



Florida Department of Health

**Cholera Guidance**

**Focus Area: Investigation and Surveillance**

**Guidance document number 2010-3**

**Guidance for Haiti-related Toxigenic *Vibrio cholerae* Type O1  
Case Reporting for County Health Departments**

Version 1.1

December 9, 2010

*This guidance has been revised in part due to lessons learned from the investigations of imported cholera cases in the past few weeks.*

*What has changed in this version?*

- 1) Modifications to the working case definition (addition of a suspect status and modifications to the definition of probable status);
- 2) Additional and modified information related to serologic testing and stool/isolate specimen shipping/handling, emphasizing ambient-temperature holding and shipping;
- 3) Updated guidance regarding documenting and reporting cases in Merlin. All cases investigated should be linked to Outbreak #1606 in the Merlin Outbreak Module. Outbreak #1606 will be used as a location to group ALL cases that have been investigated with suspicion of cholera infection including those that are later determined not to be cholera.

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**I. BACKGROUND**

On October 21, 2010 an outbreak of toxigenic *Vibrio cholerae* O1, serotype Ogawa, biotype El Tor was confirmed in Haiti. On December 7, the Pan American Health Organization (PAHO) and the Haitian Ministère de la Sante Publique et de la Population (MSPP), reported the cumulative number of hospital visits and deaths due to cholera, as of December 7, were 93,222 and 2,120 respectively. The in-hospital case fatality ratio for the whole country is 3.3%. Cholera cases have been reported in all ten of Haiti’s departments (regions). In their December 6 situation update, PAHO also noted that the Ministry of Health in the Dominican Republic reported that there have been 20 laboratory-confirmed cases of cholera of which 13 have been hospitalized. For the most current PAHO situation update visit: [http://new.paho.org/hq/images/Atlas\\_IHR/CholeraOutbreak/notes.htm](http://new.paho.org/hq/images/Atlas_IHR/CholeraOutbreak/notes.htm)

Florida has approximately 241,000 Haitian-born residents, representing 46% of the Haitian-born population residing in the U.S. The majority reside in Miami-Dade (73,000), Broward (63,000), Palm Beach (41,000), and Orange (20,000) counties. Travel to and from Haiti has increased since the Haitian earthquake in January 2010; this includes relief workers and local Haitian residents visiting family in Haiti. As a result, we can expect that some travelers returning from Haiti may become symptomatic with cholera en route to, or shortly after arrival in Florida. We may also see cholera in people who have been in close contact with ill travelers returning from Haiti. Cholera does not spread easily in developed countries such as the U.S., but we want to be sure we do not miss any high-risk situations, like cholera in a food-handler, or clusters or outbreaks. This document provides guidance to County Health Departments (CHDs) regarding case investigations and case reporting in Merlin.

## II. SURVEILLANCE GUIDANCE SUMMARY

- Cholera is **immediately reportable** to Florida's County Health Departments on suspicion by doctors, hospitals and laboratories. This requires immediate telephone reporting by healthcare providers of suspected as well as probable and confirmed cases.
- Please enter all cholera cases meeting the confirmed, probable, or suspect case definition into Merlin as cases, regardless of whether they are a Florida resident.
- Link ALL cases to **Outbreak #1606** and complete the survey questions.
  - **Outbreak #1606 will be used to group ALL cases** investigated with suspicion of cholera infection. As a result, those illnesses in non-Florida residents and those that are later determined not to fit the case definition should be linked to Outbreak #1606.
  - See working cholera case definition below. For this situation, modifications have been made to the cholera surveillance case definition to include a suspect and probable category in order to track illness prior to final laboratory confirmation.
- Confirmed, probable and suspect cases should be reported under the disease code in Merlin "*Vibrio cholerae* Type O1" **within 1 business day** of CHD notification/identification.

Please see "V. Reporting Instructions" starting on page 5 for more details.

## III. INVESTIGATION GUIDANCE

A report of suspected, probable or confirmed toxigenic *Vibrio cholerae* Type O1 requires prompt local disease control prevention measures. Your Bureau of Epidemiology Laboratory Liaisons and Bureau of Environmental Public Health Medicine Regional Environmental Epidemiologists are available for consultation as needed.

The potential for spread of cholera in the United States is low because U.S. water, sanitation, and food systems minimize the risk for fecal contamination of food and water, the primary route of transmission in epidemics. During the 1991-1993 Latin American cholera epidemic, Florida had 13 imported cases of cholera reported in 1992, 7 cases in 1993, and 1-2 cases per year in subsequent years. No documented evidence of transmission within Florida was associated with these cases. Despite this experience, the Florida Department of Health (FDOH) wants to ensure that high-risk situations, such as cholera in a food-handler, or clusters or outbreaks are not missed.

Cholera is most often transmitted through contaminated food and water, but can also spread from person to person. The latter appears to be relatively uncommon. Still, people at risk of acquiring infection by person-to-person spread would include family members, especially those who have provided supportive care to a person with profuse diarrhea. Healthcare workers are not at risk as long as standard and contact precautions are followed in a hospital or office setting. The risk of transmission of cholera in common social settings like workplaces, schools, churches, or public transit is very low.

When investigating suspected cases, key questions would be:

1. Has the person traveled to Haiti, or a neighboring affected area, within the week prior to illness onset, or been in contact with someone who is having acute watery diarrhea and has recently returned from Haiti?
2. Is there anyone else in this person's social environment with similar symptoms?
3. Does the person work or participate in food preparation for others, or in another sensitive situation such as a child care center or healthcare facility?
4. Does the person live or work in a location where there is inadequate access to clean water and sanitary conditions?

If you identify a food-handler with recent or current suspected, probable, or confirmed cholera, consult your Regional Environmental Epidemiologist immediately.

If you identify a healthcare worker or child care center employee with recent or current suspected, probable or confirmed cholera, conduct a site investigation and risk assessment, and search for additional cases. Notify your appropriate Bureau of Epidemiology Laboratory Liaison (R. Sanderson, M. Weise, or A. Schmitz) immediately.

Generally, when a case of recent or current suspected, probable, or confirmed cholera is reported, CHD epidemiology staff should identify persons at risk of acquiring infection from this case, or those who had exposures similar to those of this case, and advise them to alert their healthcare provider to this exposure if the contacts later become ill. Cases and their household and other close contacts must be fastidious about handwashing after caring for ill persons, changing diapers, or defecating, and before preparing food.

While investigating a reported case of suspected, probable, or confirmed cholera and additional people are identified with acute watery diarrhea, CHD staff **should ensure that those people get diagnostic testing promptly and manage them as probable cases until proven otherwise**. Immediately identifying secondary transmission to a healthcare worker, caretaker, etc. is very important.

#### **IV. LABORATORY TESTING**

The ability to isolate *Vibrio cholerae* is widely available through most hospital and private laboratories, but laboratories will generally only test for this organism if the testing order states that this organism is suspected. If testing of stool specimens is not available locally, or if specimens are obtained by CHD staff, the Bureau of Laboratories (BOL) in Jacksonville, Lantana, Miami, Pensacola, and Tampa can perform primary isolation.

BOL-Jacksonville will forward the confirmed isolates for detection of toxigenic *Vibrio cholerae* to the Centers for Disease Control and Prevention (CDC). Confirmation of toxin production is performed at CDC by PCR. Isolates should be submitted through BOL for confirmation of toxin production.

***BOL should be notified by phone prior to specimen or isolate submission.***

Following submission of a stool specimen or isolate, BOL results will be available in about 6 days; if isolates are submitted, results will be available 1-2 days earlier.

Specify "Suspect *V. cholerae*" on the BOL submission form (No. 1847

[http://www.doh.state.fl.us/lab/PDF\\_Files/DOH\\_Form\\_DH1847\\_1009.pdf](http://www.doh.state.fl.us/lab/PDF_Files/DOH_Form_DH1847_1009.pdf) or electronic order.

**Isolates:** Ship isolates at room temperature (not refrigerated or frozen; no cool packs). All *Vibrio spp* isolates from Florida licensed clinical laboratories must be submitted to BOL for confirmation per Chapter 64D-3, Florida Administrative Code (F.A.C.), and can be submitted directly to BOL-Jacksonville for confirmation. Speciation of *Vibrio* can be difficult, thus laboratory confirmation of isolates positive for *Vibrio spp* with travel to Haiti is also important.

**Stool:** Cholera is confirmed by culture from stool or rectal swabs transported in Cary Blair medium at room temperatures (**not refrigerated or frozen**). Cary Blair medium should be at room temperature *before* stool is placed in the media.



Cary Blair transport vial (left)

- Standard enteric stool collection vial
- Semisolid Cary Blair is optimal but most laboratories use liquid Cary Blair; Cary Blair transport media is red in color.
- Cary Blair medium should be at room temperature *before* stool is placed in the media.

Some transport media, in particular buffered glycerol saline, may be detrimental for *V. cholerae*

Stool specimens to be shipped should be placed in a cooler **without cool-packs**. **Specimen storage** prior to shipping should be at **ambient temperatures**. Prolonged storage in the refrigerator may adversely affect the laboratory's ability to culture the organism. Specimens can be shipped to any of the five BOL locations where primary isolation is performed: Jacksonville, Lantana, Miami, Pensacola and Tampa.

**Serum:** CHDs should consult with their appropriate Bureau of Epidemiology Laboratory Liaison (R. Sanderson, M. Weise, or A. Schmitz) prior to collection and submission of sera for testing.

Isolation of *Vibrio cholerae* O1 from stool is the preferred method for diagnosis of cholera, but serum antibody assays may play an important complementary role in some cases. For example, stool might not be available from all suspected cases, specimen collection might have occurred too late in the disease course, and antibiotics administered before stool collection could have produced negative results. In these situations, serum antibody assays may be the best method for determining if a person has been infected with *V. cholerae*.

CDC can perform two different serological tests for specimens submitted by the Florida Department of Health. Testing will be batched, and results may not be as timely as stool culture results. The first test is a vibriocidal antibody assay; titers increase rapidly after infection, peak about 10 days, and begin to decline within 1 month. The second test is an antitoxin antibody assay; titers peak about 21-28 days after infection and then decline slowly over months. Based on the performance characteristics of the assays, 3 serum samples (S1-S3) should be collected for each case, if possible, according to the following time schedule:

- Serum 1 (S1): Collect as soon as possible following onset of symptoms; ideally within first 3 days.
- Serum 2 (S2): Collect 10-14 days after illness onset, but no later than 3 weeks after illness onset.
- Serum 3 (S3): Collect about 2 weeks after S2, but no later than 6 weeks after illness onset.

If the optimal time for collection of S1 has passed, collect S2 and S3 specimens. If more than 3 weeks has elapsed from illness onset then collect S3 only.

Serum specimens should be placed in a cooler **with** cool-packs for shipping to the BOL-Jacksonville laboratory. If serum specimens cannot be shipped right away, serum specimens can be refrigerated for up to two weeks. Once frozen, serum must remain frozen and shipped on dry ice.

The serum should be separated from the clot or the packed cells in the serum separator tube within 1 hour of collection. Transfer the serum using sterile technique to a separate sterile tube for storage and shipment. The serum should be clear or straw colored. Serology testing will be performed at CDC. BOL-Jacksonville will ship serum specimens to CDC for testing.

**Laboratory Testing Summary:**

Specimen/Isolate:	Storage Temperature	Shipping	BOL Submission Location
Stool	Ambient temperature; No refrigeration	In cooler; No cool-packs	Jacksonville, Lantana, Miami, Pensacola, and Tampa <i>if</i> primary isolation cannot be performed locally
Isolates	Ambient temperature; No refrigeration	In cooler; No cool-packs	Jacksonville
Serum	Refrigerate (for up to 2 weeks after collection)	In cooler; With cool-packs	Jacksonville
	Frozen (if stored for 2 weeks or longer); Once frozen, serum <b>must</b> remain frozen	In cooler; With dry ice	Jacksonville

**Rapid test kits** are commercially available but do not yield an isolate for antimicrobial susceptibility or subtyping. Rapid test kits should not be used for routine diagnosis.

**V. REPORTING INSTRUCTIONS**

To facilitate case recognition associated with the Haitian epidemic, FDOH has created a working surveillance case definition with probable and suspect case classifications in addition to the laboratory-confirmed case definition. Please classify all cases, including those previously entered or investigated according to the case definition below. *This may require re-classifying some cases previously entered into Merlin.*

## **Working surveillance case definition during the Haiti cholera outbreak:**

**Clinical description:** An illness of variable severity that is characterized by diarrhea and/or vomiting; severity is variable.

### **Laboratory criteria for diagnosis:**

#### Definitive:

Isolation of *toxigenic* (i.e., cholera toxin-producing as determined at CDC) *Vibrio cholerae* O1 from stool or vomitus,

OR

Serologic evidence of recent infection. (Serologic testing is performed at CDC).

#### Presumptive:

Isolation of *Vibrio species* from stool or vomitus. (Tests performed at a licensed clinical laboratory).

Note: Diagnostic techniques in many laboratories cannot adequately distinguish between *Vibrio species*. Additionally, all isolates MUST be forwarded to BOL for confirmation of *Vibrio cholerae* per Chapter 64D-3, Florida Administrative Code (F.A.C.)

### **Case classification:**

Confirmed: A clinically compatible illness that is laboratory-confirmed.

Probable: A clinically compatible illness with recent travel to Haiti or a neighboring affected area AND a stool culture that yields a *Vibrio species* (tests performed at a licensed clinical laboratory).

OR

A clinically compatible illness in a person who is epidemiologically linked to a confirmed case AND stool culture that yields a *Vibrio species* (tests performed at a licensed clinical laboratory).

#### Suspect:

A clinically compatible illness with recent travel to Haiti or a neighboring affected area AND stool culture or serology results are pending.

OR

A clinically compatible illness in a person who is epidemiologically linked to a confirmed case AND stool culture or serology results are pending.

\*\*Cases that later test negative for *Vibrio cholerae* O1 (by all culture and serologic testing performed) should be marked for deletion unless laboratory testing confirms infection due to another reportable disease. In this situation, the case should be updated with the appropriate disease code (for example, typhoid fever, or *Vibrio cholerae* non-O1).

\*\*Only confirmed cases require the state to notify CDC, but we will also track probable and suspect cases in Merlin using this case definition.

### **Merlin Case reporting:**

- Create a case in Merlin under the "VIBRIO CHOLERAEE TYPE O1" disease code (regardless of whether patient is Florida resident).
- Suspect, probable or confirmed cases should be **entered into Merlin within 1 business day** of CHD notification (regardless of whether the patient is a Florida resident). *Please make special effort to ensure all cases are entered and up to date by COB on Fridays so data transmitted in the weekly file to CDC will be as accurate as possible.*

Outbreak #1606 will be used to group ALL cases investigated with suspicion of cholera infection; including those illnesses that are later determined not to be cholera (i.e. illness is not laboratory-confirmed or illness is laboratory-confirmed but not cholera).

Create a case in Merlin under the “VIBRIO CHOLERAЕ TYPE O1” disease code.

- A. Use the patient’s Florida local/temporary address and phone number on the Personal Profile screen. If no address is known please enter the zip code as 99999. If the patient is a non-Florida resident, please enter the local/temporary address and phone number on the Personal Profile screen. “County” should be recorded as the county reporting and investigating the case.

- B. If the case is in a non-Florida resident, on the Basic Case screen, please complete information regarding their city/country of residence outside the U.S.; the “County Assigned” field should correspond to the county investigating the case.
  - o For non-Florida residents the “Jurisdiction” field should be “OUT OF THE US” or “US, NON-FLORIDA CASE” to ensure the case is not counted as a “Florida Case” by CDC.
    - With the addition of new functionality in Merlin, **cases in non-Florida residents should NOT be marked for deletion**, unless subsequent laboratory results are negative for cholera.
    - ALL cases investigated with suspicion of cholera infection, regardless of final diagnosis, should be linked to Outbreak #1606.
    - Cases initially suspected of being cholera that are subsequently deleted due negative laboratory results should be linked to Outbreak #1606 prior to marking the case for deletion.

Profile Information at Time of Diagnosis

Jurisdiction: Out of the US

Country: HAITI

County Assigned: DADE

Select "Out of the US" or "Non-Florida Case" if the suspected case is in a non-Florida resident

Select "Haiti" for Country to indicate the case is a Haiti resident

"County Assigned" should be the country that is conducting the investigation

- C. Complete the "Imported" and "Origin" fields on the basic case screen. "Imported" refers to where the case acquired the illness. If the case acquired the illness in Haiti, then complete the "Origin" field with "Haiti."

Imported: ACQUIRED OUTSIDE OF THE UNITED STATES

Origin: HAITI

- D. On the Basic Case screen, complete the "Outbreak" field as "SPORADIC" if the case under investigation is associated with *sporadic importation* of cholera into the U.S. Mark the "Outbreak" field as "Outbreak Associated" if the case is associated with a cluster or outbreak within Florida or the U.S.

Outbreak: SPORADIC

- E. Link ALL cases investigated with suspicion of cholera infection, regardless of final diagnosis, should be linked to Outbreak #1606.
- **Outbreak #1606 will be used to group ALL cases** investigated with suspicion of cholera infection, including those illnesses that are later determined not to be cholera (i.e. no illness is laboratory-confirmed, or illness is laboratory-confirmed but not cholera).
    - **Cases should remain linked to Outbreak #1606 even if laboratory testing is negative for cholera; or positive for another disease (e.g. typhoid fever).**
    - **Please note that you must link the case to Outbreak #1606 and attach any labs before marking the case for deletion.** Once the case is marked for deletion, additional labs cannot be added and the case cannot be linked to Outbreak #1606. (Please contact the Merlin Helpdesk if a case previously marked for deletion needs to be updated.)
    - On the Basic Cata screen, enter the number "1606" in the Outbreak ID field. Once the Outbreak ID #1606 has been entered and the case has been saved, a link to the Outbreak Module will appear on the Basic Data screen.

Outbreak ID: 1606

By Outbreak ID | Detail Search

Outbreak Name: STATE - HAITI CHOLERA OUTBREAK 2010

Definition: A CLINICALLY COMPATIBLE ILLNESS (WITH OR WITHOUT LABORATORY CONFIRMATION) WITH ACUTE WATERY DIARRHEA (THREE OR MORE ABNORMALLY LOOSE OR FLUID STOOLS IN THE PAST 24 HOURS WITH OR WITHOUT DEHYDRATION) IN A PERSON WITH RECENT TRAVEL TO HAITI OR IN A PERSON WHO IS EPIDEMIOLOGICALLY LINKED TO A CONFIRMED OR PROBABLE CASE. THIS MODULE IS DESIGNED TO CAPTURE SUSPECTED CASES OF CHOLERA REGARDLESS OF FINAL DIAGNOSIS AND INCLUDES BOTH RESIDENTS AND NON-RESIDENTS OF FLORIDA.

- Please follow the link to the Profile Details screen in the Outbreak Module. Scroll down this page to complete the **Survey Questions**.
- All questions should answered. Please **do not leave** any questions marked as "Not Answered."
- The survey includes the following questions:

## Survey Questions

Order #	Survey Question	Answer
1	DID THE PATIENT RECEIVE ORAL FLUIDS FOR THIS ILLNESS?	<input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Unknown <input checked="" type="radio"/> Not Answered
2	.....IF YES, LIST TYPE OF ORAL FLUIDS RECEIVED:	
3	DID THE PATIENT RECEIVE IV FLUIDS FOR THIS ILLNESS?	<input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Unknown <input checked="" type="radio"/> Not Answered
4	.....IF YES, LIST TYPE OF IV FLUIDS ADMINISTERED:	<input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Unknown <input checked="" type="radio"/> Not Answered
5	.....IF YES, LIST TYPE OF IV FLUIDS ADMINISTERED:	
6	DID THE PATIENT TAKE ANTIBIOTICS FOR THIS ILLNESS?	<input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Unknown <input checked="" type="radio"/> Not Answered
7	.....IF YES, LIST ANTIBIOTIC(S) WITH BEGIN/END DATES (MM/DD/YYYY):	
8	.....IF YES, WAS THIS TREATMENT PRIOR TO STOOL COLLECTION?	<input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Unknown <input checked="" type="radio"/> Not Answered
9	DID THE PATIENT HAVE UNDERLYING MEDICAL CONDITIONS?	<input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Unknown <input checked="" type="radio"/> Not Answered
10	.....IF YES, SPECIFY:	
11	WAS THE PATIENT IMMUNOCOMPROMISED?	<input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Unknown <input checked="" type="radio"/> Not Answered
12	.....IF YES, SPECIFY:	<input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Unknown <input checked="" type="radio"/> Not Answered
13	FINAL DIAGNOSIS:	
14	TOTAL DURATION OF ILLNESS (IN DAYS):	
15	DID THE PATIENT BECOME ILL WHILE TRAVELING IN HAITI OR WITHIN 5 DAYS OF RETURN FROM HAITI?	<input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Unknown <input checked="" type="radio"/> Not Answered
16	.....IF YES, WAS THE PURPOSE OF THE TRAVEL TO VISIT RELATIVES/FRIENDS?	<input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Unknown <input checked="" type="radio"/> Not Answered
17	.....IF YES, WAS THE PURPOSE OF THE TRAVEL FOR RELIEF/AID WORK?	<input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Unknown <input checked="" type="radio"/> Not Answered
18	.....IF YES, WAS THE PURPOSE OF THE TRAVEL FOR BUSINESS?	<input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Unknown <input checked="" type="radio"/> Not Answered
19	.....IF YES, WAS THE PURPOSE OF THE TRAVEL FOR TOURISM?	<input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Unknown <input checked="" type="radio"/> Not Answered
20	.....IF YES, WAS THE PURPOSE OF THE TRAVEL FOR MILITARY?	<input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Unknown <input checked="" type="radio"/> Not Answered
21	.....IF YES, WAS THE PURPOSE OF THE TRAVEL FOR OTHER?	<input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Unknown <input checked="" type="radio"/> Not Answered
22	.....IF TRAVEL WAS FOR OTHER, SPECIFY THE REASON FOR TRAVEL:	
23	DID THE PATIENT HAVE CONTACT WITH A PERSON ILL WITH ACUTE WATERY DIARRHEA RECENTLY RETURNED FROM TRAVEL TO HAITI WITHIN 5 DAYS OF ONSET OF ILLNESS AND THE PATIENT DID NOT TRAVEL TO HAITI?	<input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Unknown <input checked="" type="radio"/> Not Answered
24	.....IF YES, WAS CONTACT WITH A HOUSEHOLD MEMBER?	<input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Unknown <input checked="" type="radio"/> Not Answered
25	.....IF YES, WAS CONTACT WITH A CLOSE CONTACT OTHER THAN A HOUSEHOLD MEMBER?	<input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Unknown <input checked="" type="radio"/> Not Answered
26	.....IF YES, WAS CONTACT WITH A LAB CONFIRMED CASE?	<input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Unknown <input checked="" type="radio"/> Not Answered
27	.....IF YES, SPECIFY RELATIONSHIP TO CONTACT:	
28	.....IF YES, SPECIFY TYPE OF CONTACT:	
29	WHILE SYMPTOMATIC, DID THE PATIENT PROVIDE NON-OCCUPATIONAL FOOD-HANDLING (POTLUCKS, RECEPTIONS, HOUSEHOLD MEALS)?	<input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Unknown <input checked="" type="radio"/> Not Answered
30	.....IF YES, PROVIDE DETAILS:	
31	WHILE SYMPTOMATIC, DID THE PATIENT WORK AS A FOOD WORKER?	<input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Unknown <input checked="" type="radio"/> Not Answered
32	.....IF YES, LIST PATIENT'S/S RESPONSIBILITIES:	
33	.....IF YES, LIST THE FACILITY:	
34	WHILE SYMPTOMATIC, WAS THE PATIENT WORK IN CHILD CARE OR PRESCHOOL?	<input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Unknown <input checked="" type="radio"/> Not Answered
35	.....IF YES, LIST PATIENT'S/S RESPONSIBILITIES:	
36	.....IF YES, LIST THE FACILITY:	
37	WHILE SYMPTOMATIC, DID THE PATIENT ATTEND CHILD CARE OR PRESCHOOL?	<input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Unknown <input checked="" type="radio"/> Not Answered
38	.....IF YES, LIST THE FACILITY:	
39	TOTAL NUMBER OF PERSONS IN HOUSEHOLD (INCLUDING PATIENT):	
40	ARE ANY HOUSEHOLD MEMBERS OR CLOSE CONTACTS ILL WITH SIMILAR SYMPTOMS?	<input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Unknown <input checked="" type="radio"/> Not Answered
41	.....IF YES, SPECIFY NUMBER AND RELATIONSHIP TO THE PATIENT:	
42	WAS/WERE PUBLIC HEALTH ACTION(S) TAKEN RELATED TO THIS CASE?	<input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Unknown <input checked="" type="radio"/> Not Answered
43	.....IF YES, SPECIFY:	
44	WERE STOOL SPECIMENS COLLECTED FOR THIS PATIENT?	<input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Unknown <input checked="" type="radio"/> Not Answered
45	.....IF YES, LIST DATE OF COLLECTION (MM/DD/YYYY):	<input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Unknown <input checked="" type="radio"/> Not Answered
46	.....IF YES, LIST DATE OF COLLECTION (MM/DD/YYYY):	
47	WERE SERUM SPECIMENS BEEN COLLECTED FOR THIS PATIENT?	<input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Unknown <input checked="" type="radio"/> Not Answered
48	.....IF YES, NUMBER OF SERUM SPECIMENS COLLECTED?	
49	.....IF YES, LIST DATE(S) OF COLLECTION (MM/DD/YYYY):	
50	STATE ID# (TO BE ASSIGNED BY CDC - PLEASE DO NOT FILL THIS OUT)	

F. On the Basic Case screen record information about sensitive situations under the “Daycare” and “Occupation” fields. Include all relevant facility related information.

**Sensitive Employment/Attendance Information**

**Complete “Day Care” and “Occupation” fields; please record all facility related information**

Day Care: NO  
 Occupation: HEALTH CARE WORKER

Company: ABC MEDICAL CENTER  
 Address: 123 RIGHT TURN ROAD  
 Zip: 32301 -  
 City: TALLAHASSEE State: FL  
 Phone: 555-555-5555 Fax:

Date Last Attended:

G. Record any symptoms under “Case Symptoms.” Please record all symptoms, not just those specifically meeting the case definition (i.e. diarrhea, dehydration, vomiting).

**Case Symptoms**

**Click on “Case Symptoms”**

Case Detail	DEHYDRATION	<input type="checkbox"/>	Date Onset:	
Case Status	DIARRHEA	<input checked="" type="checkbox"/>	Date Onset:	10/23/2010
Case Definition	VOMITING	<input checked="" type="checkbox"/>	Date Onset:	11/03/2010

H. Record each health care related visit under “Healthcare Visits.” If the patient did not seek medical care, select “No visit.”

**Case Healthcare Facility Visits**

Admit/Visit Date	Discharge Date	Visit Type	Healthcare Facility Name
4/2010	11/09/2010	Inpatient	DDMC BIVE RIDGE

**Select “Healthcare Visits”**

**Each healthcare visit will display once saved**

**Update Healthcare Facility Visit**

Admit/Visit Date: Discharge Date:

**Healthcare Facility Information**

**Get Facility**

Provider:  
 Address:  
 City: State: Zip:  
 Phone:  
 Fax:  
 Email:

**Record visit date(s) and facility information if known**

Visit Type: Inpatient  
 Room: Emergency Department  
 Inpatient  
 Outpatient  
 Unknown  
 No Visit

**Select visit type, Emergency Department, Inpatient, Outpatient, Unknown**

- I. Record travel information under “Travel History.” Include location, dates of travel and country information.

Name of Location	Travel Dates Begin	Travel Dates End	City/State/Country
GONAIVE, A	09/07/2010	11/01/2010	HAITI

**Travel History**

Name of Location:  Travel Dates Begin: 09/07/2010 Travel Dates End: 11/01/2010 City/State/Country: HAITI

Traveler:

Name of Location:  such as the hotel name, water park, campground name, private residence, etc.

Travel Begin Date:  Travel End Date:

Street Name 1:  Street Name 2:

Zip:  City:  Country:  State:

Phone Number:  Room Number:

Use spa or hot tub?  Yes  No  Unknown Only complete if applicable (e.g., Legionella)

Comments:

Buttons: Cancel, Delete, Save

- J. Once the required elements (noted in blue) have been filled in and the case has been saved as “Complete,” report the case (regardless of Florida residency).

**Provider Information**

Physician:

Address:

City:  State:  Zip:

Phone:  Fax:

Email:

Buttons: Delete, Report

- K. Please attach ALL laboratory test results (positive and negative) to the case in Merlin. Merlin has been modified so that negative cholera test results from BOL will show up on your CHDs ELR task list. Depending on the laboratory test type and specimen(s) initially tested, additional specimens may need to be collected (e.g. serum).

Laboratory test results from CDC will need to be hand entered. All test results (positive and negative) should be entered and attached to cases.

**Attach ALL laboratory test results prior to marking any case for deletion.**

- o (Please contact the Merlin Helpdesk if a case previously marked for deletion needs to be updated.)

- L. As a reminder, all laboratory results received electronically can also be accessed via the Search ELR feature in Merlin. For the Bureau of Laboratories, all test results (positive and negative) can be accessed via the Merlin Search ELR feature. Brief instructions about using this tool are below. To narrow your search, provide more information on the search screen.

**ELR Search**

**Patient Criteria**

Last Name:  **Enter search criteria here, such as county, name of individual, etc.; to broaden your search enter less information** First Name:

Date of Birth:  County: PALM BEACH Zip Code:

**Lab Criteria**

Accession #:

Sending Facility:

Provider Keywords:  Or

Result Keywords: VIBRIO **Enter "Vibrio" for result key words** Or

Observation Keywords:  Or

Result Date Range: 11/01/2010 **Select search date range** Through: 11/19/2010

Disposition: ALL

**Click on "Import" to import the result into Merlin and proceed with attaching the result to the case**

**Search**

**ELR Search Results - Exact Match**

No results found for the criteria selected. **Search criteria matches will display here**

**ELR Search Results**

Accession #	Order Key	Name	Reported Date	Specimen Site	Result	Observation Name	Disposition
<a href="#">Import</a>			11/16/2010	STOOL	No Vibrio cholerae isolated	Stool Culture	NOT DOI
<a href="#">Import</a>			11/15/2010	STOOL	Vibrio mimicus	Aerobic Isolate for ID	IMPORTED
<a href="#">Import</a>			11/11/2010	STOOL	No Vibrio Species Isolated	Stool Culture	NOT DOI

**Import Order**

Accession #	County	Order Key	Name	Reported Date	Specimen	Observation Key	Test Type	Result	Observation Name	Disposition
	PALM BEACH	8348098		11/16/2010	STOOL	14758788	Culture.Stool	No Vibrio cholerae isolated	Stool Culture	NOT DOI

Import all orders to ELR Task List:  **Select "To Reporting"**

**Import Individual Observation from the Order Shown Above**

Observation Key	Test Type	Result	Observation Name	Disposition
14758788	Culture.Stool	No Vibrio cholerae isolated	Stool Culture	NOT DOI

M. CDC requires case report form 52.79 COVIS (Cholera and Other Vibrio Infections Surveillance) for all Vibrio cases investigated in the state. Please complete and attach the COVIS form to the case record in Merlin.  
[http://www.doh.state.fl.us/disease\\_ctrl/epi/surv/CaseReportForms/cholera\\_vibrio\\_52.79.pdf](http://www.doh.state.fl.us/disease_ctrl/epi/surv/CaseReportForms/cholera_vibrio_52.79.pdf)

**Lab Results**

**EPI Link**

**Case Details**

Case Status

Case Symptoms

Healthcare Visits

Travel History

**Additional Info**

Case Notes

**Attach CRF** **Select "Attach CRF"**

**Upload File**

Upload File:

Description:

Document Type: CRF

Document Date: 12/03/2010

Uploaded file size is limited to 10 MB (10240 KB)

After completing investigation and reporting the case, please follow your CHD's usual interstate notification process for cases identified in residents of other states.

Please contact the Bureau of Epidemiology at (850) 245-4401 with questions.