PHG Needs Assessment Calculator
Luxembourg
Teratogens

Welcome to the PHG Health Needs Assessment Calculator for Teratogens. The contents of this file are listed below.

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(There is no sheet TER-NA2.)

Luxembourg
Shared Data
Demographic, maternal health and socio-economic indicators

Please read first! If you have already completed a needs assessment for a different topic in this country, you will be able to copy the Demography information from that Calculator into here. The information should be the same.

By default, the Toolkit contains information at the national level.
If you would like to use a different population, then replace country information with that of your specific population of interest.

Number of persons by age-group and sex	Estimates			Your estimates			Chosen estimates		
Age group	Male	Female	Total	Male	Female	Total	Male	Female	Total
0-4 years	1917794	1963660	3881454			0			0
5-9 years	1587302	1615244	3202546			0			0
10-14 years	1222668	1183939	2406607			0			0
15-19 years	925729	991323	1917052			0			0
20-24 years	774413	986526	1760939			0			0
25-29 years	707603	841416	1549019			0			0
30-34 years	583689	667865	1251554			0			0
35-39 years	481396	556191	1037587			0			0
40-44 years	366518	389087	755605			0			0
45-49 years	321236	328660	649896			0			0
50-54 years	231232	283288	514520			0			0
55-59 years	194011	208657	402668			0			0
60-64 years	140146	159557	299703			0			0
65+ years	292953	330120	623073			0			0
Total	9746690	10505533	20252223	0	0	0	0	0	0
Female population aged 15-44 years		4432408			-			-	
Data year		2007 reported in 2009							
Source, Year		UN 2011							

Ethnicity. Please enter data for the main ethnic groups if you are working with a population that is different from that of the country.

Ethnic group	Number	% population

Fertility and mortality	Estimate	Source, Year	Your estimate	Source, Year	Chosen estimate	Source, Year
Crude birth rate: live births (LB) / year / 1000 population	11.60	Unicef, 2013				
Still birth rate: still births (SB) / year / 1000 total births	3.03	WHO, 2009				
Total births in 1000s (LB+SB) per year	6	Unicef, 2013				
Infant mortality rate: infant deaths / 1000 LB / year	2.3	Unicef, 2013				
Under-5 mortality rate: U5 deaths / 1000 LB / year	3.2	Unicef, 2013				
Percentage births in women >35 years						
Life expectancy at birth (yrs)	79.96	Unicef, 2013				
% of marriages consanguineous						

Maternal health	Estimate	Source, Year	Your estimate	Source, Year	Chosen estimate	Source, Year
Prenatal visits – at least 1 visit (%)	–	Unicef, 2013				
Prenatal visits – at least 4 visits (%)	–	Unicef, 2013				
Births attended by skilled health personnel (%)	99.9	Unicef, 2013				
Contraception prevalence rate (%)	–	Unicef, 2013				
Unmet need for family planning (%)						
Total fertility rate	1.66	Unicef, 2013				
% home births						
% births at health care services	100.00	Unicef, 2013				
Newborn health	**Estimate**	**Source, Year**	**Your estimate**	**Source, Year**	**Chosen estimate**	**Source, Year**
Number of neonatal examinations by SBA / trained staff						
% neonatal examinations by SBA/ trained staff						

Socio-economic indicators	Estimate	Source, Year	Your estimate	Source, Year	Chosen estimate	Source, Year
Gross national income per capita (PPP int. $)	63540	Unicef, 2013				
% population living on < US$1 per day		Unicef, 2013				
Birth registration coverage (%)	>90	WHO 2011				
Death registration coverage (%)	90-100	WHO, 2008				

LB = live births
PPP = purchasing power parity
SBA = skilled birth attendant

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Shared Data
Health Services Data

Please read first! If you have already completed a needs assessment for a different topic in this country, you will be able to copy the Health Services information from that Calculator into here. The information should be the same.

This section provides health-service-related information for your country.
By default, the Toolkit contains information at the national level.
If you would like to use a different population, then replace country information with that of your specific population of interest.

Health Expenditure	Estimate	Source, Year	Your estimate	Source, Year	Chosen estimate	Source, Year
Per capita total expenditure on health (PPP int. $)	6876.1	WHO 2011				
Total expenditure on health as percentage of GDP	7.7	WHO 2011				
Per capita government expenditure on health (PPP int. $)	5794.4	WHO 2011				
External resources for health as percentage of total expenditure on health		WHO 2011				
General government expenditure on health as percentage of total expenditure on health	84.3	WHO 2011				
Out-of-pocket expenditure as percentage of private expenditure on health	72.8	WHO 2011				
Private expenditure on health as percentage of total expenditure on health	15.7	WHO 2011				
General government expenditure on health as percentage of total government expenditure	15.5	WHO 2011				

Health Workforce	Estimate	Source, Year	Your estimate	Source, Year	Chosen estimate	Source, Year
Number of nursing and midwifery personnel	5330	WHO, 2006				
Nursing and midwifery personnel density (per 10,000 population)	113.2	WHO, 2006				
Number of physicians	1365	WHO, 2007				
Physician density (per 10,000 population)	28.62	WHO, 2007				
Number of obstetricians						
Number of paediatricians						
Number of paediatric surgeons						
Number of paediatric cardiac surgeons						
Number of paediatric neurosurgeons						
Number of clinical geneticists						
Number of genetic counsellors						
Number of community health workers						
Number of skilled birth attendants (SBA)						
Density of SBA						
Number of lab staff providing cytogenetic testing						

Number of lab staff providing molecular genetics						
Number of lab staff providing biochemical tests for genetics						
Number of skilled health attendants						

Infrastructure	Estimate	Source, Year	Your estimate	Source, Year	Chosen estimate	Source, Year
Number of maternity units						
Number of services providing specialised care for people with CD						
Number of family planning services						
Number of preconception services						
Number of services providing prenatal care						
Number of services providing newborn care						
Number of facilities providing genetic services						
Number of laboratories providing cytogenetics						
Number of laboratories providing molecular genetics						
Number of laboratories providing biochemical tests for genetics						
Number of facillities for safe terminations of pregnancies for fetal defects						

PPP = purchasing power parity
GDP = gross domestic product
SBA = skilled birth attendant
CD = congenital disorders

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Teratogenic risk factors for congenital disorders in women of reproductive age

Risk factors	Proportion of women with risk factor	Qualitative assessment*	Variation	Source
Teratogen exposure: environmental, agricultural and occupational				
Exposure to teratogenic prescribed and non-prescribed medicines				
Syphilis				
Rubella susceptibility				
Rubella infection				
Other infections (e.g. CMV or HIV)				
Alcohol consumption				
Tobacco use				
Iodine deficiency				
Folate deficiency				
Other risk factors				
Obesity				
Diabetes				

* Complete if numerical data are unavailable. Use numbers from 1 to 5, where 1 = low importance and 5 = high importance.

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Teratogens
Epidemiology teratogen associated congenital disorders

Please enter data either for a specific teratogen or for congenital disorders caused by teratogens as a whole.

Table TER-NA1.2a Burden of disease in pregnancy, at birth and at population level			
	Chosen estimates		
Indicator	Number (n)	n/1000 TB	Range of prevalence (/1000 TB)
Annual affected live births (LB)			
Annual affected stillbirths (SB)			
Annual affected births (LB+SB)			
Annual affected persons (all age groups)			
Table TER-NA1.2b Mortality indicators			
	Chosen estimates		
Indicator	Number (n)	n/1000 LB	Range of prevalence (/1000 TB)
Annual overall mortality			
Annual neonatal mortality			
Annual infant mortality			
Annual under-5 mortality			
Mean life expectancy at birth among affected people			

TB = total births (live births + stillbirths)

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Teratogens

TER Interventions 1:Effect of preconception screening and treatment

Baseline prevalence of teratogen-induced congenital disordersper 1000 total births (live + still)		
Variables		
Proportion of women reducing teratogen risk to safe levels during pregnancy		Range: 0 to 1
Effectiveness of interventions on the outcome		Range: 0 to 1
Results		
% prevalence reduction due to intervention per 1000 total births	0%	
Final prevalence of teratogen-induced congenital disorders per 1000 births	0.000	

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Teratogens
TER Interventions 1:Effects of prenatal screening and pregnancy termination

Assumption: prenatal services are equally used for cases which would lead to still births and live births.
This could overestimate the impact of ToP if in fact ToP is more likely for severe cases that would result in still birth.
Conversely, the impact of ToP could be underestimated if screening is only available to high-income women at lower risk.
100% specificity of prenatal diagnosis assumed.

Baseline prevalence, per 1000 TB (LB + SB)		See previous sheet. Use baseline either before or after interventions.
Variables		
Coverage of prenatal diagnosis		Range: 0 to 1
Choice of ToP in confirmed cases		Range: 0 to 1
Results		
% prevalence reduction due to PNS	0%	
Prevalence reduction due to PNS	0.000	
Final prevalence after PNS	0.000	

PNS = prenatal screening
ToP = termination of pregnancy
TB = total births (live births + still births)

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Teratogens

TER Needs Assessment 3: Quantitative assessment of interventions

Table TER-NA3a	**Estimated prevalence in the absence of interventions for TER**	
Indicator	Number (n)	Prevalence (n/1000)
Women of childbearing age at increased teratogenic risk		
Potential live births		
Potential still births		

Table TER-NA3b	**Current situation in relation to interventions before pregnancy**		
Intervention	Coverage (%)	Cases averted (n)	Cases averted/1000 TB
Effect of family planning, education			
Occupational health monitoring			
Environmental health monitoring			
Interventions to reduce risk			
Information on risks and exposures			
Overall effect			

Table TER-NA3c	**Target situation in relation to interventions before pregnancy**		
Intervention	Coverage (%)	Cases averted (n)	Cases averted/1000 TB
Effect of family planning, education			
Occupational health monitoring			
Environmental health monitoring			
Interventions to reduce risk			
Information on risks and exposures			
Overall effect			

Table TER-NA3d	Current situation in relation to interventions during pregnancy		
Intervention	Coverage (%)	Cases managed (n)	Cases managed/1000 TB
Education on risks			
Targeted prenatal screening based on exposure			
Prenatal diagnosis			
Termination of pregnancy			
Maternal protection legislation			
Information on risks and exposures			
Overall effect			

Table TER-NA3e	Target situation in relation to interventions during pregnancy		
Intervention	Coverage (%)	Cases managed (n)	Cases managed/1000 TB
Education on risks			
Targeted prenatal screening based on exposure			
Prenatal diagnosis			
Termination of pregnancy			
Maternal protection legislation			
Information on risks and exposures			
Overall effect			

Table TER-NA3f	Current situation in relation to interventions after birth		
Intervention	Coverage (%)	Cases managed (n)	Cases managed/1000 LB
Effect of newborn screening			
Effect of newborn diagnosis			
Effect of clinical and related interventions			
Effect of social care and support			
Effect of education interventions			
Compensation legislation			
Overall effect			

Table TER-NA3g	Target situation in relation to interventions after birth		
Intervention	Coverage (%)	Cases managed (n)	Cases managed/1000 LB
Effect of newborn screening			
Effect of newborn diagnosis			
Effect of clinical and related interventions			
Effect of social care and support			
Effect of education interventions			
Compensation legislation			
Overall effect			

Table TER-NA3h	Current and desired outcomes			
	Current situation		**Target situation**	
Indicator	Annual number (n)	Incidence (n/1000)	Annual number (n)	Incidence (n/1000)
Estimated affected pregnancies				
Live births (LB)				
Still births (SB)				
All births (LB+SB)				
Estimated population prevalence				
All age groups				
Estimated mortality / 1000 live births				
Neonatal deaths				
Infant deaths				
Under-5 deaths				

TB = total births (live births + still births)