MALARIA CASE SURVEILLANCE REPORT

Department of Health and Human Services, Centers for Disease Control and Prevention
Division of Parasitic Diseases and Malaria (MS A-06), 1600 Clifton Road, N.E. Atlanta, Georgia 30329

Part I

Reset

LOCAL RECORD ID: **LOCAL SUBJECT ID:**

1. DEMOGRAPHIC AND CARE PROVIDER INFORMATION:

a. Subject name:*(Last, First)*

Date of symptom onset of this illness:*

b. State/territory reporting this case:

Subject's county of residence

c. Physician name: (*Include additional physicians on the continuation page)*

First and Last Name | Phone

d. Hospitalization: *(Include additional hospitalizations on the continuation page)*
Subject admitted as inpatient: Yes No Unknown.
Admission date *(mm/dd/yyyy)*
Discharge date *(mm/dd/yyyy)*
Hospital name:
Hospital record No. :
Hospital duration (*in days*):

e. Age:
Age units: yrs. mos. wks. days
Date of Birth (*mm/dd/yyyy*):

f. Height:
Height units: centimeters inches

g. Weight:
Weight units : kg g lb oz

h. Sex:
Male
Female
Unknown

i. Pregnant?
Yes
No
Unknown

j. Ethnicity:
Hispanic or Latino
Not Hispanic or Latino
Unknown

k. Race (*select one or more*):
American Indian/Alaska Native
Native Hawaiian/Other Pacific Islander
Black or African American
Asian White Unknown
Other, Specify

2. LABORATORY RESULTS:

Complete a minimum of one positive malaria diagnostic test. If more than two tests were done then additional results may be included on the continuation page. It is preferable to include the following tests: (i) blood smear with the highest percentage parasitemia, (ii) the test that indicates the Plasmodium species, and (iii) a confirmatory PCR (if applicable). For conflicting lab results for the species identification, include only the test with the final result. For a lab result that identifies more than one species, multiple species can be selected for that one test. If the species determination is inconclusive, then select "Not determined"; if there is a suspicion towards a particular species (e.g. "non-falciparum" select "Not determined" and "Other" and write the suspected species in the "Other species, specify" section.

I. Diagnostic lab test:

a. Type: Blood Smear PCR RDT Other No test done/ unknown
Specimen collection date *(mm/dd/yyyy):*
Lab result date *(mm/dd/yyyy):*

b. Result: Pos Neg Unknown Not done

c. Species: Vivax Falciparum Malariae Ovale
Not Determined Other species (specify):

d. Parasitemia (%):
Lab name :
Lab phone :

II. Diagnostic lab test:

a. Type: Blood Smear PCR RDT Other No test done/ unknown
Specimen collection date *(mm/dd/yyyy):*
Lab result date *(mm/dd/yyyy):*

b. Result: Pos Neg Unknown Not done

c. Species: Vivax Falciparum Malariae Ovale
Not Determined Other species (specify):

d. Parasitemia (%):
Lab name :
Lab phone :

3. TRAVEL HISTORY:

If more than four countries were visited in the past two years then add responses on the continuation page. Additional travel details (e.g. city or region of travel, estimation of dates or duration, etc.) can be provided in the comments section.

a. Has the subject traveled or lived outside the U.S. during the past 2 years? Yes No Unknown

b. If yes, specify Country: *(If unable to determine country, select appropriate region e.g. South America)*	1.	2.	3.	4.
Date returned/ arrived in US:	Month Day Year	Month Day Year	Month Day Year	Month Day Year
Duration in country:				
Duration units:	yrs. mos. wks. days	yrs. mos. wks. days	yrs. mos. wks. days	yrs. mos. wks. days
c. Principal reason for travel				
Other reason for travel:				

d. What is the subject's country of usual residence?

e. What is the subject's country of residence prior to most recent travel?

f. What is the subject's country of birth?

4. SPECIMEN:

a. Was a specimen(s) sent to CDC ?
Yes No Unknown

If yes, type of specimen sent to CDC
(For each specimen, enter the CDC ID)

	b. Specimen Type	**Other specimen(specify)**	**CDC ID (from 50.34 submission)**
1.			
2.			
3.			
4.			
5.			

5. CLINICAL AND TREATMENT INFORMATION:

a. Was malaria chemoprophylaxis used? Yes No Unknown

If yes, which drugs were taken? ***(select all that apply)***
Atovaquone/proguanil (Malarone) Arakoda (Tafenoquine) Chloroquine Doxycycline Hydroxychloroquine
Mefloquine Primaquine Unknown Other: (specify):

b. Was chemoprophylaxis taken as prescribed?
Yes, Missed no doses
No, Missed doses
Unknown

c. If doses were missed, what was the reason?
Forgot
Didn't think needed
Had a side effect, specify:
Was advised by others to stop
Prematurely stopped taking once home
Other, specify:
Unknown

d. History of malaria in last 12 months: Yes No Unknown
(prior to this report)
Date of previous illness:
If yes, species (*select all that apply*):
Vivax Falciparum Malariae Ovale
Not Determined Other (specify):

e. Blood transfusion/organ transplant within last 12 months: Yes No Unknown If yes, date:

f. Complications: ***(select all that apply)***
Cerebral malaria Renal failure ARDS
Severe anemia*(Hb<7)* None Other, specify:

g. Was illness fatal? Yes No Unknown
Date of death (mm/dd/yyyy):

h. Treatment for this illness: *(include all that apply)*

	Antimalarial treatment	*Date initiated*	*Date stopped*	*Duration*	*Other treatment (Specify)*
1.					
2.					
3.					

i. Comments:

Care providers with questions about diagnosis and treatment of malaria cases can call the CDC malaria hotline:
Monday – Friday, 9:00 am to 5:00 pm, EST
Call 770-488-7788 or 855-856-4713.

*Off-hours, weekends and federal holidays: call **770-488-7100** and ask to speak to the malaria clinician on call.*

Information on malaria risk, prevention, and treatment is available at the CDC malaria website: http://www.cdc.gov/malaria

6. SUBMITTER INFORMATION:

Submitter information (*last, first*):* ***Last Name*** ***First Name*** Phone:* Email:*

Reporting State: Reporting County:
National jurisdiction: Date Submitted:*

Part II (to be completed 4 weeks after treatment)

a. Was the medicine for malaria treatment taken as prescribed? Yes No Unknown

b. Did all signs or symptoms of malaria resolve without any additional malaria treatment within 7 days after treatment start? Yes No Unknown
If yes, did the subject experience a recurrence of signs or symptoms of malaria during the 4 weeks after starting malaria treatment? Yes No Unknown
Did the subject experience any adverse events within 4 weeks after receiving the malaria treatment? Yes No Unknown

If Yes, the subject experienced an adverse event within 4 weeks after receiving the malaria treatment, then answer Part II c, d, and e.

List ALL prescription and over the counter medicines the subject had taken during the **2wks before** and **4 weeks after** starting their treatment for malaria

c. *Medication taken during the **two weeks before** starting treatment for malaria*

	Medication	*Start Date*	*End Date*	*Duration*
1.				
2.				
3.				

d. *Medication taken during **four weeks after** starting treatment for malaria*

	Medication	*Start Date*	*End Date*	*Duration*
1.				
2.				
3.				

e.

	(If Yes): Event description*	**Relationship to treatment suspected****	**Time to onset since treatment start**	**Adverse event time to onset - units** *(hour, days, weeks, months, years)*	**Adverse event severity** *(Seriousness criteria)*
1					
2					
3					
4					
5					

** Include relevant medical history, outcome (e.g. resolved or ongoing, or pregnancy outcome), date of outcome, date of resolution if applicable, and relevant laboratory results (e.g. glucose-6-phosphate dehydrogenase testing). Please grade the event: Mild (asymptomatic/no intervention), Moderate (symptomatic/minimal intervention), Severe (medically important/significant intervention). Use comments box above if more space is needed.*

*** Suspected means that a causal relationship between the antimalarial and an adverse event is at least a reasonable possibility, i.e., the relationship cannot be ruled out.*

CONTINUATION PAGE (*Use only if you need more space from the front)*

1c. Second physician name:		**1c. Third physician name:**	
First and Last Name:	Phone	First and Last Name	Phone
1d. Second hospital admission:		**1d. Third hospital admission:**	
Admission date (mm/dd/yyyy) : Discharge date (mm/dd/yyyy) :		Admission date (mm/dd/yyyy) : Discharge date (mm/dd/yyyy) :	
Hospital name:		Hospital name:	
Hospital record No. :		Hospital record No. :	
Hospital duration (*in days*) :		Hospital duration (*in days*) :	

2. LABORATORY RESULTS ***The species will appear in black font color after a selection is made*

	Test type	Collection Date	Lab Results Date	Result	Species * (Hold Ctrl to select multiple)	Other species	Parasitemia (%)	Lab Name	Lab Phone
3.									
4.									
5.									
6.									
7.									
8.									
9.									
10.									

3. TRAVEL HISTORY

	5.	6.	7.
Country:			
Date returned/ arrived in U.S. (mm/dd/yyyy):			
Duration in country:			
Duration units:	☐ *yrs.* ☐ *mos.* ☐ *wks.* ☐ *days*	☐ *yrs.* ☐ *mos.* ☐ *wks.* ☐ *days*	☐ *yrs.* ☐ *mos.* ☐ *wks.* ☐ *days*
Principal reason for travel			
Other reason for travel:			

4. SPECIMEN

	Specimen Type	Other specimen(specify)	CDC ID (from 50.34)		Specimen Type	Other specimen(specify)	CDC ID (from 50.34)
6.				8.			
7.				9.			

5d. HISTORY OF MALARIA LAST 12 MONTHS ***The species will appear in black font color after a selection is made*

	Date of Previous Illness			Species** *(Select all that apply - Hold Ctrl to select multiple)*	Other species (Specify)
	Month	Date	Year		
2.					
3.					
4.					

5h. THERAPY FOR THIS ILLNESS

	Antimalarial Treatment	*Date initiated*	*Date stopped*	*Duration*	*Other treatment (Specify)*
Therapy for this illness: *(include all that apply)*					
4.					
5.					
6.					
7.					

PART II CONTINUATION

C. *Medication taken during the **two weeks before** starting treatment for malaria*

	Medication	*Start date*	*End date*	*Duration*
4.				
5.				
6.				
7.				

D. *Medication taken during **four weeks after** starting treatment for malaria*

	Medication	*Start date*	*End date*	*Duration*
4.				
5.				
6.				
7.				

INSTRUCTIONS TO COMPLETE THE MALARIA CASE SURVEILLANCE REPORT FORM

- Submit form electronically via **secure email** to malaria@cdc.gov, or to your local or state health department.
- Do not print or fax the form, since that will prevent the information from being processed electronically. If you are unable to submit this form electronically, or need additional help you may contact: CDC, Malaria Branch at **770-488-7788** or **855-856-4713.**
- Record all information accurately and as completely as possible in the appropriate spaces. Use the Continuation Page if needed.
- Use a separate form for each individual subject and illness. Subjects who experience a subsequent illness with lab-confirmed parasitemia >28 days after the initial infection (not related to antimalarial failure) should be reported as a separate illness with a new form completed.
- Built in skip logics will guide the relevant question (e.g. for males, pregnancy questions will be disabled).
- Required fields are marked with a red asterix (*).

PART I

Local Record ID: State generated identification number**. Local Subject ID:** State generated identification number that is unique to the person in the state surveillance system.

SECTION 1: DEMOGRAPHIC AND CARE PROVIDER INFORMATION

a) Please provide the official **subject's name** (last and first), if allowed by local confidentiality regulations. Do not provide a nickname. If names are not permissible, then submitting the subject's initials would be helpful.
Onset date: the date of acute symptom onset, especially the first day fever occurred. Reporting partial dates is acceptable (e.g. month and year). The year of onset is a required.

b) Select the **state** or territory that is reporting the case, and the subject's **county** of residence.

c) **Physician's name** and **phone number**. If there are more than one, then additional information can be added on the Continuation Page.

d) **Hospitalization**: Select *'Yes'* if the subject was admitted as an inpatient and enter the hospitalization details including the subject's **admission** and **discharge dates** for this illness, **hospital name** and **record number**. If the subject was hospitalized more than once for this illness (including hospitalizations at the same hospital or transfers/referrals) then include additional details on the Continuation Page. The **hospital duration** is automatically calculated based on the admission and discharge dates.

e) **Age** at time of illness onset and **age unit**, (e.g. years, months, weeks, or days). For subjects aged >24 months, it is preferable for age to be calculated in years. Please provide the subject's **date of birth**, if allowed by local confidentiality regulations.

f) Height at diagnosis, and units of measurement (centimeters or inches)

g) Weight at diagnosis, and units of measurement (kilograms, grams, pounds or ounces)

h) Subject's current **sex**. Select only one choice (Male, Female, or Unknown).

i) Indicate whether the subject is **pregnant** at the time of the event. Skip this if *'Male'*. A malaria illness in a pregnant woman may be more severe than in a non-pregnant woman. In addition, treatment recommendations are different.

j & k) Subject's self-identified ethnicity and race. *'Unknown'* should be selected for choices including: *'Unknown'*, *'Asked but unknown'*, *'No Information'*, *'Not asked'*, or *'Refused to answer'. If 'Other' is selected, then please specify in the text box provided.*

SECTION 2: LABORATORY RESULTS

I & II Diagnostic Lab Tests: *Enter the type of test, result, species, percentage parasitemia (for blood smear tests), laboratory name and contact phone number for each test reported on the subject. Include specimen collection date and laboratory result report date and the reporting laboratory name and phone number.*

a) **Type** of diagnostic test(s) performed for this subject. If more than two tests were done, then additional results may be included on the continuation page. Complete a minimum of one positive malaria diagnostic test. It is preferable to include the following tests:

i. Blood smear with the highest observed percentage parasitemia for this illness,
ii. The test that indicates the *Plasmodium* species, and
iii. A confirmatory PCR (if applicable).

b) **Result**: Please indicate the result of the test performed (positive [Pos], negative [Neg], Unknown, Not done)

c) **Species**: Indicate the *Plasmodium* species detected. If a mixed-species infection was identified, then select more than one species on the form. For subjects who had labs with conflicting species identification, include only the test with the final result. If the species determination is inconclusive, then select *'Not determined'*; if there is a suspicion towards a particular species (e.g. *'non-falciparum'* select *'Not determined'* and *'Other'* and write the suspected species in the *'Other species, specify'* section.

d) The percentage parasitemia is the number of infected erythrocytes expressed as a percentage of the total erythrocytes. For blood smear tests, enter the highest percentage parasitemia observed for this illness as numeric value. (Do not include the '%').

SECTION 3: TRAVEL HISTORY

a) Select *'Yes'* if the **subject traveled or lived outside the U.S. during the past 2 years**.

b) If 3a is *'Yes'*, then specify the **country** of travel or residence outside of the U.S. during the past 2 years. If unknown, then the region of the world may be used, (e.g. Southern Africa, Central America, etc,). For each **country** entered, provide the date returned to or arrived in the U.S, the duration of stay and the duration units. If the complete date of return is unknown then provide partial information (e.g. month and year, or minimally the year of return). If more than four countries were visited in the past two years then additional responses can be provided on the Continuation Page. If a subject with confirmed malaria has not traveled to an endemic country within two years, then contact the CDC immediately so that an investigation can be conducted to identify the source of the infection.
Country information on malaria transmission can be found at: https://www.cdc.gov/malaria/travelers/country_table/a.html.

c) Please provide the principal reason for travel to each country:

Tourism: travel was primarily for pleasure.
Military: traveler was either in the U.S. military and stationed overseas, or a member of foreign military while traveling to the U.S.
Business: travel was primarily part of the subject's employment
Peace Corps: traveler was a member of the Peace Corps while overseas
Visiting friends/relatives (VFR): A VFR traveler is an immigrant who returns to his or her homeland to visit friends or relatives. Included in the VFR category are family members such as the spouse or children, who were born in the country of residence. A non-U.S. resident can be classified as VFR if they are temporarily visiting friends or family in the U.S.
Airline/ship crew: traveled overseas as part of a flight or ship's crew
Missionary or dependent: traveled for missionary purposes (or with a family member who traveled for missionary purpose)
Refugee/immigrant: traveler arrived in the U.S. with the intention to establish residency in this country
Student/teacher: travel was primarily for education purposes
Medical relief/response: travel was primarily to provide medical work or disaster relief. If the subject traveled in this capacity as part of his or her regular work then also select "Business". If the subject traveled in this capacity as part of a church or mission group then also select "Missionary or dependent"

d) Subject's country of usual residence: Please follow the Council for State and Territorial Epidemiologist guidelines for reporting this data element. For subjects that are refugees or immigrants, establishing residence in the U.S., then *'United States of America'* should be selected as the country of usual residence.
e) Subject's country of residence prior to most recent travel: Subjects that are U.S. residents (including long-term travelers such as missionaries or Peace Corps volunteers), should select *'United States of America'*. Subjects that are refugees or immigrants should indicate their previous country of residence here.
f) Indicate the **subject's country of birth.**

SECTION 4: SPECIMEN

a) Was a specimen sent to CDC for testing?
b) If *'Yes'* then for each specimen indicate the type of specimen sent to CDC: Image, Smear, Whole blood and/or Other. If other specimen type sent, then please specify. Please include the CDC specimen ID number (from the 50.34 form submission), if known.

SECTION 5: CLINICAL AND TREATMENT INFORMATION

a) Indicate if an antimalarial drug was taken during and after travel for malaria prevention (chemoprophylaxis). **Do not include antimalarial medications used for treating the current illness in this section.** Choose applicable medication choice(s) for chemoprophylaxis.
Find information on chemoprophylaxis regimens at https://www.cdc.gov/malaria/travelers/drugs.html

b) Indicate if chemoprophylaxis medication was taken as prescribed or not. Note: chemoprophylaxis requires adherence to the medication for a period of time after travel is completed.
c) If the subject missed doses of the chemoprophylaxis in '**5a & b'**, then indicate the reason why doses were missed. If *'Had a side effect'*, then specify the side effect.
d) Indicate if the subject had a history of malaria in the last 12 months (prior to this illness), either diagnosed overseas or in the U.S. in the past year. Indicate the date of previous malaria illness (partial date is OK) and the species associated with that case, if known.
e) If subject received a blood transfusion or organ transplant in the 12 months prior to this illness. Indicate date if '**5e**' is '*Yes*'.
(f, g, and h) Complications, fatality (indicate date of death), and treatments related to this illness. Please indicate the date(s) antimalarial treatment(s) were initiated and stopped, and duration (in days) of treatment, if known.

i) Comments: Use this free text field, if needed, to communicate anything unusual or notable about this case that is not already covered with the other data elements. Information of particular interest includes: pertinent travel history itinerary details (city, region, etc.), and pre-departure antimalarial treatments for refugees originating from Sub-Saharan Africa. Do not send personally identifiable information to CDC in this field.

SECTION 6: SUBMITTER INFORMATION

Name of the person who is reporting the case to the CDC. This is the person that CDC should contact if there are questions regarding this case notification.
Phone Number of the person who is reporting the case to the CDC. This is the person that CDC should contact if there are questions regarding this case notification.
Email Address of the person reporting the case to the CDC. This is the person that CDC should contact if there are questions regarding this case notification.
Reporting State submitting the notification
Reporting County submitting the notification
National jurisdiction submitting the notification to CDC (e.g. if New York City is the jurisdiction reporting the case then this will differ from the Reporting State [New York])
Date the electronic case notification was sent

PART II – (to be completed 4 weeks after treatment)

Part II of the Malaria Case Surveillance form will capture data on the treatment regimen and treatment outcome. This section of the surveillance form is not obligatory; however, it is requested that Part II is sent if information is available. This section should be completed 4 weeks after treatment.

(a) Indicate whether the subject adhered to the treatment prescribed
(b) (i) Did all signs or symptoms of malaria resolve without any additional malaria treatment within 7 days after the start of treatment? This information captures whether the malaria treatment worked in clearing up all of the subject's symptoms related to the malaria infection in the 7 days after starting treatment.
(ii) If *'Yes'*, did the subject experience a re-occurrence of signs or symptoms of malaria during the 4 weeks after starting treatment? This information captures whether signs and symptoms of the malaria infection returned after initial treatment.
(iii) Did the subject experience any adverse events within 4 weeks after receiving the malaria treatment? Adverse events are any unintended sign, symptom, reaction, or disease that occurs during or after the use of a treatment or drug, but is not necessarily caused by it.

(c, d) If the subject experienced an adverse event and ***b(iii)*** is answered *'Yes'*, then list ALL prescriptions and over the counter medicines taken 2 weeks before the malaria treatment and 4 weeks post-treatment. Include the start and stop dates and duration (in days) that the medication was taken, if known.
e) Adverse event table (to be completed if the subject experienced an adverse event (if Part II, b[iii] is *'Yes'*)

Event description: Describe the adverse event. Include relevant medical history, outcome (e.g. resolved or ongoing, or pregnancy outcome), date of outcome, date of resolution if applicable, and relevant laboratory results (e.g. glucose-6-phosphate dehydrogenase testing). Please grade the event: Mild (asymptomatic/no intervention), Moderate (symptomatic/minimal intervention), Severe (medically important/significant intervention). Use comments box (5i) if more space is needed.

Relationship to treatment suspected: Was the adverse event related to the treatment given? Suspected means that a causal relationship between the antimalarial and an adverse event is at least a reasonable possibility, i.e., the relationship cannot be ruled out.
Time to onset since treatment start: How long after starting the initial treatment did the adverse event occur?

Adverse event severity (seriousness criteria): Categorize the adverse event according to the following criteria. More information at the link: https://www.fda.gov/safety/medwatch/howtoreport/ucm053087.htm

- Non-serious
- Death
- Life threatening
- Hospitalization - initial or prolonged
- Disability or permanent damage
- Congenital anomaly/birth defect
- Required intervention to prevent permanent impairment or damage
- Medically important

The Malaria Case Surveillance Report form contains telephone numbers for contacting the Malaria Branch for treatment and prevention information. If you have any questions or concerns about completing this form, please call CDC, Malaria Branch at ***770-488-7788*** ***or*** ***855-856-4713*** *(9 am - 5 pm, EST).*