# PHG Needs Assessment Calculator Paraguay Congenital Rubella Syndrome

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# Paraguay 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		Yo	our estimat	es	Cho	sen estima	ates
Age group	Male	Female	Total	Male	Female	Total	Male	Female	Total
0-4 years	310111	296742	606853			0			0
5-9 years	314297	300491	614788			0			0
10-14 years	372464	357954	730418			0			0
15-19 years	349342	348305	697647			0			0
20-24 years	267265	298759	566024			0			0
25-29 years	205743	257268	463011			0			0
30-34 years	180189	233931	414120			0			0
35-39 years	168528	217480	386008			0			0
40-44 years	147990	191475	339465			0			0
45-49 years	125671	164002	289673			0			0
50-54 years	107104	137718	244822			0			0
55-59 years	92551	117628	210179			0			0
60-64 years	77782	98573	176355			0			0
65+ years	194706	248933	443639			0			0
Total	2913743	3269259	6183002	0	0	0	0	0	0
Female population aged 15-44 years		1547218			-			-	
Data year	2010 reported in 2011								
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

# Demography

	Estimate	Source, Year	Your	Source,	Chosen	Source,
Fertility and mortality			estimate	Year	estimate	Year
Crude birth rate: live births (LB) / year / 1000 population	23.97	Unicef, 2013				
Still birth rate: still births (SB) / year / 1000 total births	19.41	WHO, 2009				
Total births in 1000s (LB+SB) per year	158	Unicef, 2013				
Infant mortality rate: infant deaths / 1000 LB / year	19.1	Unicef, 2013				
Under-5 mortality rate: U5 deaths / 1000 LB / year	22.4	Unicef, 2013				
Percentage births in women >35 years						
Life expectancy at birth (yrs)	72.48	Unicef, 2013				
% of marriages consanguineous						

	Estimate	Source, Year	Your	Source,	Chosen	Source,
Maternal health			estimate	Year	estimate	Year
Prenatal visits – at least 1 visit (%)	96.3	Unicef, 2013				
Prenatal visits – at least 4 visits (%)	90.5	Unicef, 2013				
Births attended by skilled health personnel (%)	81.9	Unicef, 2013				
Contraception prevalence rate (%)	79.4	Unicef, 2013				
Unmet need for family planning (%)	4.7	WHO, 2008				
Total fertility rate	2.91	Unicef, 2013				
% home births						
% births at health care services	-	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						

			Your	Source,	Chosen	Source,
Socio-economic indicators	Estimate	Source, Year	estimate	Year	estimate	Year
Gross national income per capita (PPP int. \$)	5310	Unicef, 2013				
% population living on < US\$1 per day	6.5	Unicef, 2013				
Birth registration coverage (%)						
Death registration coverage (%)	75-89	WHO, 2008				

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

Paraguay 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.

	Fatimate	0	Your		Chosen	0
Health Expenditure	Estimate	Source, Year	estimate	Source, Year	estimate	Source, Year
Per capita total expenditure on health (PPP int. \$)	526.5	WHO 2011				
Total expenditure on health as percentage of GDP	9.7	WHO 2011				
Per capita government expenditure on health (PPP int. \$)	203	WHO 2011				
External resources for health as percentage of total expenditure on health	2.6	WHO 2011				
General government expenditure on health as percentage of total expenditure on health	38.6	WHO 2011				
Out-of-pocket expenditure as percentage of private expenditure on health	91.4	WHO 2011				
Private expenditure on health as percentage of total expenditure on health	61.4	WHO 2011				
General government expenditure on health as percentage of total government expenditure	16.4	WHO 2011				

			Your		Chosen	
Health Workforce	Estimate	Source, Year	estimate	Source,	/ear estimate	Source, Year
Number of nursing and midwifery personnel	10261	WHO, 2002				
Nursing and midwifery personnel density (per 10,000 population)	17.9	WHO, 2002				
Number of physicians	6355	WHO, 2002				
Physician density (per 10,000 population)	11.1	WHO, 2002				
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

			Your		Chosen	
Infrastructure	Estimate	Source, Year	estimate	Source, Year	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

Congenital Rubella Syndrome RUB 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 (/100	0)					
Live birth prevalence (LB)						
Stillbirth prevalence (SB)						
Total birth prevalence (LB+SB)						
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						
All age groups						
<1 year olds						
1-4 year olds						
5-14 year olds						
15-44 year olds						
45+ year olds						
% cases by level of impairment						
No or minor disability						
Moderate disability						
Severe disability						
Mortality and morbidity						
Mean life expectancy (yrs)						
No. deaths < 1yr						
No. deaths 1-4 yrs						
No. deaths < 5 yrs						
Infant mortality / 1000 LB						
Under-5 mortality / 1000 LB						
Years of life lost						

Congenital Rubella Syndrome

RUB Epidemiology 1.2: International comparison

Number of cases by age-groupAnnual live birthsImage groupsAll age groupsImage groups<1 year oldsImage groups<1 year oldsImage groups1-4 year oldsImage groups5-14 year oldsImage groups5-14 year oldsImage groups15-44 year oldsImage groups15-44 year oldsImage groups45+ year oldsImage groups% cases by level of impairmentNo or minor disabilityImage groupsModerate disabilityImage groupsSevere disabilityImage groupsMortality and morbidity		Your chosen		Comparison	
Live birth prevalence (LB)       Image of the second	Epidemiological indicator	estimates	Country	Region	World
Stillbirth prevalence (SB)Image of the sected o	Prevalence at birth and by age-group (/1000 p	eople)		(Latin America, Tre	opical)
Total birth prevalence (LB+SB)Image of the section of th	Live birth prevalence (LB)				
All age groupsImage and the set of the se	Stillbirth prevalence (SB)				
<1 year olds </th <td>Total birth prevalence (LB+SB)</td> <td></td> <td></td> <td></td> <td></td>	Total birth prevalence (LB+SB)				
1-4 year oldsImage: sector of the	All age groups				
5-14 year oldsImage: style st	<1 year olds				
15-44 year oldsImage: style and	1-4 year olds				
45+ year oldsImage: constraint of cases by age-groupAnnual live birthsImage: constraint of cases by age-groupsAll age groupsImage: constraint of cases by age-groupsAll age groupsImage: constraint of cases by age-groups<1 year oldsImage: constraint of cases by age-groups1-4 year oldsImage: constraint of cases by age-groups5-14 year oldsImage: constraint of cases by age-groups% cases by level of impairmentImage: constraint of cases by age-groups% cases by level of impairmentImage: constraint of cases by age-groups% cases by level of impairmentImage: constraint of cases by age-groups% cases by level of impairmentImage: constraint of cases by age-groups% cases by level of impairmentImage: constraint of cases by age-groups% of cases by level of impairmentImage: constraint of cases by age-groups% of cases by level of impairmentImage: constraint of cases by age-groups% of cases by level of impairmentImage: c	5-14 year olds				
Number of cases by age-groupAnnual live birthsImage groupsAll age groupsImage groups<1 year oldsImage groups<1 year oldsImage groups1-4 year oldsImage groups5-14 year oldsImage groups% cases by level of impairmentImage groupsNo or minor disabilityImage groupsNo or minor disabilityImage groupsNo derate disabilityImage groupsSevere disabilityImage groupsMortality and morbidityImage groupsMortality and morbidityImage groupsNo. deaths < 1yrImage groupsNo. deaths < 1yrImage groupsNo. deaths < 1yrImage groupsInfant mortality / 1000 LBImage groupsImage groupsImage groupsImage groupsImage groupsImage groupsImage groupsImage	15-44 year olds				
Annual live birthsImage of the second se	45+ year olds				
All age groupsImage groupsImage groupsImage groupsImage groups<1 year oldsImage groupsImage groupsImage groups1-4 year oldsImage groupsImage groupsImage groups5-14 year oldsImage groupsImage groupsImage groups5-44 year oldsImage groupsImage groupsImage groups45+ year oldsImage groupsImage groupsImage groups5-44 year oldsImage groupsImage groupsImage groups45+ year oldsImage groupsImage groupsImage groups% cases by level of impairmentImage groupsImage groupsImage groups% cases by level of impairmentImage groupsImage groupsImage groups% cases by level of impairmentImage groupsImage groupsImage groupsModerate disabilityImage groupsImage groupsImage groupsModerate disabilityImage groupsImage groupsImage groupsMortality and morbidityImage groupsImage groupsImage groupsMono deaths < 1 yrImage groupsImage groupsImage groupsNo. deaths < 1 yrImage groupsImage groupsImage groupsNo. deaths < 1 yrImage groupsImage groupsImage groupsNo. deaths < 5 yrsImage grou	Number of cases by age-group				
<1 year olds   <1 year olds Image: state integration of the state integ	Annual live births				
1-4 year oldsImage: constraint of the second of	All age groups				
5-14 year oldsImage: constant of the system of	<1 year olds				
15-44 year oldsImage: constraint of the second	1-4 year olds				
45+ year oldsImage: constraint of the second se	5-14 year olds				
% cases by level of impairmentNo or minor disabilityImage: Constraint of the second s	15-44 year olds				
No or minor disabilityImage: Constraint of the second	45+ year olds				
Moderate disabilityImage: Constraint of the systemImage: Constraint of the systemSevere disabilityImage: Constraint of the systemImage: Constraint of the systemMortality and morbidityMortality and morbidityMean life expectancy (yrs)Image: Constraint of the systemMean life expectancy (yrs)Image: Constraint of the systemMean life expectancy (yrs)Image: Constraint of the systemMo. deaths < 1yrImage: Constraint of the systemNo. deaths 1-4 yrsImage: Constraint of the systemNo. deaths < 5 yrsImage: Constraint of the systemInfant mortality / 1000 LBImage: Constraint of the systemUnder-5 mortality / 1000 LBImage: Constraint of the system	% cases by level of impairment				
Severe disabilityImage: Severe disabilityMortality and morbidityMean life expectancy (yrs)Mean life expectancy (yrs)No. deaths < 1yrNo. deaths < 1yrNo. deaths 1-4 yrsNo. deaths < 5 yrsInfant mortality / 1000 LBUnder-5 mortality / 1000 LBInfant mortality / 1	No or minor disability				
Mortality and morbidityMean life expectancy (yrs)Image: Constraint of the system of t	Moderate disability				
Mean life expectancy (yrs)Image: Constraint of the systemImage: Constraint of the systemNo. deaths < 1yrImage: Constraint of the systemImage: Constraint of the systemNo. deaths 1-4 yrsImage: Constraint of the systemImage: Constraint of the systemNo. deaths < 5 yrsImage: Constraint of the systemImage: Constraint of the systemInfant mortality / 1000 LBImage: Constraint of the systemImage: Constraint of the systemUnder-5 mortality / 1000 LBImage: Constraint of the systemImage: Constraint of the system	Severe disability				
No. deaths < 1yr       Image: Constraint of the second secon	Mortality and morbidity				
No. deaths 1-4 yrs         Image: Constraint of the second se	Mean life expectancy (yrs)				
No. deaths < 5 yrs	No. deaths < 1yr				
Infant mortality / 1000 LB Infant mortality / 10	No. deaths 1-4 yrs				
Under-5 mortality / 1000 LB	No. deaths < 5 yrs				
	Infant mortality / 1000 LB				
Years of life lost	Under-5 mortality / 1000 LB				
	Years of life lost				

Congenital Rubella Syndrome

RUB Epidemiology 1.3: Country epidemiology for rubella

Epidemiological indicator	Your estimates	Range		Comparison	
			Country	Tropical	World
Rubella immunisation coverage (%)			74		
Reported number of rubella cases			0		
Reported number of congenital rubella syndrome cases			0		
Live birth prevalence (LB)					
Stillbirth prevalence (SB)					
Data year			2012		

Congenital Rubella Syndrome

RUB 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 RUB-E2.1 of the Tool), enter the best estimates for the prevalence of affected births, stillbirths and terminations of pregnancy 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 stillbirths	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		Comments
Best estimate			
Lower estimate			
Higher estimate			

#### Paraguay

Congenital Rubella Syndrome RUB 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, stillbirths and terminations of pregnancy. 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 stillbirths	Stillbirth prevalence / 1000 TB	Comments
Best estimate			
Lower estimate			
Higher estimate			
Estimates for the total country/territory	Number of terminations of pregnancy due to condition	ТоР / 1000 ТВ	Comments
Best estimate			
Lower estimate			
Higher estimate			

## Paraguay

Congenital Rubella Syndrome

RUB 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 stillbirths / year, from data source			
Number of ToP for affected fetus / year from data source			
Total number of affected births / year (live and still)	0		Number of affected live births + Number of affected still
Total number of births / year, from data source	0	C	births 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 recorded total births)	#DIV/0!	#DIV/0	1
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	1
Estimated true number of affected live births in data source (number of recorded affected live births / completeness)	#DIV/0!	#DIV/0	1
Estimated number of affected live births in total population (number of affected live births from data source / (coverage x completeness))	#DIV/0!	#DIV/0	1
Stillbirth prevalence: recorded and estimated			
Recorded stillbirth prevalence (affected recorded still births / 1000 recorded total births)	#DIV/0!	#DIV/0	I
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	1
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 still births 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 within country variation.	of values to reflect unce	rtainty of estimates and	
If studies are not representative of the national population you may need to weight your data (see t with the calculations).	he Guide for explanation	n on weighting and help	
Estimates for the whole country/territory	Number of affected live births	LB prevalence / 1000 TB	
Best estimate			
Lower estimate			
Higher estimate			

Higher estimate		
Estimates for the whole country/territory	Number of affected still births	SB prevalence / 1000 TB
Best estimate		
Lower estimate		
Higher estimate		
Estimates for the whole country/territory	Number of ToP due to condition	ТоР /1000 ТВ
Best estimate		
Lower estimate		

## Paraguay

Congenital Rubella Syndrome RUB Epidemiology 2.4: Summary of affected pregnancies

Indicator	Your estimates	Range	PHGDB minimum estimates	Chosen estimates	Range	Source
Number of annual affected live births						
Annual birth prevalence / 1000 TB						
Number of annual affected still births						
Annual Stillbirth prevalence / 1000 TB						
Number of terminations of pregnancy in affected fetuses /year						
Affected ToP / 1000 women 15-44/ year	1					]

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

#### Paraguay

Congenital Rubella Syndrome RUB 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	ToP prevalence / 1000 TB	Reason for variation
Population Sub-group	pregnancies	TOP prevalence / Tooo TB	Reason for variation

## Paraguay Congenital Rubella Syndrome RUB Epidemiology 3.1: Mortality data: Research studies

Source, year, site	Sample size	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

# Congenital Rubella Syndrome

RUB 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/	#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 7
Population coverage: what proportion of the total country/territory population is covered by the vital		Range: 0 to
Beath 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!	!

Congenital Rubella Syndrome RUB Epidemiology 3.3: Mortality data: 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).

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

Congenital Rubella Syndrome RUB 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)						
Number of annual affected neonatal deaths						
Number of affected neonatal deaths / 1000 LB						
Number of annual affected infant deaths						
Number of affected infant deaths / 1000 LB						
Number of annual affected under-5 deaths						
Number of affected under-5 deaths / 1000 LB						
Mean life expectancy at birth in affected people						7
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.

Congenital Rubella Syndrome RUB Epidemiology 3.5: Sub-population variation in mortality

Age group: neonatal Population sub-group	Cause-specific, group-specific neonatal mortality ratio / 1000 LB	Reason for variation

Age group: infant Population sub-group	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	Cause-specific, group-specific mortality ratio / 1000 population	Reason for variation

Congenital Rubella Syndrome

RUB 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.

#### Paraguay

Congenital Rubella Syndrome

RUB 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.

## Paraguay

Congenital Rubella Syndrome

RUB Epidemiology 4.3: Summary of population prevalence

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.

#### Paraguay

Congenital Rubella Syndrome

RUB 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!	

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)

Congenital Rubella Syndrome

RUB Intervention 1: Effect of immunisation on rubella incidence in women

Baseline prevalence of rubella in women aged 15-44 per 1000		
Variables		
Coverage of rubella immunisation		Range: 0 to 1
		Range: 0 to 1
Proportion of women of reproductive age receiving immunisatio	n	
Effectiveness of immunisation (proportion of cases prevented among those immunised)		Range: 0 to 1
Results		
% prevalence reduction due to immunisation <sup>1</sup>	0%	
Prevalence reduction due to immunisation, per 1000 women aged 15-44 <sup>2</sup>	0.000	
Final prevalence of rubella in women aged 15-44 per 1000 <sup>3</sup>	0.000	

TB = total births (live births + still births)

<sup>1</sup> (Coverage of immunisation X Proportion of women receiving immunisation) X Effectiveness of immunisation

<sup>2</sup> % prevalence reduction due to immunisation X Baseline prevalence of rubella in women

<sup>3</sup> Baseline prevalence of rubella in women – Prevalence reduction due to immunisation

# Paraguay

# Congenital Rubella Syndrome

RUB Intervention 2: Effect of maternal rubella diagnosis and ToP on congenital rubella

Baseline prevalence: rubella-affected pregnancies per 1000 TB		]
Variables		
Proportion of rubella cases in pregnancy that are diagnosed		Range: 0 to 1
Proportion of diagnosed cases ending in pregnancy termination		Range: 0 to 1
Results		
% prevalence reduction due to PND & pregnancy termination	0%	1
Prevalence reduction due to PND & pregnancy termination, per 1000 TB	0.000	
Final prevalence of congenital rubella after PND & pregnancy termination, per 1000 TB	0.000	1

PND = prenatal diagnosis

TB = total births (live births + still births)

ToP = termination of pregnancy

# Paraguay Congenital Rubella Syndrome RUB Needs Assessment 1: Quantitative baseline

# Table RUB-NA1a Burden of Congenital Rubella Syndrome in pregnancy, at birth and at population level

		Chosen estimates		
Indicator	Number (n)		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 RUB-NA1b Congenital Rubella Syndrome mortality indicators

	Chosen estimates			Notes
Indicator	Number (n)		Range of prevalence (/1000 TB)	
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 among affected people	0		0	Drawn from sheet E3.4

TB = total births (live births + stillbirths)

Congenital Rubella Syndrome

RUB Needs Assessment 3: Quantitative assessment of interventions

Table RUB-NA3a	Estimated prevalence in the absence of interventions for Congenital Rubella Syndrome		
Indicator	Number (n) Prevalence (n/1000)		
Potential live births			
Potential still births			

Table RUB-NA3b	Current situation in relation to interventions before birth				
Intervention	Coverage (%) Cases averted (n) Cases averted/1000 LB				
Effect of family planning, education					
Effect of vaccination					
Effect of prenatal diagnosis					
Effect of termination of pregnancy					
Overall effect					

Table RUB-NA3c	Target situation in relation to interventions before birth			
Intervention	Coverage (%)	Cases averted (n)	Cases averted/1000 LB	
Effect of family planning, education				
Effect of vaccination				
Effect of prenatal diagnosis				
Effect of termination of pregnancy				
Overall effect				

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

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

Table RUB-NA3f	Current and desired outc	omes		
	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	· ·		·	
Neonatal deaths	(	) (	)	
Infant deaths	(	) (	)	
Under-5 deaths	(		)	