ADHS Kissing Bug Submission Protocol

Kissing Bug Submission to Local Health Department (LHD)	Kissing Bug Submission to Arizona Department of Health Services (ADHS)
● **If you receive a call or email from a resident of your County regarding a kissing bug**: 1. Ask if the bug is available to have a picture sent to VBZD@AZDHS.GOV* for confirmatory identification. If yes, have the resident send the following information *with the picture of the bug*: ○ Resident's Name ○ Resident's Address ○ Location bug was found ○ Information about exposure	● **If ADHS/VBZD receives a call or email from an Arizona resident regarding a kissing bug**: 1. VBZD will ask if the bug is available to have a picture sent to VBZD@AZDHS.GOV for confirmatory identification. If yes, VBZD will request that the resident sends the following information *with the picture of the bug*: ○ Resident's Name ○ Resident's Address ○ Location bug was found ○ Information about exposure

2. If VBZD confirms that the picture is of a kissing bug, VBZD will approve the bug for testing and ask the LHD to work with the resident to fill out two forms below (also found here):
   - ○ Environmental/Miscellaneous Analysis Form
   - ○ Chain of Custody Form
3. Once VBZD approves testing, the LHD should email the resident that the kissing bug is approved for testing, provide the resident with instructions for safely handling kissing bugs (including not touching the bag with your bare hands) , and assist the resident in completing the two above forms.
   - ○ If the resident needs assistance with the forms, see detailed instructions below on completing kissing bug submission forms.
4. Once the forms are completed, provide the resident instructions on shipping the bug. The bug should be sent to Arizona State Public Health Laboratory (ASPHL) in a **crush-proof container** (e.g., a vial, plastic container, etc.) **labeled with the collection date and specimen description (Kissing bug)**, along with the two completed submission forms in a box or shipping tube addressed to:

   Arizona State Public Health Laboratory
   250 N. 17th Avenue
   Phoenix, AZ 85007

Note: If multiple kissing bugs are being sent to the lab, please send them in separate containers and include a unique number on the container with the date and specimen description (Kissing

bug). Also, include the unique number of each specimen on the Environmental/Miscellaneous Analysis Form under Sample Description.

5. Once shipped, the LHD should email the completed forms to VBZD@AZDHS.GOV who will notify ASPHL of the incoming specimen.
6. Once the lab receives the bug, they will notify VBZD and provide VBZD with the specimen's AZ number. VBZD will monitor Starlims for the test results (test results typically take a few weeks). ASPHL will then complete the CDC 50.34 Specimen Submission Form and forward the bug and submission form to CDC for identification and testing.
7. When the results are back, VBZD will report the test results to the LHD.
8. The LHD should then notify the resident of the test results.

*Note: If your staff is able to identify kissing bugs you may have the picture sent to your LHD email for confirmatory identification. Please feel free to reach out to VBZD@AZDHS.GOV if you are unsure whether the bug is a kissing bug.

Frequently Asked Questions

- What if the resident inquires about Chagas disease (American Trypanosomiasis) diagnostic testing?
    - If the resident doesn't have a history of travel to endemic areas or compatible symptoms, reassure the caller about the low risk of infection in Arizona.
    - If the resident is still interested in Chagas disease diagnostic testing, inform the resident that commercial IgG and IgM testing for Chagas disease can be ordered by their provider and is available at Mayo, ARUP, and Quest Diagnostics.
    - If the resident's commercial results are positive, especially IgG positive (IgM testing for *T. cruzi* is more non-specific than IgG testing) then confirmatory testing can be performed at CDC .

- What if the resident is worried about symptoms (e.g., itching, welts) being indicative of Chagas disease?
    - If the resident doesn't have a history of travel to endemic areas or compatible symptoms, reassure the caller about the low risk of infection in Arizona.
    - Inform the resident that mild to severe allergic reactions, including anaphylaxis, can be associated with kissing bug (Triatomine) bites but are a separate health issue unrelated to *T. cruzi* infections.
    - An allergic reaction to kissing bug bites may include a variety of symptoms, they need to be differentiated from those of acute phase Chagas infections. The key to differentiating between an allergic reaction to kissing bug bites versus acute phase chagasic symptoms is the onset of symptoms:

        - Allergic reactions arise within hours of the bites and dissipate a few hours to a day later.
        - Acute phase chagasic symptoms develop a few days to two weeks after inoculation and last for upwards of 3 months.

- Are there life stage restrictions on sending a kissing bug to ASPHL for testing at CDC?
    - No, CDC will test all life stages of kissing bugs (nymphs & adults). For nymphs, CDC will do a molecular ID test to determine species, as well as testing for *T. cruzi* (Chagas infection).

- How can I safely kill a kissing bug?
    - Try to not squish the bug. Avoid touching the bug with your bare hands, use gloves and/or a plastic bag. Close the bag or put the bug in a container and keep it outside in the sun or in a freezer until the bug dies.

- How should kissing bugs be shipped to ASPHL for testing at CDC?
    - Kissing bugs should be sent to ASPHL in a crush-proof container (e.g., a vial, plastic container, etc.) in a box or shipping tube. Padded envelopes are not acceptable.
    - If multiple kissing bugs are being sent to the lab, please send them in separate containers and include a unique number on the container with the date and specimen description (Kissing bug). Also, include the unique number of each specimen on the Environmental/Miscellaneous Analysis Form under Sample Description. This way the lab can differentiate between the bugs, in the instance that one bug tests positive.
    - The bug can be stored dry or in 70% ethanol at ambient temperature. For the general public, it is recommended that they send the bug dry to ASPHL if they do not have 70% ethanol.

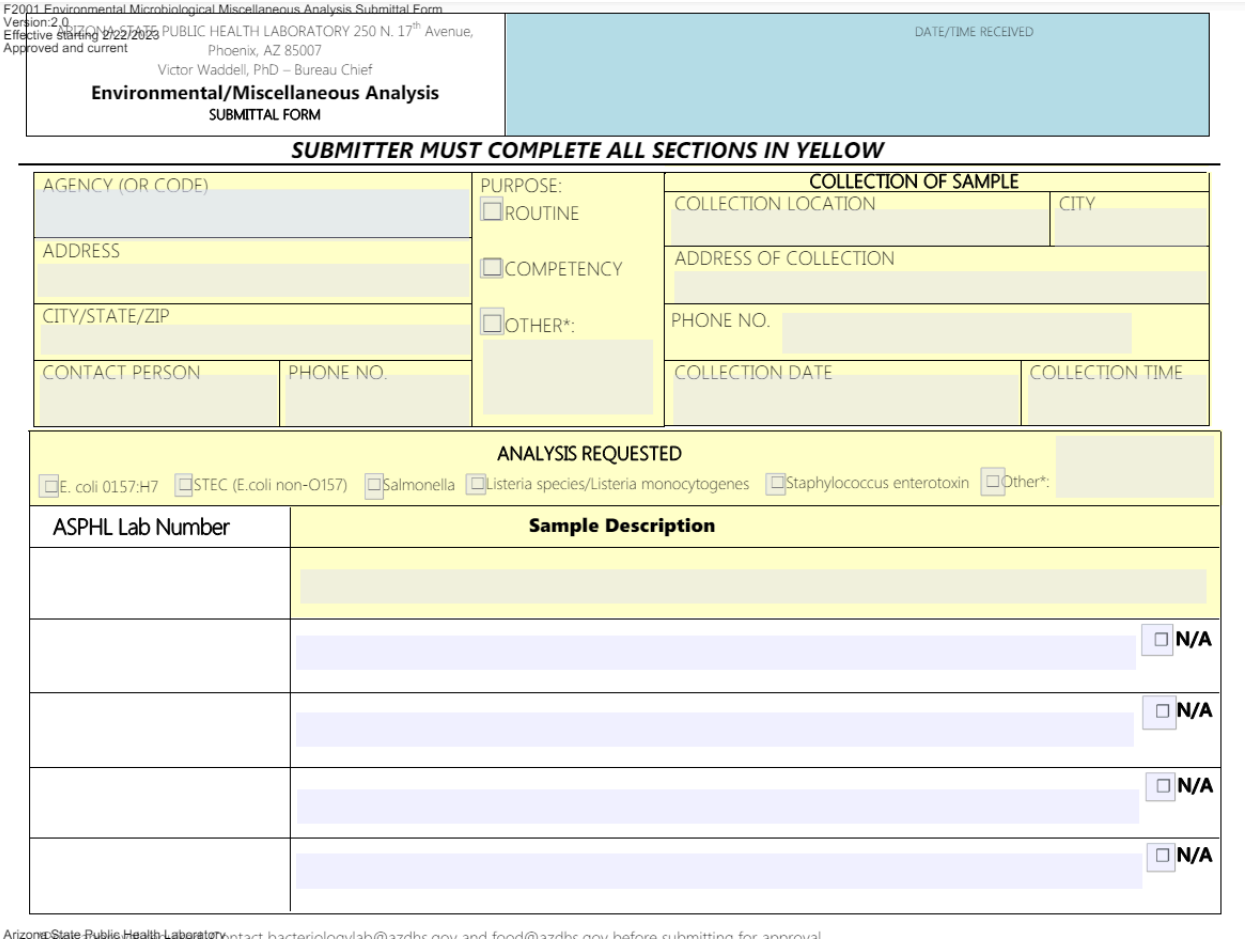
- How long will it take to receive kissing bug test results?
    - The turnaround time for results is approximately 3 weeks from when CDC receives the specimen from ASPHL.

Instructions for Completing Kissing Bug Submission Forms

There are two forms that should be completed and shipped by the resident with the kissing bug specimen to ASPHL for testing:

1. The Environmental/Miscellaneous Analysis Form
2. The Chain of Custody Form

To complete the Environmental/Miscellaneous Analysis Form, the submitter should complete all sections highlighted in yellow on the form (see below).



F2001 Environmental Microbiological Miscellaneous Analysis Submittal Form
Version:2.0
Effective starting 2/22/2023
Approved and current

ARIZONA STATE PUBLIC HEALTH LABORATORY 250 N. 17th Avenue, Phoenix, AZ 85007
Victor Waddell, PhD – Bureau Chief

Environmental/Miscellaneous Analysis
SUBMITTAL FORM

DATE/TIME RECEIVED

SUBMITTER MUST COMPLETE ALL SECTIONS IN YELLOW

AGENCY (OR CODE)		PURPOSE: ☐ROUTINE	COLLECTION OF SAMPLE
			COLLECTION LOCATION / CITY
ADDRESS		☐COMPETENCY	ADDRESS OF COLLECTION
CITY/STATE/ZIP		☐OTHER*:	PHONE NO.
CONTACT PERSON	PHONE NO.		COLLECTION DATE / COLLECTION TIME

ANALYSIS REQUESTED

☐E. coli 0157:H7 ☐STEC (E.coli non-O157) ☐Salmonella ☐Listeria species/Listeria monocytogenes ☐Staphylococcus enterotoxin ☐Other*:

ASPHL Lab Number	**Sample Description**
	☐ **N/A**
	☐ **N/A**
	☐ **N/A**
	☐ **N/A**

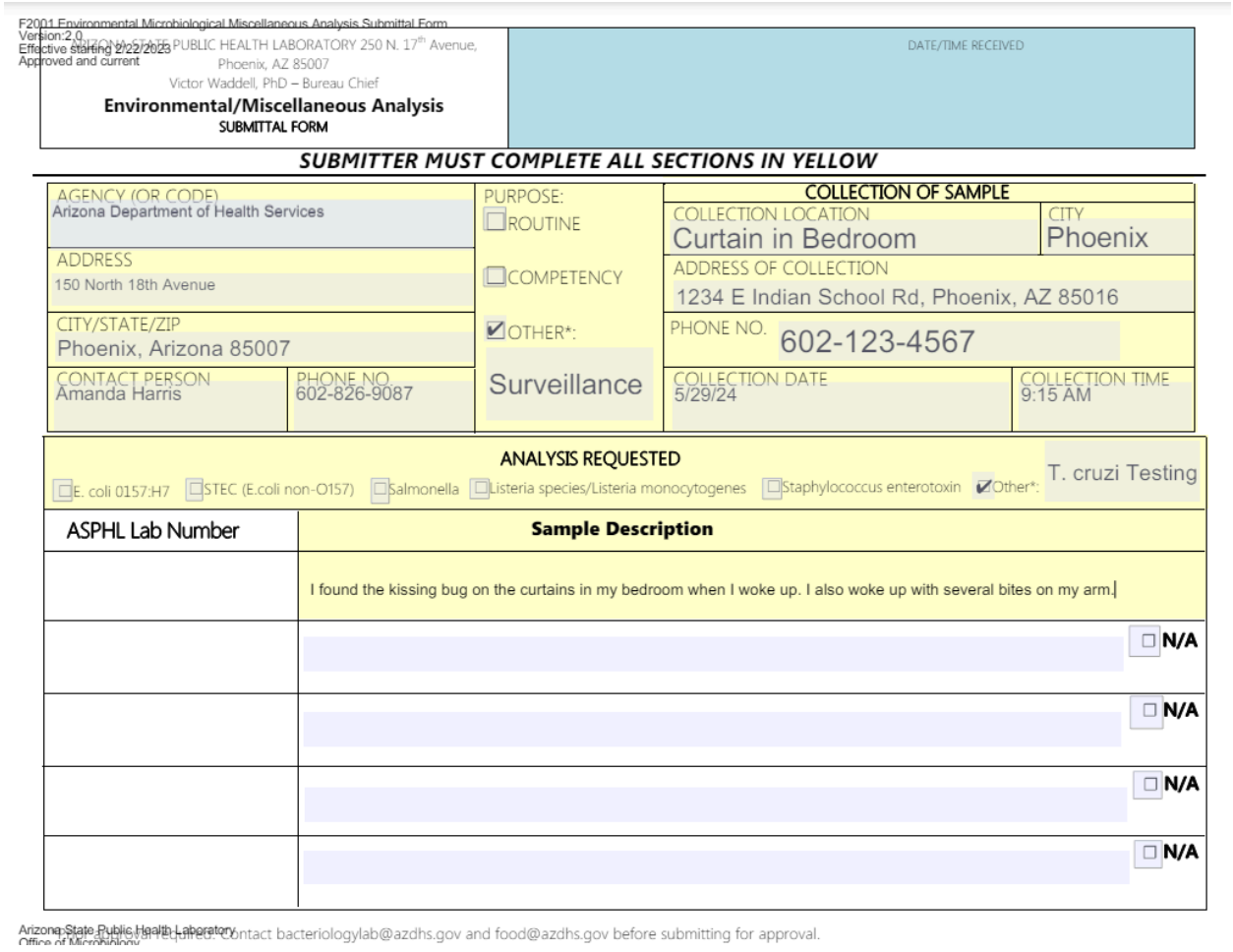
Arizona State Public Health Laboratory contact bacteriologylab@azdhs.gov and food@azdhs.gov before submitting for approval

Description of Yellow Fields Above:

- AGENCY (OR CODE) = LHD
- ADDRESS = LHD Address
- CITY/STATE/ZIP = LHD City/State/Zip
- CONTACT PERSON = Name of LHD Staff Assisting Resident
- PHONE NO. = Phone Number of LHD Staff Assisting Resident
- PURPOSE = OTHER* (“Surveillance”)

- COLLECTION LOCATION = Location where the Resident Collected the Kissing Bug (e.g., shower curtain in the bathroom, blanket in the bedroom, etc.)
- CITY = City where the Resident Collected the Kissing Bug
- ADDRESS OF COLLECTION = Address where Resident Collected the Kissing Bug
- PHONE NO. = Phone Number of Resident Submitting the Kissing Bug
- COLLECTION DATE = Date Resident Collected the Kissing Bug
- COLLECTION TIME = Time the Resident Collected the Kissing Bug
- ANALYSIS REQUESTED = Other* (“*T. cruzi* testing”)
- SAMPLE DESCRIPTION = Description of where the resident found the kissing bug and details about their exposure to the kissing bug (e.g., The kissing bug was found in the bedroom on the sheet when I woke up in the morning. I had several bites on my arm when I woke up.)

Example of Completed Environmental/Miscellaneous Analysis Form:



F2001 Environmental Microbiological Miscellaneous Analysis Submittal Form
Version:2.0
Effective starting 2/22/2023
Approved and current

ARIZONA STATE PUBLIC HEALTH LABORATORY 250 N. 17th Avenue, Phoenix, AZ 85007
Victor Waddell, PhD – Bureau Chief

Environmental/Miscellaneous Analysis
SUBMITTAL FORM

DATE/TIME RECEIVED

SUBMITTER MUST COMPLETE ALL SECTIONS IN YELLOW

AGENCY (OR CODE): Arizona Department of Health Services	PURPOSE: ☐ ROUTINE	COLLECTION OF SAMPLE: COLLECTION LOCATION: Curtain in Bedroom	CITY: Phoenix
ADDRESS: 150 North 18th Avenue	☐ COMPETENCY	ADDRESS OF COLLECTION: 1234 E Indian School Rd, Phoenix, AZ 85016	
CITY/STATE/ZIP: Phoenix, Arizona 85007	☑ OTHER*: Surveillance	PHONE NO.: 602-123-4567	
CONTACT PERSON: Amanda Harris	PHONE NO.: 602-826-9087	COLLECTION DATE: 5/29/24	COLLECTION TIME: 9:15 AM

ANALYSIS REQUESTED

☐ E. coli 0157:H7 ☐ STEC (E.coli non-O157) ☐ Salmonella ☐ Listeria species/Listeria monocytogenes ☐ Staphylococcus enterotoxin ☑ Other*: T. cruzi Testing

ASPHL Lab Number	**Sample Description**	
	I found the kissing bug on the curtains in my bedroom when I woke up. I also woke up with several bites on my arm.	
		☐ **N/A**
		☐ **N/A**
		☐ **N/A**
		☐ **N/A**

Arizona State Public Health Laboratory
Office of Microbiology

*Approval Required: Contact bacteriologylab@azdhs.gov and food@azdhs.gov before submitting for approval.

To complete the **Chain of Custody Form**, the submitter should complete all sections highlighted in yellow on the form (see below).

F2015 Chain of Custody
Version:1.0
Effective starting 3/10/2023
Approved and current

Arizona Department of Health Services **Bureau of Laboratory Services** **250 North 17th Avenue** **Phoenix, Arizona 85007-3231**	**Contact Name:**
Tel: 602-542-6131 **Fax: 602-364-1655**	**Contact Phone Number:**
Sample Description(s):	

Yellow highlighted areas must be filled out by contact before submitting to Arizona Department of Health Services.

Chain of Custody

Transfer Number	Date/Time	Released By	Received By	Reason for change
1	Date: Time:	Print Name: Signature:	Print Name: Signature:	☐ Transporting (location to location) ☐ Transferring (person to person) ☐ Testing ☐ Storage
2	Date: Time:	Print Name: Signature:	Print Name: Signature:	☐ Transporting (location to location) ☐ Transferring (person to person) ☐ Testing ☐ Storage
3	Date: Time:	Print Name: Signature:	Print Name: Signature:	☐ Transporting (location to location) ☐ Transferring (person to person) ☐ Testing ☐ Storage
4	Date: Time:	Print Name: Signature:	Print Name: Signature:	☐ Transporting (location to location) ☐ Transferring (person to person) ☐ Testing ☐ Storage

Description of Yellow Fields Above:

- Contact Name = Name of Resident Submitting the Kissing Bug
- Contact Phone Number = Phone Number of Resident Submitting the Kissing Bug
- Sample Description(s) = Resident's description of where/when the kissing bug was found and any details about exposures to the kissing bug
- Date = Date Resident Shipped/Submitted the Kissing Bug
- Time = Time Resident Shipped/Submitted the Kissing Bug
- Print Name = Name of the Resident Shipping/Submitting the Kissing Bug
- Signature = Signature of the Resident Shipping/Submitting the Kissing Bug

Example of Completed Chain of Custody Form:

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Arizona Department of Health Services **Bureau of Laboratory Services** **250 North 17th Avenue** **Phoenix, Arizona 85007-3231** **Tel: 602-542-6131** **Fax: 602-364-1655**	**Contact Name:** John Smith **Contact Phone Number:** 602-123-4567

Sample Description(s):

I found the kissing bug on the curtains in my bedroom when I woke up at 9:15 AM. I also woke up with several bites on my arm.

Yellow highlighted areas must be filled out by contact before submitting to Arizona Department of Health Services.

Chain of Custody

Transfer Number	Date/Time	Released By	Received By	Reason for change
1	Date: 5/30/24 Time: 12:30 PM	Print Name: John Smith Signature: John Smith	Print Name: Signature:	☐ Transporting (location to location) ☐ Transferring (person to person) ☐ Testing ☐ Storage
2	Date: Time:	Print Name: Signature:	Print Name: Signature:	☐ Transporting (location to location) ☐ Transferring (person to person) ☐ Testing ☐ Storage
3	Date: Time:	Print Name: Signature:	Print Name: Signature:	☐ Transporting (location to location) ☐ Transferring (person to person) ☐ Testing ☐ Storage
4	Date: Time:	Print Name: Signature:	Print Name: Signature:	☐ Transporting (location to location) ☐ Transferring (person to person) ☐ Testing ☐ Storage

Resources

Kissing Bug Identification

Instructions for Safely Handling Kissing Bugs

Environmental/Miscellaneous Analysis Form

Chain of Custody Form

What do you know about kissing bugs: Biology, Life History, Kissing Bug Bites, Health Concerns, IPM Guidelines for Kissing Bugs,

CDC's Chagas Disease Webpage

Investigation Manual for Chagas Disease (American Trypanosomiasis)