PHG Needs Assessment Calculator Barbados Teratogens

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

Full name of the sheet	Short name
Country demographic, maternal health and socioeconomic indicators	Demography
Country health service data	HealthServices
Teratogenic risk factors for congenital disorders in women of reproductive age	TER-NA1.1
Epidemiology of birth defects caused by teratogens	TER-NA1.2
TER Interventions 1:Effect of preconception screening and treatment	TER-Interv1
TER Interventions 2:Effect of prenatal screening and pregnancy termination	TER-Interv2
TER Needs Assessment Calculator 3: Quantitative assessment of interventions	TER-NA3

(There is no sheet TER-NA2.)

Barbados 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	8763	8476	17239			0			0
5-9 years	9479	9270	18749			0			0
10-14 years	9425	9188	18613			0			0
15-19 years	9434	9202	18636			0			0
20-24 years	8913	8891	17804			0			0
25-29 years	9758	9980	19738			0			0
30-34 years	9574	10014	19588			0			0
35-39 years	10155	11102	21257			0			0
40-44 years	9544	10511	20055			0			0
45-49 years	8007	8767	16774			0			0
50-54 years	6563	7075	13638			0			0
55-59 years	4376	5207	9583			0			0
60-64 years	3969	4956	8925			0			0
65+ years	11966	17445	29411			0			0
Total	0	0	250010	0	0	0	0	0	0
Female population aged 15-44 years		0			-			-	
Data year		2000 reporte	ed 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	Unicef, 2007				
Still birth rate: still births (SB) / year / 1000 total births	9	WHO, 2009				
Total births in 1000s (LB+SB) per year	3	Unicef, 2007				
Infant mortality rate: infant deaths / 1000 LB / year	17	UNICEF				
Under-5 mortality rate: U5 deaths / 1000 LB / year	20	(2AQ111) 12010				
Percentage births in women >35 years		(2011), 2010				
Life expectancy at birth (yrs)	76	WHO, 2009				
% of marriages consanguineous						

	Estimate	Source, Year	Your	Source,	Chosen	Source,
Maternal health			estimate	Year	estimate	Year
Prenatal visits – at least 1 visit (%)	100	WHO, 2007				
Prenatal visits – at least 4 visits (%)						
Births attended by skilled health personnel (%)	100	WHO, 2007				
Contraception prevalence rate (%)						
Unmet need for family planning (%)						
Total fertility rate	1.5	WHO, 2009				
% home births						
% births at health care services						
	Estimate	Source, Year	Your	Source,	Chosen	Source,
Newborn health			estimate	Year	estimate	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
Gross national income per capita (PPP int. \$)	18240	WHO, 2005			
% population living on < US\$1 per day					
Birth registration coverage (%)	>90	WHO, 2007			
Death registration coverage (%)	90-100	WHO, 2006			

LB = live births

PPP = purchasing power parity

SBA = skilled birth attendant

PHG Foundation

Barbados 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. \$)	1457	WHO, 2009				
Total expenditure on health as percentage of GDP	6.8	WHO, 2009				
Per capita government expenditure on health (PPP int. \$)	936	WHO, 2009				
External resources for health as percentage of total expenditure on health	1.9	WHO, 2009				
General government expenditure on health as percentage of total expenditure on health	64.3	WHO, 2009				
Out-of-pocket expenditure as percentage of private expenditure on health	80.6	WHO, 2009				
Private expenditure on health as percentage of total expenditure on health	35.7	WHO, 2009				
General government expenditure on health as percentage of total government expenditure	10.8	WHO, 2009				

Health Workforce	Estimate	Source, Year	Your estimate	Source, Year	Chosen estimate	Source, Year
Number of nursing and midwifery personnel	1311	WHO, 2005				
Nursing and midwifery personnel density (per 10,000 population)	48.6	WHO, 2005				
Number of physicians	489	WHO, 2005				
Physician density (per 10,000 population)	18.11	WHO, 2005				
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			

		Source,	Your	Source,	Chosen	Source,
Infrastructure	Estimate	Year	estimate	Year	estimate	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

Teratogens

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				
lodine 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.

Teratogens

Epidemiology teratogen associated congenital disorders

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

	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 e	stimates	
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)

Teratogens

TER Interventions 1:Effect of preconception screening and treatment

Baseline prevalence of teratogen-induced congenital disordersper 1000 total births (live + still)		
Proportion of women reducing teratogen sk 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	

PHG Foundation

Barbados

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)

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	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 of	Current and desired outcomes		
	Current situation	Current 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 bi	rths			
Neonatal deaths				
Infant deaths				
Under-5 deaths				

TB = total births (live births + still births)