California Department of Public Health Center for Infectious Diseases Division of Communicable Disease Control Infectious Diseases Branch Surveillance and Statistics Section MS 7306, P.O. Box 997377 Sacramento, CA 95899-7377

S. TYPHI AND S. PARATYPHI INFECTION CASE REPORT

Check one: Salmonella Typhi Salmonella Paratyphi

Please complete this form for all confirmed and probable acute and convalescent cases of S. Typhi and S. Paratyphi A, B (tartrate negative), and C infection. Prompt, standardized interview of all cases of S. Typhi and S. Paratyphi is requested to improve the accuracy of recall of possible vehicles of infection.

For all S. Typhi chronic carriers (cases without a clear symptom onset date and a history of S. Typhi >12 months ago, or that have had S. Typhi identified from their stool or urine > **12 months** from their initial symptom onset date), <u>please use the S. TYPHI CHRONIC CARRIER</u> <u>CASE REPORT</u>. Note for S. Paratyphi B: Persons with isolation of S. Paratyphi B tartrate positive from a clinical specimen should be reported as a salmonellosis case (not as a S. Paratyphi case).

PATIENT INFORMATION													
Last Name	First	Name			Midd	lle Name	,	Suffix	Primary Lang	guage			
				_				🗆 English					
Social Security Number (9 digits	s)			DOB (mm/da	DOB (mm/dd/yyyy)			□ Years	□ Spanish				
								□ Months	Other:				
								□ Days	Ethnicity (che	eck one)			
Address Number & Street – Residence					Apar	tment / L	Jnit Num	ber	□ Hispanic/L	□ Hispanic/Latino			
									🛛 Non-Hispa	anic/Non-Lat	ino		
City / Town					State	9	Zip (Code	Unknown				
									Race(s)				
Census Tract	Coun	ty of Resi	denc	ce	Country of Residence				(check all that apply, race descriptions on page 11)				
			_								should be based on the		
Country of Birth			If n	ot U.S. Born - I	Date o	f Arrival I	in U.S. (n	mm/dd/yyyy)	patient's self-identity or self-reporting. Therefore, patients should be offered the option of selecting				
									more than or	ne racial des	ignation.		
Home Telephone		Cellular	Pho	one / Pager Wor			School 7	Telephone	□ American Indian or Alaska Native				
									□ Asian <i>(che</i>	eck all that a	oply, see list on page 11)		
E-mail Address				Other Electronic Contact Information					🗆 Asian I	ndian	🗆 Korean		
Mark (Sahaal Laastian				Work / School Contact					 Bangla 	deshi	🗆 Laotian		
Work / School Location									Cambo	odian	🗆 Malaysian		
Gender									- □ Chines		🗆 Pakistani		
□ Female □ Trans female / ti	ranswo	man [٦Ge	anderqueer or n	er or non-binary 🛛 Unknown				□ Filipino		🗆 Sri Lankan		
□ Male □ Trans male/ trans				entity not listed				d to answer		•	□ Taiwanese		
Pregnant?	Ioman			If Yes, Est. De	alivory				□ Indone		□ Thai		
□ Yes □ No □ Unknown				11 TES, LSI. DE	envery	Date (III	m/uu/yyy	(y)	□ Japanese □ Vietnamese				
Medical Record Number				Patient's Pare	nt/Cur	ardian N	2000						
Medical Record Number				FallenisFale	inv Gua		anne		□ Black or A	African-Amer	ican		
											her Pacific Islander		
Occupation Setting (see list on	bage 1	2)		Other Describ	e/Spe	cify			i i	<i>that apply, s</i> Hawaiian	see list on page 11) □ Samoan		
										Hawallan	□ Tongan		
Occupation (see list on page 12)			Other Describ	e/Spe	cify			1 '	nian				
								□ Guamanian □ Other:					
									□ White				
										□ Other:			
									Unknown				

First three letters of

								patient's	s last name:			
ADDITIONAL PATIEN	T DEM	OGR/	PHICS									
Sex Assigned at Birth		ver	□ Heter	esbian, o	on or straight						wer	
CLINICAL INFORMATI	ON											
Physician Name - Last Na	me					First Name Telephone						
SIGNS AND SYMPTON	NS											
Symptomatic?	lf Ye	es, ons	et date o	f symptor	ms (mm/dd/yyyy)	Duration of Acute Syn	nptoms (days)	Date Fil	rst Sought Me	edical Ca	re (mm/c	dd/yyyy)
□ Yes □ No □ Unknow	vn	1		1								
Signs and Symptoms	Yes	No	Unk	If Yes, S	Specify as Noted							
Fever (>100.4°F or 38°C)				Onset E	Date of Fever (mm	n/dd/yyyy)		Duration	of Fever (day	/s)		
					<i>ive or Measured</i> 7 ective ("felt hot")		known	lf Measu	red, Highest T	Temperat	ure (°F c	or °C)
Cough												
Abdominal cramps												
Diarrhea (3 or more loose stools in a 24-hour period)												
Bloody diarrhea												
Constipation												
Rose spots (Faint, salmon-colored macules on trunk and abdomen)												
Other Signs / Symptoms	•											
Complications	Yes	No	Unk	If Yes, S	Specify as Noted	I						
Altered mental status												
Seizures												
Septic shock												
Intestinal perforation					rgery required? □ No □ Unkno	own						
Gallbladder surgery					Ilbladder disease □ No □ Unkno	the presenting reason a	for hospitaliza	tion?				
Other Complications	1			•								
PAST MEDICAL HIST	ORY											
Did the patient receive typhoid vaccination (primary series or booster) within five years before onset of illness? □ Yes □ No					If Yes, indicate type of vaccine received, if known. Year of Most Recent Oral Ty21a or Vivotif (Berna) four pill series Vaccination (yyyy) ViCPS or Typhim Vi shot (Pasteur Merieux) Vaccination (yyyy) Typhoid conjugate vaccine shot (TCV, e.g., Typbar-TCV TYPHIBEV) Other (specify): Unknown Vaccination (yyyy)							
Does the patient have a previous history of S. Typhi infection?				Approximate Da	ate (mm/yyyy)	Where was	the diagr	nosis made?	(City, Stai	e, Coun	itry)	
□ Yes □ No □ Unkno	7441				1							

First three letters of

patient's last name:

HOSPITALIZATION	1								
Did the patient visit the e		cy room for illnes	s?						
□ Yes □ No □ Unkn Was the patient hospitali. □ Yes □ No □ Unkn	zed?		lf Yes, how n	<pre>/es, how many total hospital nights? During any part of t an intensive care u □ Yes □ No □</pre>) or a	zation, did the patient stay in a critical care unit (CCU)?
If there were any ER visit	ts or hos	pital stays relate	d to this illne	ss, specify details in the Hospital	lization	– Details sec	tion.		
HOSPITALIZATION -	DETAI	LS							
Hospital Name 1	Street A	Address				Admit Date	(mm/dd/yyy	(Y)	
	City					Discharge /	Transfer Da	ate (I	mm/dd/yyyy)
	State	Zip Code	Telephone I	Number		Medical Red	cord Numbe	er [Discharge Diagnosis
Hospital Name 2	Street A	Address				Admit Date	(mm/dd/yyy	/y)	
	City					Discharge /	Transfer Da	ate (r	mm/dd/yyyy)
	State	Zip Code	Telephone I	Number		Medical Red	cord Numbe	er [Discharge Diagnosis
TREATMENT / MANA	GEME	NT							
Did the patient receive tre □ Yes □ No □ Unkr		?	If Yes, spec	cify the treatment below.					
TREATMENT / MANA		NT – DETAILS	;						
□ Azithromycin □ Trimetho				uinolone (e.g., ciprofloxacin, levofloxacin) prescr			ent finished antibiotics as scribed? es □ No □ Unknown Date Ended (mr.		
□ Ceftriaxone Antibiotic 2 Name □ Amoxicillin/Ampicillin			roquinolone (uinolone (e.g., ciprofloxacin, levofloxacin) pprim-sulfamethoxazole pecify):			antibiotics	as	Date Started (mm/dd/yyyy)
□ Azithromycin □ Carbapenem (e.g., Me □ Ceftriaxone	ropenen	🗆 Trim	ethoprim-sulf				□ Unknow	Date Ended (mm/dd/yyyy)	
Antibiotic 3 Name □ Amoxicillin/Ampicillin				pquinolone (e.g., ciprofloxacin, levofloxacin) pr thoprim-sulfamethoxazole			atient finished antibiotics as Date Started (mm/dd/y rescribed? I Yes □ No □ Unknown		
□ Azithromycin □ Carbapenem (e.g., Me □ Ceftriaxone	ropenen		ethoprim-sulfa r (specify):					/n	Date Ended (mm/dd/yyyy)
OUTCOME									
Outcome?] Unknov	wn		If Survived, Survived as of		(<i>mm/d</i> e	d/yyyy)	Da	ate of Death (mm/dd/yyyy)
LABORATORY INFO	RMATI	ON							
LABORATORY TEST	ING RE	SULTS							
Specimen Type Blood Gallbladder Stool Urine Other: Unknown	Image: Contract of the contract						e first positive culture?		
Culture Results Positive Negative Not done Unknown Laboratory Name	S C ×	almonella Seroty] S. Typhi] S. Paratyphi A Note: A person v	/pe □ S. Par □ S. Par with isolation	atyphi B tartrate negative*	□ Othei e from a	gative should	cimen shoul	ld be ized a	categorized as a

First three letters of

								patient's la	st name:			
LABORATORY TESTING RES	SULTS (continu	ed)									
			ANTIMI	CROE	SIAL SUSCEP	TIBILITY T	ESTING	i				
Was antimicrobial susceptibility tes	ting	Ampicillir	ı			□ Susc	eptible	□ Intermediate	□ Resista	nt 🗆 Not de	one	
<i>completed?</i> □ Yes □ No □ Unknown		Azithrom	ycin			□ Susc	eptible	□ Intermediate	□ Resista	nt 🛛 Not de	one	
		Carbape	nem (e.g.	, merop	enem)	□ Susc	eptible	□ Intermediate	□ Resista	nt 🗆 Not de	one	
Attach additional results or upload to CalREDIE electronic filing cabinet.	to	Ceftriaxo	ne			□ Susc	eptible	□ Intermediate	□ Resista	nt 🛛 Not de	one	
		Fluoroqui levofloxa		(e.g., ci	profloxacin,	□ Susc	eptible	□ Intermediate	□ Resista	ant 🗆 Not done		
	Trimeth				kazole	Susc	eptible	□ Intermediate	□ Resista	nt 🗆 Not de	one	
		Other and	timicrobial (specify):				□ Intermediate □ Resistant □ Not done					
	1		PUBL	IC HE	ALTH LABOR	ATORY TE	STING					
Was isolate tested at a local public □ Yes □ No □ Unknown	health la	ab?	Local Pi	ublic He	ealth Laboratory	Name		Local Labor	atory Isolate	ID Number		
Was isolate tested at a state public □ Yes □ No □ Unknown	health la	ab?	State Pι □ MDL		ealth Laboratory	Name		State Labora	atory Isolate	ID Number		
Was whole genome sequencing (W □ Yes □ No □ Unknown	/GS) con	npleted?				WGS ID N	lumber	Specify Res	Specify Results (e.g., allele code) or Attach			
Was isolate forwarded to CDC? □ Yes □ No □ Unknown			Date Sent to CDC (mm/dd/yyyy) Check if XDR*			f XDR*	CDC Laboratory Results / Comments / Notes					
*Extensively drug-resistant (XDR) S fluoroquinolones, and third-genera				resistar	nt to at least five	antibiotic cla	asses: chl	oramphenicol, ai	mpicillin, co-t	trimoxazole,		
EPIDEMIOLOGIC INFORMATI	ON											
			TION P		0: 30 DAYS PF to 0 days)	RIOR TO II		ONSET				
TRAVEL HISTORY												
Did the patient travel or live <u>outside</u> □ Yes □ No □ Unknown	county o	of residend	<u>ce</u> during	the inc	ubation period?							
Did the patient travel or live outside the United States during the incubation period?	1 '		nost recent return or entry to the mm/dd/yyyy)						friends	ds 🛛 Other:		
□ Yes □ No □ Unknown		s patient a			If Yes to contac	ct with an int	ernational	l traveler, provide	e contact′s d	etails below.		
	who tra	e contact o aveled inte		ly?	Contact's Nam	е	Contact's	s Phone Number	Contact's	Relationship	to Patient	
				KIIOWII	Date Travel Sta	arted (mm/d	d/yyyy)	Date Tr	avel Ended	(mm/dd/yyyy,)	
					International Tr	avel Locatio	on(s) (cour	ntry, city, resort,	etc.)			
<i>If the patient reported any internat</i> <i>If the patient and close contacts</i> <i>case (510-620-3434) or email CDP</i>	did NOT	have inte	ernationa	l trave	l, contact CDPH					nestically acc	quired	
TRAVEL HISTORY - DETAILS	\$											
Travel Type	State	Cou	ntry	Other	location details	s (city, reso	rt, etc.)	Date Trave (mm/do	I	Date Trav (mm/do		
Domestic Domestic International		<u> </u>										
Domestic Unknown International												

🗆 Unknown

□ Domestic □ International

First three letters of patient's last name:

GROUP SETTINGS &	OTHER E	xposu	RES									
Did the patient have any of the following exposures during the 30 days prior to illness onset?												
Exposure		Yes	No	Unk	If Yes	s, Specif	y as Noted					
Attended child care or pro	eschool				Locat	tion			Other De	her Details		
Lived in a skilled nursing	facility				Locat	tion			Other Details			
Lived in other congregate (e.g., LTCF, group home	e setting , prison, etc.))			Locat	tion			Other De	etails		
Experienced homelessne	ess				Location and/or Shelter Ot				Other De	otails		
HOUSEHOLD CONTA	ACTS		_!		•							
How many people, besid	es the case,	live in th	e house	hold?		Please	e provide dei	ails in HOUSEHOLD C	ONTACT	S – DETAILS section below.		
HOUSEHOLD CONTA	ACTS – DE	TAILS	(If mo	ore tha	n 4 ho	ouseho	ld contacts	, list additional cor	ntacts o	n page 13.)		
Name 1	Relationsh	ip	Age		G	ender	Occupation	1		e occupation / situation*? □ No □ Unknown		
	Telephone	Number		ar illnes s □ No		nknown	Onset Date	e (mm/dd/yyyy)	Comme	nt		
Name 2	Relationsh	ip	Age		-	ender	Occupation			Sensitive occupation / situation*?] Yes □ No □ Unknown		
	Telephone	Number	Simila	ar illnes	s?		Onset Date	e (mm/dd/yyyy)	Comme			
			□ Yes	s ⊡No		nknown						
Name 3	Relationsh	ip	Age		G	ender	Occupation			e occupation / situation*? □ No □ Unknown		
	Telephone	Number	r Similar illness? □ Yes □ No □ L			nknown	Onset Date	e (mm/dd/yyyy)	Comment			
Name 4	Relationsh	ip	Age		1	ender			Sensitive occupation / situation*?			
	Telephone	Number		Similar illness? □ Yes □ No □ Unknown		Onset Date (mm/dd/yyyy)		Comment				
*Sensitive occupations/sit	L uations may	include fo					l ders, and par	icipation in group settin	gs (such a	as daycare).		
CONTACTS / OTHER										• /		
Is this case a contact to a or S. Paratyphi carrier or	case?	р. р.	Yes, wa reviousl epartme	y knowi			Contact's	Name or CalREDIE #	Ju	risdiction where Contact Lives		
□Yes □No □Unkno	own	1] Yes		🗆 Unk	nown	lives bee	urisdiction where conta n contacted? ⊐ No □ Unknown	oct Da	ate Jurisdiction Contacted (mm/dd/yyyy)		
Any contact with similar i □ Yes □ No □ Unkno		lf	Yes, lis	t in the	ILL CC	ONTACT	S – DETAILS					
ILL CONTACTS – DETAILS (If more than 2 ill contacts, list additional contacts on page 13.)												
Name 1		Age		Gende	r	Telepho	one Number	Type of Contact / Rel	ationship	Date of Contact (mm/dd/yyyy)		
	-	Street A	ddress					Exposure Event		Illness Onset Date (mm/dd/yyyy)		
City		City				State	Zip Code	Occupation		Sensitive occupation / situation?		

(continued on page 6)

First three letters of

patient's last name:

ILL CONTACTS – DETAILS (co	ntinued)								
Name 2	Age	Gender	Telepho	one Number	Type of C	ontact / Relationship	Date of Con	tact (mm/dd/yyyy)	
	Street Address				Exposure	Event	Illness Onse	t Date (mm/dd/yyyy)	
	City		State	Zip Code	Occupatio	n	Sensitive occupation / situation?		
CLEARANCE SPECIMENS: CO SITUATION (SOS) OR CHILD <					S. PARAT	TYPHI CASES IN	A SENSITIVI	E OCCUPATION OR	
Clearance Specimens:									
 For all acute S. Typhi (<3 mon beginning at least 1 week after 							ns taken at leas	st 24 hours apart,	
 For convalescent S. Typhi (≥3 months and <12 months from onset date), six consecutive negative by culture stool and urine specimens taken at least 24 hours apart, beginning at least 1 week after discontinuation of antibiotics are required. 									
 For chronic S. Typhi carriers (≥ 12 months from onset date), six consecutive negative stool and urine specimens taken at least 24 hours apart, beginning at least 1 week after discontinuation of antibiotics are required. Negative by culture specimens taken prior to the 12-month mark count towards clearance (negative cultures must be consecutive to count). However, a S. Typhi Chronic Carrier case report form should be started and all applicable clearance specimens should be documented there. 									
 For S. Paratyphi cases in SOS or children <5 years old in group setting, restriction/exclusion is required until two consecutive negative stool specimens taken at least 24 hours apart after discontinuation of antibiotics are negative (see salmonellosis guidelines). 									
See CACDC Enteric Disease Matrix	for full details on	exclusion for	r contact	ts and for ex	clusion fro	m work criteria.			
PATIENT CLEARANCE INFOR	MATION								
Was clearance completed?	If Yes, Date of F	irst Clearance	Specime	en (mm/dd/yy	уу)	If Yes, Date of Fina	l Clearance Sp	pecimen (mm/dd/yyyy)	
□ In Progress	If No, Specify Re	eason							
<i>Is this patient in a sensitive occupation or situation?</i> □ Yes □ No □ Unknown	If Yes, which set □ Foodhandler (□ Healthcare (e.	e.g., works wit	th, serves	s, or handles	food)	□ Group setting (e. □ Other:	g., child care, i	nstitution, shelter)	
Clearance Issues / Comments (inclu					rance, etc.)				
PATIENT EMPLOYMENT / SIT	UATION INFOR	RMATION FO	DR CLE	ARANCE					
Employer/Situation 1 (place of emplo	oyment, daycare	name, etc.)							
Name of Employer Contact			7	elephone Nu	mber		Fax Number		
Street Address			C	City			State	Zip Code	
Employer/Situation 2 (place of emplo	oyment, daycare	name, etc.)							
Name of Employer Contact			7	elephone Nu	mber		Fax Number		
Street Address			C	City			State	Zip Code	
CLEARANCE SPECIMEN TES	T RESULTS –	DETAILS	•						
Clearance Specimen Type 1		S. Typhi / S.							
□ Stool □ Urine □ Other:	Urine Other: Image: Negative CIDT Image: Negative CIDT								
Clearance Specimen Type 2		S. Typhi / S.	Paratyph	ni Culture or (L CIDT* Resu	lt			
□ Stool □ Urine □ Other:		Collection Da			T □ Nega Laborator		/phi	ratyphi 🛛 Unknown	
								(continued on page 7)	

First three letters of patient's last name:

If Yes, specify details in the TREATMENT FOR CLEARANGE – DETAILS section.

Clearance Specimen Type 3	S. Typhi / S. Paratyphi Culture or CIDT* Result
□ Stool □ Urine □ Other:	□ Negative CIDT □ Positive CIDT □ Negative culture □ S. Typhi □ S. Paratyphi □ Unknown
	Collection Date (mm/dd/yyyy) Laboratory Name
Clearance Specimen Type 4	S. Typhi / S. Paratyphi Culture or CIDT* Result
□ Stool □ Urine □ Other:	□ Negative CIDT □ Positive CIDT □ Negative culture □ S. Typhi □ S. Paratyphi □ Unknown
	Collection Date (mm/dd/yyyy) Laboratory Name
Clearance Specimen Type 5	S. Typhi / S. Paratyphi Culture or CIDT* Result
□ Stool □ Urine □ Other:	□ Negative CIDT □ Positive CIDT □ Negative culture □ S. Typhi □ S. Paratyphi □ Unknown
	Collection Date (mm/dd/yyyy) Laboratory Name
Clearance Specimen Type 6	S. Typhi / S. Paratyphi Culture or CIDT* Result
□ Stool □ Urine □ Other:	□ Negative CIDT □ Positive CIDT □ Negative culture □ S. Typhi □ S. Paratyphi □ Unknown
	Collection Date (mm/dd/yyyy) Laboratory Name
*Culture-independent diagnostic test	
TREATMENT FOR CLEARANCE	
Did the patient receive treatment specifically for cle just treatment of acute illness)?	earance (and not

TREATMENT FOR CLEARANCE - DETAILS

□ Yes □ No □ Unknown

Treatment 1	If Antibiotic, Antibiotic Name	Date Star	ted (mm/dd/yyyy)						
□ Antibiotic	🗆 Amoxicillin/Ampicillin 🛛 🗆 Carbapenem (e.g., Meropenem)								
□ Gallbladder surgery	Azithromycin Fluoroquinolone (e.g., ciprofloxacin, levofloxacin)	Date Ended (mm/dd/yyyy)							
☐ Typhoid vaccine	Ceftriaxone	5 11 15							
□ Other:	Other (specify):		ished antibiotics as prescribed? ☐ No □ Unknown						
	If Gallbladder Surgery, Date of Surgery (mm/dd/yyyy)								
	If Typhoid vaccine, specify vaccine If Typhoid vaccine, specify vaccine	Date Completed (mm/dd/yyyy)							
Treatment 2	If Antibiotic, Antibiotic Name	Date Started	d (mm/dd/yyyy)						
□ Antibiotic	□ Amoxicillin/Ampicillin □ Carbapenem (e.g., Meropenem)								
☐ Gallbladder surgery	□ Azithromycin □ Fluoroquinolone (e.g., ciprofloxacin, levofloxacin) □ Ceftriaxone □ Trimethoprim-sulfamethoxazole	Date Ended (mm/dd/yyyy)							
☐ Typhoid vaccine		Patient finis	hed antibiotics as prescribed?						
□ Other:		☐ Yes ☐ No ☐ Unknown							
	If Gallbladder Surgery, Date of Surgery (mm/dd/yyyy)								
	<i>If Typhoid vaccine, specify vaccine</i> □ Oral Ty21a or Vivotif (Berna) four pill series □ Other:		Date Completed (mm/dd/yyyy)						
	□ ViCPS or Typhim Vi shot (Pasteur Merieux) □ Unknown □ TCV Typhoid conjugate vaccine								
NON-TREATMENT RELA	ATED CLEARANCE ISSUES (e.g., impact of clearance on patient, diffic	ulty in obta	ining specimens, etc.)						
		-	.						

First three letters of
patient's last name:

NOTES / REMARKS						
REPORTING AGENCY						
Investigator Name	Local Health Jurisdiction	Telephone Num	ber	Date Form Comp	pleted (mm/dd/yyyy)	
First Reported By						
□ Clinician □ Laboratory □ Other (specify):					
OUTBREAK						
Part of known outbreak? If Yes,	extent of outbreak:					
□ Yes □ No □ Unknown □ One	CA jurisdiction D Multiple CA jurisdictions	Multistate 🛛 Internatio	nal □l	Jnknown □ Other	(specify):	
Mode of Transmission		Vehicle of Outbreak	Pat	ttern 1 ID number	Pattern 2 ID number	
□ Point source □ Person-to-person	Unknown Other:					
STATE USE ONLY						
State Case Classification						
□ Confirmed □ Probable □ Not a	case ☐ Need additional information					

First three letters of patient's last name:

CASE DEFINITION

SALMONELLA TYPHI INFECTION (2019)

CLINICAL DESCRIPTION

Infections caused by *Salmonella* enterica serotype Typhi (*S.* Typhi) that are often characterized by insidious onset of sustained fever, headache, malaise, anorexia, relative bradycardia, constipation or diarrhea, and non-productive cough. However, mild and atypical infections may occur. Carriage of *S.* Typhi may be prolonged.

CLINICAL CRITERIA FOR DIAGNOSIS

One or more of the following: fever, diarrhea, abdominal cramps, constipation, anorexia, or relative bradycardia

LABORATORY CRITERIA FOR DIAGNOSIS

Confirmatory laboratory evidence

Isolation of S. Typhi from a clinical specimen.

Presumptive laboratory evidence

Detection of S. Typhi in a clinical specimen using a culture-independent diagnostic test (CIDT).

Note: Serologic testing (i.e., detection of antibodies to S. Typhi) should not be utilized for case classification.

EPIDEMIOLOGIC LINKAGE

- Epidemiological linkage to a confirmed S. Typhi Infection case, OR
- Epidemiological linkage to a probable S. Typhi Infection case with laboratory evidence, OR
- Member of a risk group as defined by public health authorities during an outbreak.

CASE CLASSIFICATION

Confirmed

A person with confirmatory laboratory evidence.

Probable:

- A clinically compatible illness in a person with presumptive laboratory evidence.
- A clinically compatible illness in a person with an epidemiological linkage.

COMMENT

Several serological tests have been developed to detect antibodies to S. Typhi. However, no current serological test is sufficiently sensitive or specific to replace culture-based tests for the identification of S. Typhi infections. Whether public health follow-up for positive serologic testing is conducted and how is at the discretion of the jurisdiction.

It is estimated that approximately 2-5% of persons infected with S. Typhi become chronic intestinal carriers who continue to shed S. Typhi for more than one year. These people are typically referred to as chronic carriers.

Differentiating whether a person is a chronic carrier or is experiencing a new infection often relies on a variety of factors, including advanced laboratory testing (e.g., pulsed-field gel electrophoresis [PFGE], whole genome sequencing [WGS]) to compare the isolate from the previous infection to the new isolate. While these methodologies can provide detailed information about the genetic make-up of the organisms, there is still significant variability in how two organisms can be defined as different. Given the potential for inconsistent application of the label "different" across jurisdictions, this case definition does not exclude persons with a previously reported S. Typhi Infection case from being counted as a new case if the subsequent positive laboratory result is more than 365 days from the most recent positive laboratory result associated with the existing case.

TYPHOID CARRIER CASE DEFINITION, RESTRICTIONS, AND SUPERVISION ADAPTED FROM TITLE 17, CCR, SECTION 2628

DEFINITION OF CARRIERS

1. Convalescent Carriers

Any person who harbors typhoid bacilli for three or more months after onset is defined as a convalescent carrier.

2. Chronic Carriers

If the person continues to excrete typhoid bacilli for more than 12 months after onset of typhoid fever, he/she is defined as a chronic carrier. Any person who gives no history of having had typhoid fever or who had the disease more than one year previously, and whose feces or urine are found to contain typhoid bacilli on two separate examinations at least 48 hours apart, confirmed by State's Microbial Diseases Laboratory, is also defined as a chronic carrier. All carriers shall be reported to the local health officer. Such reports shall be kept confidential and shall not be divulged to persons other than the carrier and his/her immediate family, except as may be required for the protection of the public health.

3. Other Carriers

A person should be held under surveillance if typhoid bacilli are isolated from surgically removed tissues, organs, e.g., gall bladder, kidney, etc., or from draining lesions such as osteomyelitis. If the person continues to excrete typhoid bacilli for more than 12 months, he/she is defined as a chronic carrier and may be released after satisfying the criteria for other chronic carriers.

First three letters of patient's last name:

CASE DEFINITION (continued)

SALMONELLA PARATYPHI INFECTION (2019)

BACKGROUND

S. Paratyphi A, B (tartrate negative), and C are bacteria that often cause a potentially severe and occasionally life-threatening bacteremic illness. Of note, S. Paratyphi B (tartrate positive), previously known as S. Java, typically causes an uncomplicated gastroenteritis, with lower rates of hospitalization and recent international travel compared with S. Paratyphi A, B (tartrate negative), and C. For these reasons, Paratyphi B (tartrate positive) is categorized as salmonellosis instead of an S. Paratyphi Infection.

CLINICAL DESCRIPTION

Infections caused by *Salmonella* enterica serotypes Paratyphi A, B (tartrate negative), and C (*S.* Paratyphi) that are often characterized by insidious onset of sustained fever, headache, malaise, anorexia, relative bradycardia, constipation or diarrhea, and non-productive cough. However, mild and atypical infections may occur. Carriage of *S.* Paratyphi A, B (tartrate negative), and C may be prolonged.

CLINICAL CRITERIA FOR DIAGNOSIS

One or more of the following: fever, diarrhea, abdominal cramps, constipation, anorexia, or relative bradycardia

LABORATORY CRITERIA FOR DIAGNOSIS

Confirmatory laboratory evidence

Isolation of S. Paratyphi A, B (tartrate negative), or C from a clinical specimen.

Presumptive laboratory evidence

Detection of S. Paratyphi A, B (tartrate negative), or C in a clinical specimen using a culture-independent diagnostic test (CIDT).

Note: Serologic testing (i.e., detection of antibodies to S. Paratyphi A, B, or C) should not be utilized for case classification.

EPIDEMIOLOGIC LINKAGE

- Epidemiological linkage to a confirmed S. Paratyphi Infection case, OR
- Epidemiological linkage to a probable S. Paratyphi Infection case with laboratory evidence, OR
- Member of a risk group as defined by public health authorities during an outbreak.

CASE CLASSIFICATION

Confirmed

A person with confirmatory laboratory evidence.

Probable

- A clinically compatible illness in a person with presumptive laboratory evidence.
- A clinically compatible illness in a person with an epidemiological linkage.

COMMENT

Persons with isolation of S. Paratyphi B (tartrate positive) from a clinical specimen should be categorized as a salmonellosis case.

Several serological tests have been developed to detect antibodies to *S*. Paratyphi A, B, and C. However, no current serological test is sufficiently sensitive or specific to replace culture-based tests for the identification of *S*. Paratyphi infections. Whether public health follow-up for positive serologic testing is conducted and how is at the discretion of the jurisdiction. The percentage of persons with *S*. Paratyphi A, B (tartrate negative), or C infections that become chronic carriers is not known.

First three letters of

patient's last name:

RACE DESCRIPTION	IS									
Race	Descrip	Description								
American Indian or Alasl	ka Native Patient h	Patient has origins in any of the original peoples of North and South America (including Central America).								
Asian	(e.g., inc	Patient has origins in any of the original peoples of the Far East, Southeast Asia, or the Indian subcontiner (e.g., including Bangladesh, Cambodia, China, India, Indonesia, Japan, Korea, Malaysia, Nepal, Pakistan, Philippine Islands, Thailand, and Vietnam).								
Black or African American Patient has origins in any of the black racial groups of Africa.										
Native Hawaiian or Othe	r Pacific Islander Patient ł	Patient has origins in any of the original peoples of Hawaii, Guam, American Samoa, or other Pacific								
White	oples of Europe, the Middle Ea	ist, or North Africa.								
ASIAN GROUPS										
Bangladeshi	Filipino	 Japanese 	Maldivian	Sri Lankan						
Bhutanese	Hmong	Korean	Nepalese	Taiwanese						
Burmese	Indian	Laotian	Okinawan	Thai						
Cambodian	Indonesian	Madagascar	Pakistani	Vietnamese						
Chinese	 Iwo Jiman 	Malaysian	Singaporean							
	AND OTHER PACIFIC ISLA	NDER GROUPS								
Carolinian	Kiribati	Micronesian	Pohnpeian	Tahitian						
Chamorro	Kosraean	Native Hawaiian	 Polynesian 	Tokelauan						
Chuukese	Mariana Islander	New Hebrides	Saipanese	Tongan						
• Fijian	Marshallese	Palauan	Samoan	Yapese						
Guamanian	Melanesian	Papua New Guinean	Solomon Islander							

First three letters of patient's last name:

OCCUPATION SETTING						
Childcare/Preschool	Homeless Shelter					
Correctional Facility	Laboratory					
Drug Treatment Center	Military Facility					
Food Service	Other Residential Facility					
Health Care - Acute Care Facility	Place of Worship					
Health Care - Long Term Care Facility	School					
Health Care - Other	• Other					
OCCUPATION						
Agriculture - farmworker or laborer (crop, nursery, or greenhouse)	Medical - medical assistant					
Agriculture - field worker	Medical - pharmacist					
Agriculture - migratory/seasonal worker	Medical - physician assistant or nurse practitioner					
Agriculture - other/unknown	Medical - physician or surgeon					
Animal - animal control worker	Medical - registered nurse					
Animal - farm worker or laborer (farm or ranch animals)	Medical - other/unknown					
Animal - veterinarian or other animal health practitioner	Military - officer					
Animal - other/unknown	Military - recruit or trainee					
Clerical, office, or sales worker	Protective service - police officer					
Correctional facility - employee	Protective service - other					
Correctional facility - inmate	 Professional, technical, or related profession 					
Craftsman, foreman, or operative	Retired					
Daycare or child care attendee	Sex worker					
Daycare or child care worker	Student - preschool or kindergarten					
Dentist or other dental health worker	Student - elementary or middle school					
• Drug dealer	Student - high (secondary) school					
Fire fighting or prevention worker	Student - college or university					
Flight attendant	Student - other/unknown					
 Food service - cook or food preparation worker 	 Teacher/employee - preschool or kindergarten 					
Food service - host or hostess	Teacher/employee - elementary or middle school					
Food service - waiter or waitress	 Teacher/employee - high (secondary) school 					
Food service - other/unknown	Teacher/instructor/employee - college or university					
• Homemaker	Teacher/instructor/employee - other/unknown					
Laboratory technologist or technician	Unemployed - seeking employment					
Laborer - private household or unskilled worker	Unemployed - not seeking employment					
Manager, official, or proprietor	Unemployed - other/unknown					
Manicurist or pedicurist	• Other					
Medical - emergency medical technician or paramedic	Refused					
Medical - health care worker	• Unknown					

First three letters of patient's last name:

HOUSEHOLD CONTACTS – DETAILS (continued from page 5)										
Name 5	Relations	ship	Age Gender		0	Occupation			Sensitive occupation / situation?	
	Telephor	ne Number	Similar illness? □ Yes □ No □ Unknown			Onset Date (mm/dd/yyyy)		Comment		
Name 6 Relat		ship	Age Gender		0	Occupation		Sensitive occupation / situation?		
	Telephone Number		Similar illness? □ Yes □ No □ Unknown			Onset Date (mm/dd/yyyy)		Comm	ent	
Name 7	Relationship		Age	Age Gender		Occupation			ive occupation / situation? □ No □ Unknown	
	Telephone Number		Similar illness? □ Yes □ No □ Unknown			Onset Date (mm/dd/yyyy)		Comment		
Name 8	Relationship		Age	Gender		Occupation		Sensitive occupation / situation?		
	Telephone Number		Similar illness? □ Yes □ No □ Unknown			Onset Date (mm/dd/yyyy)		Comment		
Name 9	Relationship		Age	Age Gender		Occupation		Sensitive occupation / situation?		
	Telephone Number		Similar illness? □ Yes □ No □ Unknown			Onset Date (mm/dd/yyyy)		Comment		
Name 10	Relationship		Age Gender		0	Occupation		Sensitive occupation / situation?		
Telepho		ne Number		i <i>milar illness?</i>] Yes □ No □ Unknown		Onset Date (mm/dd/yyyy)		Comment		
ILL CONTACTS – DET	AILS (a	continued fr	om page 5)							
Stre		Age	Gender Telephone		one Nur	Number Type of Contact / Relati		tionship	Date of Contact (mm/dd/yyyy)	
		Street Address					Exposure Event		Illness Onset Date (mm/dd/yyyy)	
		City	State Zip		Zip Co	ode	de Occupation		Sensitive occupation / situation? □ Yes □ No □ Unknown	
Name 4 Age Street Addr City		Age	Gender Telephone		one Nur	Number Type of Contact / Relati		tionship	Date of Contact (mm/dd/yyyy)	
		Street Addres	ess			Exposure Event			Illness Onset Date (mm/dd/yyyy)	
		City	State Zij		Zip Co	ode	Occupation		Sensitive occupation / situation? □ Yes □ No □ Unknown	
Name 5 Age Street Addree		Gender Telephone I		one Nur	mber Type of Contact / Relation		tionship	Date of Contact (mm/dd/yyyy)		
		Street Address					Exposure Event		Illness Onset Date (mm/dd/yyyy)	
City				State	Zip C	Code Occupation			Sensitive occupation / situation? □ Yes □ No □ Unknown	
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