

Supplemental file 1. Variables used to define cohort inclusion and exclusion criteria, study exposures, outcomes and covariates.

Assessment	Timing	Disease, procedure or condition	DAD/MOMBABY, SDS, OMHRS & NACRS fields and ICD-9 [10-CA] diagnostic codes	Other sources
Inclusion criteria	At the time of the index birth	Obstetrical live birth delivery in Ontario, Canada, between April 1, 1990 and March 31, 2016	DAD/MOMBABY (see link at https://datadictionary.ices.on.ca/Applications/DataDictionary/Library.aspx?Library=MOMBABY) Livebirth: M_STILLBIRTH='F'	--
Exclusion criteria	At the time of the index birth	a. Invalid healthcare number for the mother or the child in MOMBABY b. Invalid or missing maternal age, sex, or birth date c. Invalid or missing child age, sex or birth date d. Invalid maternal death date (precedes delivery date) e. Maternal age < 16 or > 50 years f. Gestational weeks at birth is < 20 weeks or missing	DAD/MOMBABY	RPDB (contains demographic information & encrypted healthcare numbers for all individuals eligible for OHIP)
	Age 366 days	Child not an Ontario resident	--	RPDB
	Same	Child not alive	--	RPDB
	Same	Child not eligible for OHIP	--	RPDB
Main exposure	At the index birth	Infant sex (male, female)	DAD/MOMBABY	--
Secondary exposures	Same	Maternal number of previous livebirths (0, 1, 2, ≥ 3, missing)	DAD/MOMBABY	--
	Same	Maternal world region of origin (Caribbean, East Asia/Pacific, Hispanic America, Middle East/North Africa, South Asia, Sub-Saharan Africa, Western Nations/Europe, vs. Canada/long-term resident)	--	IRCC Permanent Resident Database (contains data on country of citizenship for immigrants to Canada from 1985 onward)
	At age 366 days of the child, time-varying at each year of age	Area-level income quintile of child (1 [lowest], 2, 3, 4, 5 [highest], missing)	--	Statistics Canada census data
	Same	Rural residency of child (urban, rural, missing)	--	Statistics Canada census data
Main outcome	From age 1 to 24 years	Child/adolescent all-cause mortality, from April 1, 1991 to March 31, 2018	--	RPDB

Assessment	Timing	Disease, procedure or condition	DAD/MOMBABY, SDS, OMHRS & NACRS fields and ICD-9 [10-CA] diagnostic codes	Other sources
Secondary outcomes	Same	Child/adolescent death due to injury*	--	ORGD: ICD-9 COD E950-E959, E960-E969, E800-E849, E850-E854, E855-E949, E970-E999, 800-999
	Same	Type of child/adolescent injury death*: a. <i>Intentional self-harm</i> b. <i>Assault/homicide</i> c. <i>Transport accident</i> d. <i>Accidental poisoning/overdose</i> e. <i>Other/Undetermined intent</i>	--	ORGD: ICD-9 COD a. <i>E950-E959</i> b. <i>E960-E969</i> c. <i>E800-E849</i> d. <i>E850-E854</i> e. <i>E855-E949, E970-E999, 800-999</i>
	Same	Child/adolescent death arising out of hospital (any death not occurring in DAD, SDS, OMHRS, NACRS or OHIP)	No discharge disposition of 'Died' n DAD, SDS, OMHRS or NACRS within +/-1 day of the date of death in RPDB	OHIP physician billing with an emergency department or inpatient location code, within +/- 1 day of the date of death in RPDB
Covariates	At the time of the index birth	Maternal age	--	RPDB
	Same	Maternal number of previous livebirths (0, 1, 2, ≥ 3, missing)	DAD/MOMBABY	--
	Same	Maternal world region of origin (Caribbean, East Asia/Pacific, Hispanic America, Middle East/North Africa, South Asia, Sub-Saharan Africa, Western Nations/Europe, vs. Canada/long-term resident)	--	IRCC
	Same	Child year of birth	DAD/MOMBABY	--
	Same	Child sex (male, female)	DAD/MOMBABY	--
	Same	Child birthweight	DAD/MOMBABY	--
	Same	Child multi-gestational birth	DAD/MOMBABY	
	Same	Child born premature at < 37 completed weeks' gestation	DAD/MOMBABY <u>Pre-2002</u> : 644.2, 765 [O60, P07.2, P07.3] <u>As of 2002</u> : Gestational weeks < 37 at delivery	--

Assessment	Timing	Disease, procedure or condition	DAD/MOMBABY, SDS, OMHRS & NACRS fields and ICD-9 [10-CA] diagnostic codes	Other sources
	Between the index birth and age 365 days	Any congenital or chromosomal anomaly in the child within the first year of life	741, 742, 743, 744, 745, 746, 747, 748, 749, 750, 751, 752, 753, 754, 755, 756, 757, 758, 759, 760 [Q]	OHIP ICD-9 diagnostic code 741, 742, 743, 744, 745, 746, 747, 748, 749, 750, 751, 752, 753, 754, 755, 756, 758, 759 and billed by a Pediatrician (OHIP feecode 26)
	At age 366 days of the child, time-varying at each year of age	Area-level income quintile of child (1 [lowest], 2, 3, 4, 5 [highest], missing)	--	Statistics Canada census data
	Same	Rural residency of child (urban, rural, missing)	--	Statistics Canada census data

CIHI Canadian Institute for Health Information; DAD Discharge Abstract Database; ICD-9 International Classification of Diseases, 9th Revision; ICD-10-CA International Classification of Diseases, 10th Revision, Canada; IRCC Immigration, Refugees and Citizenship Canada; NACRS National Ambulatory Care Reporting System; OHIP Ontario Health Insurance Plan; SDS Same Day Surgery Database; RPDB Registered Persons Database; OMHRS Ontario Mental Health Reporting System; ORGD Office of the Registrar General – Deaths

*Cause of death in ORGD is available up to December 2016 only.