Form Approved
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Undetermined risk factors and modes of transmission for Candida auris infection — Colombia, 2016

Appendix 1b. Ficha de registro para casos de *Candida auris* y *Candidemia* [Spanish]

Ficha de registro para casos de *Candida auris y Candidemia*

Número de caso: _____ Sexo (M)(F) Edad: _____ (años)(meses)(días)
Dirección:_____
Lugar: País: _____ Ciudad: _____ Institución:_____
Fecha de ingreso (DD)(MM)(AA) Motivo de ingreso hospitalario: _____
Fecha de egreso (DD)(MM)(AA) Condición al egreso: Vivo ( ) Muerto ( ) Hospitalizado ( ) No dato ( )

Localización durante la hospitalización:

¿Fue el paciente trasladado desde otro hospital? (Si)(No)(ND)
Nombre y Cuidad del hospital: _____ Fecha de traslado: (DD)(MM)(AA)
Ingresó a la UCI: (Si)(No)(ND)
Fechas de ingreso a la UCI (DD)(MM)(AA) Fecha de egreso de la UCI (DD)(MM)(AA)

Describa las unidades donde el paciente ha estado hospitalizado:
Unidad: _____ habitación: _____ Fecha de entrada: (DD)(MM)(AA) Fecha de salida: (DD)(MM)(AA)
Unidad: _____ habitación: _____ Fecha de entrada: (DD)(MM)(AA) Fecha de salida: (DD)(MM)(AA)
Unidad: _____ habitación: _____ Fecha de entrada: (DD)(MM)(AA) Fecha de salida: (DD)(MM)(AA)
Unidad: _____ habitación: _____ Fecha de entrada: (DD)(MM)(AA) Fecha de salida: (DD)(MM)(AA)
Unidad: _____ habitación: _____ Fecha de entrada: (DD)(MM)(AA) Fecha de salida: (DD)(MM)(AA)

¿Ha estado el paciente en el quirófano? (Si)(No)(ND), si la respuesta es sí, describa la información a continuación:
Sala de cirugía:_____ Fecha: (DD)(MM)(AA) Descripción del procedimiento:_____
Sala de cirugía:_____ Fecha: (DD)(MM)(AA) Descripción del procedimiento:_____
Sala de cirugía:_____ Fecha: (DD)(MM)(AA) Descripción del procedimiento:_____

Factores de Riesgo

Hospitalizaciones previos:

¿El paciente ha estado hospitalizado en los últimos 90 días? (Si)(No)(ND)
Hospital y Cuidad: _____ Fecha de ingreso: (DD)(MM)(AA)
Motivo de hospitalización: _____ Fecha de egreso: (DD)(MM)(AA)

Hospital y Ciudad: _____ Fecha de ingreso: (DD)(MM)(AA)
Motivo de hospitalización: _____ Fecha de egreso: (DD)(MM)(AA)

¿Diagnóstico previo de infección con candida? (Si)(No)(ND)
Fecha:(DD) (MM) (AA)
¿Especie(s) asociada(s)? _____

¿El paciente ha recibido algún antifúngico previamente? (Si)(No)(ND)
¿Cuál?_____ Inicio: (DD)(MM)(AA) Finalización: (DD)(MM)(AA)
Motivo del tratamiento previo:
_____

Comorbilidades:

Diabetes: (Si) (No) (ND)
Tumor sólido: (Si) (No) (ND)
Malignidad hematológica: (Si) (No) (ND)
Trasplante de médula ósea: (Si) (No) (ND)
Enfermedad renal crónica: (Si) (No) (ND)
Hemodiálisis (Si) (No) (ND)
Enfermedad hepática:(Si) (No) (ND)
Enfermedad inmunosupresora: (Si) (No) (ND)
Seleccione:(Autoinmunidad)(Trasplante)(Cortiocosteroides)(Cáncer)
VIH/SIDA: (Si) (No) (ND)
CD4: _____ Carga viral: _____
Otras: (Si) (No) (ND) ¿Cuál?: _____

Hospitalización actual

Procedimientos:

Hemodiálisis: (Si) (No) (ND)	Fecha de inicio: (DD) (MM) (AA)	Fecha de finalización: (DD) (MM) (AA)
Catéter venoso central: (Si) (No) (ND)	Fecha de inicio: (DD) (MM) (AA)	Fecha de finalización: (DD) (MM) (AA)
Apoyo respiratorio: (BiPAP) (Intubación)	Fecha de inicio: (DD) (MM) (AA)	Fecha de finalización: (DD) (MM) (AA)
Broncoscopio: (Si) (No) (ND)	Fecha de inicio: (DD) (MM) (AA)	Fecha de finalización: (DD) (MM) (AA)
Fisioterapia: (Si) (No) (ND)	Fecha de inicio: (DD) (MM) (AA)	Fecha de finalización: (DD) (MM) (AA)

Tratamientos:

Quimioterapia: (Si)(No)(ND)
Inicio:(DD)(MM)(AA)
Finalización:(DD)(MM)(AA)
Alimentación parenteral: (Si)(No)(ND)
Inicio:(DD)(MM)(AA)
Finalización:(DD)(MM)(AA)
Corticosteroides: (Si)(No)(ND)
¿Cuál? _____ Inicio:(DD)(MM)(AA)
Finalización:(DD)(MM)(AA)
¿Cuál? _____ Inicio:(DD)(MM)(AA)
Finalización:(DD)(MM)(AA)

Vasopresores: (Si)(No)(ND)
¿Cuál? _____ Inicio:(DD)(MM)(AA)
Finalización:(DD)(MM)(AA)

Antimicrobianos:

¿Cuál fue el tratamiento de elección para *C. auris u otro candidemia*?:_____dosis:_____
Inicio:(DD) (MM) (AA) Finalización:(DD) (MM) (AA)

Otros antimicrobianos:

Nombre y dosis:_____
Inicio:(DD) (MM) (AA) Finalización:(DD) (MM) (AA)
Nombre y dosis:_____
Inicio:(DD) (MM) (AA) Finalización:(DD) (MM) (AA)

¿Cuál? _____ Inicio:(DD)(MM)(AA)
Finalización:(DD)(MM)(AA)
¿Otros tratamientos?
_____
Inicio:(DD)(MM)(AA)
Finalización:(DD)(MM)(AA)

Nombre y dosis:_____
Inicio:(DD) (MM) (AA) Finalización:(DD) (MM) (AA)
Nombre y dosis:_____
Inicio:(DD) (MM) (AA) Finalización:(DD) (MM) (AA)
Nombre y dosis:_____
Inicio:(DD) (MM) (AA) Finalización:(DD) (MM) (AA)
Nombre y dosis:_____
nicio:(DD) (MM) (AA) Finalización:(DD) (MM) (AA)

Hallazgos clínicos y del laboratorio

Clínicos:
Peso:_____ Talla:_____
Evidencia de sepsis severa:(Si)(No)(ND)
Sepsis: al menos 2 de los siguientes síntomas (a) temperatura >38.3C o <36C, (b) frecuencia cardiaca >90, (c) frecuencia respiratoria >20) con evidencia de infección
Sepsis severa = sepsis más falla orgánica
¿El paciente desmejoró clínicamente? (Si)(No)(ND)
Fecha: (DD)(MM)(AA)
Detalles:_____

Radiología:
Alguna alteración radiológica: (Si) (No) (ND)
¿Cuál?
_____
Fecha: (DD)(MM)(AA)

Laboratorio:
(del día más cercano al diagnóstico de candidemia)
Fecha:(DD)(MM)(AA)
G. blancos: _____
%PMNs:_____
Hb: _____
PQT: _____
Creatinina: _____
BUN: _____
Glucosa: _____
AST: _____
ALT: _____
Bilirrubina total: _____
Albúmina: _____
Lactato: _____

Cultivo de *Candida*

Primer cultivo positivo para *C. auris* u otro *Candida*: Fecha:(DD)(MM)(AA)
Tipo de muestra: (sangre)(orina) (herida) (lavado bronco alveolar) (otra)
¿Cuál? _____

Concentración inhibitoria mínima:
Fluconazol: _____
Voriconazol: _____
Anfotericina: _____
Caspofungina: _____
Anidulafungina: _____
Micafungina: _____

Cultivos (1 año antes y después del cultivo de Candida)

Tipo de Muestra	Fecha de recolección	Fecha de reporte	Resultado (microorganismo aislado)	Concentración inhibitoria mínima
	(DD)(MM)(AA)	(DD)(MM)(AA)		
	(DD)(MM)(AA)	(DD)(MM)(AA)		
	(DD)(MM)(AA)	(DD)(MM)(AA)		
	(DD)(MM)(AA)	(DD)(MM)(AA)		
	(DD)(MM)(AA)	(DD)(MM)(AA)		
	(DD)(MM)(AA)	(DD)(MM)(AA)		

Información adicional para casos de candidemia en paciente menor de un año

El paciente nació prematuro: (Si)(No)(ND) Tipo de parto: (vaginal) (cesárea)
Tiempo de gestación al nacimiento: ____ (semanas) Peso al nacer: _____ (Kilos)
Seleccione el tipo de nutrición que recibió el paciente: (fecha materna)(formula)(combinación)(otro)
Si recibió formula, ¿Cuál formula recibió? -
_____
Tenía alguna disrupción de la piel (erupción)?: (Si)(No)(ND); ¿Cuál(es)?:
_____
¿Recibió algún antifúngico profiláctico? (Si)(No)(ND); ¿Cuál(es)?:
_____
¿Necesitó alguna operación? (Si)(No)(ND) ¿Cuál?: _____ Fecha: (DD)(MM)(AA)
¿Cuál?: _____ Fecha: (DD)(MM)(AA)
¿Cuál?: _____ Fecha: (DD)(MM)(AA)
¿Necesitó otro procedimiento diferente a los mencionados anteriormente? (Si)(No)(ND)
¿Cuál?: _____ Fecha: (DD)(MM)(AA)

¿Cuál?: _____ Fecha: (DD)(MM)(AA)

El paciente estuvo expuesto a:

- Incubadora (Si)(No)(ND) Fecha: (DD)(MM)(AA) ¿Por cuánto tiempo? _____ (horas)(días)(semanas)(meses)
- Tubo de alimentación (Si)(No)(ND) Por dónde? (nariz) (boca) (sonda)

Fecha: (DD)(MM)(AA) ¿Por cuánto tiempo? _____ (horas)(días)(semanas)(meses)

- Monitor cardiaco (Si)(No)(ND) Fecha: (DD)(MM)(AA) ¿Por cuánto tiempo? _____ (horas)(días)(semanas)(meses)
- Fototerapia: (Si)(No)(ND) Fecha: (DD)(MM)(AA) ¿Por cuánto tiempo? _____ (horas)(días)(semanas)(meses)
- Esteroides para el desarrollo respiratorio (Si)(No)(ND) Fecha: (DD)(MM)(AA) ¿Por cuánto tiempo? _____ (horas)(días)(semanas)(meses)
- Aditivos para alimentos (Si)(No)(ND) Fecha: (DD)(MM)(AA) ¿Por cuánto tiempo? _____ (horas)(días)(semanas)(meses)
- Otro: _____ Fecha: (DD)(MM)(AA) ¿Por cuánto tiempo? _____ (horas)(días)(semanas)(meses)

- *subjetivo a cambiar a medida que avanza la investigación y nueva información*

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Undetermined risk factors and modes of transmission for Candida auris infection — Colombia, 2016

Appendix 1a. Case Report Form for Cases of *Candida auris* and *Candidemia* [English]

Appendix 1a. Case Report Form for cases of *Candida auris* and *Candidemia*

Case ID: _____ Sex (M)(F) Age: _____ (years)(months)(days) Address:_____
Location: Country: _____ City: _____ Institution:_____
Date of admission (DD)(MM)(YY) Reason for admission: _____
Date of discharge (DD)(MM)(YY) Condition at discharge: Alive ( ) Dead ( ) Hospitalized ( ) Unknown ( )

Location During Hospitalization:

Was the patient transferred from another facility? (Yes)(No)(UNK)
Name and City of Hospital: _____ Date of transfer: (DD)(MM)(YY)

Admitted to the ICU: (Si)(No)(ND)
Date of admission to the ICU (DD)(MM)(YY) Date of discharge from the ICU (DD)(MM)(YY)

Locations of patient during hospitalization:
Unit: _____ room: _____ Date of arrival: (DD)(MM)(YY) Date leaving: (DD)(MM)(YY)
Unit: _____ room: _____ Date of arrival: (DD)(MM)(YY) Date leaving: (DD)(MM)(YY)
Unit: _____ room: _____ Date of arrival: (DD)(MM)(YY) Date leaving: (DD)(MM)(YY)
Unit: _____ room: _____ Date of arrival: (DD)(MM)(YY) Date leaving: (DD)(MM)(YY)
Unit: _____ room: _____ Date of arrival: (DD)(MM)(YY) Date leaving: (DD)(MM)(YY)

Was the patient in the Operating Room? (Yes)(No)(UKN), If yes, please complete the following:
Operating room:_____ Date: (DD)(MM)(YY) Procedure/Operation:_____
Operating room:_____ Date: (DD)(MM)(YY) Procedure/Operation:_____
Operating room:_____ Date: (DD)(MM)(YY) Procedure/Operation:_____

Risk Factors

Previous Hospitalizations:

Has the patient been hospitalized in the past 90 days? (Yes)(No)(UNK)
Hospital and City: _____ Date of Admission: (DD)(MM)(YY)
Reason for hospitalization: _____ Date of discharge:
(DD)(MM)(YY)

Hospital and City: _____ Date of Admission: (DD)(MM)(YY)
Reason for hospitalization: _____ Date of discharge:
(DD)(MM)(YY)

Has the patient ever been previously diagnosed with candida?
(Yes)(No)(UNK)
Date:(DD) (MM) (YY)
What species was isolated? _____

Has the patient ever previously received an antifungal? (Yes)(No)(UNK)
Which?_____ Began: (DD)(MM)(YY) Stopped:
(DD)(MM)(YY)
Indication for treatment: _____

Comorbilities:

Diabetes: (Yes)(No)(UNK)
Solid tumor: (Yes)(No)(UNK)
Hematologic Malignancy: (Yes)(No)(UNK)
Bone Marrow Transplant: (Yes)(No)(UNK)
Chronic renal failure: (Yes)(No)(UNK)
Hemodialysis (Yes)(No)(UNK)
Liver disease:(Yes)(No)(UNK)
Immunosuppressed: (Yes)(No)(UNK)
Please select:(Autoimmune)(Transplant)
(Corticosteroids)(Cancer)
HIV/AIDS: (Yes)(No)(UNK)
CD4: _____ Viral load: _____
Others:(Yes)(No)(UNK) Which?: _____

Current Hospitalization

Procedure:

Hemodialysis: (Yes)(No)(UNK) Begin date: (DD) (MM) (YY) End date: (DD) (MM) (YY)
Central venous catheter (Yes)(No)(UNK) Begin date: (DD) (MM) (YY) End date: (DD) (MM) (YY)
Respiratory support: (BiPAP) (Intubation) Begin date: (DD) (MM) (YY) End date: (DD) (MM) (YY)
Bronchoscopy: (Yes)(No)(UNK) Begin date: (DD) (MM) (YY) End date: (DD) (MM) (YY)
Physical Therapy: (Yes)(No)(UNK) Begin date: (DD) (MM) (YY) End date: (DD) (MM) (YY)

Treatments:

Chemotherapy: (Yes)(No)(UNK)
Begin:(DD)(MM)(YY) End:(DD)(MM)(YY)
TPN: (Yes)(No)(UNK)
Begin:(DD)(MM)(YY) End:(DD)(MM)(YY)
Corticosteroides: (Yes)(No)(UNK)
¿Which? _____ Begin:(DD)(MM)(YY) End:(DD)(MM)(YY)
¿Which? _____ Begin:(DD)(MM)(YY) End:(DD)(MM)(YY)

Vasopressors: (Yes)(No)(UNK)
¿Which? _____ Begin:(DD)(MM)(YY) End:(DD)(MM)(YY)
¿Which? _____ Begin:(DD)(MM)(YY) End:(DD)(MM)(YY)

¿Other treatments?
_____
Begin:(DD)(MM)(YY) End:(DD)(MM)(YY)

Antimicrobials:

¿What treatment was used for this candidemia?:_____dose:_____
Begin:(DD) (MM) (YY) End:(DD) (MM) (YY)

Other antimicrobials:

Name and dose:_____
Begin:(DD) (MM) (YY) End:(DD) (MM) (YY)
Name and dose:_____
Begin:(DD) (MM) (YY) End:(DD) (MM) (YY)
Name and dose:_____
Begin:(DD) (MM) (YY) End:(DD) (MM) (YY)
Name and dose:_____
Begin:(DD) (MM) (YY) End:(DD) (MM) (YY)
Name and dose:_____
Begin:(DD) (MM) (YY) End:(DD) (MM) (YY)

Clinical and Laboratory Findings

Clinical:

Weight:_____ Height:_____
Evidence of severe sepsis(Yes)(No)(UNK)
Sepsis: at least 2 of the following
(a) temperature >38.3C or <36C, (b) heart rate >90,
(c) respiratory rate >20) with evidence of infection
Severe sepsis = sepsis plus respiratory failure
Did the patient experience a decompensation during the hospital stay? (Yes)(No)(UNK) Date: (DD)(MM)(YY)
Details:_____
_____
_____

Radiology:

Any findings on imagige: (Yes)(No)(UNK)
Which?
_____ Date: (DD)(MM)(YY)

Laboratory:

(closest available to date of positive candida culture)
Date:(DD)(MM)(YY)
WBC: _____
%PMNs:_____
Hb: _____
PLT: _____
Creatine: _____
BUN: _____
Glucose: _____
AST: _____
ALT: _____
Bilirrubin total: _____
Albumin: _____
Lactate: _____

Candida culture

First positive Candida or *C. auris* culture:
Date:(DD)(MM)(YY)
Type of sample: (**blood**)(**urine**) (**wound**) (**BAL**) (**other**)
Which? _____

MIC:
Fluconazole: _____
Voriconazole: _____
Amphotericin: _____
Caspofungin: _____
Anidulafungin: _____
Micafungin: _____

Cultures (1 year before and after positive Candida culture)

Type of Sample	Date of Collection	Date of Report	Results (microrganism isolated)	MICs
	(DD)(MM)(YY)	(DD)(MM)(YY)		
	(DD)(MM)(YY)	(DD)(MM)(YY)		
	(DD)(MM)(YY)	(DD)(MM)(YY)		
	(DD)(MM)(YY)	(DD)(MM)(YY)		
	(DD)(MM)(YY)	(DD)(MM)(YY)		
	(DD)(MM)(YY)	(DD)(MM)(YY)		

Additional Information for Candidemia Cases in those less than one year of age

Born prematurely: (Yes)(No)(UNK) Delivery: (vaginal) (c-section)
Gestation at time of birth: ____ (weeks) Birth weight: _____ (Kgs)

Select the type of nutrition received: (breastmilk)(formula)(combination)(other)
If formula received, what type? _____
Were any additives, probiotics or thickening agents used (Yes)(No)(UNK): Which?_____
Date: (DD)(MM)(YY) For how long? _____ (hours)(days)(weeks)(months)

Was there any skin breakdown (eg. Rash, open wounds)?: (Yes)(No)(UNK) ; What?:_____

Received prophylactic antifungals? (Yes)(No)(UNK) ; Which?: _____

Required an operation? (Yes)(No)(UNK) Which?: _____ Date: (DD)(MM)(YY)
Which?: _____ Date: (DD)(MM)(YY)

Any additional procedures performed apart from those mentioned previously or above? (Yes)(No)(UNK)
Which?: _____ Date: (DD)(MM)(YY)
Which?: _____ Date: (DD)(MM)(YY)

Was the patient exposed to any of the following:

- Incubator (Yes)(No)(UNK) Date: (DD)(MM)(YY) For how long? _____ (hours)(days)(weeks)(months)
- Feeding tube (Yes)(No)(UNK) Specify: (nose) (mouth) (PEG)
  Date: (DD)(MM)(YY) For how long? _____ (hours)(days)(weeks)(months)
- Cardiac monitor (Yes)(No)(UNK) Date: (DD)(MM)(YY) For how long? _____ (hours)(days)(weeks)(months)
- Phototherapy: (Yes)(No)(UNK) Date: (DD)(MM)(YY) For how long? _____ (hours)(days)(weeks)(months)
- Steroids for respiratory development (Yes)(No)(UNK)
  Date: (DD)(MM)(YY) For how long? _____ (hours)(days)(weeks)(months)
- Other: _____ Date: (DD)(MM)(YY) For how long? _____ (hours)(days)(weeks)(months)

- *Subject to change as investigation reveals additional information about cases*

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Appendix 2.Healthcare Provider Interview Questions

1. Did you observe anything notable about patients infected with *C. auris* or *C. haemulonii** compared with those infected with other *Candida* species?
    a. In terms of demographic and clinical characteristics?
    b. In terms of possible prehospital exposures, including transfer from other hospitals?
    c. In terms of patient outcomes?

2. Did you observe any possible evidence of transmission of *C. auris* or *C. haemulonii* between patients on a unit or within the hospital? If so, what?

3. Did you observe recurrent *C. auris* or *C. haemulonii* infections within a patient?

4. Do you have any reason to believe that a patient was persistently colonized with *C. auris* or *C. haemulonii*?

5. What type of daily and terminal cleaning methods are used at your hospital, and what cleaning agents are used?

6. Are there special precautions (e.g., Contact Precautions) used for patients with certain infections or colonization at your hospital? If so, what?

7. Do you have any hypotheses or guesses about the source of *C. auris* or *C. haemulonii* infections and why they have recently emerged at your hospital?

8. Do you have any suggestions for this investigation in to *C. auris* or *C. haemulonii* infections?

9. Is there anything else we should know?

*Note that *C. haemulonii* is included in the questions because most *C. auris* cases in Colombia were initially misidentified as *C. haemulonii*

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Undetermined risk factors and modes of transmission for *Candida auris* infection — Colombia, 2016

Appendix 3.Patient Open-Ended Interview Questions

The following questions will be asked about activities in the 3 months before hospitalization with C. auris *infection. Patients who have been in the hospital during that entire period will not be asked.**

1. Did you work or have an occupation? If yes, what type of work?
2. *If yes to 1*: Did your job involve any outdoor activities? If so, what?
3. What, if any, outdoor activities did you do?
4. Did you go swimming? If so, where?
5. Did you or any household members travel outside of your city or town of residence? If so, where?
6. Did you have any type of ear problem, including itching, infection, or discharge? If so, what?
7. Did you insert medicine or any other substance into your ears?
8. Did you use any type of probiotic medication?

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Case Interview Questionnaire Form

Shigellosis in Genesee and Saginaw Counties, MI, 2016

SHIGELLOSIS CASE INTERVIEW FORM
GENESEE AND SAGINAW COUNTIES, MI
October 2016

Interviewee Information: *Check here if interviewee is a proxy for a case-patient who is a minor* r

Last name: _____ First name: _____

Relationship to reference case: _____ Person number (from top row of table 1): _____

County of residence: r Genesee r Saginaw MDSS ID (*of minor if proxy interviewer*): _____

Telephone numbers (*Add as needed; circle successful number*)

( ) ____ - _____	( ) ____ - _____	( ) ____ - _____	( ) ____ - _____	( ) ____ - _____

Telephone Contact History

Call	Date (MM/DD)	Time	Outcome (codes below)	Caller Initials	Interview completed?	IF DIFFERENT TIME REQUESTED:
1	___ / ___	_____ AM / PM			Yes No	___ /___ (MM/DD) _____(AM/PM)
2	___ / ___	_____ AM / PM			Yes No	___ /___ (MM/DD) _____(AM/PM)
3	___ / ___	_____ AM / PM			Yes No	___ /___ (MM/DD) _____(AM/PM)
4	___ / ___	_____ AM / PM			Yes No	___ /___ (MM/DD) _____(AM/PM)
5	___ / ___	_____ AM / PM			Yes No	___ /___ (MM/DD) _____(AM/PM)
6	___ / ___	_____ AM / PM			Yes No	___ /___ (MM/DD) _____(AM/PM)
7	___ / ___	_____ AM / PM			Yes No	___ /___ (MM/DD) _____(AM/PM)
8	___ / ___	_____ AM / PM			Yes No	___ /___ (MM/DD) _____(AM/PM)
9	___ / ___	_____ AM / PM			Yes No	___ /___ (MM/DD) _____(AM/PM)
10	___ / ___	_____ AM / PM			Yes No	___ /___ (MM/DD) _____(AM/PM)
11	___ / ___	_____ AM / PM			Yes No	___ /___ (MM/DD) _____(AM/PM)
12	___ / ___	_____ AM / PM			Yes No	___ /___ (MM/DD) _____(AM/PM)

OUTCOME CODES:

01 = completed interview
02 = refused interview
03 = no answer
04 = busy tone
05 = non-working number
06 = fax machine
07 = business phone
08 = no eligible respondent
09 = language barrier
10 = interview terminated within questionnaire
11 = physical/mental impairment
12 = answering machine
13 = setting up a better time
99 = unknown

SECTION 1 Shigellosis

Complete the table on the last page of the packet (Table 1) based on responses to the questions in this section. To make it easier to complete the table, you can detach it from the case interview packet.

"Since I'll be asking you to answer questions about the time you were sick with diarrhea from *Shigella*, it might be helpful to have a calendar handy. Do you need a moment to grab one?" *Wait until interviewee is ready to continue the interview.* "Ok, I'd like to start by confirming the information we have in our records."

1. It looks like you first got sick with diarrhea from *Shigella* on ___ / ___ / ___ (MM / DD / YY)." R*efer to the MDSS onset date you pre-populated in the table at the end of this packet*. "Is that correct or did your symptoms start on a different day?"
2. At the time you were sick, how old were you? *[Confirm the information you wrote in Table 1 is correct]*

"Now I'd like to know about the people in your house and if any of them also got sick with symptoms like yours."

3. During the week before you got sick, how many people were living or staying in your household at least 4 nights a week? *(include interviewee, if applicable)* _____ household members

   *Complete 3a—3d (in Table 1) for **all household members**, confirming the pre-populated information in Table 1 or adding new entries as needed*:

   3a. How old was the person at the time you got sick?
   3b. What is this person's gender or sex?
   3c. What is this person's race?
   3d. What is this person's ethnicity?

4. Did any of these people get sick with symptoms like yours 2 weeks before or 2 weeks after you got sick?
   r No (*skip to question 5*) r Yes (*go to 4a*)

   IF YES: 4a. Without telling me their names, who got sick? You can refer to them by their age and gender or sex. *[Write this into table 1]*

   4b. Who was the first person in the household to get sick? ***(select only one person!)***
   [This is the "index case" – please check the box for "first person ill" in table 1]

"Now I'll ask you some questions about [*when you were/everyone in your household who got*] sick."

5. For each person in the house who was sick during this time, complete the following questions:
   [Write responses into table 1]

   5a. Which of the following symptoms did you [*or sick member of your household*] have? *Read options*

   5b. How many days [*were you/was each person*] sick?

   5c. Did [*you/anyone*] receive medical care at any of these settings? *Read options and mark all the apply*

5d. Antibiotics are medicines that are sometimes used to treat infections. [*Were you/Was anyone*] prescribed antibiotics when [*you/they*] were sick?

5e. At the time you [*and other members of your household*] were sick with diarrhea, did [*any of*] you have a chronic medical condition for which you had to see your doctor or health care provider regularly?

5f. At the time you [*and other members of your household*] were sick with diarrhea, did [*any of*] you have a medical condition that weakens the immune system, or were [*any of*] you receiving treatment that can weaken your immune system? Examples include receiving a transplant, being on cancer treatment, or being diagnosed with HIV/AIDS.

5g. At the time you [*and other members of your household*] were sick with diarrhea, [*were you/was anyone, including children or adults*] wearing diapers?

6. Do you or any adults in your house have any kind of health care coverage, including health insurance, prepaid plans such as HMOs, government plans such as Medicare, or Indian Health Service?

   r No r Yes r Refused

   IF NO: *skip to question 8.*

   IF YES: *check all that apply*:

   r Employer provides r A plan that you or someone else buys on your own
   r Medicare r Medicaid or Healthy Michigan Plan
   r Refused r Military, CHAMPUS, or the VA
   r Don't know r Other: _____

7. Not including the people counted in the last question, did anyone else stay in your home for at least one night during the week before you got sick?

   r No r Yes

   IF NO: *skip to next section.*

   IF YES: 7a. How many visitors stayed in your home at least one night in the week before you got sick? _____ visitors

   7b. Were any of these visitors sick with diarrhea at the time they visited?

   r No r Yes

SECTION 2 Activities Outside the Home

*The following questions are to be asked of the index case-patient. In the event the index case-patient is a minor, a parent or guardian can serve as proxy, preferably one who was a case-patient reported to MDSS**. Once you have determined who will speak for the index case-patient, please indicate in Table 1: "Interviewed:" and also at the top of page 4.***

Check here if talking to the index case-patient: r

Continue interview: "Now I'm going to ask you some questions about activities outside the home."

Check here If not talking to the index case-patient: r

Continue interview: "Now I'm going to ask you some questions about the first person in your household to get sick. These questions are about activities outside the home. I'd like you to answer them on behalf of the first person who got sick in your household."

1. In the week before you/they became sick, did you/they work or volunteer at a job outside your home?

   r No r Yes r Refused

   IF NO: Skip to 2.

   IF YES: 1a. Did you/they work in a:

   - r School (K-12) **IF YES**: What grade level? _____, *then skip to 2.*
   - r Healthcare or long-term care facility, *continue to 1b.*
   - r Childcare/Day Camp/Daycare, *skip to 1c.*
   - r Other: _____, then *skip to 2.*

   1b. What kind of patient care were you/they involved in? *Read options, mark all that apply, then skip to 2*

   - r Nurse
   - r Home health care
   - r Therapist (PT, ST, OT)
   - r MA / Patient Care Technician / Nurse's Aid
   - r Physician/NP/PA
   - r Other: _____

   1c. What kind of childcare did you/they provide? *Read options and mark all that apply.*

   - r Daycare center worker
   - r Baby-sitter or Nanny
   - r Camp / Day Camp worker
   - r Other: _____

2. In the week before you/they became sick, did you/they have contact with any children or adults outside the house who were in diapers?

   r No r Yes

   IF NO: Continue to 3.

   IF YES: 2a. In the week before you/they became sick, did you/they change any diapers?

   r No r Yes

SECTION 2 Activities Outside the Home

****This question should be asked between questions 1 and 2 in section 2.** *Please administer question 1 as written regardless of the age of the patient (i.e. if patient is 3 year-old, answer to question 1 will be "No").* ***Question 1 assesses <u>if you/they are an employee</u>, while question 1.5 assesses <u>if you/they are an attendee</u>.***

Question 1.5: In the week before you/they became sick, did you/they attend any of the following **outside the home**: ***(Check all that apply)***

- r School (K-12) – If yes, which grade? ____
- r Post-High School education (College, trade school)
- r Daycare center/facility
- r Childcare in someone's home (not your own)
- r Camp or Day Camp

3. In the week before you/they became sick, did you/they spend one of more nights at another address?

   r No r Yes

   IF NO: Skip to 4.

   IF YES: 3a. In which city is this place located? _____

   3b. At the time you/they stayed there, were any of the household members sick with diarrhea?

   r No r Yes

4. Not including household members and visitors listed already, in the week before you/they became sick did you/they come in contact with anyone outside your home who had diarrhea? *Prompt for extended family, small children, at church, at work.*

   r No r Yes

   IF NO: Continue to next section.

   IF YES: 4a. In which of the following settings did you/they come in contact with a person with diarrhea in the week before you/they got sick? *Read options and check all that apply.*

   - r Daycare
   - r Camp / Day camp
   - r School
   - r Work / volunteering
   - r Clinic, hospital, or emergency department
   - r Church
   - r House of friend / extended family
   - r Other: _____

SECTION 3 Travel

The following questions are to be asked of the index case-patient. In the event the index case is a minor, a parent or guardian can serve as proxy, preferably one who was a case-patient reported to MDSS.

If talking to the index case-patient: "Now I'm going to ask you some questions about travel."

If not talking to the index case-patient: "Now I'm going to ask you some questions about whether the first person in your household to get sick traveled anywhere."

1. In the week before you/they became sick, did you/they travel to any other cities in Michigan for work, visit friends, or family, an event, or any other reason?

   r No r Yes

   IF NO: Skip to 2.

   IF YES: 1a. Which cities did you/they travel to?

   1a1. _____

   1a2. _____

   1a3. _____

   1a4. _____

   1a5. _____

   1b. What type of transportation did you/they use to travel to these cities? *Read options and mark all that apply.*

   - r Private car
   - r MTA rideshare
   - r Greyhound/AMTRAK
   - r Uber/Lyft/Taxi/Other rideshare company
   - r Other: _____

   1c. What activities did you/they do while you/they were traveling during this week before you/they became sick? *Read options and mark all that apply.*

   - r Community gathering (fair, picnic, church, etc)
   - r Spent the night with friend/family
   - r Visit a friend/family (not overnight)
   - r Shower or bathe
   - r Go to work
   - r Other: _____

2. In the week before you/they became sick, did you travel outside of Michigan?

r No r Yes

IF NO: Skip to 3.

IF YES: 2a. Where did you/they travel? *List city, state, and country if outside the United States.*

2a1. _____

2a2. _____

2a3. _____

2a4. _____

2a5. _____

2b. What days were you/they traveling? *Include month and day:* ____ / ____ -- ____ / ____

3. In the week before you/they became ill, did you/they go to any of the following events in your community?

r No (Go to Section 4) r Yes (Go to 3a)

3a. Collect additional information about these events in the following table:

#	Event Type (check all that apply)	Location (city, state)	Date of Event	Anyone with diarrhea?
3a	r Wedding/party/picnic/barbecue r Fair, carnival, or concert r Church or School event r Other: _____		____ / ____ (MM/DD)	Yes No
3b	r Wedding/party/picnic/barbecue r Fair, carnival, or concert r Church or School event r Other: _____		____ / ____ (MM/DD)	Yes No
3c	r Wedding/party/picnic/barbecue r Fair, carnival, or concert r Church or School event r Other: _____		____ / ____ (MM/DD)	Yes No
3d	r Wedding/party/picnic/barbecue r Fair, carnival, or concert r Church or School event r Other: _____		____ / ____ (MM/DD)	Yes No
3e	r Wedding/party/picnic/barbecue r Fair, carnival, or concert r Church or School event r Other: _____		____ / ____ (MM/DD)	Yes No

SECTION 4 Food

The following questions are to be asked of the index case-patient. In the event the index case is a minor, a parent or guardian can serve as proxy, preferably one who was a case-patient reported to MDSS.

If talking to the index case-patient: "Now I'm going to ask you where you ate during the week before you got sick."

If not talking to the index case-patient: "Now I'm going to ask you where the first person who got sick in your household ate during the week before they got sick. Do your best to answer the questions on their behalf."

1. In the week before you/they became sick, did you/they eat any meals prepared at the following types of food establishments? *Read options and mark all that apply.*

    r Restaurant
    r Fast-food establishment
    r Cafeteria
    r Deli
    r Street-vended food (food truck, food cart)
    r Ready-to-eat food served in a supermarket or department store
    r Concession stand at sporting event, snack bar, or gas station

2. Can you tell me more about the food establishments where you ate during the week before you got sick? *Prompt for the following information:*

Name: _____ Date: ____ / ____ (MM / DD)

Address: _____ Time: _____ AM / PM

Foods eaten: _____

_____

Name: _____ Date: ____ / ____ (MM / DD)

Address: _____ Time: _____ AM / PM

Foods eaten: _____

_____

Name: _____ Date: ____ / ____ (MM / DD)

Address: _____ Time: _____ AM / PM

Foods eaten: _____

_____

SECTION 5 Water

The following questions are to be asked of the index case-patient. In the event the index case is a minor, a parent or guardian can serve as proxy, preferably one who was a case-patient reported to MDSS.

If talking to the index case-patient: "Now I'm going to ask you some questions related to water."

If not talking to the index case-patient: "Now I'm going to ask you some questions related to water. Do your best to answer them on behalf of the first person who got sick in your household."

1. In the week before you got sick, did you/they swim, wade or play in water?
   r No r Yes r Don't know r Refused

   IF NO: *Skip to 2*.

   IF YES: *Read the following options and choose all that apply:*

   r Ocean Beach
   r Lake, pond, river, or stream
   r Hot tub/spa, whirlpool, Jacuzzi
   r Recreational water park
   r Natural hot spring
   r Swimming Pool

"As you know, the outbreak of diarrhea caused by the *Shigella* germ has affected Genesee and Saginaw Counties. Similarly, we recognize that the Flint Water Crisis has had an impact beyond Flint and Genesee County. Since residents of this area have told us that they've changed the way they use water, I'd like to ask whether you've made any changes to the way you use water."

2. Which one of the following is the source of tap water in your home?
   *(**Choose ONE answer – READ OPTIONS**)*

   r Municipal, city, or county water (Specify name of water utility, if known: _____)
   r Private well water
   r No tap water available
   r Refused
   r Other: _____

"Now I'd like to ask how members of your household used water in the week before you became sick. I'll start off by listing the different types of water you might use, then I'll list the things you might use water for."

R*ead types of water (e.g., unfiltered tap water, filtered tap water, etc.), then read water uses (e.g., drinking, mixing cold drinks, etc.).*

"As an example, members of your household might use both bottled water and unfiltered tap water for preparing hot food. Let's get started. In the week before you got sick, what type of water did members of your household use for…"

Begin reading uses of water, starting with 'drinking'. Place a checkmark in boxes that correspond to the interviewee's answers. If different household members use different types of water for any single activity, place a check in each appropriate box.

	Unfiltered tap water	Filtered tap water	Bottled water	Boiled water	Other (write)	Don't know
Drinking						
Mixing cold drinks (like iced tea, lemonade, cool-aid)						
Hot drinks (like coffee or tea)						
Making ice						
Cooking hot food						
Mixing infant formula						
Brushing teeth						

"Now I'll ask you how you and members of your household cleaned, cooked, and bathed during the week before you/they got sick. In addition to the types of water we already listed, let me know if you used hand sanitizer or cleansing wipes for any of these tasks."

Begin reading down the first column, starting with 'rinsing fruits, etc'. Place a checkmark in boxes that correspond to the interviewees answers.

	Unfiltered tap water	Filtered tap water	Bottled water	Boiled water	Hand sanitizer	Cleansing wipes	Other (write)	Don't know
Rinsing fruits, vegetables, other foods								
Washing dishes by hand								
Cleaning kitchen or bathroom counters								
Washing hands								
Bathing/showering								
Bathing someone (like a baby or elder)								
Cleaning diaper-changing station								

3. Since the Flint water crisis, have you changed your bathing and/or showering habits?

   r No r Yes r Refused

   IF NO: *Skip to 4.*

   IF YES: Can you tell me more about what changes you've made to bathing and/or showering habits?

Here are examples of prompts you can give the participant if need be: method (e.g., cleansing wipes, sponge bathes, bottled water), location (office, someone else's house, etc), frequency (more/less), duration (longer/shorter)

_____

_____

_____

_____

_____

_____

_____

4. Since the Flint water crisis, have you changed your handwashing habits?

   r No r Yes r Refused

   IF NO: *Skip to script below.*

   IF YES: Can you tell me more about what changes you've made to handwashing?

   Here are examples of prompts you can give the participant if need be: method (e.g., hand sanitizer, cleansing wipes, soap without water, soap with water), location (office, someone else's house), when (after using the bathroom, after changing diapers, before eating, before preparing food), frequency (more/less), duration (longer/shorter)

_____

_____

_____

_____

_____

_____

_____

"That's the end of the interview. Thanks for taking the time to answer these questions today. Is there anything else you'd like to share with us or any questions we can answer for you?"

Refer to FAQ; if the answer is not listed, record the question below and inform the interviewee that an expert from the health department will call them within 24 hours.

_____

_____

_____

_____

"Would you like us to send you information about *Shigella*, the germ that caused you to get sick?"

r No r Yes

-- END OF INTERVIEW –

Table 1

Person #	**1**	**2**	**3**	**4**	**5**
MDSS ID ***(if applicable)***					
Onset Date **MM/DD/YY**	___ / ___ (MM/DD)	___ / ___ (MM/DD)	___ / ___ (MM/DD)	___ / ___ (MM/DD)	___ / ___ (MM/DD)
Index Case ***(select 1 only)***	First person ill? r Yes r No	First person ill? r Yes r No	First person ill? r Yes r No	First person ill? r Yes r No	First person ill? r Yes r No
Age	________ yrs / mo	________ yrs / mo	________ yrs / mo	________ yrs / mo	________ yrs / mo
Sex	r M r F r Other	r M r F r Other	r M r F r Other	r M r F r Other	r M r F r Other
Race	r Black/African Am. r White r Asian r American Indian r Hawaian/Pacific Isl.	r Black/African Am. r White r Asian r American Indian r Hawaian/Pacific Isl.	r Black/African Am. r White r Asian r American Indian r Hawaian/Pacific Isl.	r Black/African Am. r White r Asian r American Indian r Hawaian/Pacific Isl.	r Black/African Am. r White r Asian r American Indian r Hawaian/Pacific Isl.
Ethnicity	r Hispanic/Latino r Arab/Chaldean r Neither	r Hispanic/Latino r Arab/Chaldean r Neither	r Hispanic/Latino r Arab/Chaldean r Neither	r Hispanic/Latino r Arab/Chaldean r Neither	r Hispanic/Latino r Arab/Chaldean r Neither
Was this person ill?	r Yes r No r Don't know	r Yes r No r Don't know	r Yes r No r Don't know	r Yes r No r Don't know	r Yes r No r Don't know
Symptoms	r Fever >100F r Stomach ache r Diarrhea r Bloody stools r Nausea r Vomiting r Urgency to have a bowel movement	r Fever >100F r Stomach ache r Diarrhea r Bloody stools r Nausea r Vomiting r Urgency to have a bowel movement	r Fever >100F r Stomach ache r Diarrhea r Bloody stools r Nausea r Vomiting r Urgency to have a bowel movement	r Fever >100F r Stomach ache r Diarrhea r Bloody stools r Nausea r Vomiting r Urgency to have a bowel movement	r Fever >100F r Stomach ache r Diarrhea r Bloody stools r Nausea r Vomiting r Urgency to have a bowel movement
Duration of illness (days)					
Medical care	r Doctor office r Urgent care r Pharmacy r Natural healer r ED r Hospitalized (admitted >36 hrs) r None	r Doctor office r Urgent care r Pharmacy r Natural healer r ED r Hospitalized (admitted >36 hrs) r None	r Doctor office r Urgent care r Pharmacy r Natural healer r ED r Hospitalized (admitted >36 hrs) r None	r Doctor office r Urgent care r Pharmacy r Natural healer r ED r Hospitalized (admitted >36 hrs) r None	r Doctor office r Urgent care r Pharmacy r Natural healer r ED r Hospitalized (admitted >36 hrs) r None
Antibiotics	r Yes r No r Don't know	r Yes r No r Don't know	r Yes r No r Don't know	r Yes r No r Don't know	r Yes r No r Don't know
Chronic medical conditions	r Yes r No r Don't know	r Yes r No r Don't know	r Yes r No r Don't know	r Yes r No r Don't know	r Yes r No r Don't know
Immuno-compromised	r Yes r No r Don't know	r Yes r No r Don't know	r Yes r No r Don't know	r Yes r No r Don't know	r Yes r No r Don't know
Wore diapers	r Yes r No r Don't know	r Yes r No r Don't know	r Yes r No r Don't know	r Yes r No r Don't know	r Yes r No r Don't know

TABLE 1 (Continued)

Person #	6	7	8	9	10
MDSS ID *(if applicable)*					
Onset Date MM/DD/YY	___ / ___ (MM/DD)	___ / ___ (MM/DD)	___ / ___ (MM/DD)	___ / ___ (MM/DD)	___ / ___ (MM/DD)
Index Case *(select 1 only)*	First person ill? r Yes r No	First person ill? r Yes r No	First person ill? r Yes r No	First person ill? r Yes r No	First person ill? r Yes r No
Age	________ yrs / mo	________ yrs / mo	________ yrs / mo	________ yrs / mo	________ yrs / mo
Sex	r M r F r Other	r M r F r Other	r M r F r Other	r M r F r Other	r M r F r Other
Race	r Black/African Am. r White r Asian r American Indian r Hawaian/Pacific Isl.	r Black/African Am. r White r Asian r American Indian r Hawaian/Pacific Isl.	r Black/African Am. r White r Asian r American Indian r Hawaian/Pacific Isl.	r Black/African Am. r White r Asian r American Indian r Hawaian/Pacific Isl.	r Black/African Am. r White r Asian r American Indian r Hawaian/Pacific Isl.
Ethnicity	r Hispanic/Latino r Arab/Chaldean r Neither	r Hispanic/Latino r Arab/Chaldean r Neither	r Hispanic/Latino r Arab/Chaldean r Neither	r Hispanic/Latino r Arab/Chaldean r Neither	r Hispanic/Latino r Arab/Chaldean r Neither
Was this person ill?	r Yes r No r Don't know	r Yes r No r Don't know	r Yes r No r Don't know	r Yes r No r Don't know	r Yes r No r Don't know
Symptoms	r Fever >100F r Stomach ache r Diarrhea r Bloody stools r Nausea r Vomiting r Urgency to have a bowel movement	r Fever >100F r Stomach ache r Diarrhea r Bloody stools r Nausea r Vomiting r Urgency to have a bowel movement	r Fever >100F r Stomach ache r Diarrhea r Bloody stools r Nausea r Vomiting r Urgency to have a bowel movement	r Fever >100F r Stomach ache r Diarrhea r Bloody stools r Nausea r Vomiting r Urgency to have a bowel movement	r Fever >100F r Stomach ache r Diarrhea r Bloody stools r Nausea r Vomiting r Urgency to have a bowel movement
Duration of illness (days)					
Medical care	r Doctor office r Urgent care r Pharmacy r Natural healer r ED r Hospitalized (admitted >36 hrs) r None	r Doctor office r Urgent care r Pharmacy r Natural healer r ED r Hospitalized (admitted >36 hrs) r None	r Doctor office r Urgent care r Pharmacy r Natural healer r ED r Hospitalized (admitted >36 hrs) r None	r Doctor office r Urgent care r Pharmacy r Natural healer r ED r Hospitalized (admitted >36 hrs) r None	r Doctor office r Urgent care r Pharmacy r Natural healer r ED r Hospitalized (admitted >36 hrs) r None
Antibiotics	r Yes r No r Don't know	r Yes r No r Don't know	r Yes r No r Don't know	r Yes r No r Don't know	r Yes r No r Don't know
Chronic medical conditions	r Yes r No r Don't know	r Yes r No r Don't know	r Yes r No r Don't know	r Yes r No r Don't know	r Yes r No r Don't know
Immuno-compromised	r Yes r No r Don't know	r Yes r No r Don't know	r Yes r No r Don't know	r Yes r No r Don't know	r Yes r No r Don't know
Wore diapers	r Yes r No r Don't know	r Yes r No r Don't know	r Yes r No r Don't know	r Yes r No r Don't know	r Yes r No r Don't know