction.
- Annually: Forms requiring revisions and/or coding queries are completed.
- Annually: all LBN forms are usually received by the Centre by the end of February for the previous calendar year.
- March 31, YYYY: the annual cycle of social and medical coding, and data entry for the previous data year is scheduled for completion.
- May 1, YYYY: The error corrections are completed and the live birth longitudinal file is scheduled to be updated with the previous calendar year data.

4. Data Quality Processes

4.1 Edit and Correction Process

The NLCHI Live Birth System edit process contains 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 process 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. Appendix 4 lists the edits performed on live birth data.

The correction process is scheduled to be completed by mid-April to allow for the longitudinal file to be available by May 1st 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.

4.2 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 Data Quality Measures for the NLCHI Live Birth System							
Year	Total # Records Edited	Total # Errors Identified	Total # Corrections Using Internal Resources	Total # Corrections Using External Resources	Total # Outstanding Errors After Facility Corrections	Outstanding Error Rate	Number of Records with one or more outstanding errors
2010	4888	1411	736	651	24	0.5%	24
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
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	1772	441	1361	1	0.02%	1
2019	3768	2717	99	2618	0	0%	0
2020	3648	2455	651	1804	6	0.2%	5

4.3 Maintenance Process

The Live Birth/Mortality Advisory Committee members are responsible for bringing forward issues or concerns from their respective organizations, providing key expertise, seeking input and circulating decisions made by the committee.

This is a dynamic dataset therefore users should be aware of past data element changes and that changes are likely to occur in the future. Due to these ongoing changes data elements have been added, revised or classified as inactive. Data elements that are deemed inactive are no longer entered into the dataset. However, for historical purposes these data elements and their values remain in the dataset (for the applicable years).

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

When corrections are required after the year-end file is closed, the revisions are made and the changes documented, including the rationale for the changes. The revised Live Birth dataset is assigned a new version number and date to ensure accurate identification of the most recent data.

For example, in 2008, data entry screens were redesigned and standardized to assist with data quality on input; the date of birth format validation as mm/dd/yyyy was implemented.

End users of live birth data may identify data quality issues. When an issue is reported to DAIS staff, corrective and/or preventative action is taken.

5. Changes to Dataset

5.1 Methodological/Revision History

It has been acknowledged that the data elements collected and entered into 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 into 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 2020 SGC version 2016 was used.

6. Data Quality Limitations

6.1 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, DAIS 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 a number of 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 the Health Information Standards and Quality. 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.

7. Data Access, Storage, Retrieval and Privacy

7.1 Access

Access by Centre staff to this database is granted when DAIS directors or managers grant permission on an individual basis, based on job responsibilities. Authorized users will be required to use a unique user name and password in order to access the file, which is housed in the NLCHI Information Management Solutions (NIMS) secure environment.

Positions that have access to the dataset:

- Manager, Clinical and Administrative Standards
- Health Information Management Analyst
- Data Entry Operator
- Database Analyst
- Manager, Analytics
- Health Records Data Consultant
- Epidemiologists
- Research/Business Analysts

7.2 Storage/Retrieval

Source documents used to create the dataset are kept for 5 years and then securely shredded.

The electronic dataset is maintained indefinitely and is stored on a secure server at the Centre.

Only the Infrastructure Department's staff has access to the backup files. The Centre uses the GFS (Grandfather-Father-Son) method to backup data. The backups are organized into Daily, Weekly, and Monthly. The Daily tapes are retained for 1 week. Weekly tapes are retained for 5 weeks, and Monthly tapes are retained for 1 year. The Centre also performs an annual backup with no specified retention period. The annual tapes are archived and are not reused.

7.3 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 policies outlined by the Centre.

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

7.4 Authority to Access

Access to the live birth dataset is by authorization from the DAIS manager/directors.

7.5 Audit Trail

An audit trail is maintained on NLCHI's Live Birth System for DAIS staff with access; a record of each users' access and the additions, revisions or deletions to the data are logged.

No auditing process exists within the Live Birth System for users outside DAIS. However, work assignments and outputs are supervised, and most data has been de-identified.

8. De-identification Process

The live birth data is de-identified post editing before it is made available for use. Access to identifiable information is only provided when absolutely necessary.

Once the data is ready for use, the Database Analyst or designate performs the de-identification process. Each record with a valid MCP/HCN number will have a unique de-identification identifier (DID) and data warehouse patient identifier (W_PAT_ID) assigned and the file stripped of identifiable data, such as name and MCP/HCN number. These unique identifiers are used for linkage of patient records across datasets in the NIMS and Data Warehouse secure environments. In case re-identification of a record is required, the Database Analyst or designate will be responsible to re-identify records (only possible to provide MCP number). In some cases records may not be re-identifiable e.g. the original data did not have a valid MCP/HCN number so they are assigned a generic DID/W_PAT_ID.

9. Comparisons to Other Holdings

9.1 NLCHI Holdings

Comparability across the years in the Live Birth System and with other Centre datasets is possible using static 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.

9.2 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 DATA DICTIONARY						
Variable Name	Label	Value/Example	Type	Length	Applicable Year	Comments
Year	Year of Birth	Value: YYYY	Numeric	8	1992-2020	Derived from Registration # up to 2016
W_PAT_ID	DW Unique Patient Identifier		Numeric	8	1992-2020	
DID_KEY	De-identified Unique Patient Identifier		Numeric	8	1992-2020	
reg_num	Infant's Registration Number	Year-Province - Accession Number YYYY/NL/1234... NL = 10 for Newfoundland and Labrador	Numeric	8	1992-2020	
*c_name	Infant's Surname, Full Given Name(s)	Full name of infant, if available	String	765	1997-2020	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	1992-2020	
c_dob	Infant's Date of Birth (MM/DD/YYYY)	MM/DD/YYYY	Date	8	1992-2020	
*c_mcp	Child's HCN Number	None	String	12	1992-2020	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	1996 2001-2020	
c_locoth	Other Location (Specify)	Specify other location of birth	String	60	2002-2020	
hospital	Hospital Name	Name of Facility where birth occurred.	String	765	1992-2020	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	String	18	1992-2020	C Clinic E En Route H Hospital R Residence

NLCHI LIVE BIRTH SYSTEM DATA DICTIONARY						
Variable Name	Label	Value/Example	Type	Length	Applicable Year	Comments
		e.g. R01=Born at home but admitted to HSC.				
c_locat	Place of Occurrence – City / Town	City/Town where birth occurred	String	120	1992-2020	Derived from hospital code birthtown in 3M
c_plccde	SGC code for Place of Occurrence	SGC for city/town of occurrence	String	21	1992-2020	Derived from hospital code
*c_admnum	Infant's Hospital Admit Number	Admission # assigned by facility	String	33	1996 2002-2006	
*c_chanum	Infant's Hospital Chart Number	Chart number as recorded on LBN form – format is facility-driven.	String	36	2002-2020	
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	1992-2020	No punctuation used e.g. O'Leary is entered: OLeary
*m_maiden	Mother's Maiden Name	Mother's maiden name	String	180	1992-2020	No punctuation used e.g. O'Leary is entered: OLeary
*m_mcp	HCN Number	None	String	12	1991-2020	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	2009-2020	New for 2009, but all MCP #s in Longitudinal File validated also.
*m_admnum	Mother's Hospital Admission Number	Admission number generated by health care facility	String	36	1992-2006	
*m_chanum	Mother's Hospital Chart Number	Chart number as recorded on LBN form.	String	36	1994-2020	
m_dob_derived	Mother's DOB Derived from MCP (MM/DD/YYYY)	Mother's Date of Birth from validated MCP	Date	10	1992-2020	Derived from validated MCP

NLCHI LIVE BIRTH SYSTEM DATA DICTIONARY						
Variable Name	Label	Value/Example	Type	Length	Applicable Year	Comments
m_age_derived	Mother's Age Derived from MCP		Numeric	8	1992-2020	Derived from validated MCP
m_age_derived1	Mother's age derived from validated MCP # (to 1 decimal)		Numeric	8 +1 decimal	1992-2020	Derived from validated MCP
m_age_derived2	Mother's age derived from validated MCP # (to 1 decimal)		Numeric	8 +1 decimal	1992-2020	Derived from validated MCP
m_age_text	Mother's Age (Text)	Mother's age stored as a String	String	8	2017 -	
m_brcode	Mother's Birth Place Residence Code	Code used to identify Mother's birth place	String	9	1992-2002	
*maddres1 *maddres2 maddres3 maddres4	Mother's Address	Completed if permanent residence is different than mailing address.	String	75 75 150 75	1992 - 2001	
m_pcode	Postal Code	Mother's postal code for place of residence	String	21	1992-2020	
m_addcod	Mother's Address Code	Mother's current home residence code (7-digit SGC code)	Numeric	8	1992-2020	
sgc Office use only	SGC Code	Shortened SGC code for Mother's residence 4-5 digits.	Numeric	8	1992-2020	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	1992-2020	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
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	Numeric	8	1991-2016	Derived from SGC

NLCHI LIVE BIRTH SYSTEM DATA DICTIONARY						
Variable Name	Label	Value/Example	Type	Length	Applicable Year	Comments
		99=System Missing				
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	1992-2020	
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	2001-2020	
mrparent	Birth Parents Legally Married to Each Other	1=Yes 2=No 98=Unknown 99=System Missing	Numeric	8	2002-2003 2006	
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	2002-2020	
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
f_dob	Other Parent's Date of Birth (MM/DD/YYYY)	MM/DD/YYYY	Date	8	1992-2002 2006-2020	*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 2006-2020	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 2006-2020	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 2006-2020	Derived from f_dob
f_brkode	Father's Birth Residence Code	Code used to identify Father's birth place	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	Enter numeric value for number of live born children ever born to	Numeric	8	1992-2020	

NLCHI LIVE BIRTH SYSTEM DATA DICTIONARY						
Variable Name	Label	Value/Example	Type	Length	Applicable Year	Comments
	(including this delivery) Live born	this mother, which includes current delivery				
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	1992-2020	
lastdate	Date of Last Delivery	MM/DD/YYYY	Date	8	1992-2020	
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	2002-2020	
lstyle1	Substance Use During Pregnancy: NONE	1 = Substance Use 2 = None 98 = Unknown 99= System Missing	Numeric	8	2002-2020	Check box for "None".
lstyle2	Substance Use During Pregnancy: DRUGS	1 = Yes 2 = No 98 = Unknown 99= System Missing	Numeric	8	2002-2020	
lstyle3	Substance Use During Pregnancy: UNKNOWN	1 = Yes 2 = No 98 = Unknown 99= System Missing	Numeric	8	2002-2020	
lstyle4	Substance Use During Pregnancy: ALCOHOL	1 = Yes 2 = No 98 = Unknown 99= System Missing	Numeric	8	2002-2020	
lstyle5	Substance Use During Pregnancy: SMOKING	1 = Yes 2 = No 98 = Unknown 99= System Missing	Numeric	8	2002-2020	
lstyle6	Number of Cigarettes / Day	Enter numeric value 98 = Unknown 99= System Missing	Numeric	8	2002-2020	
support1	Support Available – Husband / Partner	1 = Yes 2 = No 98 = Unknown 99 = System Missing	Numeric	8	2002-2020	
support2	Support Available - Living With Parents / Other Supports	1 = Yes 2 = No 98 = Unknown 99= System Missing	Numeric	8	2002-2020	
support3	Support Available - Lives Alone	1 = Yes 2 = No 98 = Unknown 99= System Missing	Numeric	8	2002-2020	
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 2006-2020	

NLCHI LIVE BIRTH SYSTEM DATA DICTIONARY						
Variable Name	Label	Value/Example	Type	Length	Applicable Year	Comments
other1 other2 other3	Specialist for Prenatal Care – Other	Specify “Other”	String	60	2002-2020	
pnc_famdoc_gp		1 = Yes 98 = Unknown 99 = System Missing	Numeric	8	2020-	New field added in 2020
pnc_rn		1 = Yes 98 = Unknown 99 = System Missing	Numeric	8	2020-	New field added in 2020
pnc_midwife		1 = Yes 98 = Unknown 99 = System Missing	Numeric	8	2020-	New field added in 2020
pnc_obsgyn		1 = Yes 98 = Unknown 99 = System Missing	Numeric	8	2020-	
pnc_np		1 = Yes 98 = Unknown 99 = System Missing	Numeric	8	2020-	New field added in 2020
pnc_none		1 = Yes 98 = Unknown 99 = System Missing	Numeric	8	2020-	
pnc_other			String	75	2020-	
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	
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 2006-2020	
pncrtime	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	

NLCHI LIVE BIRTH SYSTEM DATA DICTIONARY						
Variable Name	Label	Value/Example	Type	Length	Applicable Year	Comments
famdis3	- Other	1 = Yes 2 = No 98 = Unknown 99 = System Missing	Numeric	8	1992-2001	
famcd1 famcd2 famcd3 famcd4 famcd5 famcd6	Familial Diseases ICD Code(s)	Code used to identify familial disease	String	12	1992-2001	
numdeliv	Total Number of Infants in <u>THIS</u> <u>Delivery</u>	1 = Single Birth 2 = Twins 3 = Triplets 4 = Quadruplets 5 = Quintuplets 99 = System Missing	Numeric	8	1992-2020	
nonestil Only on HRA's list	Stillborn <u>this</u> delivery <u>NONE</u>	0 = Stillborn occurred <u>in</u> <u>this event</u> 1 = No Stillborn in this event			"nonestil" is for editing purposes only & is deleted following the edit process.	Checkbox for "None" – if checked, it means no stillbirths in this delivery. "
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 2006-2020	
multiple	Multiple Birth - Order	0 = Not a multiple birth 1=1st 2=2 nd 3=3 rd 4=4 th 98 = Unknown 99 = System Missing	Numeric	8	1992-2002 2006-2020	
medterm	Was this birth due to medical termination?	1 = Yes 2 = No 98 = Unknown 99 = System Missing	Numeric	8	2001 2008 - 2017	
mr_none	Medical Risk Factors – NONE	1 = Medical Risk Factors- Existed 2 = No Medical Risk Factors 98 = Unknown 99 = System Missing	Numeric	8	1992-2020	Checkbox for "None" – if checked, it means no medical risk factor existed.
anemia	Anemia (< 100G/L)	1= Yes 2 = No 98 = Unknown 99 = Systems Missing	Numeric	8	1992-2020	
hyper_c	Hypertension (Chronic)	1= Yes 2 = No 98 = Unknown 99 = Systems Missing	Numeric	8	2002 -2020	
hyper_p	Hypertension (Associated with Pregnancy)	1= Yes 2 = No 98 = Unknown 99 = Systems Missing	Numeric	8	2002 -2020	

NLCHI LIVE BIRTH SYSTEM DATA DICTIONARY						
Variable Name	Label	Value/Example	Type	Length	Applicable Year	Comments
uti	UTI (Urinary Tract Infection)	1= Yes 2 = No 98 = Unknown 99 = Systems Missing	Numeric	8	2002 -2020	
iugr	IUGR (Intrauterine Growth Restriction)	1= Yes 2 = No 98 = Unknown 99 = Systems Missing	Numeric	8	1992 -2020	
iddm	Pre-existing Diabetes	1= Yes 2 = No 98 = Unknown 99 = Systems Missing	Numeric	8	1992 -2020	
violence	Violence During Pregnancy	1= Yes 2 = No 98 = Unknown 99 = Systems Missing	Numeric	8	2002 -2020	
depress	Depression	1= Yes 2 = No 98 = Unknown 99 = Systems Missing	Numeric	8	2002 -2020	
isoimmun	Isoimmunization	0 = No 1= Yes 2 = Unknown 99 = Systems Missing	Numeric	8	1992 -2020	
gestdiab	Gestational Diabetes	1= Yes 2 = No 98 = Unknown 99 = Systems Missing	Numeric	8	2003 -2020	
hemmorr	Antepartum Hemorrhage	1= Yes 2 = No 98 = Unknown 99 = Systems Missing	Numeric	8	1992 -2020	
mr_other	Other Medical Risk Factor	1= Yes 2 = No 98 = Unknown 99 = Systems Missing	Numeric	8	1992 -2020	
mrficd1 mrficd2 mrficd3 mrficd4 mrficd5	Medical Risk Factors (Other): ICD code(s)	ICD-10 Codes to identify risk factor	String	24	1992 -2020	mrficd5 added in 2016
mrficd1txt mrficd2txt mrficd3txt mrficd4txt mrficd5txt	Medical Risk Factors (Other): ICD code(s) text		String	78	2017-	
mr_clari (Office use only)	Medical Risk Factors (Other) CLARIFY	C = Clarification Required	String	3	Deleted after edit process.	
infect	Infectious Disease	1= Yes 2 = No 98 = Unknown 99 = Systems Missing	Numeric	8	2002	

NLCHI LIVE BIRTH SYSTEM DATA DICTIONARY						
Variable Name	Label	Value/Example	Type	Length	Applicable Year	Comments
tox_hyp	Toxaemia or Hypertension	1= Yes 2 = No 98 = Unknown 99 = Systems Missing	Numeric	8	1992-2001	
diagpre			Numeric	8		No values
labtype	Labour Type	1= Spontaneous Labor 2 = Induced Labour 98 = Unknown 99 = Systems Missing	Numeric	8	2012 - 2016	
labour	Labour Onset	1= Yes 2 = No 3 = Induction 98 = Unknown 99 = Systems Missing	Numeric	8	1995-2020	
spontan	Spontaneous Labour	1= Yes 2 = No 98 = Unknown 99 = Systems Missing	Numeric	8	1994-2020	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	1992-2020	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	1994-2020	
dpresoth	Delivery Presentation Other (Specify)	Specify other type of delivery presentation	String	90	1994-2005	
dpresicd	Delivery Presentation (Other): ICD-10	ICD code for "Other" type of delivery presentation	String	6	2002-2020	
dpresicdtxt	Delivery Presentation (Other): ICD-10 text		String	78	2017-	

NLCHI LIVE BIRTH SYSTEM DATA DICTIONARY						
Variable Name	Label	Value/Example	Type	Length	Applicable Year	Comments
dprescla (Office use only)	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	1992-2020	
csecicd1 csecicd2 csecicd3 csecicd4	C / S Indications: ICD	ICD code to provide reason for C/Section	String	24	1994-2020	
csecicd1txt csecicd2txt csecicd3txt csecicd4txt	C / S Indications: ICD Text		String	78	2017-	
dmethcla (Office use only)	Delivery Method 'Other' - Clarify	C = Clarification Required	String	3		Variable deleted after edit process.
interven	Interventions During Delivery - None	1= Yes 2 = No 98 = Unknown 99 = Systems Missing	Numeric	8	2002-2020	
lowforcp	Interventions - Low Forceps	1= Yes 2 = No 98 = Unknown 99 = Systems Missing	Numeric	8	2002-2011 2017 -	
midforcp	Interventions - Mid Forceps	1= Yes 2 = No 98 = Unknown 99 = Systems Missing	Numeric	8	2002-2011 2017 -	
vacuum	Interventions - Vacuum Extraction	1= Yes 2 = No 98 = Unknown 99 = Systems Missing	Numeric	8	2002-2020	
episiot	Interventions - Episiotomy	1= Yes 2 = No 98 = Unknown 99 = Systems Missing	Numeric	8	2002-2020	
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 - 2017	In 2010, this field used for <u>Other Interventions</u> only.
icicd1 icicd2 icicd3 icicd4	Complication (Other): ICD Code	ICD code to identify 'Other' Complication(s).	String	24	2008-2020	
icicd1txt icicd2txt icicd3txt icicd4txt	Complication (Other): ICD Text	ICD code to identify 'Other' Complication(s).	String	78	2017 -	
comp	Complications of Delivery - NONE	1= Yes 2 = No 98 = Unknown 99 = Systems Missing	Numeric	8	2010 -2020	

NLCHI LIVE BIRTH SYSTEM DATA DICTIONARY						
Variable Name	Label	Value/Example	Type	Length	Applicable Year	Comments
tear	Interventions - Tear	1= Yes 2 = No 98 = Unknown 99 = Systems Missing	Numeric	8	2002-2020	
teardeg	Tear (Specify degree)	1=1 st 2=2 nd 3=3 rd 4=4 th 98 = Unknown 99=System Missing	Numeric	8	2003-2020	2010-2016, <i>only</i> 3 rd & 4 th degree tears were collected.
tearicd	Tear (Specify degree): ICD-10	None	String	18	2002	
postpart	Post-partum Hemorrhage	1= Yes 2 = No 98 = Unknown 99 = Systems Missing	Numeric	8	2010 -2020	
comp_oth	Complication of Delivery-Other	1= Yes 2 = No 98 = Unknown 99 = Systems Missing	Numeric	8	2010 -2020	
shoulder_dystocia	Complication of Delivery-Shoulder Dystocia	1= Yes 2 = No 98 = Unknown 99 = Systems Missing	Numeric	8	2020	New field added in 2020
ic_clari (Office Use Only)	Intervention – Complication ‘Other’ –clarify	C = Clarification Required	String	3	2008-2020	Variable deleted after edit process.
gestagew	Gestational Age Completed - Weeks	Value 01-43 98 = Unknown 99 = Systems Missing	Numeric	8	1992-2020	
gestaged	Gestational Age Completed - Days	Value 1-6 98 = Unknown 99 = Systems Missing	Numeric	8	2002 2007-2020	
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	1992-2020	9999 default value for missing birth weight
AGA	Appropriate size for Gestational Age	1= Yes 2 = No 98 = Unknown 99 = Systems Missing	Numeric	8	1992-2020	Derived from Gestational Age & Birth Weight

NLCHI LIVE BIRTH SYSTEM DATA DICTIONARY						
Variable Name	Label	Value/Example	Type	Length	Applicable Year	Comments
SGA	Small for Gestational Age	1= Yes 2 = No 98 = Unknown 99 = Systems Missing	Numeric	8	1992-2020	Derived from Gestational Age & Birth Weight
LGA	Large for Gestational Age	1= Yes 2 = No 98 = Unknown 99 = Systems Missing	Numeric	8	1992-2020	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	1992-2020	Derived from Gestational Age & Birth Weight
apgar1	Apgar Score 1	Value 01-10 98 = Unknown 99 = Systems Missing	Numeric	8	1992-2020	
apgar5	Apgar Score 5	Value 01-10 98 = Unknown 99 = Systems Missing	Numeric	8	1992-2020	
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 99 = System Missing	Numeric	8	1992-2001	
neoidc1	Neonatal Conditions-ICD	ICD code to identify condition	String	4	1992-2001	
neoidc2	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, 2008-2020	
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 -	
fetalalc	Fetal Alcohol Syndrome	1= Yes	Numeric	8	1992-2001	
fistula	T E Fistula	1= Yes	Numeric	8	1992-2001	
hypospad	Hypospadias-Epispadias	1= Yes	Numeric	8	1992-2001	
reducdef	Reduction Deformity	1= Yes	Numeric	8	1992-2001	
atresia	Rectal/Anal Atresia/Stenosi	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	

NLCHI LIVE BIRTH SYSTEM DATA DICTIONARY						
Variable Name	Label	Value/Example	Type	Length	Applicable Year	Comments
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 2008-2020	This was changed in 2013 to add variables 1, 2, and 3.
ntdicd	NTD (Neural Tube Defect ICD-10)	ICD code to identify condition	String	18	2002	
ntd_sp	NTD (Neural Tube Defect) (Specify)	Specify condition	string	120	2008-2020	
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.
heartcd	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	
cran_sp	Craniofacial (Specify)	Specify condition	String	120	2008-2009	
gi	Gastrointestinal	1=Yes 2=No 4= Diagnosed Prenatally 5= Suspected at Birth 98=Unknown 99 = System Missing	Numeric	8	2008-2020	This was changed in 2013 to add variables 1, 2, and 3.
chd	chd	1 = Yes 2 = No 98 = Unknown 99 = System Missing	Numeric	8	2016 -2020	
giicd	Gastrointestinal - ICD-10	ICD code to identify condition	String	18	2002	
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 2008-2020	This was changed in 2013 to add variables 1, 2, and 3.
mskicd	Musculoskeletal - ICD-10	ICD code to identify condition	String	18	2002	

NLCHI LIVE BIRTH SYSTEM DATA DICTIONARY						
Variable Name	Label	Value/Example	Type	Length	Applicable Year	Comments
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 2008-2020	This was changed in 2013 to add variables 1, 2, and 3.
guicd	Genitourinary - ICD-10	ICD code to identify condition	String	6	2002	
gu_sp	Genitourinary (Specify)	Specify condition	String	40	2008-2009	
chrom	Chromosomal	1=Yes 2=No 4= Diagnosed Prenatally 5= Suspected at Birth 98=Unknown 99 = System Missing	Numeric	8	2002 2008-2020	This was changed in 2013 to add variables 1, 2, and 3.
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	
othicd2	Other Congenital Anomalies ICD-10	ICD code to identify condition	String	18	2002	
othicd3	Other Congenital Anomalies ICD-10	ICD code to identify condition	String	18	2002	
othicd4	Other Congenital Anomalies ICD-10	ICD code to identify condition	String	18	2002	
anomcon1 anomcon2 anomcon3	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	2002-2020	
attendot	Designation of Attendant Other (Specify)	Completed if "Other" selected for Designation of Attendant	String	765	2002-2020	
forceps	Interventions – Forceps	0=No 1=Yes 98=Unknown 99=System Missing	Numeric	8	2002-2020	New field for 2012 to replace mid and low forceps
comments	Comments	Comments/Clarifications by HRA or DBA	String	765	1994 1997-2000 2011-2020	Free text
m_mcp	Mother's HCN Number	Mother's Health Care Number, for NL residents it is a 12-digit MCP number	String	12	1997-2020	This variable is kept in Master File, but no longer appears in Longitudinal File.

NLCHI LIVE BIRTH SYSTEM DATA DICTIONARY						
Variable Name	Label	Value/Example	Type	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.
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	1992-2020	In 2010: auto-calculated on data entry.
m_age_Text	Mother's Age (Text)		Numeric	8		
m_age1	Mother's age truncated		Numeric	8	2012-2020	
m_age2	Mother's age To 1 decimal place	Mother's age to 1 decimal	Numeric	8 +1 decimal	1992-2020	
ntdicd	NTD - ICD-10	ICD code to identify condition	String	18	2002	
ntd_sp	NTD (Specify)	Specify condition	String	120	2009	
town	Mother's Town of Residence	GANDER	String	45	2017-2020	
province	Mother's Province of Residence	NEWFOUNDLAND AND LABRADOR	String	26	2017-2020	
country	Mother's Country of Residence	CANADA	String	44	2017-2020	
BMI_25_29	Body Mass Index 25-29		Numeric	8	2017-2020	
BMI_30	Body Mass Index 30		Numeric	8	2017-2020	
OOP_HCN	Out of Province Indicator	1 = OOP	Numeric	8	2017-2020	

Appendix 2

2020 Form



**Government of Newfoundland and Labrador
Service NL, Vital Statistics Division
LIVE BIRTH NOTIFICATION 2020**

1. Registration number									
								10	

Department Use Only

Privacy Notice

Personal information contained on this form is collected under the authority of the Vital Statistics Act 2009, and will be used to register the birth, update or amend other vital event records, and provide extracts or search notices for administrative, statistical, research, medical and law enforcement purposes. If you have any questions about the collection or use of this information, please contact a Vital Statistics Client Representative at the following location: —→

Vital Statistics Division
Service Newfoundland and Labrador
P.O. Box 8700
St. John's, NL, Canada A1B 4J6
T (709) 729-3308

Part A – Mandatory for Registration of Birth (Required within 48 hours of delivery)										
INFANT	2. Surname					Full Given Name(s)			3. Sex <input type="checkbox"/> M <input type="checkbox"/> F <input type="checkbox"/> Unknown	
	4. Date of Birth MM/DD/YYYY		5. Locality of Birth <input type="checkbox"/> Hospital <input type="checkbox"/> Private Home <input type="checkbox"/> Other Health Care Facility <input type="checkbox"/> Unknown <input type="checkbox"/> Other (Specify) —→							
	6. Hospital		Hospital Code		7. Place of Occurrence City / Town		8. Infant's Admit #		9. Infant's Hospital Chart #	
	10. Surname, Full Given Name(s)					11. Maiden Name and Initials				
MOTHER	12. Health Care Number		13. Date of Birth MM/DD/YYYY		14. Age at Delivery		15. Birth Place (Province/Territory-Country if Outside Canada)			
	16. Usual Home Address				SGC Code		Postal Code		Telephone Number () - - - - -	
	17. Complete Mailing Address									
	18. Legal Marital Status of Birth Mother <input type="checkbox"/> Never Married <input type="checkbox"/> Legally Married and Not Separated <input type="checkbox"/> Legally Married but Separated <input type="checkbox"/> Divorced <input type="checkbox"/> Widowed <input type="checkbox"/> Unknown									
	19. Living Arrangements of Birth Parents <input type="checkbox"/> Living Together as a Couple <input type="checkbox"/> Not Living Together as a Couple <input type="checkbox"/> Unknown				20. Marital Relationship of Birth Parents of this delivery (Legally Married to Each Other) <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown					
	21. Education <input type="checkbox"/> Has not Graduated High School <input type="checkbox"/> Graduated High School <input type="checkbox"/> Beyond High School <input type="checkbox"/> College or University Degree (including trade) <input type="checkbox"/> Unknown									
	22. Surname, Full Given Name(s)					23. Date of Birth MM/DD/YYYY		24. Age		
OTHER PARENT	25. Birth Place (Province/Territory-Country if Outside Canada)									
HEALTH HISTORY AND MEDICAL CERTIFICATION OF BIRTH										
27. Total Number of Children Ever Born to this Mother (including this delivery) Liveborn: _____ Number Stillborn: _____					28. Complete Date of Last Delivery (prior to this delivery) MM/DD/YYYY					
29. Total Number of Infants in this Delivery (including Live & Stillborn) <input type="checkbox"/> Single birth <input type="checkbox"/> Twin <input type="checkbox"/> Triplet <input type="checkbox"/> Quadruplet <input type="checkbox"/> Quintuplet					30. Number of Stillborn in this Delivery None <input type="checkbox"/> Number: _____					
31. Multiple Birth-Birth Order: <input type="checkbox"/> 1 st <input type="checkbox"/> 2 nd <input type="checkbox"/> Other (Specify) _____					32. Gestational Age _____ weeks _____ days					
33. Was this Birth due to Medical Termination of Pregnancy? <input type="checkbox"/> Yes <input type="checkbox"/> No					34. Birth Weight _____ grams		35. Delivered by (Surname, Given Name) - Identify Only One Person			
36. Designation of Attendant (Select one only) <input type="checkbox"/> RN <input type="checkbox"/> Unknown <input type="checkbox"/> Other (Specify) _____					37. Signature for Certification of Birth		38. Date MM/DD/YYYY			
39. Prior C/Section(s)		40. Substance Use During Pregnancy <input type="checkbox"/> Yes <input type="checkbox"/> No Cigarette Smoking <input type="checkbox"/> Alcohol <input type="checkbox"/> Methadone/Suboxone <input type="checkbox"/> Inhalants/Solvents <input type="checkbox"/> Other <input type="checkbox"/> Vaping (nicotine/non-nicotine) <input type="checkbox"/> Cannabis/Cannabinoids <input type="checkbox"/> Opioids <input type="checkbox"/> Stimulants <input type="checkbox"/> None				41. Prenatal Care began at Num. of Weeks —→				
42. Supports Available (check one only) <input type="checkbox"/> Husband / Partner <input type="checkbox"/> Lives Alone <input type="checkbox"/> Living with Parents / Other supports			43. Prenatal Care Provider (Check all that apply) <input type="checkbox"/> Family Doctor/GP <input type="checkbox"/> RN <input type="checkbox"/> Midwife <input type="checkbox"/> OBS / GYN <input type="checkbox"/> NP <input type="checkbox"/> None <input type="checkbox"/> Other (Specialty) _____							
44. Maternal Risk Factors <input type="checkbox"/> None <input type="checkbox"/> Anemia (<100g/L) <input type="checkbox"/> Violence during pregnancy <input type="checkbox"/> Pre-pregnancy BMI: <input type="checkbox"/> 25.0 - 29.9 <input type="checkbox"/> 30+ <input type="checkbox"/> Gestational Diabetes <input type="checkbox"/> Antepartum Hemorrhage <input type="checkbox"/> IUGR <input type="checkbox"/> Isolation <input type="checkbox"/> Pre-existing Diabetes <input type="checkbox"/> Depression <input type="checkbox"/> UTI <input type="checkbox"/> Other (Specify) _____ <input type="checkbox"/> Hypertension (Chronic) <input type="checkbox"/> Hypertension (Assoc. Pregnancy)					45. Labour Onset (check one only) <input type="checkbox"/> Spontaneous <input type="checkbox"/> Induction <input type="checkbox"/> No labour					
46. Delivery Presentation <input type="checkbox"/> Vertex <input type="checkbox"/> Breech <input type="checkbox"/> Other (Specify) _____					47. Method of Delivery <input type="checkbox"/> Vaginal Spontaneous <input type="checkbox"/> Vaginal Assisted <input type="checkbox"/> C/Section > Reason(s) for C/Section: _____					
48. Interventions / Complications of Delivery (check all that apply) Delivery Interventions <input type="checkbox"/> None <input type="checkbox"/> Episiotomy <input type="checkbox"/> Forceps <input type="checkbox"/> Vacuum Extraction					Delivery Complications <input type="checkbox"/> None <input type="checkbox"/> Shoulder Dystocia <input type="checkbox"/> 3 rd Degree Tear <input type="checkbox"/> Postpartum Hemorrhage <input type="checkbox"/> 4 th Degree Tear <input type="checkbox"/> Other (Specify) _____ (Do not record 1 st and 2 nd degree tears)					
49. Apgar Score At 1 _____ At 5 _____					50. Mother's Admit Number		51. Mother's Chart Number			

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Appendix 3

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 Health Record (EHR). The Client Registry enables the accurate identification of individuals in the provincial EHR by linking person-specific information from clinical information systems to the correct person. It is currently used by staff in hospitals; community services offices, long term care facilities and MCP 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

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.

Canadian Classification of Health Interventions (CCI) is a national standard for classifying health care procedures. CCI is the companion classification system to ICD-10-CA.

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

Social 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).