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

# TYPHUS AND OTHER NON-SPOTTED FEVER RICKETTSIOSES CASE REPORT

Check one:

Flea-borne (murine) typhus (*Rickettsia typhi*)
 Epidemic typhus (*Rickettsia prowazekii*)

This form should be completed only for typhus and other non-spotted fever rickettsiosescases. Rocky Mountain spotted fever and other spotted fever rickettsioses cases should be reported on the Spotted Fever Rickettsioses Case Report form. Ehrlichiosis/anaplasmosis cases should be reported on the Ehrlichiosis/Anaplasmosis Case Report form.

PATIENT INFORMATION											
Last Name	First	Name			Middle Name		Suffix		Primary Language		
								□ English			
Social Security Number (9 digits	s)			DOB (mm/dd	l/уууу)		Age	□ Years	□ Spanish		
								□ Months	Other:		
					1			□ Days	Ethnicity (check one)		
Address Number & Street – Res	sidence	9			Apar	tment / L	Jnit Num	ber	□ Hispanic/Latino		
									□ Non-Hispanic/Non-Latino		
City / Town					State	9	Zip	Code	Unknown		
	r								Race(s)	o descriptions on nega 7)	
Census Tract	Coun	ity of Resi	idenc	e	Cour	ntry of Re	esidence			e descriptions on page 7)	
			<b>1</b>							n should be based on the	
Country of Birth			lf n	not U.S. Born - Date of Arrival in U.S. (mm/dd/yyyy)					patient's self-identity or self-reporting. Therefore, patients should be offered the option of selecting more than one racial designation.		
Home Telephone		Cellular	Phor	one / Pager		Work / School Telephone		☐ American Indian or Alaska Native			
									□ Asian (check all that apply, see list on page 7)		
E-mail Address				Other Electronic Contact Information					🗆 Asian Indian	🗆 Korean	
Work / School Location				Mark / Dehael Contect					Bangladeshi	Laotian	
Work / School Location				Work / School Contact					□ Cambodian	🗆 Malaysian	
Gender									□ Chinese	🗆 Pakistani	
□ Female □ Trans female / tr	answo	man [	7 Ge	enderqueer or non-binary				'n	□ Filipino	□ Sri Lankan	
$\Box$ Male $\Box$ Trans male/ trans				dentity not listed						□ Taiwanese	
Pregnant?		-		If Yes, Est. Delivery Date (mm/dd/yyyy)					□ Indonesian	□ Thai	
□ Yes □ No □ Unknown								<b>J</b> /	□ Japanese	□ Vietnamese	
Medical Record Number				Patient's Parent/Guardian Name					□ Other:		
									Black or African-American		
Occupation Setting (see list on page 8)				Other Describe/Specify				Native Hawaiian or Of (check all that apply, s			
							Native Hawaiian	🗆 Samoan			
Occupation (see list on page 8)				Other Describe/Specify					🗆 Fijian	🗆 Tongan	
									🗆 Guamanian		
									Other:		
									□ White		
									Other:		
									Unknown		

First three letters of patient's last name:

ADDITIONAL PATIENT DE	MOGR	APHIC	S						
Sex Assigned at Birth Female Unknown Male Declined to ans	wer		erosexu , lesbia	ation al or straight n, or same-gender loving	□ Questioning, unsure, or patient doesn't know □ Declined to □ Orientation not listed □ Unknown				
CLINICAL INFORMATION									
Physician Name - Last Name					First Name Telephon			Number	
SIGNS AND SYMPTOMS					I		1		
Symptomatic? □ Yes □ No □ Unknown		Or	iset Da	te (mm/dd/yyyy)	Date First Sought Medical Care (mm/dd/yyyy)				
Signs and Symptoms	Yes	No	Unk If Yes, Specify as Noted						
Fever				Highest temperature (s	pecify °F/°C)				
Muscle pain									
Headache									
Nausea or vomiting									
Rash or other cutaneous lesion				Location / size / appear	ance				
Chills									
Sweats									
Joint pain				Joint(s)					
Eye pain									
Abdominal pain									
Diarrhea									
Cough									
Hypotension				Date measured (mm/do	l/yyyy)	Systolic /	Diastolic		
Other signs / symptoms (specify)	)								
HOSPITALIZATION									
Did patient visit the emergency r □ Yes □ No □ Unknown	oom for	illness?	>						
Was patient hospitalized? □ Yes □ No □ Unknown			If Yes	s, how many total hospita	I nights? During any part of the hospitalization, did the patient stay in an intensive care unit (ICU) or a critical care unit (CCU)? □ Yes □ No □ Unknown				
If there were any ER visits or hos	spital st	ays rela	ted to t	his illness, specify details				).	

TYPHUS CASE REPORT

First three letters of patient's last name:

HOSPITALIZATION -	- DETA	ILS									
Hospital Name 1	Street A	Address				Admit Date (mm/dd/yyyy)					
	City				Discharge / Transfer Date (mm/dd/yyyy)					уу)	
	State	State Zip Code Telephone Number			Medical Record Nur			l Number	Discharge	Diagnosis	
Hospital Name 2	Street A	Address	I		Admit Date (mm/dd/			m/dd/yyyy)			
	City					Discharge / Transfer Date (m					
	State	Zip Code	Telephon	e Number			Medical Record	l Number	Discharge	Diagnosis	
TREATMENT / MANA	GEMEI	NT	I				I		I		
Received treatment? □ Yes □ No □ Unki	nown	If Yes, specify t	he treatmer	nts below.							
TREATMENT / MANA	GEME	NT DETAILS									
Treatment Type 1     If Antibiotic, specify route     Tr       □ Antibiotic     □ Other     Tr			Treatment Name Da			Started (mm/dd/	уууу)	Date Ended (mm/dd/yyyy)			
<i>Treatment Type 2</i> □ Antibiotic □ Other					Name Date Started (mm/dd/y			yyyy) Date Ended (mm/dd/yyyy)			
OUTCOME											
Outcome?     If Survived,       Survived     Died     Unknown       Survived as of					(mm/dd/yyyy)			Date of	Date of Death (mm/dd/yyyy)		
LABORATORY INFO	RMATIC	ON									
LABORATORY RESU	JLTS SU	JMMARY - SE	ROLOGY	,							
Specimen Type 1         Collection Date (mm/dd/yyyy)			Type of Test		Antigen						
Results			Laboratory Name		Telephone Number						
Specimen Type 2         Collection Date (mm/dd/yyyy)			Type of Test		Antigen						
Results			Laboratory Name		Telephone Number						
LABORATORY RESU	JLTS SU	JMMARY - 01	THER		1			1			
Hematology? □ Yes □ No □ Unki	nown	Collection Date	e (mm/dd/yy	<i>yy)</i>	WBC	НСТ		Hb		Platelets	
Serum chemistry? □ Yes □ No □ Unki	nown	Collection Date	e (mm/dd/yy	<i>yy)</i>	ALT AST						
Other laboratory diagnos □ Yes □ No □ Unkt	•	ormed (e.g., PCI	R, buffy coa	nt smear)?	If Yes, describe		1				

patient's last name:

EPIDEMI	OLOGIC INFORMA	TION											
		IN	ICUBATION F	PERIO	D: UP T	O 14 DA	AYS B	EFORE ILL	NESS ONSET				
ANIMAL	AND INSECT EXPO	DSURES											
Observe any of the following during incubation period <u>at or around home</u> ? □ Dogs □ Cats □ Rodents □ Opossums □ Fleas □ Ticks					,	Desc	ribe						
	e home, how often are				) of Trea	atment				Date(s) of Last Treatm	nent (mm/dd/yyyy)		
prevention	medication?												
	ay of the following duri □ Cats □ Rodents				<u>ne</u> ?	,	Desci	ribe	1				
-	vere observed, were t				cats?								
	ray □ Indoor □ O					- ,							
21 days (in	ent spend any nights i cluding in a car, unshe No □ Unknown						Desci	ribe					
-	recall any insect bites No □ Unknown	in the 10 days	prior to illness	?			lf Yes	s, specify all	locations, type	of insect bite, and date	s on page 4.		
INSECT E	BITE HISTORY - DE	TAILS											
Bite 1 Location (city, county, state, country) Date of Inse				of Insect	Bite (mm/dd/yyyy) Type of Insect Bite □ Flea □ Tick □ Other:								
Bite 2	Location (city, county	y, state, country	1)		Date o	of Insect	Bite (mm/dd/yyyy)     Type of Insect Bite						
							□ Flea □ Tick □ Other:						
	HISTORY travel outside count	v of rosidonco	during the in	subatic	on porio	ad?							
	No 🗆 Unknown	y of residence	during the mo	Jupatic	on perio	JU ?		L	f Yes, specify a	ll locations and dates b	elow.		
TRAVEL	HISTORY – DETAI	ILS											
Travel Typ	e	State	Country	Ot	ther loc	ation de	etails	(city, resor	t, etc.)	Date Travel Started (mm/dd/yyyy)	Date Travel Ended (mm/dd/yyyy)		
□ Domest □ Internati	-												
□ Domest □ Internati													
□ Domest □ Internati	-												
ILL CONT	TACTS			·									
Any contacts with similar illness (including household contacts)?       If         Yes       No       Unknown					lf Ye	Yes, specify details below.							
ILL CONT	TACTS - DETAILS												
Name 1	Name 1 Age Gender Telephone Number			Number	r Type of Contact / Relationship			ip Date of Contact (	Date of Contact (mm/dd/yyyy)				
		Street Add	ress				Exposure Event         Illness Onset Date (mm/dd/yyyy)			te (mm/dd/yyyy)			
		City		State		Zip Code	le Occupation						
Name 2		Age	Gender	Tele	ephone I	Number	Type of Contact / Relationship			ip Date of Contact (	Date of Contact (mm/dd/yyyy)		
		Street Add	ress	_1			E	Exposure Ev	rent	Illness Onset Da	te (mm/dd/yyyy)		
		City		State		Zip Code	le (	Occupation		I			

TYPHUS CASE REPORT

First three letters of	
patient's last name:	

EPIDEMIOLOGICAL LINKAGE									
Epi-linked to known case?	Contact Name / Case Nur	nber							
□ Yes □ No □ Unknown									
For flea-borne (murine) typhus only: <i>Did the patient ha in an area with suitable seasonal and ecological conditivector-borne transmission?</i> □ Yes □ No □ Unk		Describe							
NOTES / REMARKS									
REPORTING AGENCY									
Investigator Name Loc	al Health Jurisdiction	Telephone Number	Date (mm/dd/yyyy)						
First Reported By									
□ Clinician □ Laboratory □ Other (specify):									
DISEASE CASE CLASSIFICATION									
Case Classification (see case definition on page 6)									
□ Confirmed □ Probable □ Suspect									
STATE USE ONLY									
State Case Classification									
□ Confirmed □ Probable □ Suspect □ Not a ca	ase 🛛 Need additional info	ormation							

First three letters of patient's last name:

# CASE DEFINITION

## TYPHUS (CDPH working definition, 2020)

#### CLINICAL CRITERIA (For the purpose of surveillance)

Fever as reported by the patient or healthcare provider, AND two or more of the following: myalgia, headache, nausea/vomiting, elevated liver enzymes, rash, or thrombocytopenia.

# LABORATORY CRITERIA FOR DIAGNOSIS

# Confirmatory laboratory evidence:

- Detection of *Rickettsia typhi* or *R. prowazekii* nucleic acid in a clinical specimen via amplification of *R. typhi* or *R. prowazekii* target by rt-PCR assay, **OR**
- Serological evidence of a fourfold increase in immunoglobulin G (IgG)-specific antibody titer reactive with *R. typhi or R. prowazekii* by indirect immunofluorescence assay (IFA) between paired serum specimens (one taken in the first two weeks of illness and a second up to 10 weeks later) and with the second serum sample having a titer of ≥1:128, **OR**
- · Demonstration of typhus fever group antigen in a biopsy or autopsy specimen by IHC, OR
- Isolation of R. typhi or R. prowazekii organisms from a clinical specimen in cell culture and molecular confirmation (e.g., PCR or sequence).

#### Presumptive laboratory evidence:

- Has serologic evidence of elevated IgG at a titer of ≥1:128 reactive with *R. typhi or R. prowazekii* antigen by IFA in a sample taken within 60 days of illness onset, **OR**
- Has serologic evidence of elevated IgM at a titer of ≥1:256 reactive with *R. typhi or R. prowazekii* antigen by IFA in a sample taken within 60 days of illness onset.

### EPIDEMIOLOGIC LINKAGE CRITERIA.

A clinically compatible case that:

- Was in same household/same defined exposure as a confirmed case within the past 14 days before onset of symptoms, OR
- Likely had vector exposure in an area with suitable seasonal and ecological conditions for potential local vector-borne transmission

#### CASE CLASSIFICATION

Confirmed: A clinically compatible case (meets clinical criteria) that is laboratory confirmed.

- Probable: A clinically compatible case (meets clinical criteria) that has presumptive laboratory evidence and evidence of epidemiologic link.
- Suspected: A case with presumptive or confirmatory laboratory evidence of infection but no clinical information available, **OR** A clinically compatible case (meets clinical criteria) that has evidence of epidemiologic link but no laboratory testing or equivocal results.

## NOTES

- Because antibodies for rickettsial diseases can be cross-reactive, specimens should be tested against a panel of *Rickettsia* antigens, including, at a minimum, *R. rickettsii* and *R. typhi* to differentiate between Spotted Fever Group *Rickettsia* (SFGR) and non-SFGR species. In addition, according to CDC, rickettsial IgM tests lack specificity (resulting in false positives); thus, IgG titers are considered to be much more reliable.
- A case should not be counted as new if the case has ever previously been reported for the same condition.

patient's last name:

RACE DESCRIPTIONS	6								
Race	Descript	Description							
American Indian or Alaska	Native Patient h	Patient has origins in <b>any</b> of the original peoples of North and South America (including Central America).							
Asian	(e.g., inc	Patient has origins in <b>any</b> of the original peoples of the Far East, Southeast Asia, or the Indian subcontinent (e.g., including Bangladesh, Cambodia, China, India, Indonesia, Japan, Korea, Malaysia, Nepal, Pakistan, the Philippine Islands, Thailand, and Vietnam).							
Black or African American	Patient h	as origins in <b>any</b> of the black racial	groups of Africa.						
Native Hawaiian or Other	Pacific Islander Patient h	as origins in <b>any</b> of the original peo	ples of Hawaii, Guam, Americ	can Samoa, or other Pacific Islands.					
White	Patient h	as origins in <b>any</b> of the original peo	ples of Europe, the Middle Ea	ast, 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						
NATIVE HAWAIIAN AI	ND OTHER PACIFIC ISLA	NDER GROUPS							
Carolinian	Kiribati	Micronesian	Pohnpeian	Tahitian					
Chamorro	Kosraean	Native Hawaiian	<ul> <li>Polynesian</li> </ul>	Tokelauan					
Chuukese	Mariana Islander	New Hebrides	Saipanese	Tongan					
• Fijian	Marshallese	Palauan	Samoan	Yapese					
Guamanian	Melanesian	Papua New Guinean	Solomon Islander						

TYPHUS CASE REPORT

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	<ul> <li>Professional, technical, or related profession</li> </ul>
Craftsman, foreman, or operative	Retired
Daycare or child care attendee	Sex worker
Daycare or child care worker	<ul> <li>Student - preschool or kindergarten</li> </ul>
Dentist or other dental health worker	<ul> <li>Student - elementary or middle school</li> </ul>
Drug dealer	<ul> <li>Student - high (secondary) school</li> </ul>
Fire fighting or prevention worker	Student - college or university
Flight attendant	Student - other/unknown
<ul> <li>Food service - cook or food preparation worker</li> </ul>	<ul> <li>Teacher/employee - preschool or kindergarten</li> </ul>
Food service - host or hostess	Teacher/employee - elementary or middle school
Food service - waiter or waitress	<ul> <li>Teacher/employee - high (secondary) school</li> </ul>
Food service - other/unknown	<ul> <li>Teacher/instructor/employee - college or university</li> </ul>
• Homemaker	<ul> <li>Teacher/instructor/employee - other/unknown</li> </ul>
Laboratory technologist or technician	Unemployed - seeking employment
<ul> <li>Laborer - private household or unskilled worker</li> </ul>	<ul> <li>Unemployed - not seeking employment</li> </ul>
Manager, official, or proprietor	Unemployed - other/unknown
Manicurist or pedicurist	• Other
Medical - emergency medical technician or paramedic	Refused
Medical - health care worker	• Unknown