PHG Needs Assessment Calculator
Bangladesh
Down's Syndrome

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Bangladesh
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	1075260	1046327	2121587			0			0
5-9 years	877117	842412	1719529			0			0
10-14 years	630003	587096	1217099			0			0
15-19 years	487774	536876	1024650			0			0
20-24 years	499644	521036	1020680			0			0
25-29 years	455010	451239	906249			0			0
30-34 years	365078	323567	688645			0			0
35-39 years	289644	246474	536118			0			0
40-44 years	207631	185485	393116			0			0
45-49 years	182267	158270	340537			0			0
50-54 years	141965	119356	261321			0			0
55-59 years	115200	93859	209059			0			0
60-64 years	79104	65005	144109			0			0
65+ years	118099	108026	226125			0			0
Total	5523796	5285028	10815694	0	0	0	0	0	0
Female population aged 15-44 years		2264677			-			-	
Data year		1988 reported in 1992							
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	19.97	Unicef, 2013				
Still birth rate (SB) per year per 1000 total births	36.42	WHO, 2009				
Total births in 1000s (LB+SB) per year	3016	Unicef, 2013				
Infant mortality rate: infant deaths / 1000 LB / year	36.7	Unicef, 2013				
Under-5 mortality rate: U5 deaths / 1000 LB / year	46	Unicef, 2013				
Percentage births in women >35 years						
Life expectancy at birth (yrs)	68.94	Unicef, 2013				
% of marriages consanguineous						

Maternal health	Estimate	Source, Year	Your estimate	Source, Year	Chosen estimate	Source, Year
Prenatal visits – at least 1 visit (%)	54.6	Unicef, 2013				
Prenatal visits – at least 4 visits (%)	25.5	Unicef, 2013				
Births attended by skilled health personnel (%)	31.7	Unicef, 2013				
Contraception prevalence rate (%)	61.2	Unicef, 2013				
Unmet need for family planning (%)	16.8	WHO, 2007				
Total fertility rate	2.20	Unicef, 2013				
% home births						
% births at health care services	28.80	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. $)	1940	Unicef, 2013				
% population living on < US$1 per day	49.6	Unicef, 2013				
Birth registration coverage (%)	9.8	WHO 2006				
Death registration coverage (%)						

LB = live births

PPP = purchasing power parity

SBA = skilled birth attendant

Bangladesh
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. $)	67.3	WHO 2011				
Total expenditure on health as percentage of GDP	3.7	WHO 2011				
Per capita government expenditure on health (PPP int. $)	24.6	WHO 2011				
External resources for health as percentage of total expenditure on health	17.2	WHO 2011				
General government expenditure on health as percentage of total expenditure on health	36.6	WHO 2011				
Out-of-pocket expenditure as percentage of private expenditure on health	96.6	WHO 2011				
Private expenditure on health as percentage of total expenditure on health	63.4	WHO 2011				
General government expenditure on health as percentage of total government expenditure	8.9	WHO 2011				

Health Workforce	Estimate	Source, Year	Your estimate	Source, Year	Chosen estimate	Source, Year
Number of nursing and midwifery personnel	39992	WHO, 2007				
Nursing and midwifery personnel density (per 10,000 population)	2.7	WHO, 2007				
Number of physicians	43315	WHO, 2007				
Physician density (per 10 000 population)	2.95	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

Bangladesh
Down's Syndrome
DOWNS Epidemiology 1.1: Country epidemiology

Epidemiological indicator	Your estimates	Range	PHGDB minimum estimates	Chosen estimates	Range	Source
Year of estimate						
Prevalence at birth and by age-group (/1000)						
Live birth prevalence (LB)			1.36			
Stillbirth prevalence (SB)			0.05			
Total birth prevalence (LB+SB)			1.42			
All age groups						
<1 year olds						
1-4 year olds						
5-14 year olds						
15-44 year olds						
45+ year olds						
Number of cases by age group						
Annual live births			4,404			
All age groups						
<1 year olds						
1-4 year olds						
5-14 year olds						
15-44 year olds						
45+ year olds						
No. of cases by level of impairment						
No or minor disability						
Moderate disability*						
Severe disability*						
Mortality and morbidity						
Mean life expectancy (yrs)			14.2			
No. deaths < 1yr			2058			
No. deaths 1-4 yrs			406			
No. deaths < 5 yrs			2464			
Infant mortality / 1000 LB			0.66			
Under-5 mortality / 1000 LB			0.79			
Years of life lost						

LB = live births

* For Down's, Moderate = mild mental retardation and Severe = moderate or worse mental retardation (see Background)

Bangladesh
Down's Syndrome
DOWNS Epidemiology 1.2: International comparison

Epidemiological indicator	Your chosen estimates	Comparison		
		Country	Region	World
Prevalence at birth and by age-group (/1000 people)			(Asia, South)	
Live birth prevalence (LB)		1.36	1.31	1.49
Stillbirth prevalence (SB)		0.05	0.05	0.06
Total birth prevalence (LB+SB)		1.42	1.36	1.55
All age groups				
<1 year olds				
1-4 year olds				
5-14 year olds				
15-44 year olds				
45+ year olds				
Number of cases by age-group				
Annual live births		4,404	48726	200416
All age groups				
<1 year olds				
1-4 year olds				
5-14 year olds				
15-44 year olds				
45+ year olds				
No. cases by level of impairment				
No or minor disability				
Moderate disability*				
Severe disability*				
Mortality and morbidity				
Mean life expectancy (yrs)		14.2	12.9	22.3
No. deaths < 1yr		2058	22,984	80,306
No. deaths 1-4 yrs		406	4,484	15,226
No. deaths < 5 yrs		2464	27,468	95,532
Infant mortality / 1000 LB		0.66	0.47	0.40
Under-5 mortality / 1000 LB		0.79	0.56	0.48
Years of life lost				

LB = live births

* For Down's, Moderate = mild mental retardation and Severe = moderate or worse mental retardation (see Background)

Bangladesh
Down's Syndrome
DOWNS Epidemiology 2.1: Data on affected pregnancies: Research studies

Study author, year, site	Sample size	Study quality and representativeness	Main findings

Based on the studies listed above (or in section DOWNS-E2.1 of the Tool), enter the best estimates for the prevalence of affected births and terminations in the country, and a range of values to reflect uncertainty or within-country variation.

If studies are not representative of the national population you may need to weight your data (see the Guide for explanation on weighting and help with the calculations).

Estimates for the total country/territory	Number of affected live births	LB prevalence / 1000 TB	Comments
Best estimate			
Lower estimate			
Higher estimate			
Estimates for the total country/territory	Number of affected still births	SB prevalence / 1000 TB	Comments
Best estimate			
Lower estimate			
Higher estimate			
Estimates for the total country/territory	Number of terminations of pregnancy due to condition	ToP / 1000 women aged 15-44	Comments
Best estimate			
Lower estimate			
Higher estimate			

TB = total births (live births + stillbirths); ToP = termination of pregnancy

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Down's Syndrome
DOWNS Epidemiology 2.2: Data on affected pregnancies: Surveillance

Based on surveillance data, enter the best estimates for the prevalence of the condition in live births, still births and pregnancy terminations in the country. Give a range of values to reflect uncertainty and within-country variation, and use comments for information on data quality, uncertainty and representativeness.

If studies are not representative of the national population you may need to weight your data (see the Guide for explanation on weighting and help with the calculations).

Estimates for the total country/territory	Number of affected live births	Birth prevalence / 1000 TB	Comments
Best estimate			
Lower estimate			
Higher estimate			

Estimates for the total country/territory	Number of affected still births	Stillbirth prevalence / 1000 TB	Comments
Best estimate			
Lower estimate			
Higher estimate			

Estimates for the total country/territory	Number of ToP due to condition	ToP / 1000 women aged 15-44	Comments
Best estimate			
Lower estimate			
Higher estimate			

TB = total births (live births + stillbirths); ToP = termination of pregnancy

Bangladesh
Down's Syndrome
DOWNS Epidemiology 2.3: Data on affected pregnancies: Other sources

	Source 1:	Source 2:	Notes
Enter year and source of data – use last year with information available.			
Basic Numbers			
Number of affected live births / year, from data source			
Total number of live births / year, from data source			
Number of affected still births / year, from data source			
Total number of still births / year, from data source			
Number of ToP for affected fetus / year from data source			
Total number of affected births / year (live and still)	0	0	Number of affected live births + Number of affected still births
Total number of births / year, from data source	0	0	Total number of live births + Total number of still births
Total number of ToP / year, from data source			
Total number of women aged 15-44			
Live birth prevalence: recorded and estimated			
Recorded live birth prevalence (affected recorded live births / 1000 total births)	#DIV/0!	#DIV/0!	
Estimated completeness of recording: what proportion of true affected live births in your data source were recorded?			Range: 0 to 1
Estimated coverage of recorded live births (number of recorded live births / total live births in country or territory)			Range: 0 to 1
Estimated live birth prevalence (recorded prevalence / completeness)	#DIV/0!	#DIV/0!	
Estimated true number of affected live births in data source (number of recorded affected live births / completeness)	#DIV/0!	#DIV/0!	
Estimated number of affected live births in total population (number of affected live births from data source / (coverage x completeness))	#DIV/0!	#DIV/0!	
Stillbirth prevalence: recorded and estimated			
Recorded stillbirth prevalence (affected recorded still births / 1000 recorded total births)	#DIV/0!	#DIV/0!	
Estimated completeness of recording: what proportion of true affected stillbirths in your data source were recorded?			Range: 0 to 1
Estimated coverage of recorded stillbirths (number of recorded still births / total still births in country or territory)			Range: 0 to 1
Estimated stillbirth prevalence (recorded prevalence / completeness)	#DIV/0!	#DIV/0!	
Estimated true number of affected stillbirths in data source (number of recorded affected still births / completeness)	#DIV/0!	#DIV/0!	

Estimated number of affected stillbirths in total population (number of affected stillbirths from data source / (coverage x completeness))	#DIV/0!	#DIV/0!

ToP prevalence: recorded and estimated			
Recorded ToP prevalence (ToP in affected fetuses / 1000 women aged 15-44)	#DIV/0!	#DIV/0!	
Estimated completeness of recording: what proportion of true affected pregnancy terminations in your data source were recorded?			Range: 0 to 1
Estimated coverage of recorded ToP (number of recorded ToP / total ToP in country or territory)			Range: 0 to 1
Estimated ToP prevalence (recorded prevalence / estimated completeness)	#DIV/0!	#DIV/0!	
Estimated true number of ToP in data source (number of recorded ToP / completeness)	#DIV/0!	#DIV/0!	
Estimated number of ToP in total population (number of ToP from data source / (coverage x completeness))	#DIV/0!	#DIV/0!	
Based on the sources above, enter the best prevalence estimates for your population, and a range of values to reflect uncertainty of estimates and within country variation.			
If studies are not representative of the national population you may need to weight your data (see the Guide for explanation on weighting and help with the calculations).			
Estimates for the whole country/territory	Number of affected live births	LB prevalence / 1000 TB	
Best estimate			
Lower estimate			
Higher estimate			
Estimates for the whole country/territory	Number of affected stillbirths	SB prevalence / 1000 TB	
Best estimate			
Lower estimate			
Higher estimate			
Estimates for the whole country/territory	Number of ToP due to condition	ToP /1000 women aged 15-44	
Best estimate			
Lower estimate			
Higher estimate			
TB = total births (live births + stillbirths); ToP = termination of pregnancy			

Bangladesh
Down's Syndrome
DOWNS Epidemiology 2.4: Summary of affected pregnancies

Indicator	Your estimates	Range	PHGDB minimum estimates	Chosen estimates	Range	Source
Number of annual affected **live births**			4404			
Annual birth prevalence / 1000 TB			1.36			
Number of annual affected **stillbirths**			169			
Annual still birth prevalence / 1000 TB			0.05			
Number of **terminations of pregnancy** in affected fetuses/ year			0			
Affected ToP / 1000 women 15-44/ year			0.00			

If there are specific sub-types of condition, you can repeat this exercise below. However, you should consider (a) whether sub-types would have different implications for advocacy, and (b) whether a sub-type might require a full, specific needs assessment.

TB = total births (live births + stillbirths); ToP = termination of pregnancy

Bangladesh
Down's Syndrome
DOWNS Epidemiology 2.5: Sub-population variation in affected pregnancies

If the birth prevalence rates vary by population sub-group (e.g. geographically or by another factor), indicate any population groups with different prevalence estimates from the whole population and describe reasons for variation. If a group is substantially different from the general population, you may wish to conduct a needs assessment for that group alone.

Population sub-group	Number of affected live births	LB prevalence / 1000 TB	Reason for variation

Population sub-group	Number of affected stillbirths	SB prevalence / 1000 TB	Reason for variation

Population sub-group	Number of ToP in affected pregnancies	ToP prevalence / 1000 women aged 15-44	Reason for variation

TB = total births (live births + stillbirths); ToP = termination of pregnancy

Bangladesh
Down's Syndrome
DOWNS Epidemiology 3.1: Mortality data: Research studies

Source, year, site	Sample size	Age group	Study quality and representativeness	Main findings

Based on the studies above, enter the best estimates for the specific mortality by age-group e.g. infant, under 5s, etc, as appropriate, and a range of values to reflect uncertainty of estimates and within-country variation.
If studies are not representative of the national population you may need to weight your data (see the Guide for explanation on weighting and help with the calculations).

Mortality estimates	Number of deaths	Ratio (deaths / 1000 LB)	Comments
Neonatal group (<28 days)			
Best estimate			
Lower estimate			
Higher estimate			
Infant group (<1 year)			
Best estimate			
Lower estimate			
Higher estimate			
Under-5 group (<5 years)			
Best estimate			
Lower estimate			
Higher estimate			
Other age group:			
Best estimate			
Lower estimate			
Higher estimate			

LB = live births

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Down's Syndrome
DOWNS Epidemiology 3.2: Mortality data: Vital registration data

Fill in the blank cells based on your vital registration data.	
Enter year and source of data	
Registered data	
Total registered live births	
Registered condition-specific neonatal deaths (first 28 days of life)	
Registered condition-specific infant deaths (first year of life)	
Registered condition-specific under-5 deaths (first 5 years of life)	
Registered condition-specific neonatal mortality ratio (condition-specific neonatal deaths /(Total registered live births/ 1000))	#DIV/0!
Registered condition-specific infant mortality ((condition-specific infant deaths /(Total registered live births/ 1000))	#DIV/0!
Registered condition-specific under-5 mortality (condition-specific under-5 deaths / (Total registered live births/ 1000))	#DIV/0!

Adjustment for under-ascertainment of cause of death and sub-registration of deaths: Enter estimates in the highlighted cells. It is not always possible to adjust the estimates, in which case you may give the value '1', accepting that the estimates in these cases will usually be biased towards low values. (Or you may move to the next section.)

It is assumed that under-ascertainment is stable across age-groups; if ascertainment varies by age-group, you could use separate estimates for each age group.

Estimated completeness of recording: what proportion of deaths in affected persons were registered as such?		Range: 0 to 1
Population coverage: what proportion of the total country/territory population is covered by the vital registration?		Range: 0 to 1
Death ascertainment (population coverage x completeness)	0	
Estimated values for the total country/ territory population		
Estimated number of live births in total population (Total registered live births/population coverage)	#DIV/0!	
Estimated number of neonatal deaths in total population (number of deaths registered in neonatal period / ascertainment)	#DIV/0!	
Estimated number of infant deaths in total population (number of deaths registered in first year of life / ascertainment)	#DIV/0!	
Estimated number of under-5 deaths in total population (number of deaths registered in under-5s / ascertainment)	#DIV/0!	
Estimated neonatal mortality ratio (estimated neonatal deaths / 1000 live births)	#DIV/0!	
Estimated infant mortality ratio (estimated infant deaths / 1000 live births)	#DIV/0!	
Estimated under-5 mortality ratio (estimated under-5 deaths / 1000 live births)	#DIV/0!	

Bangladesh
Down's Syndrome
DOWNS Epidemiology 3.3: Mortality data: Other sources

Source, year, site	Sample size	Age group	Data quality and representativeness	Main findings

Based on data from the sources above, enter estimates for the disease-specific deaths and mortality rates in your population.

If studies are not representative of the national population you may need to weight your data (see the Guide for explanation on weighting and help with the calculations).

Estimates for the total country/territory	Neonatal mortality		Infant mortality		Under-5 mortality	
	Value	Ratio/1000 LB	Value	Ratio/1000 LB	Value	Ratio/1000 LB
Best estimate						
Lower estimate						
Higher estimate						

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Down's Syndrome
DOWNS Epidemiology 3.4: Summary mortality estimates

Indicator	Your estimates	Range	PHGDB minimum estimates	Chosen estimates	Range	Source
Year of data collection						
Number of annual deaths in affected persons						
Number of annual live births (in 1000s)			3,107			
Number of annual affected neonatal deaths			1279			
Number of affected neonatal deaths / 1000 LB			0.41			
Number of annual affected infant deaths			2058			
Number of affected infant deaths/ 1000 LB			0.66			
Number of annual affected under-5 deaths			2464			
Number of affected under-5 deaths / 1000 LB			0.79			
Mean life expectancy at birth in affected people			14.2			
Other indicators (e.g. survival following surgical procedure, etc)						

If there are specific sub-types of condition, you can repeat this exercise (copy table and paste below). However, you should consider (a) whether sub-types would have different implications for advocacy, and (b) whether a sub-type might require a full, specific needs assessment.

Bangladesh
Down's Syndrome
DOWNS Epidemiology 3.5: Sub-population variation in mortality

Age group: neonatal Population sub-group	Number of deaths in affected persons	Cause-specific, group-specific neonatal mortality ratio / 1000 LB	Reason for variation

Age group: infant Population sub-group	Number of deaths in affected persons	Cause-specific, group-specific infant mortality ratio / 1000 LB	Reason for variation

Age group: under 5 Population sub-group	Number of deaths in affected persons	Cause-specific, group-specific under-5 mortality ratio / 1000 LB	Reason for variation

Age group: .... Population sub-group	Number of deaths in affected persons	Cause-specific, group-specific mortality ratio / 1000 population	Reason for variation

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Down's Syndrome
DOWNS Epidemiology 4.1: Population prevalence: Research studies

Study, year, site	Sample size	Study quality and representativeness	Main findings

Based on the studies above, enter the best estimates for population prevalence, and a range of values to reflect uncertainty of estimates and within-country variation.
If studies are not representative of the national population you may need to weight your data (see the Guide for explanation on weighting and help with the calculations).

	Prevalence / 1000 persons	Range	Comments
Best estimate			
Lower estimate			
Higher estimate			

If there are specific sub-types of condition, you can repeat this exercise (copy table and paste below). However, you should consider (a) whether sub-types would have different implications for advocacy, and (b) whether a sub-type might require a full, specific needs assessment.

Bangladesh
Down's Syndrome
DOWNS Epidemiology 4.2: Population prevalence: Other sources

Source, year, site	Sample size	Data quality and representativeness	Main findings

Based on data from the sources above, enter estimates for the disease-specific deaths and mortality rates in your population.
If studies are not representative of the national population you may need to weight your data (see the Guide for explanation on weighting and help with the calculations).

	Prevalence / 1000 persons	Range	Comments
Best estimate			
Lower estimate			
Higher estimate			

If there are specific sub-types of condition, you can repeat this exercise (copy table and paste below). However, you should consider (a) whether sub-types would have different implications for advocacy, and (b) whether a sub-type might require a full, specific needs assessment.

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Down's Syndrome
DOWNS Epidemiology 4.3: Population prevalence summary

Source of estimates	Estimated total population number of affected persons	Range	Estimated total population prevalence / 1000 persons	Range
1				
2				
3				
4				
5				
PHGDB				
Chosen estimates				

If there are specific sub-types of condition, you can repeat this exercise (copy table and paste below). However, you should consider (a) whether sub-types would have different implications for advocacy, and (b) whether a sub-type might require a full, specific needs assessment.

Bangladesh
Down's Syndrome
DOWNS Epidemiology 4.4: Sub-population prevalence variation

Population sub-group	Number of affected people	Total number of people in population sub-group	Population prevalence per 1000 people	Reason for variation
			#DIV/0!	
			#DIV/0!	
			#DIV/0!	
			#DIV/0!	

If there are specific sub-types of condition, you can repeat this exercise (copy table and paste below). However, you should consider (a) whether sub-types would have different implications for advocacy, and (b) whether a sub-type might require a full, specific needs assessment.

Formula in column D: Number of affected people/ (Total number of people in population subgroup/1000)

Bangladesh
Down's Syndrome
DOWNS Intervention 1: Effects of maternal age

If you have an estimate for the birth prevalence of chromosomal disorders, you can use the Calculator on the left.
If you have an estimate of the proportion of births that are to mothers aged over 35, you can use the Calculator on the right.

Birth prevalence per 1000 TB		
Proportional birth prevalence due to high maternal age[1]	#DIV/0!	Requires a birth prevalence above
Birth prevalence attributable to high maternal age, per 1000 TB[2]	-0.86	
Baseline prevalence without maternal age effect	0.86	This figure is set at 0.86

Proportion of mothers aged >35		Range: 0 to 1
Estimated birth prevalence per 1000 TB[3]	0.86	
Proportional birth prevalence due to high maternal age[4]	0.00	
Birth prevalence attributable to high maternal age, per 1000 TB[5]	0	
Baseline prevalence without maternal age effect	0.86	This figure is set at 0.86

TB = total births (live births + stillbirths)

[1](Birth prevalence – 0.86)/Birth prevalence

[2]Birth prevalence – Baseline prevalence

[3]0.86+(7*Proportion of mothers aged >35)

[4](Estimated birth prevalence- Baseline prevalence)/Estimated birth prevalence

[5]Estimated birth prevalence*Proportional birth prevalence

Bangladesh
Down's Syndrome
DOWNS Intervention 2: Effect of prenatal screening and diagnosis and pregnancy termination

Note: this makes the simplifying assumption that stillbirth is equally likely in cases that are diagnosed as in cases that are not diagnosed.

Assumption: prenatal services are equally used for cases which would lead to stillbirths and live births.

This could overestimate the impact of ToP if in fact ToP is more likely for severe cases that would result in stillbirth.

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.

Birth prevalence (allowing for maternal age effect), per 1000 TB		Can be found in sheet DOWNS-Interv1
Variables		
Coverage of prenatal screening and diagnosis		Range: 0 to 1
Proportion of cases diagnosed		Range: 0 to 1
Proportion of diagnosed cases ending in ToP		Range: 0 to 1
Results		
% prevalence reduction due to PNS & ToP[1]	0%	
Prevalence reduction due to PNS & ToP, per 1000 TB[2]	0.000	
Final prevalence: affected live births after PNS & ToP, per 1000 TB[3]	0.000	

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

[1]Coverage of PNS and diagnosis X Proportion of cases diagnosed x Proportion of cases ending in ToP
[2]% prevalence reduction due to PNS and ToP x Birth prevalence
[3]Birth prevalence – Prevalence reduction due to PNS & ToP

Bangladesh
Down's Syndrome
DOWNS Needs assessment 1: Quantitative baseline

Table DOWNS-NA1a   Burden of Down's Syndrome in pregnancy, at birth and at population level

Indicator	Chosen estimates			Notes
	Number (n)	n/1000 pregnancy outcomes	Range of prevalence (/1000 TB)	
Annual affected live births (LB)	0	0	0	Drawn from sheet E2.4
Annual affected stillbirths (SB)	0	0	0	Drawn from sheet E2.4
Annual affected births (LB+SB)	0	0		Drawn from sheet E2.4
Annual affected persons (all age groups)	0	0	0	Drawn from sheet E1.1

Table DOWNS-NA1b   Down's Syndrome mortality indicators

Indicator	Chosen estimates			Notes
	Number (n)	n/1000 LB	Range of prevalence (/1000 LB)	
Annual overall mortality	0			Drawn from sheet E3.4
Annual neonatal mortality	0	0	0	Drawn from sheet E3.4
Annual infant mortality	0	0	0	Drawn from sheet E3.4
Annual under-5 mortality	0	0	0	Drawn from sheet E3.4
Mean life expectancy at birth in affected people	0		0	Drawn from sheet E3.4

TB = total births (live births + stillbirths)

LB = live births

Bangladesh
Down's Syndrome
DOWNS Needs assessment 3: Quantitative assessment of interventions

Table DOWNS-NA3a	Estimated prevalence in the absence of interventions for Down's Syndrome	
Indicator	Number (n)	Prevalence (n/1000)
Potential live births		
Potential stillbirths		

Table DOWNS-NA3b	Current situation in relation to interventions before birth		
Intervention	Coverage (%)	Cases averted (n)	Cases averted/1000 TB
Effect of family planning, education			
Effect of prenatal screening			
Effect of prenatal diagnosis			
Effect of ToP			
Overall effect			

Table DOWNS-NA3c	Target situation in relation to interventions before birth		
Intervention	Coverage (%)	Cases averted (n)	Cases averted/1000 TB
Effect of family planning, education			
Effect of prenatal screening			
Effect of prenatal diagnosis			
Effect of ToP			
Overall effect			

Table DOWNS-NA3d	Current situation in relation to interventions after birth		
Intervention	Coverage (%)	Cases managed (n)	Cases managed/1000 TB
Effect of newborn diagnosis			
Effect of management and treatment			
Effect of social care and support			
Overall effect			

Table DOWNS-NA3e	Target situation in relation to interventions after birth		
Intervention	Coverage (%)	Cases managed (n)	Cases managed/1000 TB
Effect of newborn diagnosis			
Effect of management and treatment			
Effect of social care and support			
Overall effect			

Table DOWNS-NA3f	Current and desired outcomes			
	Current situation		Target situation	
Indicator	Annual number (n)	Prevalence (n/1000)	Annual number (n)	Prevalence (n/1000)
Estimated affected pregnancies				
Live births (LB)	0	0		
Stillbirths (SB)	0	0		
Total births (LB+SB)	0	0		
Estimated population prevalence				
All age groups				
Estimated mortality / 1000 live births				
Neonatal deaths	0	0		
Infant deaths	0	0		
Under-5 deaths	0	0		