

HIV Risk Factors Interview Guide

QUALITATIVE INTERVIEW TRACKING FORM

To be completed by the interviewer at the time of screening for eligibility:		
Date of screening		
Name of interviewer/recruiter		
How recruited?		
Screening Interview Questions	Participant must answer the following for eligibility	Participant response
1. How old are you?	1. Must be 18 years or older	
2. Do you currently live in [County Name] County?	2. Must be yes.	
3. When was the last time you injected drugs?	3. Must be within the previous 12 months.	
4. Where on your body do you usually inject?	4. Screen for IDU status. Injection marks or NEP card (next question) are both acceptable.	
5. Have you ever used the Needle Exchange Program here in [County Name] County?	5. Any answer is fine, aim for a mix.	
6. Did you participate in the group research at the H2O Church in July?	6. Try not to have too many repeats from the focus groups, but some are ok.	
Note to Interviewer: Aim for a balance in the number of women and men.		

Eligible?	Yes	No (stop the interview)
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To be completed by the interviewer at the beginning of the interview for eligible participants:		
Date of interview		
Site of interview		
Lead Interviewer name		
Secondary Interviewer name		
Participant provided consent (circle one)	Yes	No
Participant ID		
(Observed) Gender	Male	Female
(Ask participant) Hispanic/Latino Ethnicity	Yes	No
(Ask participant) Race	White	Other (circle one): American Indian/Alaska Native, Asian, Black/African American, Native Hawaiian/Other Pacific Islander

Interviewer Post-Interview Comments:

Complete the following based on the screener and interview responses[to be used to track diversity in sample and for subsequent recruitment]

Age: 18-29 30-39 40-49 50 or older
Gender: Male Female
Preferred drug of choice: _____
Reported sex work? Yes No
Enrolled in NEP? Yes No
HIV Pos Neg Not tested Tested, don't know Refused to disclose
Hepatitis C Pos Neg Not tested Tested, don't know Refused to disclose

Other Post-Interview Comments and Observations:



INTERVIEW GUIDE – MAKE SURE RECORDER IS ON

OK, today is [insert date]. My name is [insert name] and my assistant is [insert name]. We are with interviewee number [say number].

For the Record, we just want to confirm that you understand information in the study information sheet provided, and that you agree to participate in the interview.

Ok, great, let's get started.

HIV IN THE COMMUNITY MONTH – INTERVIEWEE PERSPECTIVE

Many of our questions will ask you to share your experiences CURRENTLY regarding injection drug use. But we will also ask about your experiences BEFORE you were aware of HIV in [County Name] County.

When did you become aware of HIV in [County Name] County? What month was that?

Write month: _____

Ok, think of that month when we ask you about experiences before you learned of HIV in the community.

Great, let's get started with our first question.

Note to Interviewer: You may need to slightly adjust question and probes to account for variations in using experiences [e.g., substitute different names of drugs; adjust between different forms drugs – pills versus powder]; right now the interview guide is written with Opana as the reference drug.

A. Drugs Used, Drugs of Choice

Ok, let's start by talking about the drugs you use.

QA1. What drugs do you CURRENTLY use?

Probes

- *If prescription drugs, are they used how the doctor told you to use them?*
- *Any used daily? On and off? Together with other drugs?*
- *What drugs do you use the most?*
- *When used and how much?*
- *How do you use them? Swallow? Snort? Smoke? Inject?*
- *How often do you usually inject? – daily, weekly, monthly?*

QA2. How has your drug use changed, if at all, since you became aware of the HIV in the community and why [i.e., since – insert month].

B. Last Experience Injecting Opana [ADJUST DRUG IF OPANA IS NOT REGULARLY INJECTED BUT A DIFFERENT DRUG IS]

QB1. Now I would like to know more about your experiences using Opana.

Let's begin by talking about the **LAST** time you injected Opana.

When was that – day, time, year? _____

Ok, describe to me your experiences the last time you injected? Walk me through the process – where, when, with who, how?

[Note to interviewer: Let interviewee describe the episode. Listen for answers to each of the following questions below. Once interviewee's story is told, probe for any questions not answered. Be sure to remind the person to NOT give names when asking who questions; can use pronouns such as myself, or roles such as my friend].

NOTE TO INTERVIEWER: BRING A BOTTLE OF WATER, A FEW PENS, A SODA CAN BOTTOM, A FILTER, ETC AND ASK THEM TO ACTUALLY ILLUSTRATE WHAT HAPPENS

Probes - Content Areas for Drug Injection Narrative:

- *Before Using:*
 - o What was going on that day?
- *Buying/Exchanging/Stealing/Being Prescribed*
 - o How did you get the drugs?
 - o How much drugs? For whom – just you? To be shared?
 - o Who got them (no names, relationship only)? Who paid? Who was there?
 - o How did you get money for the drugs? Any pooling of money together? If didn't have money, how did you get your portion?
- *Time, Place and People*
 - o What time of the day?
 - o Where? At home? On the street, car, public place? (Try to get a sense of living situation)
 - o Nature of place – is it 'safe' from police?
 - o How many people were there? What are your relationships with these people?
- *Nature/Source of Syringe and Injection equipment*
 - o Describe the syringe you used- what kind was it? Fixed/ vs removable needle?
 - o New? Used? Used by whom? How often prior used?
 - o Where did you get the needle and other injection equipment [filter, cooker, etc.] and how?
- *Preparing*
 - o Who prepared the drugs?
 - o How were they prepared? [step by step from pill form to ready to use form]

- If sharing drugs with others, how were they measured and divided? [pills cut before hand]? Using ONE syringe to divide up drugs into other syringes? [front or back loading]?
- What about rinsing syringes? Any rinsed? Rinsed with what? With whom? Any not rinsed with certain folks?
- *Injecting*
 - How was the drug injected (self? another person?)
 - How were needles shared, if at all? Who shared with? Relationship with those you shared with? Who went first (second, third, etc.) and why?
 - How about other injection equipment? Anything else shared such as water, cookers, filters, etc.? Can you tell me more about that?
 - § Probe for each individually – start with cookers, then filters, then water
 - § Probe for whether these sources vary by whom they may share with [e.g., partner versus other]
- *Number of times injected per day*
 - During the last day you injected, can you tell me about the number of times you injected, how often, when, with whom, etc.?
- *HIV/HCV*
 - Was HIV or HCV discussed with anyone who was with you that last time? Did they bring it up with you? Or was anyone's Hep C or HIV status already known to you or others? Was Your HIV/Hep C status known? Sharing partner's status? Others who were there whom you did not share with? If so, how and when?
 - How did knowing or not knowing your own or others' status in the room affect injecting drugs that time?
 - Did you or anyone else do anything specifically to make it less likely for someone who is HIV or Hep C positive to be passed to someone who is negative? What did you or someone else do? If affected by doing things to reduce risk, probe what kinds of things, if any, to reduce risk were done?

C. Typical Current Experiences Injecting Opana [ADJUST DRUG IF NEEDED]

QC1. How, in any way, was the **LAST** time you injected different from your usual experience injecting in the past few weeks? Is what you described above your usual experience NOW? If not usual, can you tell me about what is different?

D. Experiences Injecting Opana before HIV in the Community

QD1. Ok, now I want to shift to your experiences **BEFORE** you were aware of HIV in [County Name] County [remind them of the month reported earlier]? How is your usual experience injecting Opana NOW similar to or different from your usual experience THEN? How so?

Probes – especially for these content areas from the above narrative:

- *Before Using*

- *Buying/Exchanging/Stealing/Being Prescribed*
- *Time, place and people*
- *Nature of Syringe*
- *Preparing*
- *Injecting*
- *HIV/HCV*
- *Number of times injected per day*

E. Experiences Injecting other Drugs

QE1. Tell me how you prepare and inject any other drugs, such as heroin, differently from how you prepare and inject Opana? Please explain the differences and similarities?

Probes

- *Any differences over time? That is, BEFORE you were aware of HIV in the community as compared to NOW?*

F. Transition from Non-Injection to Injection Drug Use

QF1. Ok, tell me about your experiences of how you first started injecting drugs; why did you start injecting, how old were you, where were you?

Note to interviewer: Try to construct a timeline and circumstances around the transition from non-injection drug use to first injection

Probes

- *What drugs did you use before you started injecting?*
- *Why did you start injecting?*
- *How old were you?*
- *What drug injected when first time injecting?*
- *When was the first time using Opana? Have you ever injected any other painkillers? What are they? [how old? month, year?] First time injecting [how old? month, year?] Where you got the drug? Have you ever been prescribed Opana by a Doctor? How did you initially start using Opana? What made you use it differently?*
- *Describe how using Opana increased over time; explore if used different types of prescription opioids over time/other substances as well as order of use.*
- *Explore preparing and injection practices to see if risk started immediately upon first injection. Have you changed how you inject Opana from the first time you used to now? How?*

G. Experiences With Needle Exchange Program

QG1. Tell me about your experiences using the needle exchange program? Do you use the program?

Probes for "folks who have used"

- *Probe about context and content of program (If any are problematic, ask why and what could be done better to meet their needs):*

- *How are the services working for you? Are you getting what you need?*
 - *Use of NEW CENTER versus the SUV*
 - *Location of new center*
 - *Location of the SUV*
 - *Type of needles and amount of needles given out*
 - *Type of filters provided [probe about cotton, whether they think cig filters are safe; size]*
 - *Time it takes to get the needles*
 - *Hours of operation of the SUV? Or the NEP*
 - *People providing the needles*
 - *Police presence*
 - *Community perceptions*
 - *Stigma and discrimination*
- *Do you give or sell needles to anyone? If yes, can you tell me about that? How does this affect your needle supply, if at all?*

Probes if "Never used":

- Why not? What are some reasons? Prompts - Anything to do with?
 - *location*
 - *hours of operation*
 - *police presence*
 - *community perceptions*
- *What would need to change for you to attend the needle exchange program?*

Probe for all

BRING A TYPICAL BAG THAT IS GIVEN AT THE NEP WHEN THEY FIRST ENROLL AND ASK THEM TO TELL YOU ABOUT THE ITEMS – WHATS USEFUL, WHATS NOT?

Note To Interviewer: Do A Time Check, And ONLY Ask The Sex Questions If You Think You Can Get Through Everything. If Not, Skip to I, OR JUST ASK QH3, And Go To I.

H. Sexual Risk Behaviors

Now I would like to ask some questions about sex. We realize that this is a very personal subject, but your answers are very important to understanding what people may need here. Your answers will remain completely private and remember names will not be attached to anything you say to us.

QH1. I would like to talk about the last time you had sex with someone that included vaginal or anal sex WITHOUT a condom. Note: This includes if a condom broke or came off during sex.

When was that? [if always use condoms, skip to QH2].

Date [month/year]_____

Ok, think back now and try to remember as much as you can about that time, and tell me. What is your relationship with this person? What you were doing? Why did you have sex

with them? Were others there in the house? Other having sex together? How did injecting drugs fit in, if at all?

[Interviewer note: Let interviewee describe the episode. Listen for answers to each of the following questions below. Once interviewee's story is told, probe for any questions not answered. Be sure to remind the person to NOT give names when asking who questions; can use pronouns such as myself, or roles such as my boyfriend]. Only select areas are covered here for sake of time]

Probes Select Content Areas for Sexual Interactions:

- *Partner characteristics (age, gender)*
 - o Relationship with this partner (duration and nature of relationship, where/when/how met partner; main, casual, paying or exchange)
 - o Have you ever had sex with them previously? How often? Past sexual experiences with this partner, whether condoms used.
 - o Did you want to have sex with this person? Can you tell me more about that?
- *Sexual Events/Condom Use*
 - o What determined the kinds of sex you had? [foreplay/touching, plating; Intercourse; oral or whatever]
 - o Do you typically have sex with this person?
 - o Why did you decide to NOT use a condom?/why didn't you use condoms?
- *Using Drugs*
 - o Did you and/or your partner use before/during/after sex? Did you and/or your partner use alcohol before/during, after sex? Drugs or alcohol used by you or this sex partner before, during or after having sex (Injected drugs/non-injected drugs/alcohol; levels of intoxication).
- *HIV*
 - o Have you ever talked about HIV with your sex partner(s)? (Your status? Partner's status? If so, how? Before or after sex?)
 - o If not discussed, then what did you believe (or assume)? Before or after sex?
 - o How did knowing or not knowing your partner's HIV status affect having sex this time.

QH2. Thinking about when you have sex in general, have you ever used a condom with sex?

Probes: What makes it easier to use condoms/protection with partners?
What are some of the reasons you haven't used condoms/protection?

QH3. Have you ever had sex with someone and they gave you something for it? Have they ever given you money? How about drugs? What about something else like food or a place to sleep?

Probes:

- *How often? With whom? Where do the folks [clients] come from?*
- *What about condoms? Used, not used? Why?*
- *Can you tell me more about that both before and after you learned about HIV in [County Name] County?*

I. HIV Testing and Care & Treatment Experiences

Now I have some questions about HIV testing.

Q1.1. Have you ever been tested for HIV before- why or why not? Tell me about your experiences of being tested for HIV? Test? No Test?

Probes if "Never tested"

- *Why not? What has kept you from getting tested?*
- *What would make it more likely or easier for you to get tested?*

Probes if "Tested"

- *How many times? Where? When [before/after you knew about HIV in the community]?*
- *When were you last tested (month and year)?*
- *How, if at all, did that testing change how you inject drugs or prepare them to be used?*
- *Have you changed how you use condoms when having sex? Change? No change? How so?*
- *How about use of the needle exchange program? Did it affect your use of the program? Increase? Decrease? How so?*
- *Did you get your HIV test results? If not, why not? If yes, what were they?*
If you don't feel comfortable telling me, you don't have to.

IF PARTICIPANT IS HIV POSITIVE

Q12. Tell me what that has been like for you to be diagnosed positive? How has your life changed? What have your experiences with HIV doctors been like? Taking HIV meds?

Probes:

- *If not in care, why not? What would it take to get you into care? What would make you want to be in care?*

IF PARTICIPANT IS HIV NEGATIVE

Q13. I would like to ask you about some HIV prevention services that may be available to you. Have you been told how often you should be retesting for HIV? [interviewer should also be aware of PreP and TasP when probing here as those are effective prevention measures as well]?

Probes:

- *If they seem to have accurate knowledge but are not retesting, ask why? What would make it more likely for you to get tested again for HIV?*

Q14. Have you heard about any medications that prevent HIV? Can you tell me what you have heard?

Probes:

- *Who told you about taking HIV meds to prevent HIV infection?*
- *Would you be interested in taking it? Why not? What are your concerns? What would make you want to take the pill?*

Q14a. Is there anything you have heard about people who are HIV positive taking medications that can prevent transmission to others? Can you tell me what you have heard?

QI.5. Many folks who inject drugs in [insert city name] have tested positive for HIV but others have not tested positive. Why do you think some people tested HIV+ and others have not? What keeps some people negative?

J. Hepatitis C Testing and Care & Treatment Experiences

J.1. What about your experiences being tested for Hepatitis C? Tell me about your experiences. Test? No Test?

Probes if "Never tested":

- *Why not? What would it take to get you tested? What would make it easier for people to test for Hep C?*

Probes if "Tested":

- What were the results? What happened afterwards?
- *If positive: Can you tell me what that has been like for you? How has your life changed? What have your experiences with HCV care providers been like?*
- *If not in care, why not? What would it take for you to get care? What would make it easier to get into care?*

K. FINAL QUESTION

We trying to understand the risk for HIV and other health problems in your community and how to help prevent disease. What else do you think is important for me to know that I haven't already asked about? Is there anything else you would like to share?

WRAP UP AND REFER

- THANK THEM
- PROVIDE RESOURCE BAG AND REFER IF NEEDED

**Invasive GAS in LTCF 2015
Employee Survey**

Form Approved; OMB No. 0920-1011; Exp Date: 03/31/2017

Date Completed: ___/___/___

A. Employee Background		1. Name: _____	2. Age: _____
3. Sex: <input type="checkbox"/> Male <input type="checkbox"/> Female		4. Employed at Capital Care since: ___/___/___	
5. List occupation: <input type="checkbox"/> Activity aid <input type="checkbox"/> Administrative <input type="checkbox"/> CNA <input type="checkbox"/> Dietary <input type="checkbox"/> Food service <input type="checkbox"/> Housekeeping <input type="checkbox"/> Laundry <input type="checkbox"/> PT/OT <input type="checkbox"/> Pharmacist <input type="checkbox"/> Physician <input type="checkbox"/> Maintenance <input type="checkbox"/> RNA <input type="checkbox"/> RN/LPN <input type="checkbox"/> Social service <input type="checkbox"/> Van driver <input type="checkbox"/> Other _____			
6. Since <u>May 3, 2015</u> , did you work in any other patient-care facility? <input type="checkbox"/> Yes <input type="checkbox"/> No <i>(If no, skip to Section B)</i>			
Name & city of facility	Dates of employment	Have you been in contact with a patient infected with group A strep?	What was the patient's diagnosis?
	Start: ___/___/___ End: ___/___/___	<input type="checkbox"/> Yes <input type="checkbox"/> No If yes, date of contact: ___/___/___	<input type="checkbox"/> Strep throat <input type="checkbox"/> Impetigo <input type="checkbox"/> Cellulitis <input type="checkbox"/> Bacteremia/Sepsis <input type="checkbox"/> Other, specify: _____
	Start: ___/___/___ End: ___/___/___	<input type="checkbox"/> Yes <input type="checkbox"/> No If yes, date of contact: ___/___/___	<input type="checkbox"/> Strep throat <input type="checkbox"/> Impetigo <input type="checkbox"/> Cellulitis <input type="checkbox"/> Bacteremia/Sepsis <input type="checkbox"/> Other, specify: _____
	Start: ___/___/___ End: ___/___/___	<input type="checkbox"/> Yes <input type="checkbox"/> No If yes, date of contact: ___/___/___	<input type="checkbox"/> Strep throat <input type="checkbox"/> Impetigo <input type="checkbox"/> Cellulitis <input type="checkbox"/> Bacteremia/Sepsis <input type="checkbox"/> Other, specify: _____
B. Job Description at Capital Care		7. As part of your job, do you have physical contact with patients? <input type="checkbox"/> Yes <input type="checkbox"/> No <i>(If no, skip to Section D)</i>	
8. Areas usually worked: <input type="checkbox"/> Patient rooms <input type="checkbox"/> Nurses' station <input type="checkbox"/> Cafeteria <input type="checkbox"/> Other _____			
9. Shifts usually worked: <input type="checkbox"/> Day <input type="checkbox"/> Evening <input type="checkbox"/> Night <input type="checkbox"/> Other _____			
10. Patient units usually worked: <input type="checkbox"/> 1E <input type="checkbox"/> 1W <input type="checkbox"/> 2E <input type="checkbox"/> 2W <input type="checkbox"/> 3E <input type="checkbox"/> 3W <input type="checkbox"/> 4E <input type="checkbox"/> 4W <input type="checkbox"/> Do not work in patient units <input type="checkbox"/> All patient units			
11. Which days do you usually work <i>(circle ALL that apply)</i> :			
Sunday	Monday	Tuesday	Wednesday
			Thursday
			Friday
			Saturday
12. What kind of patient contact do you have? <i>(check ALL that apply)</i>			
<input type="checkbox"/> Give oral medications	<input type="checkbox"/> Feeding resident	<input type="checkbox"/> Respiratory therapy	<input type="checkbox"/> Tracheostomy care
<input type="checkbox"/> Change dressings/wound care	<input type="checkbox"/> Gastrostomy care	<input type="checkbox"/> Handle urinary catheter	<input type="checkbox"/> Bathe resident
<input type="checkbox"/> Assist with patient transfer	<input type="checkbox"/> Clean room	<input type="checkbox"/> Handle soiled linens/bedding	<input type="checkbox"/> Handle soiled diapers/bedpans
<input type="checkbox"/> Deliver meal trays	<input type="checkbox"/> Take vital signs		

(OVER)

C. Work Practice	13. Do you use soap and water to clean your hands?	<input type="checkbox"/> Yes	<input type="checkbox"/> No				
	14. Do you use alcohol-based hand sanitizer to clean your hands?	<input type="checkbox"/> Yes	<input type="checkbox"/> No				
15. Please answer the following questions (circle answer)		Never	Always				
a.	Do you perform hand hygiene BEFORE physical contact with patients?	1	2	3	4	5	N/A
b.	Do you perform hand hygiene BEFORE physical contact with each patient's environment or belongings (e.g. bedside table, refrigerator, rolling walker, etc.)?	1	2	3	4	5	N/A
c.	Do you perform hand hygiene AFTER physical contact with patients?	1	2	3	4	5	N/A
d.	Do you perform hand hygiene AFTER physical contact with each patient's environment or belongings (e.g. bedside table, refrigerator, rolling walker, etc.)?	1	2	3	4	5	N/A
e.	Do you perform hand hygiene BETWEEN contact with patients?	1	2	3	4	5	N/A
f.	Do you use the sink or alcohol-based sanitizer in the patient's bathroom?	1	2	3	4	5	N/A
g.	Do you use the sink or alcohol-based sanitizer at the nurse's station?	1	2	3	4	5	N/A
h.	Do you use gloves when changing bandages/dressing wounds?	1	2	3	4	5	N/A
i.	If yes, do you change gloves between patients/patient rooms?	1	2	3	4	5	N/A
j.	If yes, do you perform hand hygiene before donning gloves?	1	2	3	4	5	N/A
k.	If yes, do you perform hand hygiene after removing gloves?	1	2	3	4	5	N/A
l.	Do you use gloves when cleaning soiled patients or linens?	1	2	3	4	5	N/A
m.	If yes, do you change gloves between patients/patient rooms?	1	2	3	4	5	N/A
n.	If yes, do you perform hand hygiene before donning gloves?	1	2	3	4	5	N/A
o.	If yes, do you perform hand hygiene after removing gloves?	1	2	3	4	5	N/A
p.	Do you use person protective equipment (PPE) when bathing patients?	1	2	3	4	5	N/A
q.	If yes, please specify type of PPE: _____						
D. Your Health	16. Do you have paid "Sick Leave"?	<input type="checkbox"/> Yes	<input type="checkbox"/> No				
	17. Did you receive prophylaxis for group A streptococcal infection?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	When? ___ / ___ / ___			
18. a.	Since May 3, 2015, have you had a sore throat?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	(If no, skip to #19)			
b.	When? _____ / _____ / _____						
c.	Was a throat swab for testing collected from you?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	d. If yes, specify month: _____			
e.	Was a rapid strep throat test done (you would have been given results immediately)?						
f.	If yes, specify month: _____			g. If yes, was the result positive?			
h.	Were you diagnosed with strep throat?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	i. If yes, specify month: _____			
j.	Did you miss work for this illness?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	k. How many days did you miss? _____			
l.	How many days were you ill? _____						
m.	Did you receive antibiotics for this condition?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	n. If yes, antibiotic name _____			
19. a.	Since May 3, 2015, did you have a rash, open wound, or skin infection?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	(If no, skip to #20)			
b.	When? _____ / _____ / _____			c. What was your diagnosis? _____			
d.	Did you miss work for this illness?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	How many days did you miss? _____			
f.	How many days were you ill? _____						
g.	Did you receive antibiotics for this condition?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	If yes, antibiotic name _____			
20.	If you're feeling sick before a work shift, how do you notify Capital Care? _____						
21. a.	How many people are in your household? _____ (If none, END)						
b.	How many children under 18 years of age are in your household? _____						
c.	Since May 3, 2015, did anyone in your household have a sore throat?	<input type="checkbox"/> Yes	<input type="checkbox"/> No				
d.	When? _____ / _____ / _____			e. Who (relationship)? _____			
e.	Was he/she diagnosed with strep throat?	<input type="checkbox"/> Yes	<input type="checkbox"/> No				
g.	Were they treated? <input type="checkbox"/> Yes <input type="checkbox"/> No			If so, with what? _____			
h.	During the past 3 months, did anyone in your household have impetigo or cellulitis (skin infections)?	<input type="checkbox"/> Yes	<input type="checkbox"/> No				
i.	When? _____ / _____ / _____						

END – Thank you!

Investigation of GAS outbreak in LTCF, Illinois – 2015
Resident Record Extraction Form

Form Approved; OMB No. 0920-1011; Exp Date: 03/31/2017

Person Completing Form _____

Date Completed: ___/___/___

If CONTROL, date of matched case's culture: ___/___/___

A. GAS Lab results

1. Did resident have any cultures/tests positive for GAS?

ÿ Yes ÿ No

#	Date obtained	Site cultured
a.	___/___/___	ÿ Blood ÿ Pleural ÿ Skin/Wound: _____ ÿ Rapid strep ÿ Sputum ÿ Other _____ ÿ Throat
b.	___/___/___	ÿ Blood ÿ Pleural ÿ Skin/Wound: _____ ÿ Rapid strep ÿ Sputum ÿ Other _____ ÿ Throat
c.	___/___/___	ÿ Blood ÿ Pleural ÿ Skin/Wound: _____ ÿ Rapid strep ÿ Sputum ÿ Other _____ ÿ Throat
d.	___/___/___	ÿ Blood ÿ Pleural ÿ Skin/Wound: _____ ÿ Rapid strep ÿ Sputum ÿ Other _____ ÿ Throat
e.	___/___/___	ÿ Blood ÿ Pleural ÿ Skin/Wound: _____ ÿ Rapid strep ÿ Sputum ÿ Other _____ ÿ Throat
f.	___/___/___	ÿ Blood ÿ Pleural ÿ Skin/Wound: _____ ÿ Rapid strep ÿ Sputum ÿ Other _____ ÿ Throat

B. Resident Background

2. Sex: ÿ Male ÿ Female

3. Age: _____

4. Date of Birth: ___/___/___

5. Room history for 1 month prior to GAS for case or time of time match for control:

Room #	Dates	Type	Roommate (Dates)
a.	___/___/___ to ___/___/___	ÿ Private ÿ Double ÿ Triple	___/___/___ to ___/___/___
b.	___/___/___ to ___/___/___	ÿ Private ÿ Double ÿ Triple	___/___/___ to ___/___/___
c.	___/___/___ to ___/___/___	ÿ Private ÿ Double ÿ Triple	___/___/___ to ___/___/___
d.	___/___/___ to ___/___/___	ÿ Private ÿ Double ÿ Triple	___/___/___ to ___/___/___
e.	___/___/___ to ___/___/___	ÿ Private ÿ Double ÿ Triple	___/___/___ to ___/___/___
f.	___/___/___ to ___/___/___	ÿ Private ÿ Double ÿ Triple	___/___/___ to ___/___/___

1 of 4

Public reporting burden of this collection of information is estimated to average 45 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. An agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a currently valid OMB control number. Send comments regarding this burden estimate or any other aspect of this collection of information including suggestions for reducing this burden to CDC/ATSDR Reports Clearance Officer; 1600 Clifton Road NE, MS D-74 Atlanta, Georgia 30333; ATTN: PRA (0920-1011)

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6. Total length of stay at CC (most recent stay only) at time of group A streptococcal culture (*mark only one*):

≤ 1 week

1-3 weeks

4-8 weeks

≥ 8 weeks

7a. Is resident deceased? Yes No If yes, date of death: ___/___/___

b. If resident died, death was: Related to GAS infection Possibly related to GAS infection

Not related

Not applicable

8. Resident's physicians?

Physician's name	Name of practice	Specialty (e.g., wound care, etc.)
a.		
b.		
c.		
d.		

9. List last admission prior to GAS infection or time of match for controls (including home, CC, hospitals, and any other LTCF).

Name & Location	Admission Date	Discharge Date	Diagnosis (if applicable)	Admission from
a.	___/___/___	___/___/___		
b.	___/___/___	___/___/___		

C. Medical History

10. Which medical condition(s) does the resident have? (*mark ALL that apply*):

Diabetes

CHF/history of MI

Peripheral Vascular Disease

Stroke

Asthma/COPD

Hypertension

Chronic Leg Edema

Recent Herpes Zoster

Dialysis

Renal insufficiency

Dementia

Chronic skin condition

Cancer, specify type: _____

Immunosuppressed/immunosuppression

None

Other: _____

(Note: immunosuppression includes: HIV/AIDS, chemo, radiation, immunosuppressive meds, including tacrolimus [Prograf], sirolimus [Rapamune], mycophenolate mofetil [Cellcept], high-dose or chronic steroids [prednisone, methylprednisone, hydrocortisone, dexamethasone] methotrexate.)

11. Weight: _____ lbs or kg (*circle unit of measure*)

12b. Height: _____

12. Did patient have any surgical wounds, pressure ulcers, or other wounds at the time of admission to CC?

Yes If yes, how many _____

No

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13. Did patient have any surgical wounds, pressure ulcers, or other wounds at the time of first GAS isolation for case or at time-match for controls?

Yes If yes, how many _____ No

14. Did the patient receive wound care consulting services within 1 month prior to the GAS case or time-match for controls?

Yes No

Dates	Name(s) of doctors or nurses

15. Did the patient receive wound care WITHOUT wound care consultation within 1 month prior to GAS case or time-match for controls?

Yes No

16. Has the patient had a surgical procedure within 1 month of GAS infection or time match for control?

Yes No

Procedure	Date	Incision Site
	____ / ____ / ____	
	____ / ____ / ____	

17. Type of IV access present at time of positive GAS culture/referral from CC? None Not applicable

15a. Access Type	15b. Date of Insertion	15c. Person Inserting (e.g. RN)

18. At time of GAS case or time-match for control, was a clinical diagnosis made of:

- | | | |
|--------------------|--|------------------------------|
| a. cellulitis | <input type="checkbox"/> Yes <input type="checkbox"/> No | Date of Onset ____/____/____ |
| b. wound infection | <input type="checkbox"/> Yes <input type="checkbox"/> No | Date of Onset ____/____/____ |
| c. pharyngitis | <input type="checkbox"/> Yes <input type="checkbox"/> No | Date of Onset ____/____/____ |
| d. bacteremia | <input type="checkbox"/> Yes <input type="checkbox"/> No | Date of Onset ____/____/____ |

Legionella Environmental Assessment Form

Public reporting burden of this collection of information is estimated to average 120 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. An agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a currently valid OMB control number. Send comments regarding this burden estimate or any other aspect of this collection of information including suggestions for reducing this burden to CDC/ATSDR Reports Clearance Officer; 1600 Clifton Road NE, MS D-74 Atlanta, Georgia 30333; ATTN: PRA (0920-1011)

Legionella Environmental Assessment Form

HOW TO USE THIS FORM

This form enables public health officials to gain a thorough understanding of a facility's water systems and assist facility management with minimizing the risk of legionellosis. It can be used along with epidemiologic information to determine whether to conduct *Legionella* environmental sampling and to develop a sampling plan. The assessment should be performed on-site by an epidemiologist and an environmental health specialist with knowledge of the ecology of *Legionella*. Keep in mind that conditions promoting *Legionella* amplification include water stagnation, warm temperatures (77-108°F or 25-42°C), availability of organic matter, and lack of residual disinfectant such as chlorine. For training and information, please visit CDC's legionellosis resources webpage at: <http://www.cdc.gov/legionella/outbreak-toolkit/>.

Complete the form in as much detail as possible. Do not leave sections blank; if a question does not apply, write "N/A". If a question applies but cannot be answered, explain why. Where applicable, specify the units of measurement being used (e.g., ppm). Completion of the form may take several hours.



BEFORE ARRIVING ON SITE

- Request the attendance of the lead facility manager as well as others who have a detailed knowledge of the facility's water systems, such as a facility engineer or industrial hygienist.
- Request that they have maintenance logs and blueprints available for the meeting.
- Bring a plastic bottle, thermometer, pH test kit, and a chlorine test kit that can detect a wide range of residual disinfectant (<1 ppm for potable water and up to 10 ppm for whirlpool spas).
- If the epidemiologic information available suggests a particular source (e.g., whirlpool spa, cooling tower), request that they shut it down (but do not drain or disinfect) in order to stop transmission.

INSTRUCTIONS FOR MEASURING WATER PARAMETERS IN THE PREMISE PLUMBING (TABLE P. 8)

It is very important to measure and document the current physical and chemical characteristics of the potable water, as this can help determine whether conditions are likely to support *Legionella* amplification.

STEP 1: Plan a sampling strategy that incorporates all central hot water heaters/boilers and various points along each loop of the potable water system. For example, if the facility has one loop serving all occupant rooms, an occupant room near (proximal) the central hot water heater and another at the farthest point (distal) of the loop should be sampled.

STEP 2: For each sampling point (e.g., tap in an occupant room):

- a. Turn on the hot water tap. Collect the first 50 ml from the tap. Measure the free chlorine residual and pH. Document the findings in the table on p. 8. Note: If there is no residual chlorine in the hot water, measure it in the cold water. Note: Total chlorine should be measured instead of free chlorine if the method of disinfection is not chlorine (e.g., monochloramine).
- b. Allow the hot water tap to run until it is as hot as it will get. Collect 50 ml and measure the temperature. Document the temperature and the time it took to reach the maximum temperature.

LEGIONELLA ENVIRONMENTAL ASSESSMENT FORM

Persons completing the assessment:

Name: _____ Job Title: _____ Organization: _____

Telephone: _____ E-mail: _____

Name: _____ Job Title: _____ Organization: _____

Telephone: _____ E-mail: _____

Assessment details:

Facility Name: _____ Date of Assessment: _____

Facility Address: _____
street city state zip

Person(s) interviewed during assessment:

Name: _____ Job Title: _____

Name: _____ Job Title: _____

Name: _____ Job Title: _____

Facility Characteristics

- Is this a healthcare facility or senior living facility with skilled nursing care (e.g., hospital, long term care/rehab/assisted living/skilled nursing facility, or clinic)?
 - YES → If yes, skip to Q.3 & also complete Appendix A.
 - NO
- If NO, indicate type of facility (check all that apply):
 - Senior living facility (e.g., retirement home without skilled nursing care)
 - Other residential building (e.g., apartment, condominium)
 - Hotel, motel, or resort
 - Recreational facility (e.g., health club, water park)
 - Office building
 - Manufacturing facility
 - Restaurant
 - Other _____
- Total number of buildings on campus: _____ Total number of buildings being assessed: _____
- Total number of rooms that can be occupied overnight (e.g., patient rooms, hotel rooms): _____
- Does occupancy vary throughout the year? YES NO
If YES, seasons with lowest occupancy (check all that apply):
 - Winter Spring Summer Fall
- Are any occupant rooms taken out of service during specific parts of the year, e.g., low season?
 - YES NO
 - If YES, which rooms? _____

7. Average length of stay for occupants (check one):
 1 night 2-3 nights 4-7 nights >7 nights
8. Does the facility have emergency water systems (e.g., fire sprinklers, safety showers, eye wash stations)?
 YES NO
 If YES, are these systems regularly tested (i.e., sprinkler head flow tests)? YES NO
 If YES, how often and when was the last test? _____
9. Are there any cooling towers or evaporative condensers on the facility premises?
 YES → If yes, also complete Appendix B.
 NO
10. Are there any whirlpool spas, hot tubs, or hydrotherapy spas on the facility premises?
 YES → If yes, also complete Appendix C.
 NO
11. Are there any decorative fountains, misters, water features, etc. on the facility premises?
 YES → If yes, also complete Section D.
 NO
12. Does the facility have centralized humidification (e.g., on air-handling units) or any room humidifiers?
 YES NO
 If YES, describe their location and operation: _____

13. Has there been any recent (last 6 months) or ongoing major construction on or around the facility premises?
 YES → If yes, also complete Appendix E.
 NO
14. Has this facility been associated with a previous legionellosis cluster or outbreak?
 YES NO
 If YES, please describe number of cases, dates, source if found, and any interventions (immediate and long-term) to prevent recurrence: _____

15. Does the facility have a water safety plan or *Legionella* prevention program?
 YES NO
 If YES, does the facility ever test for *Legionella* in water samples?
 YES → If yes, obtain copies of results NO
 If YES, please describe the plan briefly here (does it include clinical disease surveillance and/or environmental *Legionella* surveillance?) and **obtain a written copy** of the program policy:

16. Describe each building that shares water or air systems, including the main facility

Building Name (List main facility building first)	Original Construction	Later Construction (renovation, expansion)	Stories or Levels	Occupancy rate (%)*	Daily Census (yr. avg.)	Use (List all types of uses)
	Year Completed	From/To or "N/A"	#	Rate (%) or "N/A"	#/day or "N/A"	e.g., occupant rooms, utilities, heating/AC plant For healthcare, specify: Outpatient = O Inpatient (acute) = I Chronic = C Intensive care = ICU Transplant = Tx
1.						
2.						
3.						
4.						
5.						
6.						
7.						

*[occupancy rate = (# of rooms occupied overnight / total # of rooms) X 100]

Water Supply Source

17. What is the source of the water used by the facility? (Check all that apply)

Municipal water if YES:

Name of supplier _____

How is the municipal water disinfected? (Check one) Chlorine Monochloramine Other _____

Has treatment of municipal water changed in the past year? YES NO

If YES, specify _____

Non-municipal well if YES:

How is the well water disinfected? (Check one) Chlorine Other _____ Not disinfected

Is the water filtered onsite? YES NO

Other _____

18. Have there been any pressure drops, boil water advisories, or water disruptions (e.g., water main break) to the facility in the past 6 months? YES NO

If YES, describe what happened and which buildings or parts of buildings were affected: _____

19. Does the facility monitor incoming water parameters (e.g., residual disinfectant, temperature, pH)?

YES → If yes, obtain copies of the logs NO

If YES, what is the range of disinfectant residual, temperature, and pH entering the facility? _____

Premise Plumbing System

Note: It is important to gain an understanding of where and how water flows, starting where it enters the facility and including its distribution to and through buildings to the points of use. Understand water processes, including but not limited to: heating, storage, filtration, UV irradiation, and addition of secondary disinfectants. Refer to a facility map and blueprints; *obtain copies of these and/or draw a diagram* and include with the completed assessment.

20. Are cisterns and/or water storage holding tanks used to store potable water before it's heated?

YES NO

21. Is there a recirculation system (a system in which water flows continuously through the piping to ensure constant hot water to all endpoints) for the hot water?

YES NO

If YES, please describe where it runs and delivery/return temperatures if they are measured: _____

22. Are thermostatic mixing valves used?

YES NO

If YES, describe where they are located (ideally, mixing valves are close to the point of use): _____

23. How is the hot water system configured to deliver hot water to each building?

Building name	Type of system (e.g., instantaneous heater, hot water heater with a storage tank, solar heating)	Name of system (e.g., Boiler #1, Loop #1)	Areas served (e.g., floor, rooms)	Date of installation	Total capacity (gallons)	Usual temperature setting (°F)
1.						
2.						
3.						
4.						
5.						
6.						
7.						

Comments/notes: _____

24. What is the maximum **hot** water temperature at the point of delivery permitted by state / local regulations?
 _____ °F or _____ °C

25. Are **hot** water temperatures ever measured by the facility at the points of use?

YES → If yes, obtain copies of the temperature logs

If YES, what is the **lowest** documented **hot** water temperature measured at any point within the facility?

_____ °F or _____ °C documented on (Month/Date/Year) _____/_____/_____

NO

26. Are **cold** water temperatures ever measured by the facility at the points of use?

YES → If yes, obtain copies of the temperature logs

If YES, what is the **highest** documented **cold** water temperature measured at any point within the facility?

_____ °F or _____ °C documented on (Month/Date/Year) _____/_____/_____

NO

27. Are the potable water disinfectant levels (e.g., chlorine) ever measured by the facility at the points of use?

YES → If yes, obtain copies of the logs

If YES, how often are they measured? _____

If YES, list the range of disinfectant residuals _____

NO

28. Does the facility have a supplemental disinfection system for long term control of *Legionella* or other microorganisms?

YES NO

If YES, obtain SOPs for routine use and maintenance as well as maintenance logs and records of disinfection levels, and complete the table:

Buildings with supplemental disinfection	Type of system (e.g., chlorine, chlorine dioxide, copper-silver)	Date installed	Describe any maintenance in the past year (include routine and emergency)

Comments/Notes: _____

29. Please describe any maintenance (either routine or emergency) carried out on the potable water system in the past year. Obtain records/SOPs if available. _____

APPENDIX A. HEALTHCARE FACILITIES

Note: Complete for all healthcare facilities, including but not limited to hospitals, long term care/rehab/assisted living/skilled nursing facilities, or clinics.

1. Type of healthcare facility (check all that apply):

Acute care hospital

If YES, does the facility have a solid organ or bone marrow transplant program?

YES NO

Long term care facility (i.e., nursing home, long term acute care)

Rehabilitation facility or other skilled nursing care

Assisted living facility

Outpatient surgical center

Other outpatient clinic (describe): _____

Other healthcare facility (describe): _____

2. Number of beds: _____

3. Are ice machines used to provide ice for patient consumption or processing medical equipment?

YES NO

If YES, list manufacturer and model or catalog number: _____

4. Has this facility experienced previous Legionnaires' disease cases that were "possibly" or "definitely" facility-acquired?

YES NO

If YES, describe (e.g., number of cases, dates): _____

APPENDIX B. COOLING TOWERS AND EVAPORATIVE CONDENSERS

Note: It is important to gain an understanding of where the cooling towers are located, how they work, and how they are maintained. Cooling towers are frequently maintained by an outside contractor, and you may need to contact them directly if facility management does not have an in-depth knowledge of these systems. Request copies of the maintenance logs.

- List all cooling towers and evaporative condensers on the facility premises:

Name of device (e.g., CT1)	Date Installed	Manufacturer	Location of device	Distance to nearest air intake*/location of the air intake/ passive or forced	Drift eliminators used? (Y/N)	Party responsible for maintenance

*intakes to air handling units (AHUs)

- List details of how each cooling tower is chemically disinfected:

Name of device from Table 1 (e.g., CT1)	List type/name of bactericide(s) used	Range in which the bactericide(s) is regularly maintained (e.g., 5–10 ppm)	Schedule and method of adding bactericide (e.g., daily, weekly, as needed, automatic, by hand)	Are cooling towers turned off at any time? (e.g., seasonally) (Y/N) If yes, include schedule

3. List recent (last 6 months) special (non-routine) treatments, maintenance, or repairs to cooling devices:

Name of device from Table 1 (e.g., CT1)	Action taken	Date	Comments

4. Does the cooling tower water come from a branch of the potable water system inside the facility?

YES NO

If YES, are backflow prevention devices in place to ensure cooling tower water is not introduced into the potable water system?

YES NO

If NO, what is the source of water for the cooling towers and evaporative condensers? _____

5. Can any windows in any occupant rooms or common areas be opened? YES NO

If YES, describe which rooms or which buildings have windows that can be opened: _____

APPENDIX C. WHIRLPOOL SPAS, HOT TUBS, AND HYDROTHERAPY SPAS

Note: Do NOT complete Appendix C for Jacuzzis or whirlpool baths that are filled from the tap and drained after each use. In many jurisdictions, whirlpool spas are publicly permitted and inspected by the local health authority. An environmental health specialist with expertise in pool and spa inspection should participate in assessment of spas and will be aware of local regulations and enforcement powers, as well as have access to a pool sampling kit. Request copies of the last inspection report as well as routine maintenance logs.

1. Who performs the spa maintenance (e.g., on-site facilities management, name of outside contractor)? _____
2. Describe each whirlpool spa and how it is disinfected:

Spa Questions	Spa Descriptor/Location (e.g., main pool, private room #)			
Indoor or outdoor?				
Max. bather load				
Filter type S = sand DE = diatomaceous earth, C = cartridge				
Date filter was last changed				
Date of last filter backwash				
Compensation tank present?				
Type of disinfectant used (include chemical name, formulation, and amount used)				
Current measured disinfectant level (e.g., free chlorine, bromine) (ppm)				
Current measured pH				
Method used for adding disinfectant (e.g., automatic feeder, by hand)				
Method used for monitoring and maintaining disinfectant and pH levels (e.g., automatic controllers)				
Date last drained and scrubbed				
Was there a recent disinfectant “shock” treatment?				
Operating as designed and in good repair? If no, describe issues.				

APPENDIX D. OTHER WATER FEATURES

Note: Complete for decorative fountains, water walls, recreational misters, etc. This can also be modified for industrial use water. If SOPs and/or maintenance logs exist, request copies.

Water Feature Questions	Water Feature Descriptor/Location (e.g., lobby fountain, cabana misters)			
Indoor or outdoor?				
Source of water				
Operates continuously (C) or intermittently (I)				
Presence of a heat source? (e.g., incandescent lighting)				
Type of disinfectant used (include chemical name, formulation, and amount used)				
Current measured disinfectant level (e.g., free chlorine, bromine) (ppm)				
Current measured pH				
Is there a maintenance protocol?				
Date last cleaned				
Operating as designed and in good repair? If no, describe issues.				

APPENDIX E. RECENT OR ONGOING MAJOR CONSTRUCTION

1. Describe in general the extent of the construction: _____

2. Was temporary water service provided to the new construction area (i.e., separate meter)?
 YES NO
If YES, describe: _____

3. Has jack-hammering or pile-driving been used during the construction process?
 YES NO
If YES, list dates and locations: _____

4. Have there been disruptions or changes to the existing potable water system during the construction?
 YES NO
If YES, describe: _____

5. Has the potable water changed in terms of taste or color during the construction process?
 YES NO
If YES, describe the changes including when they started and ended: _____

6. Is there a standard operating procedure (SOP) for shutting down, isolating, and refilling/flushing for water service areas that have been subjected to repair and/or construction interruptions?
 YES NO
If YES, briefly describe the steps used in the SOP (attach a copy if possible): _____

7. Was the potable water system flushed before occupying the new building space?
 YES NO
If YES, what period of time passed between flushing and when the building was occupied? _____

8. Complete table on next page.

8. Complete the table below:

New Building/Wing Name or Remodeled Area	Date construction began	Estimated date of completion	Date water service began or restarted*	Relationship to existing potable water system Independent=I Extension of existing system=E	Stories and Square Feet Involved (# and Ft ²)	Uses (e.g., rooms, dining, recreation, utilities) For healthcare: Inpatient = I Outpatient = O Both = B Intensive Care = ICU Transplant = Tx	Date occupants began occupying new or remodeled building	Floors currently occupied

*If remodeling of existing structure, include water shut-down date and re-start date.

Sample Data Sheet

Public reporting burden of this collection of information is estimated to average 3 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. An agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a currently valid OMB control number. Send comments regarding this burden estimate or any other aspect of this collection of information including suggestions for reducing this burden to CDC/ATSDR Reports Clearance Officer, 1600 Clifton Road NE, MS D-74 Atlanta, Georgia 30333; ATTN: PRA (0920-1011)

Sample Data Sheet

Use this form to keep track of environmental samples taken for *Legionella* culture during a legionellosis outbreak investigation.

NOTE: this is NOT a chain of custody form.

Sample ID	Date Collected	Specimen Type (e.g., water, swab, filter)	Sample Description (e.g., room 253 shower)	Temp (°F)	Free Cl ₂ (ppm)	Total Cl ₂ (ppm)	pH

