Today's date: _____/_____/_____
Day Month Year

DENGUE CASE INVESTIGATION REPORT

CDC Dengue Branch and Puerto Rico Department of Health
1324 Calle Cañada, San Juan, P. R. 00920-3860
Tel. (787) 706-2399, Fax (787) 706-2496

Form Approved OMB No. 0920-1011
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FOR CDC DENGUE BRANCH USE ONLY

Case number

SAN ID GCODE

Specimen #	Days post onset (DPO)	Type	Date Received
S1			____/____/____
S2			____/____/____
S3			____/____/____
S4			____/____/____

Please read and complete ALL sections

Patient Data Hospitalized due to this illness: No ☐ Yes ☐ → Hospital Name: Record Number:

Name of Patient: _____
Last Name First Name Middle Name or Initial

If patient is a minor, name of father or primary caregiver: _____
Last Name First Name Middle Name or Initial

Fatal: Yes ☐ No ☐ Unk ☐

Mental status changes: Yes ☐ No ☐ Unk ☐

Home (Physical) Address

Home address here

City: Zip code: _ _ _ _ _ - _ _ _ _

Tel: Other Tel:

Residence is close to:

Work address:

Physician who referred this case

Name of Healthcare Provider:

Tel: Fax: Email:

Send laboratory results to (mailing address):

Patient's Demographic Information

Date of Birth: _____/_____/_____
Day Month Year

Age: _____month or _____years

Sex: M F

Pregnant: Y N UNK

Weeks pregnant (gestation): _____

Who filled out this form?

Name (complete):

Must have the following information for sample processing

Day Month Year

Date of first symptom: _____/_____/_____

Date specimen taken:

Serum: First sample (Acute = first 5 days of illness – check for virus) _____/_____/_____

Second sample (Convalescent = more than 5 days after onset – check for antibodies) _____/_____/_____

Third sample _____/_____/_____

Fatal cases (tissue type):_____ _____/_____/_____

Modified Variables for AZ investigation

Duration of hospitalization (days)? _____

Country of birth _____

Admitted to the ICU? ☐ *Yes* ☐ *No* ☐ *Unk*

Duration of ICU admission (days): _____

Sought care in Mexico? ☐ *Yes* ☐ *No* ☐ *Unk*

During the 14 days before onset of illness, did you TRAVEL to other cities or countries?

☐ Yes, another country ☐ Yes, another city ☐ No ☐ Unk

WHERE did you TRAVEL? _____

PLEASE indicate below the signs and symptoms that the patient had at any time during the illness for which they sought care

	Yes	No	Unk
Fever in 7 days before visit	☐	☐	☐
Fever during visit	☐	☐	☐
Platelets ≤100,000/mm³	☐	☐	☐

Lowest platelet count: _____

Any hemorrhagic manifestation

	Yes	No	Unk
Petechiae	☐	☐	☐
Purpura/Ecchymosis	☐	☐	☐
Vomit with blood	☐	☐	☐
Blood in stool	☐	☐	☐
Nasal bleeding	☐	☐	☐
Bleeding gums	☐	☐	☐
Blood in urine	☐	☐	☐
Vaginal bleeding	☐	☐	☐
Positive urinalysis (over 5 RBC/hpf or positive for blood)	☐	☐	☐

Tourniquet test ☐ Pos ☐ Neg ☐ Not done

Evidence of capillary leak

Lowest hematocrit (%) _____

Highest hematocrit (%) _____

Lowest serum albumin _____

Lowest serum protein _____

Lowest blood pressure (SBP/DBP) _____/_____

Lowest pulse pressure (systolic - diastolic) _____

Lowest white blood cell count (WBC) _____

Symptoms	Yes	No	Unk
Rapid, weak pulse	☐	☐	☐
Pallor or cool skin	☐	☐	☐
Chills	☐	☐	☐
Rash	☐	☐	☐
Headache	☐	☐	☐
Eye pain	☐	☐	☐
Body (muscle/bone) pain	☐	☐	☐
Joint pain	☐	☐	☐
Anorexia	☐	☐	☐

Warning signs	Yes	No	Unk
Persistent vomiting	☐	☐	☐
Abdominal pain/Tenderness	☐	☐	☐
Mucosal bleeding	☐	☐	☐
Lethargy, restlessness	☐	☐	☐
Liver enlargement >2cm	☐	☐	☐
Pleural or abdominal effusion	☐	☐	☐

Additional symptoms

Diarrhea	☐	☐	☐
Cough	☐	☐	☐
Conjunctivitis	☐	☐	☐
Nasal congestion	☐	☐	☐
Sore throat	☐	☐	☐
Jaundice	☐	☐	☐
Convulsion or coma	☐	☐	☐
Nausea and vomiting (occasional)	☐	☐	☐
Arthritis (Swollen joints)	☐	☐	☐

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SOUTHERN ARIZONA HOUSEHOLD DENGUE INVESTIGATION

HOUSEHOLD ENROLLMENT FORM

Date of visit (MM/DD /YYYY): ___/___/___
Team number: ___

Complete one form for each household.

1. Cluster ID# - Household ID#: __ __ __ - __ __
2. Phone number (Número de Teléfono): _____
3. Household Latitude: 32º_____._____'N Longitude: 114º_____._____'W

List all individuals who slept in the house last night and sleep in the house regularly in the last 3 months, starting with the head of household.

If there are not enough spaces, please write the additional information below this section.

				Individual ID #	
A.	_____	Age: _____ yrs	□ M □ F	_ _ _-_ _ -_ _	□ Blood
B.	_____	Age: _____ yrs	□ M □ F	_ _ _-_ _ -_ _	□ Blood
C.	_____	Age: _____ yrs	□ M □ F	_ _ _-_ _ -_ _	□ Blood
D.	_____	Age: _____ yrs	□ M □ F	_ _ _-_ _ -_ _	□ Blood
E.	_____	Age: _____ yrs	□ M □ F	_ _ _-_ _ -_ _	□ Blood
F.	_____	Age: _____ yrs	□ M □ F	_ _ _-_ _ -_ _	□ Blood
G.	_____	Age: _____ yrs	□ M □ F	_ _ _-_ _ -_ _	□ Blood
H.	_____	Age: _____ yrs	□ M □ F	_ _ _-_ _ -_ _	□ Blood
I.	_____	Age: _____ yrs	□ M □ F	_ _ _-_ _ -_ _	□ Blood
J.	_____	Age: _____ yrs	□ M □ F	_ _ _-_ _ -_ _	□ Blood
K.	_____	Age: _____ yrs	□ M □ F	_ _ _-_ _ -_ _	□ Blood
L.	_____	Age: _____ yrs	□ M □ F	_ _ _-_ _ -_ _	□ Blood
M.	_____	Age: _____ yrs	□ M □ F	_ _ _-_ _ -_ _	□ Blood

***Individual ID refers to the [cluster ID # - household ID # - individual id #] (e.g. 008 – 01 – 05)**

4. Describe structure of the home *(Describa la estructura de la casa)*: ☐ Mobile home or trailer/*Casa móvil* ☐ RV ☐ Single Family Dwelling/*domicilio de una sola familia* ☐ Duplex or Four-plex ☐Apartment/*Apartamento* ☐Multi-story Condominium/*Condominio de varios niveles* ☐Temporary shelter/*Refugio temporal* ☐Other: _____

5. What is the source of household water supply? *De donde obtiene el agua de su casa?*

☐ Piped/Public -*público* ☐ Well/*Pozo* ☐Rain water/*agua de lluvia*

☐ Water tank/tanque de agua (Diamond Brooks) ☐ Unknown/*no se*

☐Other: _____

6. In the last 3 months do you store water in open containers on your property? *En los últimos 3 meses tiene usted agua almacenada en envases/depositos abiertos dentro de su propiedad?*: ☐Yes ☐ No ☐ Don't know

7. Have you had any visitors that have traveled from out of the country, for example Mexico, in the last three months? *En los últimos 3 meses ha tenido usted visitantes de otro país, por ejemplo de México?* ☐ Yes ☐ No ☐ Unknown

If YES… **7a. Where did they travel from? *De que país vinieron?***

☐ Mexico ☐ Other country: _____

8. Has anyone in your household including visitors had a fever while residing in the house in the last three months? *Alguna persona en su casa ha tenido fiebre en los últimos tres meses?*

☐ Yes ☐ No ☐ Unknown

9. Does your home have window screens? *Tiene su casa mosquiteros en las ventanas ?*

☐ On all windows ☐ On some windows ☐ On no windows ☐ Unknown

10. In the last 3 months do you leave your windows open? *En los últimos 3 meses usted deja sus ventanas abiertas?* *Note:* If windows only rarely or sometimes left open, please check "no."

☐ Yes, At night and during day ☐ Yes, at night ☐ Yes, during the day ☐ No ☐ Unknown

10b. If yes, how often do you leave your windows open? *Si es asi, con que frequencia deja sus ventanas abiertas?*

Note: If different frequency at different time, pick highest frequency. I.e., if day is always and night rarely, check always.

☐ Rarely ☐ Sometimes ☐ Usually ☐ Always ☐ Unknown

11. In the last 3 months what methods do you use to cool your home? ***En los últimos 3 meses que metodos usa para enfriar su casa?***

☐ Swamp cooler(cooler) ☐AC (window unit or central air) ☐ Nothing ☐Unknown

12. In the past 3 months have you seen mosquitos in your home? ***En los últimos 3 meses ha visto mosquitos dentro de su casa?*** ☐ Yes ☐ No ☐ Unknown

13. In the last 3 months which of the following methods have you used to control mosquitos in or around your home? ***En los últimos 3 meses cual de los siguientes metodos ha usado para controlar mosquitos dentro o alrededor su casa?***

☐ Sprayed own house ☐ Professional sprayed house ☐ Fogging by Health Department

☐ Mosquito coils ☐ Citronella ☐ None ☐ Unknown

13. Do you have a septic tank? ***Tiene fosa septica?***

☐ Yes ☐ No ☐ Unknown

NOTES:

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SOUTHERN ARIZONA HOUSEHOLD DENGUE INVESTIGATION

IMMATURE MOSQUITO SURVEY FORM

Complete one form for each household.

Date of visit (MM/DD/YYYY): ___/___/_2014_
Team number: _____

Case Patient ID Number ID #: _____-_____

Container ID	Type of Container	Number of containers (indoors)		
		Dry	Wet – water present	
			Larvae/pupae absent	Larvae/pupae present
1	Bucket			
2	Tire			
3	Water Drum			
4	Plastic container			
5	Aluminum can			
6	Styrofoam			
7	Jar			
8	Flower vase			
9	Septic tank			
10	Animal watering pan			
11	Potted plant			
12	Bird Bath/Fountains			
13	Other artificial container: _____			
14	Tree: _____			
15	Toys			
16	Pools			
17	Sewers			
18	Bamboo			
19	Other – natural container (specify)			
20	Tarps			

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SOUTHERN ARIZONA HOUSEHOLD DENGUE INVESTIGATION

INDIVIDUAL INTERVIEW FORM

Specimen Label

Team number: ___ **Language of interview:** □ Spanish □ English Other:_____

Complete one form for each consenting individual in the household.

1. Case Patient ID # - Household ID # - Individual #: __ __ __ - __ __ - __ __

2. Your name *Nombre*: _____
First (given) **Middle** **Last**

3. How long have you been living in Arizona? *Cuánto tiempo ha estado viviendo en Arizona?*
_____ years

4. Have you used mosquito repellent in the past three months? *Ha usado repelente de mosquitos en los últimos tres meses?* ☐ Yes ☐ No ☐ Unknown

5. Have you traveled outside of the country, for example to Mexico, in the past three months? *Ha viajado usted fuera del país, por ejemplo a México, en los últimos 3 meses?*

☐ Yes ☐ No ☐ Don't know

5a. If you have traveled to Mexico, how often do you travel to Mexico? Si ha viajado a Mexico, con que frecuencia?

☐ Daily ☐ Weekly ☐ Monthly ☐ Yearly

5b. *If case traveled monthly or yearly, fill out box below.* If yes, specify when and where. Start with most recent travel.

	Dates of Travel *Fechas del viaje* (e.g. Dec 2012–Jan 2013)	Duration of travel *Duración del viaje* (weeks)
Country 1		
Country 2		
Country 3		
Country 4		
Country 5		

6. Have you had a fever in the last three months? ***Ha tenido usted fiebre en los últimos tres meses?*** ☐ Yes ☐ No ☐ Multiple ☐ Don't know

Note: If respondent has had multiple fevers in the last 3 months, repeat all of question 6 using another copy of the survey for each fever episode that is separated by at least 1 week.

6a. First day of fever. ***Primer dia con fiebre*** **(**MM/DD/YYYY**)** _____/_____/_____

6b. Did you seek medical attention (e.g. doctor, pharmacist, healer, etc.)? ***Buscó usted atención médica (doctor, farmaceutico, curandero, etc.)?*** ☐ Yes ☐ No ☐Unknown

6b-1. If yes, what is the name of the health care facility where you sought care? ***Si busco ayuda médica, cual es el nombre del lugar?***

☐ Yuma Regional Medical Center ☐ Sunset Community Health Center

☐ Private physician ☐ Urgent care ☐ Mexico ☐ Unknown

☐ Other _____

6b-2. If yes, were you diagnosed with Dengue? ***Si es asi, le han diagnosticado con Dengue?***

☐ Yes ☐ No

6b-3. Were you hospitalized for this illness? ***Estuvo usted hospitalizado por esta enfermedad?*** ☐ Yes ☐ No ☐ Unknown

6b-4a. Duration of hospitalization. ***Duración de la hospitalización***
_____ days

6b-4b. Hospital Name. ***Nombre del hospital***

_____

6c. During your illness, did you have any of the following:

	Yes	No	Unknown	Comments
Headache /*Dolor de la cabeza*				
Body/muscle pain /*Dolor del cuerpo o los musculos*				
Eye pain/ Dolor de los ojos				
Rash /*Erupcion de la piel*				
Weakness /*Cansancio*				
Lack of Appetite / *Falta de appetito*				
Nausea/vomiting /*Nausea/vomito*				
Dizziness / *Mareos*				
Severe persistent abdominal pain /*Dolor abdominal severo y persistente*				
Persistent vomiting (≥3 times in 1 day) / *Vómito persistente*				
Bruising / *Moretones*				
Nose Bleeding / *Sangrado nasal*				
Bleeding from gums /*Sangrado en las encías*				
Blood in vomitus / *Vomito con sangre*				
Blood in urine / *Sangre en la orina*				
Blood in stool / *Sangre en el excremento*				
Black, tarry stools / *Excreta negra*				
Heavy vaginal bleeding / *Sangrado vaginal excesivo*				

7. **How do you pay for medical care? *Como paga por su cuidado medico?***

☐Travel to Mexico and pay out of pocket ☐Travel to Mexico and use employer insurance ☐AHCCCS

☐VA/Military/TriCare ☐Employer/private insurance ☐Don't access medical care ☐Other_____

Comments:

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Dengue Household Investigation in Arizona — Consent Form

The Arizona Department of Health Services and the U.S. Centers for Disease Control and Prevention (CDC) are investigating an illness called "dengue" that is spread by mosquitoes. There have been several cases of dengue in your community. We are trying to find out if the virus that causes dengue has been circulating locally. We are asking volunteer adults and children to answer a short survey and to have their blood drawn by a doctor or nurse and tested to see if they have had dengue. This investigation will help us learn what steps we need to take to prevent more dengue cases in your community.

If you agree, we will draw a small amount of blood – about 2 teaspoons – through a needle in your arm. We will test your blood to see if you have been exposed to dengue, and to see if you currently have dengue virus in your blood. We will tell you your test results in about a month. The blood draw may hurt a little. Some people may have bruising or bleeding at the needle site; some people feel dizzy when they have their blood drawn.

We will ask you to answer a brief survey. The survey will include questions about your health and recent activities, and about your household.

We will give you information about dengue, including tips for how to avoid dengue. Tips include avoiding mosquito bites by using mosquito repellent and wearing long sleeved shirts and pants, and emptying or covering water containers where mosquitoes breed. Also, if you have an illness that you think may be dengue, you should seek medical care immediately.

Taking part in this survey is voluntary.

If you choose to take part, you may stop at any time. We will keep your information private, to the extent allowed by law. There is no cost to you for taking part in this survey.

We are happy to answer any questions or concerns about the investigation. You may also contact the Yuma County Department of Health. Their phone number is 928-317-4550. We will give you a copy of this form to keep for your records.

Your blood sample will be sent to the CDC for testing. If any blood is left over after the tests are done, the CDC would like to store the remaining sample, if you agree. Stored samples may be used for future testing related to dengue or other similar illnesses, or for public health investigations that are relevant to your community.

□ Yes □ No I agree to allow my blood specimen to be stored at the Centers for Disease Control and Prevention Dengue Branch.

Your signature:_____ Date_____

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Investigación de dengue en hogares de Arizona- Forma de consentimiento

El Departamento de Servicios de Salud de Arizona y los Centros de Control y Prevención de Enfermedades (CDC) están investigando una enfermedad llamada dengue, que se transmite por mosquitos. Han habido varios casos de dengue en su comunidad. Estamos intentando investigar si el virus que causa dengue ha estado circulando localmente. Estamos pidiendo a voluntarios (adultos y niños) responder una breve encuesta y darnos una muestra de sangre tomada por un médico o enfermero/a. Es una prueba para ver si han tenido dengue. Esta investigación nos ayudará a decidir que acciones son necesarias para prevenir más casos de dengue en su comunidad.

Si está de acuerdo, tomaremos una pequeña muestra de sangre – unas dos cucharillas- de su brazo con una jeringa. Vamos a examinar la sangre para ver si usted ha sido expuesto/a a dengue, y para ver si usted en este momento tiene el virus del dengue en su sangre. Le comunicaremos los resultados de la prueba en un mes aproximadamente. El sacar de la sangre puede dolerle un poco. A algunas personas les puede causar moretones o salir un poco de sangre en el lugar del pinchazo; algunas personas pueden marearse cuando se les saque sangre.

Le pediremos que responda a una encuesta breve. La encuesta incluye preguntas sobre su salud, y actividades recientes y sobre su hogar. Le entregaremos información sobre dengue incluyendo sugerencias de como evitar la enfermedad. Las sugerencias incluyen evitar la picadura del mosquito usando repelente para mosquitos, llevar camisas de manga larga y pantalones, y vaciar o cubrir contenedores de agua donde los mosquitos se reproducen. También, si tiene una enfermedad que crea pueda ser dengue, le recomendamos buscar atención medica inmediatamente.

La participación en esta encuesta es voluntaria. Si decide participar, usted puede dejar de contestar en cualquier momento. Toda la información la mantendremos privada hasta el punto permitido por la ley. Participar en esta encuesta no tiene ningún costa para usted.

Estamos a su disposición para responder a cualquier pregunta o preocupación que tenga sobre esta investigación. También puede contactar al Departamento de Servicios de Salud del condado de Yuma. Su numero de teléfono es 928-317-4550. Le entregaremos una copia de este documento para que usted la guarde.

Su muestra de sangre será enviada al CDC para las pruebas. La muestra puede no usarse completamente y de ser así, el CDC quisiera almacenarla, si usted esta de acuerdo. Las muestras de sangre almacenadas podrían usarse para otras pruebas en el futuro relacionados con dengue u otras enfermedades similares, o para investigaciones de salud publica importante para su comunidad. No se harán pruebas de las muestras para condiciones genéticas o para evidencia de infección con VIH.

☐ Si ☐ No Estoy de acuerdo en permitir que mi muestra de sangre sea almacenada en la Subdivisión de Dengue de los Centros de Prevención y Control de Enfermedades (CDC).

Firma: _____ Fecha _____

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Dengue Household Investigation in Arizona —Children Assent Form

You may have heard of the dengue virus. We are doing an investigation to find out if people living in this neighborhood have had this infection, which comes from mosquito bites. We would like you to be in this investigation. You don't have to be in the investigation unless you want to. It is up to you.

What will happen?
If you let us, we will take a small amount of blood from you by putting a needle in your arm for a few seconds. First we will rub your skin with alcohol to clean it.

Will it hurt?
The needle stick in your skin may hurt a little for a few seconds.

Why are we doing this investigation?
This blood test is being done for this investigation. It is not necessary for you. We are not doing it because you are sick. It will tell us if you had dengue virus in your blood. We will tell you and your parents what we find out.

You can say, 'No'
You can say, 'No' and we won't do the blood test. You will not be in trouble if you say, 'No.' Would you like to participate?

Parental permission
If you agree allow your child to participate in this investigation, please check on of the boxes below regarding storage of your blood specimen, and sign or make your mark below:

□ Yes □ No I agree to allow my blood specimen to be stored at the Centers for Disease Control and Prevention Dengue Branch.

Your signature:_____ Date _____

Form Approved
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Investigación de dengue en hogares de Arizona-

Forma de consentimiento para niños

Puede que hayas escuchado sobre el virus del dengue. Estamos haciendo una investigación para averiguar si personas que viven en este barrio han tenido esta infección, causada por la picadura de mosquitos. Quisiéramos que participaras en esta investigación. No estás obligado a participar si no quieres. Es tu decisión.

¿Qué va a pasar?

Si nos lo permite, te vamos a sacar una muestra de sangre pinchándote con una aguja en tu brazo por unos segundos. Primero, vamos a frotarte la piel con alcohol para limpiarla.

¿Me va a doler?

El pinchazo de la aguja en tu piel puede dolerte un poco por unos segundos.

¿Por qué estamos haciendo esta investigación?

No la estamos haciendo porque estés enfermo, estamos haciendo esta prueba solo para esta investigación, no porque la necesites. La prueba nos dirá si tú has tenido el virus de dengue. Te diremos los resultados a ti y a tus padres.

Tu puedes decir 'NO'

Tu puedes decir 'no' y no te va a causar ningún problema. Quisieras participar?

_____

Permiso de tus padres

Si está de acuerdo en permitir que su hijo participe en esta investigación. Por favor, firme y marque una de las opciones.

☐ Si ☐ No Estoy de acuerdo en permitir que la muestra de sangre de mi hijo se almacene en la Subdivisión de Dengue de los Centros de Control y Prevención de Enfermedades.

Firma: _____Fecha: _____

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OMB#0929-1011
expires 03/31/2017

Infection Prevention and Control Questions for Investigation of Mucormycosis Outbreak in BMT Unit Undergoing Construction

EXISTING PRECAUTIONS

-What special precautions were taken for the construction period?
    -all patients in unit 41 and unit 42
    -Bone marrow transplant patients
    -neutropenic patients?
    -immunocompromised patients?
-What barriers or protection from rest of hospital exist (i.e. anteroom or waiting area separating BMT unit)?
-What precautions were taken when patients walk in the hallways? What precautions were taken when patients left the ward?

POTENTIAL EXPOSURES

-Have you noticed any water damage, leaks, discoloration, moisture/condensation?
-What equipment or supplies are used in the nose or mouths of patients? Where and how are they stored?
    (i.e. nasal sprays, nasal cannula, masks, nebulizer machines, medicine/water for breathing tx)
-Are any oral procedures done on the ward?
-Where are linens laundered and stored? How are they delivered to the wards?
-How are the units cleaned?
-How are respiratory viral panels obtained?
-How are patients transported off the units?

AIR SUPPLY

-What is the difference in air quality of rooms on the ward?
-What regular maintenance or upgraded precautions were done on the air supply (HEPA filters/air units)?
-Was ward duct system/plumbing exposed to construction area? Was HVAC system in construction isolated?
-Was vacuuming or air pressure systems used to protect air quality?
-Any air leaks from the outdoors?
-Was air supply shared between unit 41 and unit 42?
-What are the air pressure differentials on unit 41 and unit 42?
-How was air exhausted out of the construction area

CONSTRUCTION

-What other special precautions taken during construction?
-Was construction site completely isolated from ward?
-What kind of barriers were used to isolation construction area?
-What holes existed in completely isolating construction?
-Did any construction personnel have to access ward? If so, what precautions were used?
-How long after construction were barriers removed? How were barriers and debris removed?
-What cleaning was done after construction?
-What air testing or monitoring was done during construction and before barriers were removed?
-What was the flow of patient and construction traffic during theconstruction period?
-How was negative pressure attained? How was it monitored?
-How was demolition waste removed?

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Data Abstraction Form (long-version):
Matched-Case Control Investigation of Mucormycosis Disease among Bone Marrow Transplant Patients

Patient initials: _____
Patient Investigation #: _____
Medical Record #: _____

Date of Birth: ☐☐/☐☐/☐☐☐☐

Phone #: ☐☐☐-☐☐☐-☐☐☐☐

Reviewers Initials: _____
Review Date: _____

Confirmed Case of Nosocomial Rhinocerbral or Pulmonary Mucormycosis Infection
Rhinocerebral or pulmonary mucormycosis in a patient with a hematologic malignancy diagnosed by histopathology or culture between January 1, 2014 – present with an admission to Hospital A for at least 5 days within the 30 days prior to date of clinical suspicion for mucormycosis defined as initiation of antifungal medications for treatment of suspected mucormycosis

Clinical suspicion for mucormycosis is defined as initiation of antifungal medications for treatment of suspected mucormycosis

Definition of histopathological confirmation
Histopathological examination showing hyphae consistent with a mucormycete from needle aspiration or biopsy specimen

Definition of culture confirmation
Positive culture result for a sample obtained by sterile procedure from normally sterile

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Appendix 1: Case Abstraction Form

Section I: Demographic and Admission Data

1. Date of Birth: ____/____/____
2. Gender: _____
3. Race: (select all that apply) ☐ white/Caucasian ☐ black/African-American
   ☐ Asian, American ☐ Indian/Alaskan ☐ Hawaiian/Pacific Islander ☐ Not known
4. Ethnicity: ☐ Hispanic ☐ non-Hispanic ☐ Not known
5. Occupation: _____
6. City of Residence: _____ State of Residence: _____
7. Date of clinical suspicion for mucormycosis (mm/dd/yy): ____/____/____

Section II: Underlying Medical Conditions and Risk Factors

8. Underlying Conditions (active within 30 days prior to or at the time of clinical suspicion for mucormycosis)
9. Diabetes? ☐ Yes ☐ No
   a. If yes, specify last Hemoglobin A1C level within 30 days prior to mucormycosis diagnosis _____mmol/mol or ☐ Unknown
      Date of this HgA1C: __/__/____
   b. If yes, did the patient have Diabetic Ketoacidosis (DKA) during stay on unit? ☐ Yes ☐ No
10. Iron Overload? ☐ Yes ☐ No
    a. If yes, specify level _____µg/dL or ☐ Unknown
    b. If yes, check underlying disease
       ☐ Hemochromatosis
       ☐ Frequent Transfusion
       ☐ Other_____
11. Previous fungal infections? ☐ Yes ☐ No
    a. If yes, which organism?
       ☐ *Candida* spp. ☐ Aspergillus ☐ Mucormycosis ☐ Histoplasmosis
       ☐ Unknown ☐ Other_____
    b. If yes, date of diagnosis (mm/dd/yy): ____/____/____ or ☐ Unknown
12. Solid tumor malignancy? ☐ Yes ☐ No
    a. If yes, specify type: _____
13. Solid organ transplant (ever)? ☐ Yes ☐ No
    a. If yes, specify type (select all that apply: ☐ Renal ☐ Liver ☐ Lung ☐ Heart
       ☐ Other (specify) _____
    b. If yes, date of most recent transplant (mm/dd/yy): ____/____/____ or ☐ Unknown
14. Aplastic anemia? ☐ Yes ☐ No

15. Myelodysplastic syndrome (e.g. RA, RARS, RAEB-1, RAEB-2, RCMD, RCMD/RS, 5q syndrome, CMML)?
☐ Yes ☐ No

16. Hematologic malignancy? ☐ Yes ☐ No
    a. If yes, check all that apply:

☐ Leukemia (if marked, indicate subtype below)
- ☐ Acute myeloid leukemia (AML) (e.g. M0-M7)
- ☐ Chronic myeloid leukemia (CML) (e.g. Chronic phase, Accelerated phase, Blast crisis)
- ☐ Acute lymphocytic leukemia (ALL) (e.g. L1-L3)
- ☐ Chronic lymphocytic leukemia (CLL) (e.g. B cell origin, T cell origin, Adult T cell leukemia, Sezary syndrome, Unclassified)
- ☐ Other_____
- ☐ Unknown

☐ Hodgkin's disease (e.g. Lymphocyte predominant, Lymphocyte rich, Nodular sclerosis, Hairy cell leukemia, Mixed cellularity, Lymphocyte depleted, Large, granular lymphocyte leukemia)

☐ Non-Hodgkin's lymphoma (e.g. B cell origin, T cell origin)

☐ Multiple myeloma

☐ Other _____

☐ None

Transplant-related history

17. Has the patient had a hematopoietic stem cell transplant? ☐ Yes ☐ No
    a. If yes, check the type of transplant:

☐ Allogeneic

If allogeneic, which type: ☐ Identical Sib ☐ Haploidentical ☐ MUD ☐ Cord blood

☐ Autologous

b. If transplant recipient, date of most recent transplant (mm/dd/yy): ____/____/____

c. If transplant recipient, last CD4count within 30 days prior clinical suspicion for mucormycosis _____cells/mm^3 or ☐ Unknown

18. Has the patient had Graft-versus-host disease (GVHD): ☐ Yes ☐ No
    a. If yes, did they have acute GVHD? ☐ Yes ☐ No
        i. If yes, record grade (I-IV) _____ or ☐ Unknown
        ii. If yes, date of most recent acute GVHD diagnosis (mm/dd/yy): ____/____/____ or ☐ Unknown
        iii. If yes, is disease: ☐ Treated ☐ Untreated ☐ Unknown
    b. If yes, did they have chronic ☐ Yes ☐ No
        i. If yes, check one: ☐ limited ☐ extensive ☐ unknown

ii. If yes, date of most recent chronic GVHD diagnosis (mm/dd/yy): ____/____/___ or ☐ Unknown

iii. If yes, is disease: ☐ Treated ☐ Untreated ☐ Unknown

19. Has the patient undergone chemotherapy in the past 30 days prior to clinical suspicion for mucormycosis (If yes, document chemotherapy agents in the Medication section) ☐ Yes ☐ No

20. Has the patient had neutropenia (< 500 neutrophils per mm^3) within 30 days prior clinical suspicion for mucormycosis ? ☐ Yes ☐ No

    a. If yes, total number of neutropenic days within 30 day period: _____or ☐ Unknown

21. Has the patient received systemic corticosteroids at avg dose ≥0.3 mg/kg/day prednisone (or equivalent) for > 2 weeks? ☐ Yes ☐ No

Section III: Patient flow

22. Dates of admission during which mucormycosis was diagnosed? (mm/dd/yy): ____/____/____ -___/___/_____ or ☐ Ongoing, patient is still hospitalized

23. Where was patient admitted from?

☐ Home

☐ Nursing home/subacute care facility

☐ Other acute care hospital

☐ Unknown

a. If Nursing home, subacute care facility or acute care facility: specify facility name_____

24. Did this patient have any inpatient hospitalizations at Kansas University Medical Center within 30 days prior to clinical suspicion for mucormycosis? Note: include the admission during which the diagnosis was made.

☐ No ☐ Unknown

☐ Yes *(fill out the patient flow table below with room locations for all KUMC admissions within 30 days prior to clinical suspicion and including the admission during which the diagnosis was made. Please choose one location per row. If a patient moved rooms or units during a single admission, document that change in location on a separate line, using the same admission number. If a patient had exposure to the same location on a separate admission, please document this in a separate row with a new admission number. The earliest admission within 30 days of clinical suspicion should be denoted as admission #1))*

Admission #	**Location Unit**	**Room Number**	**Start and** (mm/dd/yy)	**Stop date** (mm/dd/yy)
	☐ Unit 41 ☐ Unit 42 ☐ Unit 45 ☐ Other, specify_____		____/____/____	____/____/____ or ☐ Ongoing

	☐ Unit 41 ☐ Unit 42 ☐ Unit 45 ☐ Other, specify_________		____/____/____	____/____/____ or ☐ Ongoing
	☐ Unit 41 ☐ Unit 42 ☐ Unit 45 ☐ Other, specify_________		____/____/____	____/____/____ or ☐ Ongoing

Section IV: Medications and Procedures

Medications

25. Has patient received immunosuppressive medications (including chemotherapy and GVHD treatment) within 30 days of clinical suspicion for mucormycosis? ☐ Yes ☐ No

a. If yes, please complete the following table:

Immunosuppressant medications	Medication Indication	Most recent dose prior to clinical suspicion (mm/dd/yy)	Total treatment days	Average daily dose (steroids only)
☐ MEC ☐ Flu/Cyt/TBI ☐ FLAG ☐ Intrathecal MTX ☐ Cyt/Daun ☐ Intrathecal Cyt ☐ Solumedrol ☐ Prednisone ☐ Dexamethasone ☐ None ☐ Other___________	☐ Induction chemo ☐ Maintenance chemo ☐ GVHD ☐ Other____________	____/____/____ ☐ Unknown		
☐ MEC ☐ Flu/Cyt/TBI ☐ FLAG ☐ Intrathecal MTX ☐ Cyt/Daun ☐ Intrathecal Cyt ☐ Solumedrol ☐ Prednisone ☐ Dexamethasone ☐ None ☐ Other___________	☐ Induction chemo ☐ Maintenance chemo ☐ GVHD ☐ Other____________	____/____/____ ☐ Unknown		
☐ MEC ☐ Flu/Cyt/TBI ☐ FLAG ☐ Intrathecal MTX ☐ Cyt/Daun ☐ Intrathecal Cyt ☐ Solumedrol ☐ Prednisone ☐ Dexamethasone ☐ None ☐ Other___________	☐ Induction chemo ☐ Maintenance chemo ☐ GVHD ☐ Other____________	____/____/____ ☐ Unknown		

☐ MEC ☐ Flu/Cyt/TBI ☐ FLAG ☐ Intrathecal MTX ☐ Cyt/Daun ☐ Intrathecal Cyt ☐ Solumedrol ☐ Prednisone ☐ Dexamethasone ☐ None ☐ Other___________	☐ Induction chemo ☐ Maintenance chemo ☐ GVHD ☐ Other____________	____/____/____ ☐ Unknown		
☐ MEC ☐ Flu/Cyt/TBI ☐ FLAG ☐ Intrathecal MTX ☐ Cyt/Daun ☐ Intrathecal Cyt ☐ Solumedrol ☐ Prednisone ☐ Dexamethasone ☐ None ☐ Other___________	☐ Induction chemo ☐ Maintenance chemo ☐ GVHD ☐ Other____________	____/____/____ ☐ Unknown		
☐ MEC ☐ Flu/Cyt/TBI ☐ FLAG ☐ Intrathecal MTX ☐ Cyt/Daun ☐ Intrathecal Cyt ☐ Solumedrol ☐ Prednisone ☐ Dexamethasone ☐ None ☐ Other___________	☐ Induction chemo ☐ Maintenance chemo ☐ GVHD ☐ Other____________	____/____/____ ☐ Unknown		

26. Did the patient receive systemic antifungal medication in the 30 days prior to clinical suspicion for mucormycosis that were given for reasons other than treatment of the mucormycosis infection (i.e. prophylaxis or treatment of another fungal infection)? **DO NOT** include drugs given to treat mucormycosis.

☐ Yes *(fill out the table below, select one antifungal drug per row)* ☐ No ☐ Unknown

Antifungal drug	Purpose	Start date (mm/dd/yy)	Stop date (mm/dd/yy)	Course Status at time of diagnosis
☐ Amphotericin B ☐ Fluconazole ☐ Micafungin ☐ Posaconazole ☐ Itraconazole ☐ Voriconazole	☐ Prophylaxis ☐ Treatment	Start: ____/____/____ ☐ Unknown	Stop:____/____/____ ☐ Unknown	☐ Completed ☐ Ongoing ☐ Unknown
☐ Amphotericin B ☐ Fluconazole ☐ Micafungin ☐ Posaconazole ☐ Itraconazole ☐ Voriconazole	☐ Prophylaxis ☐ Treatment	Start: ____/____/____ ☐ Unknown	Stop:____/____/____ ☐ Unknown	☐ Completed ☐ Ongoing ☐ Unknown

☐ Amphotericin B ☐ Fluconazole ☐ Micafungin ☐ Posaconazole ☐ Itraconazole ☐ Voriconazole	☐ Prophylaxis ☐ Treatment	Start: ____/____/____ ☐ Unknown	Stop:____/____/____ ☐ Unknown	☐ Completed ☐ Ongoing ☐ Unknown
☐ Amphotericin B ☐ Fluconazole ☐ Micafungin ☐ Posaconazole ☐ Itraconazole ☐ Voriconazole	☐ Prophylaxis ☐ Treatment	Start: ____/____/____ ☐ Unknown	Stop:____/____/____ ☐ Unknown	☐ Completed ☐ Ongoing ☐ Unknown

27. Did the patient have administration of any of the following products to the oral or nasal cavities in the thirty days prior to diagnosis? (Check all that apply)

☐ Nasal Packing ☐ nasal saline spray ☐ Afrin ☐ RVP ☐ Other_____

☐ None

28. Did the patient have any inpatient respiratory therapies in the 30 days prior to clinical suspicion for mucormycosis?

☐ Yes ☐ No ☐ Unknown

a. If yes, check all that apply:

☐ NC O2 ☐ NC O2 w/ humidified air ☐☐ Nebulized meds (SVN) ☐ MDIs ☐

☐ CPAP/BIPAP ☐ Other _____ ☐ None ☐ Unknown

b. If 'yes' to SVN or MDI, fill in the table below:

Drug	Mode of Administration (SVN or MDI)

Procedures

29. Did the patient have any procedures within 30 days prior to the clinical suspicion for mucormycosis?

☐ No ☐ Unknown

☐ Yes *(fill out the patient table below with all procedures within 30 days prior to clinical suspicion and including the admission during which the diagnosis was made. Please choose one procedure per row. If a patient had the same procedure on multiple occasions, please document each procedure on a separate row.)*

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Exp. Date 03/31/2017

Procedure	**Procedure type (document for OMFS/Dental, ENT, radiology and GI procedures**	**Date (mm/dd/yy)**	**Location/Unit**	**Procedure Room**	**If surgery or procedure, list orifices manipulated**
☐ Oral Intubation ☐ Nasal Intubation ☐ Oral Maxillary Facial/Dental ☐ ENT procedure ☐ Tracheostomy ☐ Bronchoscopy ☐ Radiology ☐ GI procedure ☐ Other________		____/____/____	☐ OR ☐ ICU ☐ Ward ☐ IR ☐ Radiology ☐ GI suite ☐ Unknown ☐ Other_________		
☐ Oral Intubation ☐ Nasal Intubation ☐ Oral Maxillary Facial/Dental ☐ ENT procedure ☐ Tracheostomy ☐ Bronchoscopy ☐ Radiology ☐ GI procedure ☐ Other________		____/____/____	☐ OR ☐ ICU ☐ Ward ☐ IR ☐ Radiology ☐ GI suite ☐ Unknown ☐ Other_________		
☐ Oral Intubation ☐ Nasal Intubation ☐ Oral Maxillary Facial/Dental ☐ ENT procedure ☐ Tracheostomy ☐ Bronchoscopy ☐ Radiology ☐ GI procedure ☐ Other________		____/____/____	☐ OR ☐ ICU ☐ Ward ☐ IR ☐ Radiology ☐ GI suite ☐ Unknown ☐ Other_________		

☐ Oral Intubation ☐ Nasal Intubation ☐ Oral Maxillary Facial/Dental ☐ ENT procedure ☐ Tracheostomy ☐ Bronchoscopy ☐ Radiology ☐ GI procedure ☐ Other_____		____/____/____	☐ OR ☐ ICU ☐ Ward ☐ IR ☐ Radiology ☐ GI suite ☐ Unknown ☐ Other_____		
☐ Oral Intubation ☐ Nasal Intubation ☐ Oral Maxillary Facial/Dental ☐ ENT procedure ☐ Tracheostomy ☐ Bronchoscopy ☐ Radiology ☐ GI procedure ☐ Other_____			☐ OR ☐ ICU ☐ Ward ☐ IR ☐ Radiology ☐ GI suite ☐ Unknown ☐ Other_____		
☐ Oral Intubation ☐ Nasal Intubation ☐ Oral Maxillary Facial/Dental ☐ ENT procedure ☐ Tracheostomy ☐ Bronchoscopy ☐ Radiology ☐ GI procedure ☐ Other_____			☐ OR ☐ ICU ☐ Ward ☐ IR ☐ Radiology ☐ GI suite ☐ Unknown ☐ Other_____		

Section V: Diagnosis

Radiology

30. Did the patient have a CT head or sinuses within 30 days of clinical suspicion for mucormycosis?

☐ Yes ☐ No ☐ Unknown

a. If yes, please list date of first CT head or sinuses after clinical suspicion of mucormycosis: ____/____/____ and findings

☐ Thrombosis ☐ Changes to the orbit ☐ Infarct ☐ Sinusitis ☐ Osteomyelitis

☐ Other findings: ____

31. Did the patient have a MRI brain within 30 days of clinical suspicion for mucormycosis?

☐ Yes ☐ No ☐ Unknown

a. If yes, please list date of first MRI brain after clinical suspicion of mucormycosis : ____/____/____ and findings

☐ Thrombosis ☐ Changes to the orbit ☐ Infarct ☐ Sinusitis ☐ Osteomyelitis

☐ Other findings: ____

Laboratory

Histopathology

32. Did patient have specimens sent to pathology for review within 30 days before or 30 days after clinical suspicion for mucormycosis? ☐ Yes ☐ No ☐ Unknown

a. If yes, please complete table:

Date (mm/dd/yy)	Anatomical site	Mucormycosis mentioned in report	Pathology Technique
____/____/____	☐ Nasal cavity ☐ Palate ☐ Orbit ☐ Lung ☐ Skin ☐ Brain ☐ Other_________ ☐ Unknown	☐ Yes ☐ No ☐ Unknown ☐ Other__________	☐ Morphology ☐ Stain ☐ Unknown ☐ Other_____________
____/____/____	☐ Nasal cavity ☐ Palate ☐ Orbit ☐ Lung ☐ Skin ☐ Brain ☐ Other_________ ☐ Unknown	☐ Yes ☐ No ☐ Unknown ☐ Other__________	☐ Morphology ☐ Stain ☐ Unknown ☐ Other_____________
____/____/____	☐ Nasal cavity ☐ Palate ☐ Orbit ☐ Lung ☐ Skin ☐ Brain ☐ Other_________ ☐ Unknown	☐ Yes ☐ No ☐ Unknown ☐ Other__________	☐ Morphology ☐ Stain ☐ Unknown ☐ Other_____________
____/____/____	☐ Nasal cavity ☐ Palate ☐ Orbit ☐ Lung ☐ Skin ☐ Brain ☐ Other_________ ☐ Unknown	☐ Yes ☐ No ☐ Unknown ☐ Other__________	☐ Morphology ☐ Stain ☐ Unknown ☐ Other_____________

Culture

33. Did patient have tissue or aspirate specimens sent for fungal culture within 30 days before or 30 days after clinical suspicion for mucormycosis? ☐ Yes ☐ No ☐ Unknown

a. If yes, please complete table (do not include blood cultures) :

Culture Date (mm/dd/yy)	Specimen Type	Result	Micro Technique
____/____/____	☐ Tissue, specify type: ______________ ☐ Aspirate ☐ Sinus fluid/drainage ☐ BAL ☐ Other_____________	☐ No growth of fungus ☐ Growth of fungus, specify organism________	☐ Morphology ☐ Thermotolerance ☐ Other_____________ ☐ Unknown
____/____/____	☐ Tissue, specify type: ______________ ☐ Aspirate ☐ Sinus fluid/drainage ☐ BAL ☐ Other_____________	☐ No growth of fungus ☐ Growth of fungus, specify organism________	☐ Morphology ☐ Thermotolerance ☐ Other_____________ ☐ Unknown
____/____/____	☐ Tissue, specify type: ______________ ☐ Aspirate ☐ Sinus fluid/drainage ☐ BAL ☐ Other_____________	☐ No growth of fungus ☐ Growth of fungus, specify organism________	☐ Morphology ☐ Thermotolerance ☐ Other_____________ ☐ Unknown
____/____/____	☐ Tissue, specify type: ______________ ☐ Aspirate ☐ Sinus fluid/drainage ☐ BAL ☐ Other_____________	☐ No growth of fungus ☐ Growth of fungus, specify organism________	☐ Morphology ☐ Thermotolerance ☐ Other_____________ ☐ Unknown

Section VI: Treatment

34. Did the patient undergo surgical treatment for mucormycosis? ☐ Yes ☐ No ☐ Unknown

a. If yes, complete the following chart of all surgical treatments for mucormycosis within 30 days after clinical suspicion.

Date (mm/dd/yy)	Surgery type
____/____/____	
____/____/____	
____/____/____	
____/____/____	
____/____/____	

35. Did the patient receive hyperbaric oxygen therapy (HBO)? ☐ Yes ☐ No ☐ Unknown
36. Was the patient treated with an antifungal drug for their mucormycosis infection? ☐ Yes ☐ No ☐ Unknown
    a. If yes, complete table:

Antifungal drug	Route	Start dates (mm/dd/yy)	Total treatment days	Course Status
☐ Amphotericin B ☐ Posaconazole ☐ Other, specify___________	☐ IV ☐ PO ☐ Topical administration ☐ Unknown	Start:___/___/____ ☐ Unknown		☐ Finished ☐ Ongoing ☐ Unknown
☐ Amphotericin B ☐ Posaconazole ☐ Other, specify___________	☐ IV ☐ PO ☐ Topical administration ☐ Unknown	Start:___/___/____ ☐ Unknown		☐ Finished ☐ Ongoing ☐ Unknown
☐ Amphotericin B ☐ Posaconazole ☐ Other, specify___________	☐ IV ☐ PO ☐ Topical administration ☐ Unknown	Start:___/___/____ ☐ Unknown		☐ Finished ☐ Ongoing ☐ Unknown

37. Did the patient receive iron chelator therapy? ☐ Yes ☐ No ☐ Unknown
    a. If yes, which medication? ☐ Deferasirox ☐ Deferiprone ☐ None ☐ Other (specify)_____________

Section VII: Outcomes

38. Was there extension of the disease from the original site observed at surgical diagnosis?
    ☐ Yes ☐ No ☐ Unknown
    a. If yes, did disease extend to:

Brain? ☐ Yes ☐ No   Orbit? ☐ Yes ☐ No
Sinuses? ☐ Yes ☐ No   Jaw? ☐ Yes ☐ No
Other? ☐ Yes ☐ No   If yes, specify____________

39. Did the patient suffer any complications? ☐ Yes ☐ No ☐ Unknown
    a. If yes, did patient develop:
    Nerve Palsy? ☐ Yes ☐ No Vascular Event? ☐ Yes ☐ No
    Enucleation? ☐ Yes ☐ No Renal failure from mediations? ☐ Yes ☐ No
    Other? ☐ Yes ☐ No If yes, specify_____
40. Status at discharge: ☐ Alive ☐ Deceased ☐ Unknown
41. Current status: ☐ Alive ☐ Deceased ☐ Unknown
    a. If deceased, date of death: (mm/dd/yy)____/____/____
    b. If deceased, what was the cause of death? Specify_____ or ☐ Unknown
    c. If deceased, how was cause of death determined? ☐ Chart Review ☐ Death Certificate ☐ ICD-9 ☐ Autopsy report ☐ Other_____

Section VIII: Symptoms/Signs

42. When was the onset of symptoms? (mm/dd/yy)____/____/____ or ☐ Unknown

Please check all symptoms and signs which were documented within 30 days prior to clinical suspicion for mucormycosis

Constitutional

43. Fever? ☐ Yes ☐ No ☐ Unknown
44. Headache? ☐ Yes ☐ No ☐ Unknown

Ophthalmologic/Integument

45. Reddish skin over nose? ☐ Yes ☐ No ☐ Unknown
46. Swollen skin over nose? ☐ Yes ☐ No ☐ Unknown
47. Proptosis? ☐ Yes ☐ No ☐ Unknown

Respiratory

48. Nasal congestion? ☐ Yes ☐ No ☐ Unknown
49. Rhinorrhea? ☐ Yes ☐ No ☐ Unknown
50. Dilated pupil? ☐ Yes ☐ No ☐ Unknown
51. Nonreactive pupil? ☐ Yes ☐ No ☐ Unknown
52. Necrotic lesions visualized in mouth? ☐ Yes ☐ No ☐ Unknown
53. Necrotic lesions visualized within nares? ☐ Yes ☐ No ☐ Unknown
54. Edema of the nasal turbinates? ☐ Yes ☐ No ☐ Unknown
55. Edema of the posterior pharynx? ☐ Yes ☐ No ☐ Unknown
56. Sputum production? ☐ Yes ☐ No ☐ Unknown
57. Hemoptysis? ☐ Yes ☐ No ☐ Unknown

58. Epistaxis? ☐ Yes ☐ No ☐ Unknown
59. Dyspnea? ☐ Yes ☐ No ☐ Unknown

Neurologic

60. Facial pain? ☐ Yes ☐ No ☐ Unknown
61. Tinnitus? ☐ Yes ☐ No ☐ Unknown
62. Ptosis of the eyelid? ☐ Yes ☐ No ☐ Unknown
63. Cranial Nerve deficits? ☐ Yes ☐ No ☐ Unknown
64. Alerted Mentation? ☐ Yes ☐ No ☐ Unknown
65. Blindness of the eye? ☐ Yes ☐ No ☐ Unknown

Entrevistas de Seguimento na Comunidade

Formulário Aprovado
OMB N0. 0920-1011
Data de validade:
31/03/2017

Nome

Apelido

Idade

Sexo

M F

Codigo do individuo

Consentimento verbal obtido

Bairro

25 de Junho | Caho | Vale de Chitima | Guebuza
Boroma | Catondo | Cawira B | Cadongolo
Josina Machel | Cawira A | 1 de Maio | Outro

Teve alguns sintomas durante as ultimas quatro semanas?

Voce foi atendido no banco socorro ou centro de saude por causa dessas sintomas?

Se sim, foi internado?

Data de internamento

Sintomas Neurologicas

Marcar se o paciente tenha esta sintoma agora ou teve esta sintoma durante as ultimas 4 semanas. Se o paciente nao saba, escreve "nao sabe." Escreve "ate agora" se o paciente tenha esta sintoma agora.

Fraqueza generalizada	Dia de inicio		Data resolvido	
Fraqueza nos membros	Dia de inicio		Data resolvido	
Perda de sensacao (maos ou pes)	Dia de inicio		Data resolvido	
Formigueiro	Dia de inicio		Data resolvido	
Problemas de equilibrio	Dia de inicio		Data resolvido	
Cefaleia	Dia de Inicio		Data resolvido	
Tontura	Dia de inicio		Data resolvido	
Visao embacada	Dia de inicio		Data resolvido	
Perda da visão periférica	Dia de inicio		Data resolvido	
Perda de audicao	Dia de inicio		Data resolvido	
Zumbido dos ouvidos	Dia de inicio		Data resolvido	
Dificuldades de engolir	Dia de inicio		Data resolvido	
Perda da memoria	Dia de inicio		Data resolvido	
Dificuldades de sorrir ou fechar dos olhos?	Dia de inicio		Data resolvido	
Tremor	Dia de inicio		Data resolvido	
Convulsoes	Dia de inicio		Data resolvido	

Outras

Gastrointestinal

☐ Dor abdominal	Dia de inicio		Data resolvido	
☐ Nausea	Dia de inicio		Data resolvido	
☐ Vomitos	Dia de inicio		Data resolvido	
☐ Diarreia	Dia de inicio		Data resolvido	
☐ Olhos amarelos	Dia de inicio		Data resolvido	

Cardiopulmonary

☐ Dor toraxica	Dia de inicio		Data resolvido	
☐ Palpitacao	Dia de inicio		Data resolvido	
☐ Dificultade de respiracao	Dia de inicio		Data resolvido	
☐ Inchaco nas pernas	Dia de inicio		Data resolvido	

Sintomas Gerais e Outros

☐ Rash ou outras manchas novas no pele (descrever)	Dia de inicio		Data resolvido	
☐ Mudancas nos cabelos ou unhas (descrever)	Dia de inicio		Data resolvido	
☐ Febre	Dia de inicio		Data resolvido	
☐ Contusoes anormal	Dia de inicio		Data resolvido	
☐ Sangramento	Dia de inicio		Data resolvido	
☐ Quantidade de urina dimunuiu	Dia de inicio		Data resolvido	
☐ Perda de appetite?	Dia de inicio		Data resolvido	

Voce ja se sente completamente curado dessa doenca?

Os seus sintomas afectaram as suas actividades de vida diárias?

Notas / Outro

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

Tainted Beverage Investigation
Medical Record Abstraction

Dados Clinicos dos Centros de Saude em Chitima e Songo

Codigo individual

Nome

Apelido

Idade

Sexo

- M
- F

Barrio de residencia

- 25 de Junho
- Boroma
- Josina Machel
- Caho
- Catondo
- Cawira A
- Vale de Chitima
- Cawira B
- 1 de maio
- Guebuza
- Cadongolo
- Outro

Data de inicio dos sintomas

Hora de inicio dos sintomas

Hospital de internamento

Data de internamento

Hora de interamento

Desfecho

Data de desfecho

Hora de desfecho

Sinais Vitais #1

Data

Hora

Pulso

Pressao Arterial Sistólica

Pressao Arterial Diastólica

Frequência Respiratória

Temperatura (C)

Sinais Vitais #2

Data

Hora

Pulso

Pressao Arterial Sistólica

Pressao Arterial Diastólica

Frequência Respiratória

Temperatura (C)

Sinais Vitais #3

Data

Hora

Pulso

Pressao Arterial Sistólica

Pressao Arterial Diastólica

Frequência Respiratória

Temperatura (C)

Dados Clinicos dos Centros de Saude em Chitima e Songo

Laboratório #1

Data | Hora

WBC | Hgb | HCT | Plt | PMN | Lymphocytes | MXD

Na | K | HCO3 | Cl | BUN | Cr | Gluc

AST (SGOT) | ALT (SGPT) | TBili | Alk Phos | Total Protein | Albumin

Laboratório #2

Data | Hora

WBC | Hgb | HCT | Plt | PMN | Lymphocytes | MXD

Na | K | HCO3 | Cl | BUN | Cr | Gluc

AST (SGOT) | ALT (SGPT) | TBili | Alk Phos | Total Protein | Albumin

Outros Resultados Laboratoriais

Problemas Médicos

Medicamentos em Casa

Dados Clinicos dos Centros de Saude em Chitima e Songo

Sintomas

- [ ] Cefaleia
- [ ] Dor abdominal
- [ ] Tosse
- [ ] Febre
- [ ] Tontura
- [ ] Náusea
- [ ] Dificuldade em respirar
- [ ] Agitacao
- [ ] Parestesias
- [ ] Vómitos
- [ ] Dor torácica
- [ ] Convulsos
- [ ] Fraqueza
- [ ] Diarréia
- [ ] Palpitacao
- [ ] Tremor
- [ ] Outras Sintomas

Se sim, quais sintomas? _____

Exame Físico

- [ ] Ataxia
- [ ] Ternura abdominal
- [ ] Dispneia
- [ ] Agitacao
- [ ] Diminuição da sensação
- [ ] Vómitos
- [ ] Roncos
- [ ] Coma
- [ ] Fraqueza muscular
- [ ] Diarréia
- [ ] Edema nas pernas
- [ ] Convulsos
- [ ] Reflexos diminuídos
- [ ] Vômito sanguinolento
- [ ] Icterícia
- [ ] Tremor
- [ ] Outros achados

Se sim, quais achados? _____

Narrativa

Intervenções

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

Tainted Beverage Questionnaire

Follow up Interviews in the Community
Patient ID
First Name, Last Name, Age, M/F
Neighborhood of residence (radio button list)
Have you had other symptoms during the last 4 weeks? (drop down Y/N)
Have you been seen at the first aid clinic or health center because of these symptoms? (dropdown Y/N)
If yes, were you hospitalized? (dropdown Y/N) / Date of hospitalization:

Neurologic symptoms
Checkboxes:
Weakness - Date of onset/Date of resolution
Generalized weakness – Date of onset/Date of resolution
Extremity weakness - Date of onset/Date of resolution
Loss of sensation - Date of onset/Date of resolution
Paresthesias - Date of onset/Date of resolution
Problems with equilibrium - Date of onset/Date of resolution
Headache - Date of onset/Date of resolution
Dizziness - Date of onset/Date of resolution
Visual changes - Date of onset/Date of resolution
Blurry vision - Date of onset/Date of resolution
Double vision - Date of onset/Date of resolution
Loss of peripheral vision - Date of onset/Date of resolution
Hearing loss - Date of onset/Date of resolution
Buzzing in the ears - Date of onset/Date of resolution
Difficulty swallowing - Date of onset/Date of resolution
Memory loss - Date of onset/Date of resolution

GI symptoms
Checkboxes:
Abdominal pain - Date of onset/Date of resolution
Nausea - Date of onset/Date of resolution
Vomiting - Date of onset/Date of resolution
Diarrhea - Date of onset/Date of resolution
Yellow eyes - Date of onset/Date of resolution

Cardiopulmonary
Checkboxes:
Chest pain - Date of onset/Date of resolution
Palpitations - Date of onset/Date of resolution
Difficulty breathing - Date of onset/Date of resolution

General and other symptoms

Checkboxes:
Fever - Date of onset/Date of resolution
Chills - Date of onset/Date of resolution
Leg swelling - Date of onset/Date of resolution
Bruising - Date of onset/Date of resolution
Bleeding - Date of onset/Date of resolution
Decreased urine output - Date of onset/Date of resolution
(ADD) Loss of appetite - Date of onset/Date of resolution

Do you feel that you are completely cured of this disease? (dropdown Y/N)
If no, are these symptoms affecting your activities of daily living?

Notes/other (free text)

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Tainted Beverage - Medical Record Abstraction

Clinical data of the Health Centers in Chitima and Songa
Patient ID
First Name, Last Name, Age, M/F
Neighborhood of residence (radio button list)
Date of symptom onset, time of symptom onset
Date of hospitalization, hour of hospitalization
Where hospitalized (drop down: Chitima/Songo/Other)
Date of disposition, hour of disposition
Final disposition (drop down: discharged home, transferred, left AMA, died, no information)

Vital Signs #1: Date, hour, pulse, SBP, DBP, RR, temp
Vital Signs #2: Date, hour, pulse, SBP, DBP, RR, temp
Vital Sings #3: Date, hour, pulse, SBP, DBP, RR, temp

Laboratory Data #1: Date, hour, WBC, Hgb, Hct, Plt, PMN%, Lymph%, MXD% (eos/baso/monocytes), Na, K, Cl, HCO3, Cl, BUN, Cr, Gluc, AST, ALT, TBili, Alk Phos, TP, Alb
Laboratory Data #2: Date, hour, WBC, Hgb, Hct, Plt, PMN%, Lymph%, MXD% (eos/baso/monocytes), Na, K, Cl, HCO3, Cl, BUN, Cr, Gluc, AST, ALT, TBili, Alk Phos, TP, Alb
Laboratory Data #3: Date, hour, WBC, Hgb, Hct, Plt, PMN%, Lymph%, MXD% (eos/baso/monocytes), Na, K, Cl, HCO3, Cl, BUN, Cr, Gluc, AST, ALT, TBili, Alk Phos, TP, Alb
Other laboratory data (free text, consider adding malaria testing as a separate entry)

Medical problems (free text):
Home medications (free text):

Symptoms (checkboxes):
Headache, dizziness, paresthesias, weakness, abdominal pain, nausea, vomiting, diarrhea, cough, breathing difficulties, chest pain, palpitations, fever, agitation, convulsions, tremor, other symptoms (if yes, which other symptoms)?

Physician exam (checkboxes):
Ataxia, diminished sensation, muscle weakness, diminished reflexes, abdominal tenderness, vomiting, diarrhea, hematemesis, dyspnea, rhonchi, leg edema, icterus, agitation, coma, convulsions, tremor

Narrative (free text):

Interventions (free text):

Exposure History for Blood Donors

LAST NAME: _____ FIRST NAME: _____

SEX: ☐Male ☐Female DATE OF BIRTH: ____/____/____ AGE____

RACE: ☐White ☐Black ☐Asian ☐Other ETHNICITY: ☐Hispanic ☐Non-Hispanic ☐Unknown

PHONE: ( ) _____ -_____

HOME ADDRESS STREET: _____

CITY:_____ STATE:_____ZIP:_____

1. What is your occupation (job title)? _____
2. Were you on the inspection tour on January 20-23? ____Yes ____No
3. Did you work with **rhesus macaque IL38 or rhesus macaque1b22?**

   Husbandry? ____Yes ____No ____Maybe/Unsure*

   Treatment of sick animal? ____Yes ____No ____Maybe/Unsure

   Necropsy? ____Yes ____No ____Maybe/Unsure

   Clinical Pathology? ____Yes ____No ____Maybe/Unsure

   Other (specify) _____
4. Have you worked in the TNPRC now or in the past? ____Yes ____No ____Maybe/Unsure
5. Have you previously worked with Burkholderia pseudomallei?

   ____Yes ____No ____Maybe/Unsure

   If yes, please explain any possibly exposures:

_____

6. Did you exit the vehicle while inside the facility? ____Yes ____No ____Maybe/Unsure
7. Were you in the van driven by Skip Bohm or by Jim Blanchard on day 1 (circle).
8. Did you:

Area	8. a. Look from outside?	8. b. Enter inside?	8. c. Did you touch anything inside?
Necropsy Antiroom			
Necropsy Suite			
Visit sample transfer area			
Animal Clinic			
Other Areas			

9. Did you touch any soil or water while on the tour? _____Yes _____No _____Maybe/Unsure
10. Location/Site?

11. Do you have any of the following chronic conditions that can increase your risk of disease from Burkholderia exposure?

Diabetes	_____Yes	_____No	_____Maybe/Unsure
Chronic liver or kidney disease	_____Yes	_____No	_____Maybe/Unsure
Alcohol abuse	_____Yes	_____No	_____Maybe/Unsure
Hematologic malignancy (blood cancers such as leukemia)	_____Yes	_____No	_____Maybe/Unsure
Neutropenia or neutrophil dysfunction (low white blood cell count)	_____Yes	_____No	_____Maybe/Unsure
Chronic lung disease (asthma, bronchitis, emphysema, cystic fibrosis)	_____Yes	_____No	_____Maybe/Unsure
Thalassemia	_____Yes	_____No	_____Maybe/Unsure
Long-term steroid use	_____Yes	_____No	_____Maybe/Unsure
Other form of immunosuppression	_____Yes	_____No	_____Maybe/Unsure

12. Have you ever traveled or been deployed during military service to areas where *Burkholderia pseudomallei* occurs naturally, including:
Asia: Thailand, Laos, Singapore, Vietnam, Malaysia, Burma, Vietnam, Taiwan, China
Northern Australia
Africa: South Africa, Madagascar
Central, South America and Caribbean

Country	Dates of Visit	Working in Soil or Water

13. What animals do you have in your home or regularly interact with? If possible include species and numbers.

_____
_____
_____

Risk Assessment for individuals who may have had contact with *Burkholderia pseudomallei*

Name: _____Department: _____

Date completed: _____Contact phone number: _____
Please complete and return to Occupational Health as soon as possible,

***PLEASE CHECK ALL APPROPRIATE BOXES*:**

LOW RISK

☐ Inadvertent opening of a lid of an agar plate growing *B. pseudomallei*
☐ Inadvertent sniffing of agar plate growing *B. pseudomallei*
☐ Splash event leading to visible contact of *B. pseudomallei*
☐ Spillage of small volume of liquid culture within a functioning biologic safety cabinet
☐ Contamination of intact skin with culture

HIGH RISK

☐ The presence of any predisposing condition **without** proper PPE (personal protective equipment) diabetes mellitus; chronic liver or kidney disease; alcohol abuse; long-term steroid use; hematologic malignancy; neutropenia or neutrophil dysfunction; chronic lung disease (including cystic fibrosis); thalassemia; any other form of immunosuppression
☐ Needlestick or other penetrating injury with implement contaminated with *B. pseudomallei*
☐ Bite or scratch by experimental animal infected with *B. pseudomallei*
☐ Splash event leading to contamination of mouth or eyes
☐ Generation of aerosol outside biologic safety cabinet (e.g., sonication, centrifuge incident)

Acknowledgements:

☐ I do not believe I have any of the above low or high risk factors.
☐ I have had the opportunity to have all of my questions answered by Occupational Health
☐ I have had the opportunity to have all of my questions answered by the Office of Environmental Health and Safety
☐ I have had the opportunity to have all of my questions answered by the Office of Biosafety
☐ I am aware that I can contact Occupational Health at 985.966.6515 or the infectious disease department at Tulane at 504.988.5263 if I develop any symptoms of infection.
☐ I would like to request a private counseling session with (circle one/or more)
Biosafety OEHS Occupational Health

Employee Signature: _____