Appendix 2: Data Dictionary and Full-Text Exclusion Reasons

Appendix 2.1: Data Dictionary

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	Definition and instructions	Data validation	example values	Validation values																					
Study Report Identifiers and Characteristics																									
	Social number to identify a study uniquely - please copy exactly as appears on Data Extraction Division of Work Sheet																	-			+		++		+-
Study ID6	on Data Extraction Division of Work Sheet		TT775; TT748.TT####																						
First Author Last Name	Last name of the first author of the publication																								
Publication Year	Year article was published																								
	Title of publication																								
Journal name	Journal of Publication																								4
Contact Author!	Need to contact author(s) for additional data from the study or to ask for challication? Incidence/provaknce rate reported?	y	yex, no yex, no	y														_			_				4
	Typhoid iteal perforation rate reported?	у у	yex, no	y		-												-					+		+
	Duals rate reported?	y	yes, no	v														_					-		+
	Deaths caused by typhoid iteal perforation rate reported?	y	yes, no	y	a													-				-	+		+
Study Population Characteristics																		-			+		++		+-
Characteristics	Regions of the World as defined by the World Bank (Sub-Saharan Africa,																						+		+
Geographic Region (according to World Bank)	Regions of the W orld as defined by the World Bank (Sub-Subram Africa, Latin Aerorica and Caribbean, Tart Asia and Pacific, Europe and Central Asia, Sooth Asia, Middle East and North Africa, North America) (http://data.worldbank.org/uboast/country-and-lending-groups)	y	Drop-down menu																						
																		_							4
Country	Country name; If traveller study, country where study is conducted																								
Location																									
Human Dovelopment Index Rankins (UN)	As defined by United Nations (http://hdr.undp.org/em/content/table-1- human-development-index-and-its-components)	у	Drop-down menu																						
Income (according to World	Income categories as defined by the World Bank (Low income, lower		1:yes, 0:no																						
Bank	Income categories as defined by the World Hash (Low Income, lower middle income, upper middle income, high income) high pictus wellbank cepibensicountry-and-lending- groupsH.cover middle income) Countries listed as undersic an definal by the DAMAY Obspecives with annea orginals hyphod-downy	У	1.30, 0.20																						
Currently Endomic	Countries field as endersic as defined by the IAMAT (https://www.iamat.org/ticks/typhoid-fever)	у	yes, no	y																					
Snady Sample Size	Number of participants included in the study overall, unstrainfied, that fit the study selection criteria - included details in Comments section																								
	Male, Female or both	у	Drop-down manu	Male	Female	Both										-	+	+	+	\vdash	+		++	+	+
			25%, 30%													+	H	\dashv	+		+	-	+	+	+
	Pracertage of females in overall study population Any age, can include age mage if a point estimate of age is not reported. Be some to include the units and the type of measurement (range, average, mean, modius)		34, 15-49, 6 months														$\dagger \dagger$	$^{+}$	1				+		T
Age of Sample	median) Urban or rand population as reported by the study. He or report -1		, s.rvs, v milets		1												+	_	-	\vdash	+		++	-	\perp
UrbanRural	Uftium or nand population as reported by the study. If not reported, look up the description of the study location and assess urban or nanl. Record as I completely as possible the geographic information reported by the study.	y	ucurbus, poperiurbus, cor		P	r																			
					[$\sqcup \bot$			$\perp \perp$		\perp
Proportion of population immunited	паналиния чин на роргани (и пропо о) на у		5%, 25%		1													_		$\sqcup \bot$		_	$\perp \perp$		Ш
	Does the study present data from an outbreak (as defined by the study)?		y, n, u			ļ										_	\sqcup	_	-	$\sqcup \bot$	$\perp \perp$	_	₩	_	$\downarrow \downarrow \downarrow$
	Does the study include outcomes of interest pertaining to travellers? Add we comments pertaining to study that we not included in other		y, n															_			_				4
Study Comments	Add any comments pertaining to snady that are not included in other column (e.g. Serveiry of Typhoid was assessed) Cohort, cross-sociosal, longitudinal, etc. (E.g. if same participants are not inflormed over time, then cross-sociosaly, Comer research supervisors if			Cross- sectional	or Repeated cross				Ousi-									_					-		+
Study Design	followed over time, then cross-sectional; Contact research supervisors if unsure.		pull down menu		or Repeated cross sectional	Cohort	Case-control	RCT	Quasi- experimental	Otheriussum															
Years of Case Ascertainment	Year of start and end of study; Any range of years		1994, 2003																						
Multi-year Single Data Point	Does study report single point prevalence for a range of years? In this case, data for multiple years are groups laggregated together as a single		yex, no																						
Sources of Data	Single- or multi-centre study location.	y	single, multicentre, not reported	single	multicentre	not reported																			
			-	·														_							4
	Toots that were used for identification and/or confirmation of servour including Hone marrow, blood culture, social culture, PCR, Widal toot, sensingly, or others		I:yes, 0:no, -:at least one serovar																						
Method of Diagnosis		У	identification/confirmation test performed, but study does not specify	1	0	-																			
	Pive options: S. Typki, S. Parasyphi A, S. Parasyphi B or S. Parasyphi C, mobilele		1:yes, 0:no		-	-												-					+		+
	multiple Skip. If they have lab verification of infection	у	1:yes, 0:no		-											_		-			+		+++		+
	Skip. If they have up vertication of intertion. Disk diffusion, PCR, DNA hybridization, E-test, microbooth dilution, agar dilution, or others.	y			0													-			+		++		+-
Antimicrobial resistance test	dilution, or others	у	1:-yes; 0:-no (not done); - :- at least one AMR test performed, but study does not specify	1	0																				
			not specify																				ш		
TrendeOutcomes																									4
Study Location																									
Organism	S. Typhi, S. Pantyphi A, S. Pantyphi B or S. Pantyphi C; Assume S. Typhi for "enteric fever"; Assume S. Parasyphi A for "pantyphoid fever"	y	pull down menu																						+
	Midpoint time (month/year) estimate of rate (incidence, prevalence, mobility, mortality)	y	in .															_					++		+
Number of Saknonella spp.	mobidity, mortality) Number of samples positive for Salmonella species including typhoidal Salmonella	y		ND .	and .	apr	may	jun .	м	and	нер	oct	204	asc				-			+		++		+-
Population Strata Comments	Salmonella Specify details/comments of report numerator and denominator. For traveller studies, enter the destination travelled to in this cell				1													-				-	+		+-
And Information authority			5 years; 6 months;															_					++		+
	Age data reported (numeri: value) groups of age in any way (i.e. less than 15 or guster than 15); If Mean and Range are reported, mean and the standard deviation is preferred to be extracted																						+		+
Age information estimate type	Range are reported, mean and the standard deviation is preferred to be extracted		mean, median, range	neas	median	nage	age group	other																	
Denominator Type	Specify the denominator type as either blood culture, urine, bone marrow, Widal, or stool culture. If the outcome is diagnosed using more than one	y		Blood Culture	Urine	Stool Culture	Bose Marrow	Widal Test	Combined	Other - see comments	Test Method Unspecified	Combined with blood	l T				1 [1		1 1	- 1 -		1	
Incidence Reported					1		-									+	+	+	+	\vdash	+	-	++	-	+
Modula 11-	Number of new cases of typhoid. Categorized into age adjusted, gender adjusted and overall. Annual typhoid field perforation rate of the population. Categorized into age adjusted, gender adjusted overall.				1	 										+	+	+	+		+	+	++	+	+
Mortality Rate	Around tembolid death rate (if deaths / if tembolid cause). Categorised into use				1											-	+	+	+		+		++	+	+
	adjusted, gender adjusted and overall Annual deaths from typhoid final perforation rate of the population. Categorized into ago adjusted, gender adjusted and overall				1	-										+	++	+	-	+	+	+	++		+
Performation Mortality Rate																							$\perp \perp$		
Comments	Report if values were read off graph; Open test field for comments on reported variables. A place to make notes and flag issues																Ш	\perp							<u> </u>
Number of AMR Samples Tested	Number of samples tented for AMR																	I							
MDR estimate	Multi Drug Resistant estimate, if reported in paper																								
Assimicrobial resistance rate	Prevalence rate of animics while resistance reported in the study; Ensure susceptibility is converted to assistance (% resistance : 100% - % susceptibility)				1								l T				1 [1		1 1	- 1 -		1	
Incidence Estimate Type	nam-upaned())			counts	rate per 1,000	rate per 10,000	rate per 100,000	rate per 1,000,000	rate per 1,000 person years	rate per 100,000 person years	rate per 1,000,000 person years	rate per 100,000 per year	rate per 100	rate per 100,000	rate per 1,000,000	-	+	+	+		+		++	+	+
								1,000,000	parata year	paron year	person years	year		100,000	1,000,000										
	Passive Surveillance refers to the receipt of reports of infections/disease from physicians,				1			1	1				l T				1 [l [1		1 1	1		1	
	Passive Starveillance: refers to the accepte of reports of indection-disease from physicians, laboratories and other healthcare professionals. In those cases the sick- people mod to suck aid on their own (i.e. visit a decisor/heaptal), that is, they are self-self-self-spirited cases.				1																				
	Active Surveillance (this will be rare) refers to a system that actively neeks people who are ill. These people would				1																				
	many nor nave been captured ornerwise. In active sampling, we do not wait for cases to be reported for for ill persons to seek case. We find them in the community and in their bornes.				1																				
	e.g. Sampling all fever cases and toxing for typhoid e.g. Population is defined here as say 1000 households and population				1																				
Population Surveillance Types	Active Savedhace (the will be eary a district to a system that storby anks people who are II. These people would make to a system that storby anks people who are III. These people would for case to be reported for for ill provent to work cam. We find then in the community and in their homes. a.g. Sampling all fever cases and storing for typhold a.g. Sampling all fever cases and storing for typhold a.g. Population is defined here as wy 1000 towards that and population sampling would be representative of these broadwhalf and population sampling would be representative of these broadwhalf are placed. Parather.			Passive Surveillance	Active Surveillance	Augmented Passive Surveillance																			
	Passive Passive are extracted but their corresponding for fevers Subjects are STILL self-selected but their participation in the surveillance system or study have been promoted with education campaigns or mass modils campaigns.				1																				
	system or study have been promoted with education campaigns or mass media campaigns.				1		1																		
	and in campaigns. Assisted or sugmented passive sentiacl surveillance helps to ensure regular reporting and to improve the data quality. Cooperation of the reporting units can be hereased forming a stransport reporting system, regular contact, workshops, training and forbinck mechanisms. Where compariso can be found at: https://doi.org/10.1009/10				1																				
	workshops, trainings and feedback mechanisms "More examples can be found at:				1																				
	https://docs.google.com/document/d/IRN/t/Stabille/CoPuTNgoV3pASk64 G MCN2AEM/Stc/iede/http://document/d/IRN/t/Stabille/CoPuTNgoV3pASk64				1																				
Population Types	A CONTRACTOR OF			General Population	Laboratory Studies	Ambulatory	Hospitalized											1							\Box
Overall Row			у											_			\vdash	_	+		+		++	+	+
	1			Sub-Saharan Africa	Overall Monthly Latin America and Caribbean	AME Only East Asia and Pacific	Europe and Central	D South Asia	P Middle East and North Africa	Pas North America	IID Multiple	W	artes	u.P	u7n	ur?in DP	DPm 1	a7n 22					+		T
Works work w.																									1 1
World Bank Regions			У		Carpocas	74.14	Au		North Africa								+	_	_		+	-	++		+
World Bank Regions Age Code			у		C	Y	A	s	North Africa	n	IA.	is	кү	RCA .	ics	KYA KYS	ICYAS (Y C/	cs	CYA CYS	CYAS	YA YS	YAS AS	S NR	7

Appendix 2.2 Reason for exclusion at full-text screening phase

Exclusion Reason	Number of Studies Excluded						
No relevant outcome data/rates	425						
Non-English Study	310						
Data less than 18 months	231						
Duplicate	129						
Review	90						
Developing country prior to 1990	82						
Other (Math model/Graph difficult to read/vaccination study without control/human challenge)	54						
Study duration Not Stated	47						
Full text not found-exhausted all methods	25						
Not Peer-Reviewed	20						
Special populations i.e. Travellers, Military groups, Cancer, HIV positive groups, Sickle Cell Anemia groups, Outbreaks	16						
Purely antimicrobial resistance reporting	13						
Clinical case study/series	11						
Carrier Study	10						
Excluded during synthesis	296						
Total Excluded	1759						