State of California—Health and Human Services Agency

Local ID Number: _____

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

CHIKUNGUNYA CASE REPORT

***Please note**: Prompt, standardized interview of all cases of chikungunya is strongly encouraged to improve the accuracy of recall of possible sources of infection. Jurisdictions that choose to use this form should send completed forms to the Surveillance and Statistics Section by mail through your communicable disease reporting staff. For jurisdictions participating in CalREDIE, entry of information into the CalREDIE form will facilitate investigations and surveillance.*

PATIENT INFORMATION

Last Name	*First Name*	*Middle Name*	*Suffix*

Social Security Number (9 digits)	*DOB (mm/dd/yyyy)*	*Age*	☐ Years ☐ Months ☐ Days

Address Number & Street – Residence	*Apartment / Unit Number*

City / Town	*State*	*Zip Code*

Census Tract	*County of Residence*	*Country of Residence*

Country of Birth	*If not U.S. Born - Date of Arrival in U.S. (mm/dd/yyyy)*

Home Telephone	*Cellular Phone / Pager*	*Work / School Telephone*

E-mail Address	*Other Electronic Contact Information*

Work / School Location	*Work / School Contact*

Gender
☐ Female ☐ Trans female / transwoman ☐ Genderqueer or non-binary ☐ Unknown
☐ Male ☐ Trans male/ transman ☐ Identity not listed ☐ Declined to answer

Pregnant? ☐ Yes ☐ No ☐ Unknown	*If Yes, Est. Delivery Date (mm/dd/yyyy)*

Medical Record Number	*Patient's Parent/Guardian Name*

Occupation Setting (see list on page 8)	*Other Describe/Specify*

Occupation (see list on page 8)	*Other Describe/Specify*

Primary Language
☐ English
☐ Spanish
☐ Other: _____

Ethnicity (check one)
☐ Hispanic/Latino
☐ Non-Hispanic/Non-Latino
☐ Unknown

Race(s)
(check all that apply, race descriptions on page 7)

The response to this item should be based on the patient's self-identity or self-reporting. Therefore, patients should be offered the option of selecting more than one racial designation.

☐ American Indian or Alaska Native

☐ Asian *(check all that apply, see list on page 7)*
- ☐ Asian Indian
- ☐ Bangladeshi
- ☐ Cambodian
- ☐ Chinese
- ☐ Filipino
- ☐ Hmong
- ☐ Indonesian
- ☐ Japanese
- ☐ Korean
- ☐ Laotian
- ☐ Malaysian
- ☐ Pakistani
- ☐ Sri Lankan
- ☐ Taiwanese
- ☐ Thai
- ☐ Vietnamese
- ☐ Other: _____

☐ Black or African-American

☐ Native Hawaiian or Other Pacific Islander *(check all that apply, see list on page 7)*
- ☐ Native Hawaiian
- ☐ Samoan
- ☐ Fijian
- ☐ Tongan
- ☐ Guamanian
- ☐ Other: _____

☐ White

☐ Other: _____

☐ Unknown

ADDITIONAL PATIENT DEMOGRAPHICS

Sex Assigned at Birth
☐ Female ☐ Unknown
☐ Male ☐ Declined to answer

Sexual Orientation
☐ Heterosexual or straight ☐ Questioning, unsure, or patient doesn't know ☐ Declined to answer
☐ Gay, lesbian, or same-gender loving ☐ Orientation not listed ☐ Unknown
☐ Bisexual

First three letters of patient's last name: | | | |

CLINICAL INFORMATION

Physician Name - Last Name	*First Name*	*Telephone Number*

SIGNS AND SYMPTOMS

Symptomatic? ☐ Yes ☐ No ☐ Unknown	*Onset Date (mm/dd/yyyy)*	*Date First Sought Medical Care (mm/dd/yyyy)*

Signs / Symptoms	Yes	No	Unk	If Yes, Specify as Noted	Signs / Symptoms	Yes	No	Unk	If Yes, Specify as Noted
Fever				*Highest temperature (specify °F/°C)*	Rash				*Maculopapular?* ☐ Yes ☐ No ☐ Unknown
Headache					Nausea or vomiting				
Eye pain					Diarrhea				
Muscle ache					Chills				
Joint pain				*Joint(s)*	Cough				
Joint swelling					Abdominal pain				
Arthritis					Fatigue				

Other symptom(s) (specify)

PAST MEDICAL HISTORY

Has the patient been previously diagnosed with chikungunya? ☐ Yes ☐ No ☐ Unknown	*If Yes, date of diagnosis (mm/dd/yyyy)*	
Does the patient have a history of cardiovascular disease? ☐ Yes ☐ No ☐ Unknown	*Hypertension?* ☐ Yes ☐ No ☐ Unknown	*Diabetes?* ☐ Yes, Type: _____ ☐ No ☐ Unknown

Other significant history/exposures:

HOSPITALIZATION

Did patient visit emergency room for illness? ☐ Yes ☐ No ☐ Unknown	*Was patient hospitalized?* ☐ Yes ☐ No ☐ Unknown	*If Yes, how many total hospital nights?*
Was patient placed in respiratory isolation? ☐ Yes ☐ No ☐ Unknown	*If there were any ER visits or hospital stays related to this illness, specify details below.*	

HOSPITALIZATION - DETAILS

Hospital Name 1	*Street Address*			*Admission Date (mm/dd/yyyy)*	
	City			*Discharge / Transfer Date (mm/dd/yyyy)*	
	State	*Zip Code*	*Telephone Number*	*Medical Record Number*	*Discharge Diagnosis*
Hospital Name 2	*Street Address*			*Admission Date (mm/dd/yyyy)*	
	City			*Discharge / Transfer Date (mm/dd/yyyy)*	
	State	*Zip Code*	*Telephone Number*	*Medical Record Number*	*Discharge Diagnosis*

OUTCOME

Outcome? ☐ Survived ☐ Died ☐ Unknown	*If Survived,* Survived as of _____*(mm/dd/yyyy)*	*Date of Death (mm/dd/yyyy)*

LABORATORY INFORMATION

LABORATORY RESULTS SUMMARY

Specimen Type 1
☐ Serum
☐ CSF
☐ Other:_____

Laboratory Type
☐ State PH lab ☐ Local PH Lab ☐ Commercial lab ☐ CDC lab ☐ Blood bank ☐ Other (specify):_____

Type of Test
☐ PCR ☐ ELISA-IgM ☐ ELISA-IgG ☐ IFA-IgM ☐ IFA-IgG ☐ PRNT ☐ Other (specify):_____

Interpretation	*Results*	*Collection Date (mm/dd/yyyy)*
☐ Positive ☐ Negative ☐ Equivocal		
Laboratory Name		*Telephone Number*

Specimen Type 2
☐ Serum
☐ CSF
☐ Other:_____

Laboratory Type
☐ State PH lab ☐ Local PH Lab ☐ Commercial lab ☐ CDC lab ☐ Blood bank ☐ Other (specify): _____

Type of Test
☐ PCR ☐ ELISA-IgM ☐ ELISA-IgG ☐ IFA-IgM ☐ IFA-IgG ☐ PRNT ☐ Other (specify): _____

Interpretation	*Results*	*Collection Date (mm/dd/yyyy)*
☐ Positive ☐ Negative ☐ Equivocal		
Laboratory Name		*Telephone Number*

LABORATORY RESULTS SUMMARY - OTHER

Hematology ☐ Yes ☐ No ☐ Unknown	*Date Collected (mm/dd/yyyy)*	*WBC*	*HCT*	*Hb*	*Platelets*

Other laboratory diagnostics performed (e.g., IHC, virus isolation)? ☐ Yes ☐ No ☐ Unknown	*If Yes, describe*

EPIDEMIOLOGIC INFORMATION

INCUBATION PERIOD: UP TO 12 DAYS BEFORE ILLNESS ONSET

BLOOD AND ORGAN DONATION

Did patient donate blood during the incubation period?	*Did patient donate an organ during the incubation period?*
☐ Yes, Date: ☐ No ☐ Unknown	☐ Yes, Date: ☐ No ☐ Unknown
Did patient receive a blood transfusion during the incubation period?	*Did patient receive an organ transplant during the incubation period?*
☐ Yes, Date: ☐ No ☐ Unknown	☐ Yes, Date: ☐ No ☐ Unknown

TRAVEL HISTORY

*Did patient travel **outside of county of residence** during the incubation period?* ☐ Yes ☐ No ☐ Unknown	*Has the patient traveled **outside of California** during the incubation period?* ☐ Yes ☐ No ☐ Unknown
*Has the patient traveled **outside the U.S.** during the incubation period?* ☐ Yes ☐ No ☐ Unknown	*If Yes for any of these questions, specify all locations and dates below.*

TRAVEL HISTORY – DETAILS

Travel Type	**State**	**Country**	**Other location details (city, resort, etc.)**	**Date Travel Started *(mm/dd/yyyy)***	**Date Travel Ended *(mm/dd/yyyy)***
☐ Domestic ☐ Unknown ☐ International					
☐ Domestic ☐ Unknown ☐ International					
☐ Domestic ☐ Unknown ☐ International					

First three letters of patient's last name: | | | |

EXPOSURES / RISK FACTORS

Did patient recall any mosquito bites during the incubation period? ☐ Yes ☐ No ☐ Unknown	*If Yes, specify all locations and dates below.*

BITE HISTORY - DETAILS

Location (city, county, state, country)	**Date Mosquito Bite (mm/dd/yyyy)**

NOTES / REMARKS

REPORTING AGENCY

Investigator Name	*Local 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 5)
☐ Confirmed ☐ Probable ☐ Suspected

STATE USE ONLY

Case Classification
☐ Confirmed ☐ Probable ☐ Suspected ☐ Not a case ☐ Need additional information

CASE DEFINITION

CHIKUNGUNYA (CDPH, working definition, 2022)
(adapted from 2015 CSTE case definition https://ndc.services.cdc.gov/case-definitions/arboviral-diseases-neuroinvasive-and-non-neuroinvasive-2015/)

CLINICAL DESCRIPTION

Most arboviral infections are asymptomatic. Clinical disease ranges from mild febrile illness to severe encephalitis. For the purpose of surveillance and reporting, based on their clinical presentation, arboviral disease cases are often categorized into two primary groups: neuroinvasive disease and nonneuroinvasive disease.

Neuroinvasive disease
Many arboviruses cause neuroinvasive disease such as aseptic meningitis, encephalitis, or acute flaccid paralysis (AFP). These illnesses are usually characterized by the acute onset of fever with headache, myalgia, stiff neck, altered mental status, seizures, limb weakness, or cerebrospinal fluid (CSF) pleocytosis. AFP may result from anterior ("polio") myelitis, peripheral neuritis, or post-infectious peripheral demyelinating neuropathy (i.e., Guillain-Barre' syndrome). Less common neurological manifestations, such as cranial nerve palsies, also occur.

Non-neuroinvasive disease
Most arboviruses are capable of causing an acute systemic febrile illness (e.g., West Nile fever) that may include headache, myalgias, arthralgia, rash, or gastrointestinal symptoms. Some viruses also can cause more characteristic clinical manifestations, such as severe polyarthralgia or arthritis due to Chikungunya virus or other alphaviruses (e.g., Mayaro, Ross River, O'nyong-nyong)

CLINICAL CRITERIA

A clinically compatible case of arboviral disease is defined as follows:

Neuroinvasive disease

- Meningitis, encephalitis, acute flaccid paralysis, or other acute signs of central or peripheral neurologic dysfunction, as documented by a physician, **AND**
- Absence of a more likely clinical explanation. Other clinically compatible symptoms of arbovirus disease include: headache, myalgia, rash, arthralgia, vertigo, vomiting, paresis and/ or nuchal rigidity.

Non-neuroinvasive disease

- Fever (chills) as reported by the patient or a health-care provider, **AND**
- Absence of neuroinvasive disease, **AND**
- Absence of a more likely clinical explanation. Other clinically compatible symptoms of arbovirus disease include: headache, myalgia, rash, arthralgia, vertigo, vomiting, paresis and/ or nuchal rigidity.

LABORATORY CRITERIA FOR DIAGNOSIS

Isolation of virus from, or demonstration of specific viral antigen or nucleic acid in, tissue, blood, CSF, or other body fluid, **OR**

- Four-fold or greater change in virus-specific quantitative antibody titers in paired sera, **OR**
- Virus-specific IgM antibodies in serum with confirmatory virus-specific neutralizing antibodies in the same or a later specimen, **OR**
- Virus-specific IgM antibodies in CSF or serum.

CASE CLASSIFICATION

Probable

Neuroinvasive disease

A case that meets the above clinical criteria for neuroinvasive disease and the following laboratory criteria:

- Virus-specific IgM antibodies in CSF or serum but with no other testing.

Non-neuroinvasive disease

A case that meets the above clinical criteria for non-neuroinvasive disease and the laboratory criteria for a probable case:

- Virus-specific IgM antibodies in serum but with no other testing.

Confirmed

Neuroinvasive disease

A case that meets the above clinical criteria for neuroinvasive disease and one or more of the following laboratory criteria for a confirmed case:

- Isolation of virus from, or demonstration of specific viral antigen or nucleic acid in, tissue, blood, CSF, or other body fluid, **OR**
- Four-fold or greater change in virus-specific quantitative antibody titers in paired sera, **OR**
- Virus-specific IgM antibodies in serum with confirmatory virus-specific neutralizing antibodies in the same or a later specimen, **OR**
- Virus-specific IgM antibodies in CSF, with or without a reported pleocytosis, and a negative result for other IgM antibodies in CSF for arboviruses endemic to the region where exposure occurred.

Non-neuroinvasive disease

A case that meets the above clinical criteria for non-neuroinvasive disease and one or more of the following laboratory criteria for a confirmed case:

- Isolation of virus from, or demonstration of specific viral antigen or nucleic acid in, tissue, blood, or other body fluid, excluding CSF, **OR**
- Four-fold or greater change in virus-specific quantitative antibody titers in paired sera, **OR**
- Virus-specific IgM antibodies in serum with confirmatory virus-specific neutralizing antibodies in the same or a later specimen.

First three letters of patient's last name: | | | |

CASE DEFINITION (continued)

COMMENT

Imported arboviral diseases:

Human disease cases due to Dengue or Yellow fever viruses are nationally notifiable to CDC using specific case definitions. However, many other exotic arboviruses (e.g., Japanese encephalitis, Tick-borne encephalitis, Venezuelan equine encephalitis, and Rift Valley fever viruses) are important public health risks for the United States as competent vectors exist that could allow for sustained transmission upon establishment of imported arboviral pathogens. Health-care providers and public health officials should maintain a high index of clinical suspicion for cases of potentially exotic or unusual arboviral etiology, particularly in international travelers. If a suspected case occurs, it should be reported to the appropriate local/state health agencies and CDC.

Interpreting arboviral laboratory results:

- **Serologic cross-reactivity:** In some instances, arboviruses from the same genus produce cross-reactive antibodies. In geographic areas where two or more closely-related arboviruses occur, serologic testing for more than one virus may be needed and results compared to determine the specific causative virus. For example, such testing might be needed to distinguish antibodies resulting from infections within genera, e.g., flaviviruses such as West Nile, St. Louis encephalitis, Powassan, Dengue, or Japanese encephalitis viruses.
- **Rise and fall of IgM antibodies:** For most arboviral infections, IgM antibodies are generally first detectable at 3 to 8 days after onset of illness and persist for 30 to 90 days, but longer persistence has been documented (e.g., up to 500 days for West Nile virus). Serum collected within 8 days of illness onset may not have detectable IgM and testing should be repeated on a convalescent-phase sample to rule out arboviral infection in those with a compatible clinical syndrome.
- **Persistence of IgM antibodies:** Arboviral IgM antibodies may be detected in some patients months or years after their acute infection. Therefore, the presence of these virus-specific IgM antibodies may signify a past infection and be unrelated to the current acute illness. Finding virus-specific IgM antibodies in CSF or a fourfold or greater change in virus-specific antibody titers between acute- and convalescent-phase serum specimens provides additional laboratory evidence that the arbovirus was the likely cause of the patient's recent illness. Clinical and epidemiologic history also should be carefully considered.
- **Persistence of IgG and neutralizing antibodies:** Arboviral IgG and neutralizing antibodies can persist for many years following a symptomatic or asymptomatic infection. Therefore, the presence of these antibodies alone is only evidence of previous infection and clinically compatible cases with the presence of IgG, but not IgM, should be evaluated for other etiologic agents.
- **Arboviral serologic assays:** Assays for the detection of IgM and IgG antibodies commonly include enzyme-linked immunosorbent assay (ELISA), microsphere immunoassay (MIA), or immunofluorescence assay (IFA). These assays provide a presumptive diagnosis and should have confirmatory testing performed. Confirmatory testing involves the detection of arboviral-specific neutralizing antibodies utilizing assays such as plaque reduction neutralization test (PRNT).
- **Other information to consider.** Vaccination history, detailed travel history, date of onset of symptoms, and knowledge of potentially cross-reactive arboviruses known to circulate in the geographic area should be considered when interpreting results.

First three letters of patient's last name: | | | |

RACE DESCRIPTIONS

Race	Description
American Indian or Alaska Native	Patient has origins in **any** of the original peoples of North and South America (including Central America).
Asian	Patient has origins in **any** 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 has origins in **any** of the black racial groups of Africa.
Native Hawaiian or Other Pacific Islander	Patient has origins in **any** of the original peoples of Hawaii, Guam, American Samoa, or other Pacific Islands.
White	Patient has origins in **any** of the original peoples of Europe, the Middle East, or North Africa.

ASIAN GROUPS

- Bangladeshi
- Bhutanese
- Burmese
- Cambodian
- Chinese
- Filipino
- Hmong
- Indian
- Indonesian
- Iwo Jiman
- Japanese
- Korean
- Laotian
- Madagascar
- Malaysian
- Maldivian
- Nepalese
- Okinawan
- Pakistani
- Singaporean
- Sri Lankan
- Taiwanese
- Thai
- Vietnamese

NATIVE HAWAIIAN AND OTHER PACIFIC ISLANDER GROUPS

- Carolinian
- Chamorro
- Chuukese
- Fijian
- Guamanian
- Kiribati
- Kosraean
- Mariana Islander
- Marshallese
- Melanesian
- Micronesian
- Native Hawaiian
- New Hebrides
- Palauan
- Papua New Guinean
- Pohnpeian
- Polynesian
- Saipanese
- Samoan
- Solomon Islander
- Tahitian
- Tokelauan
- Tongan
- Yapese

First three letters of patient's last name: | | | |

OCCUPATION SETTING

- Childcare/Preschool
- Correctional Facility
- Drug Treatment Center
- Food Service
- Health Care - Acute Care Facility
- Health Care - Long Term Care Facility
- Health Care - Other
- Homeless Shelter
- Laboratory
- Military Facility
- Other Residential Facility
- Place of Worship
- School
- Other

OCCUPATION

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