

Variables in EUROLINKCAT Common Data Model: Mortality

Variable Name	Variable Definition and Instructions	Variable Format	Variable Values
Core variable required for linkage to vital statistics or mortality databases and for calculating age at death			
L_CH_ID	Unique identifier of child A unique ID that links child to another database	As recorded locally	
L_CH_DATE_B	Child's date of birth Needed to calculate age at death.	DDMonYYYY	
L_CH_DATE_D	Child's date of death Needed to calculate age at death.	DDMonYYYY	
Variables relating to linkage			
L_MATCH_TYPE	Match with vital statistics database (or local health care databases)	Numeric	1 = Linked to national/vital statistics database – match 2 = Linked to national/vital statistics database – non-match 3 = Linked to mortality database only – match 4 = Linked to mortality database only – non-match 5 = EUROLINKCAT death only

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L_CONFIDENCE	Strength of match with vital statistics or health care database. Use local data provider's codes for assessing confidence that the case is correctly matched. If local code unavailable, use suggested coding (see Appendix for full details)	Numeric	1=Excellent 2=Good 3=Fair 4=Poor 9=Not Matched
L_DATE_LOST	Date lost to follow-up/ linkage (i.e. due to emigration, adoption or other reason)	DDMonYYYY	.=Not recorded by registry or not available for study
L_YEAR_LOST	Year lost to follow-up/ linkage (i.e. due to emigration, adoption or other reason)	YYYY	.=Not recorded by registry or not available for study
L_AGE_L_D	Age lost to follow-up/ linkage <u>in complete days</u>	Numeric (1-4 digits)	.=Not recorded by registry or not available for study
Standardised variables relating to child			
L_CH_YEAR_B	Child's year of birth	YYYY	
L_CH_SEX	Child's sex	Numeric	1 = Male 2 = Female 3=Indeterminate 9 = Not known .=Not recorded by registry or not available for study
L_CH_REG_TYPE	Type of birth/ civil registration of baby	Numeric	1 = Livebirth 2 = Stillbirth 9 = Not known .=Not recorded by registry or not available for study
L_CH_NON_EUR	Citizenship/ Nationality of infant /country of origin	Numeric	1= National 2= Other European 3 = Non-European

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			4= Non-national (exact nationality not specified) 9 = Not known . = Not recorded by registry or not available for study
L_CH_BW	Child's birthweight (grams)	Numeric	9999=Not known .=Not recorded by registry or not available for study
L_CH_GA_B	Child's gestational age at birth (completed weeks)	Numeric	99=Not known .=Not recorded by registry or not available for study
Variables relating to mortality			
L_CH_STATUS	<p>Outcome status</p> <p>-Died = child is known to have died before 10th birthday or 31 Dec 2015 (whichever earlier)</p> <p>-Alive at 10th birthday = child was born on or before the 31st Dec 2005 and:</p> <p>(i) is definitively known to be alive on 10th birthday; or (ii) there is no information on death or lost to follow-up</p> <p>- Censored on 31st Dec 2015 = child was born on or after 1st Jan 2006 and:</p> <p>(i) is definitively known to be alive on 31st Dec 2015; or (ii) there is no information on death or lost to follow-up</p> <p>-Lost to follow up = child is lost to follow-up/ linkage (i.e. due to emigration, adoption or other reason)</p>	Numeric	<p>1 = Died</p> <p>2 = Alive at 10th birthday</p> <p>3 = Censored on 31st Dec 2015</p> <p>4 = Lost to follow up</p>

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L_EXIT_DATE	<p>Date of last day in study (censored/lost/died/alive)</p> <ul style="list-style-type: none"> - Date lost - if child was lost to follow up - Date of death - if child has died - Date of birth plus 3652 days (approx. 10th birthday) if child was born on or before the 31st Dec 2005 and: <ul style="list-style-type: none"> (i) is definitively known to be alive on 10th birthday; or (ii) there is no information on death or lost to follow-up - Date of last day of the study (31st Dec 2015) if child was born on or after 1st Jan 2006 and: <ul style="list-style-type: none"> (i) is definitively known to be alive on 31st Dec 2015; or (ii) there is no information on death or lost to follow-up 	DDMonYYYY	
L_EXIT_DAYS	<p>Number of days child is in study</p> <p>This is calculated as the last date child was in the study (L_EXIT_DATE) minus the child's birth date (L_CH_DATE_B).</p>	Numeric (1-4 digits)	
L_CH_YEAR_D	Year of child's death as recorded on the death certificate	YYYY	
L_CH_AGED_H	<p>Age at death in complete hours for day 0 (first 24 hours) = applies to infants who died within the first 24 hours</p> <p>This variable can be used to check values recorded under variable L_CH_AGED_D.</p> <p>A child who died within 24 hours but across two dates is coded "0" on L_CH_AGED_D below.</p>	<p>Numeric</p> <p>(1-2 digits)</p>	<p>0 = Died <1 hour after birth</p> <p>1 = Died 1 complete hour after birth</p> <p>2 = Died 2 complete hours after birth</p> <p>Etc.</p> <p>23 = Died 23 complete hours after birth</p> <p>88 = Alive at 24 hours</p> <p>99 = Died within first 24 hours, but exact time unknown</p>

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L_CH_AGED_D	Age at death <u>in complete days</u> (up to 10 th birthday). A calculated field using the difference between date of death and death of birth i.e. subtract child's date of birth from child's date of death.	Numeric (1-4 digits)	0 = died <24 hours after birth 1 = died 1 complete day after birth 2 = died 2 complete days after birth Etc. 8888 = Alive on 10th birthday or by end of study period, whichever is sooner 9999 = Died before 10th birthday, but exact time unknown
L_CAUSE_D_U	Underlying cause of death - diagnosis There can only be one underlying cause of death	String	ICD9 or ICD10 code
L_CAUSE_D_P	Primary/ immediate cause of death - diagnosis	String	ICD9 or ICD10 code
L_CAUSE_D_C	Contributing cause of death - diagnosis	String	ICD9 or ICD10 code
L_CAUSE_D_O1	Other causes of death- diagnosis 1	String	ICD9 or ICD10 code
L_CAUSE_D_O2	Other causes of death- diagnosis 2	String	ICD9 or ICD10 code
L_CAUSE_D_O3	Other causes of death- diagnosis 3	String	ICD9 or ICD10 code
L_CAUSE_D_O4	Other causes of death- diagnosis 4	String	ICD9 or ICD10 code
L_CAUSE_D_O5	Other causes of death- diagnosis 5 Additional "Other causes of death" can be recorded in variables L_CAUSE_D_O6 to L_CAUSE_D_15 (not listed)	String	ICD9 or ICD10 code
L_CH_PLACE_D	Place of death	Numeric	1 = Home 2 = Hospital 3 = Other 9 = Not known .=Not recorded by registry or not available for study

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Variables relating to mother			
L_MAT_YEAR_B	Maternal year of birth	YYYY	99 = Not known . = Not recorded by registry or not available for study
L_MATAGE_B	Maternal age at infant's birth <u>in completed years</u> May be used to link information held on the child in local health care databases	Numeric	99=Not known . =Not recorded by registry or not available for study
L_MULT_BIRTH	Singleton or multiple birth	Numeric	1=Singleton 2=Twins 3=Triplets or higher 4= Multiple birth, number unknown 9= Not known . =Not recorded by registry or not available for study
L_MAT_CTRY_B	Maternal country of birth/ place of birth/ country of origin	Numeric	1= National 2= Other European 3 = Non-European 4= Non-national (exact nationality not specified) 9 = Not known . =Not recorded by registry or not available for study
L_MAT_BMI	Maternal Body Mass Index (BMI) at first antenatal visit/at booking Expected range 15 – 50	Numeric (Whole number only)	Exact BMI value 97 = <30 98 = >=30 99 = Not known . =Not recorded by registry or not available for study
L_MAT_EDUC	Maternal education	Numeric	1 = Pre-primary /Primary 2 = Any secondary 3 = Postsecondary (non-tertiary)

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	(UNESCO's International Standard Classification of Education (ISCED))		4 = Tertiary 5=No education 9 = Not known . = Not recorded by registry or not available for study
L_MAT_OCC	Maternal occupation (Based on Paris (INSERM) coding classification)	Numeric	1= Farmer 2= Artisan (ex: baker) / shop-owner 3= Professional 4= Intermediate 5= Administrative/public service 6= Business employees: shop assistants/ salesperson 7= Household and personal service 8= Skilled manual worker 9=Unskilled manual worker 0= No occupation declared / student 99= Not known . =Not recorded by registry or not available for study
L_MATDEPR_IND	Deprivation index at maternal residence Multiple deprivations scores are ranked into quintiles where 1= Least deprived and 5 = Most deprived (coding scheme used in Wales & Basque Country)	Numeric	1 = First quintile (Least deprived) 2 = Second quintile 3 = Third quintile 4 = Fourth quintile 5 = Fifth quintile (Most deprived) 9 = Not known . =Not recorded by registry or not available for study
L_PROXY_SES	Proxy variable for SES This is registry-specific. Use the agreed proxy variable for each registry. Maternal education: <ul style="list-style-type: none"> • Tertiary/ post-secondary=High • Any secondary = Middle 	Numeric	1 = High 2 = Middle 3 = Low 9=Not known . = Not recorded by registry or not available for study

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	<ul style="list-style-type: none"> Primary/ pre-primary/ No education = Low Maternal occupation: <ul style="list-style-type: none"> Professional = High Intermediate= Middle No occupation = Low Multiple Deprivation Index <ul style="list-style-type: none"> Quintile 1 (Least deprived)=High Quintiles 2-4= Middle Quintile 5 (Most deprived)= Low 		
L_MATMAR_STA	Maternal marital status	Numeric	1 = Single 2 = Married/ Living together 3 = Widow 4 = Divorced/ Separated 9 = Not known . =Not recorded by registry or not available for study
Recoded variables			
Yeargp	Grouped year of birth 1995/2004=1 2005/2014 =2	Numeric	1 = 1995-2004 2 = 2005-2014
BMI_gp	Grouped BMI BMI <10, code as unknown BMI >60, code as unknown Blank or missing, code as unknown	Numeric	1 = <30 2 = 30+ 9 = unknown
BW_gp	Grouped Birthweight BW <400g, code as unknown BW >7000g, code as unknown Blank or missing, code as unknown	Numeric	1= <1000g 2 = 1000-1499g 3 = 1500-2499g 4 = 2500-3999g 5 = 4000+ g 9 = unknown
GA_gp	Grouped Gestational age	Numeric	1 = 24-27weeks 2 = 28-31 weeks

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	GA <24 weeks, excluded from study GA >45 weeks, code as unknown Blank or missing, code as unknown		3= 32-36 weeks 4 = 37+ weeks 9 = unknown
GA_disc_gp	Grouped Gestational age at discovery GA at discovery <8 weeks, code as unknown GA at discovery >42 weeks, code as unknown Blank or missing, code as unknown	Numeric	1= <22 weeks 2 = 22-31 weeks 3 = 32+ weeks 9 = unknown
matage_gp	Grouped Maternal age at infant's birth Maternal age range 10-19 years, code =1 20-34 years, code=2 35-59 years, code=3 All other values, blanks or missing, code=9	Numeric	1= <20 years 2= 20-34 years 3= 35+ years 9=Not known