BACKGROUND
The Pan American Health Organization (PAHO) / World Health Organization (WHO), on 7 May 2015, issued an Epidemiological Alert recommending that Member States establish and maintain the capacity for Zika virus infection detection, clinical management and an effective public communication strategy to reduce the presence of the mosquito that transmits this disease, particularly in areas where the vector is present.

PHASE 1: PREPAREDNESS
During the preparedness phase, the epidemiological surveillance system of Zika virus infection in Jamaica will be strengthened through the following strategies:

1. Training the epidemiological and clinical staff on Zika management
2. Standardizing a Case Definition
3. Designation of Zika Fever as a Class 1 Notifiable disease
4. Laboratory surveillance for confirmation of autochthonous transmission of Zika Infection

Clinical Features
Common Clinical Features
- Fever
- Non-purulent conjunctivitis
- Headache
- Myalgia
- Arthralgia
- Asthenia
- Maculopapular rash
- Oedema in the lower limbs
Less Common Clinical Features
  o Retro-orbital pain
  o Anorexia
  o Vomiting
  o Diarrhoea
  o Abdominal pain
  o Mild Thrombocytopenia (laboratory finding)
  o Mild Leucopenia (laboratory finding)

Severe Clinical Features
  o Guillain Barre
  o Meningoencephalitis
  o Thrombocytopenia purpura

Suspected Case (Preparedness Phase):

Patient with rash or elevated body temperature (> 37.2 °C) with one or more of the following symptoms (not explained by other medical conditions):
  • Arthralgia or myalgia
  • Non-purulent conjunctivitis or conjunctival hyperaemia
  • Headache or malaise
in someone who resides in or has visited epidemic or endemic areas within two weeks prior to the onset of symptoms.

Confirmed Case:

A suspected case with laboratory positive result for the specific detection of Zika virus. (see figure 1).
Designation of Zika Fever as a Class 1 Notifiable Disease

Zika Fever is a Class 1 Notifiable disease and is to be notified on suspicion within 24 hours to the Parish Health Department and the National Epidemiology Unit, Ministry of Health. Cases (confirmed by laboratory testing) should also be notified as a Class 1 Notifiable disease to the Parish Health Department and the National Epidemiology Unit, Ministry of Health.

Laboratory Testing for Zika

Samples for serology should be sent to the National Public Health Laboratory along with the completed CARPHA Laboratory form. The following are the requirements for the sampling and for the conservation of the sample:

- **Type of sample:** Serum: 4-5 mls. of blood in a plain red top tube
  - Acute phase: Until 8 days after symptom onset
  - Convalescent phase: 10–15 days after symptom onset
**Conservation of the sample:**
- Keep refrigerated (2°–8°C) if sample will be processed within 48 hours at the NPHL.
- Keep frozen (-10 to -20°C) if sample will be processed after the first 48 hours.
- Maintain frozen (-70°C) if sample will be processed after one week.

**Method for Confirmation of the Start of a Zika Outbreak in Jamaica**

Laboratory surveillance will be used as the methodology for the confirmation of autochthonous transmission.

**Inclusion Criteria**

The following are inclusion criteria for the laboratory surveillance to confirm autochthonous transmission:

1. Samples that are negative for Dengue and CHIK testing **AND** consistent with ZIKA.
2. Cases consistent with clinical features of Zika: fever **AND** non-purulent conjunctivitis
3. The samples should be processed according to the day of sampling with respect to the onset of symptom. The algorithm in Appendix 2 should be strictly followed by the laboratory. At most 25 of the samples positive for Zika should be sent to the collaborating laboratory and 10% of the negative samples that fit the Case Definition.

**PHASE 2: ESTABLISHED OUTBREAK**

The confirmation of an imported or autochthonous case of Zika Fever will activate the Ministry of Health response mechanisms, the National and International Epidemiological Focal Point, National IHR Focal Point and the PAHO / WHO IHR Contact Point will be notified, as described by the International Health Regulations (Appendix 1).

**Enhanced Surveillance**

The clinical and epidemiological surveillance system will be enhanced based on the epidemiology of the confirmed case(s).
- The case definitions will be changed to:
  - **Suspected Case (Established Outbreak):**
    - Patient with rash or elevated body temperature (≥ 37.2 °C) with one or more of the following symptoms (not explained by other medical conditions):
      - Arthralgia or myalgia
      - Non-purulent conjunctivitis or conjunctival hyperaemia
      - Headache or malaise
**Confirmed Case:**
A suspected case with laboratory positive result for the specific detection of Zika virus.

- All persons fitting the Case Definition should be notified immediately to the Parish Health Department and the National Epidemiology Unit, Ministry of Health.
- A detailed investigation of all suspected cases is to be conducted. A report should be submitted within 48 hours using the standard Investigation Form (Appendix 2), but not limited to this form.
- Surveillance of persons with similar exposure is to be conducted for at least 21 days post exposure. A line listing is to be completed, indicating the possible date of exposure, the date that person was contacted and their clinical status recorded.
- Active community surveillance is to be conducted where indicated (Appendix 3).

**Characterization of the Outbreak**

The data related to the Zika fever outbreak will be analyzed regularly (weekly or daily as required) to characterize the outbreak.

- Demographic characteristics of the outbreak
- Monitoring and description of the spread of Zika virus
- Clinical features
- Clinical severity and impact on society
- Identification of risk factors for severe disease

**PHASE 3: END OF THE OUTBREAK**

Based on the epidemiological assessment, a decision will be made regarding declaration of the end of the outbreak.

**PHASE 4: ENDEMIC SEASONAL TRANSMISSIONS**

Zika fever as a Class 1 Notifiable disease will be monitored according to the current Integrated Surveillance system. The preparedness plan will be reviewed and revised in keeping with the epidemiological situation to maintain preparedness.
## FRAMEWORK FOR EPIDEMIOLOGICAL SURVEILLANCE OF ZIKA

<table>
<thead>
<tr>
<th>Expected Result</th>
<th>Indicators</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Zika Epidemiological Surveillance system for timely alert and opportune response implemented.</strong></td>
<td>• Zika surveillance systems in place (e.g., laboratory data, clinical data, entomological data)</td>
</tr>
<tr>
<td></td>
<td>• Number of sites (Hospitals, Health Centres, and Private Doctors) within the country that have the information about Zika fever (Epidemiological Surveillance Plan)</td>
</tr>
<tr>
<td></td>
<td>• Zika fever outbreaks reported according to IHR (2005) guidelines.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Epi Activities</th>
<th>Tasks</th>
<th>Responsible Persons</th>
<th>Budget</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Phase 1: Preparedness</strong></td>
<td>Include Zika as part of Disease Surveillance System</td>
<td>CMO, National Epidemiologist, Medical Epidemiologist, Communicable Diseases, Director, National Laboratory Services (NLS), Director, EDMSSB</td>
<td></td>
</tr>
<tr>
<td></td>
<td>System ï Class 1 Notifiable disease (reported immediately on suspicion, within 24hrs).</td>
<td></td>
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<tr>
<td></td>
<td>Standardize a Zika Case Definition (clinical and epidemiological) based on PAHO/WHO guidelines.</td>
<td></td>
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</tr>
<tr>
<td></td>
<td>Set up clinical, laboratory and epidemiological surveillance</td>
<td></td>
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</tr>
<tr>
<td></td>
<td>Standardize the methods used to determine the criteria (clinical, epidemiological and laboratory) to confirm the start of a Zika outbreak</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Train the epidemiological, laboratory and clinical staff on Zika fever management</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Review and revise epidemiological surveillance plan</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Epi Activities</td>
<td>Tasks</td>
<td>Responsible Persons</td>
<td>Budget</td>
</tr>
<tr>
<td>---------------</td>
<td>-------</td>
<td>---------------------</td>
<td>--------</td>
</tr>
<tr>
<td><strong>Phase 2: Established outbreak</strong></td>
<td>Declare the start of the outbreak</td>
<td>CMO</td>
<td></td>
</tr>
<tr>
<td>1. Confirmation/Declaration of the beginning of an outbreak</td>
<td>Classify cases as locally-acquired or imported cases.</td>
<td>National Epidemiologist, Medical Epidemiologist, Communicable Diseases</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Notify the National and International Epidemiological Focal Points, National IHR Focal Point and PAHO / WHO IHR Contact Point, according to IHR (2005).</td>
<td>IHR NFP Ŷ Officer with Primary Responsibility</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Enhance clinical, epidemiological and laboratory surveillance systems.</td>
<td>National Epidemiologist, Medical Epidemiologist, Communicable Diseases, Director, NLS</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Review and revise epidemiological surveillance plan</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Monitor and assess the epidemic situation</strong></td>
<td>Activate and maintain the National, Regional and Parish Emergency Operations Centres / Coordination mechanisms.</td>
<td>CMO, Director. EDMSS, National Epidemiologist, MOH NEOC, Ministry of Health Emergency and Disaster Risk Management Committee</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Establish routine communication mechanisms with parish and regional health authorities and international organizations</td>
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<tr>
<td></td>
<td>Analyze and interpret weekly data and develop a daily and weekly outbreak report.</td>
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<tr>
<td></td>
<td>Provide support and technical assistance to the field</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Epi Activities</td>
<td>Tasks</td>
<td>Responsible Persons</td>
<td>Budget</td>
</tr>
<tr>
<td>--------------------------------------------</td>
<td>----------------------------------------------------------------------</td>
<td>-------------------------------------------------------------------------------------</td>
<td>--------</td>
</tr>
<tr>
<td><strong>PHASE 3: End of the outbreak</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Analyze the actions taken during the outbreak</td>
<td>Maintain the monitoring and evaluation activities.</td>
<td>CMO, Director, EDMSS, National Epidemiologist, Ministry of Health Emergency and Disaster Risk Management Committee, Director, National Laboratory Services (NLS)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Conduct after-action evaluations to identify and remedy gaps in the country surveillance and response program.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Review and revise Epidemiological Surveillance Plan</td>
<td>National Epidemiologist, Medical Epidemiologist, Communicable Diseases, Director, NLS</td>
<td></td>
</tr>
<tr>
<td><strong>PHASE 4: Endemic seasonal transmissions</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Maintain the surveillance activities</td>
<td>Establish a regular, integrated surveillance program.</td>
<td>CMO, Director, EDMSS, National Epidemiologist, Ministry of Health Emergency and Disaster Risk Management Committee</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Review evaluation of the plan and revise the preparedness plan to ensure preparedness is maintained.</td>
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<td></td>
</tr>
</tbody>
</table>
APPENDIX 1

Algorithm for Notification and Intervention of a Suspected Case

Suspected case

Laboratory (NPHL)

Negative

Exclude and consider other Aetiologies

Positive

Confirmed case

Notification

Parish Health Department

Alert Vector Control Team and Health Facilities

Ministry of Health

Confirm outbreak, Investigate and Control
# APPENDIX 2

## MINISTRY OF HEALTH

### JAMAICA

### ZIKA FEVER

## CASE INVESTIGATION FORM

### Reporting Centre: Date of Report / / (dd/mm/yy)

## 1. Patient information

<table>
<thead>
<tr>
<th>Name</th>
<th>Age (yrs)</th>
<th>Sex:</th>
<th>M</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Address</th>
<th>Phone #</th>
<th>D.O.B: / / (dd/mm/yy)</th>
<th>Community (STATIN):</th>
<th>Case #</th>
<th>Occupation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

## 2. Clinical Data

<table>
<thead>
<tr>
<th>Date of onset of illness / / (dd/mm/yy)</th>
<th>(dd/mm/yy)</th>
</tr>
</thead>
</table>

### Clinical features

- **Fever**
- **Arthralgia**
- **Is the Arthralgia Severe?**
- **Non-purulent Conjunctivitis**
- **Lower Limb Oedema**
- **Periarticular oedema**
- **Skin manifestations**
- **Arthralgia (joint pain)** (Circle/list joints involved)
- **Myalgia**
- **Back pain**
- **Headache**
- **Retro-orbital Pain**
- **Asthenia (generalized weakness)**
- **Others: (Specify)**
- **Diarrhoea**

### Additional Clinical Features:

### Risk Factors:

<table>
<thead>
<tr>
<th>Pregnancy</th>
<th>Other:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Diabetes</th>
<th>Cardiovascular diseases</th>
<th>Sickle Cell Disease</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Clinical diagnosis:

<table>
<thead>
<tr>
<th>Is/was this patient hospitalised?</th>
<th>Y</th>
<th>N</th>
<th>Date (s)</th>
<th>Outcome of illness</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Resolution of symptoms</th>
<th>Y</th>
<th>N</th>
<th>Date (s)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
3. Exposure and Travel History

| Has the patient travelled to a Zika fever endemic/epidemic area within the past 2 weeks | Y | N | Date | Details |
| Has the patient been in contact with a Zika fever case within the past 2 weeks | □ | □ |

| Country, Endemic/Epidemic Area | Arrival-Date & Time | Departure-Date & Time | Accommodations |
| Visitors from abroad - Country | Date of Arrival | Date of Departure | Remarks |
| Places visited in the past 2 weeks | |

4. LABORATORY DATA

| Specimen | Date collected | Date rec'd | Condition | Test | Result | Date sent | Comment |
| First blood specimen | | | | Virus Isolation | IgM ELISA |
| Second blood specimen | | | | IgG | RT-PCR |

5. ENVIRONMENTAL SURVEY

| Community type | Planned | Unplanned |
| Aedes population: | □ Aegypti | □ Albopictus |
| Water supply: | □ Piped | Stored |
| Solid waste collection: | □ Frequent (at least once weekly) | □ Infrequent |

AEDES INDICES SURROUNDING COMMUNITY:

| Home | Workplace/School |
| Premises index: | |
| Container index: | |
| Breteaux index: | |

INVESTIGATOR:

Name: Signature: Date:

6. Final Case Classification:

| □ Suspected Case | □ Confirmed Case |
| □ Imported | □ Imported |
| □ Autochthonous | □ Autochthonous |
| □ Discarded | |
APPENDIX 3

CONTACT TRACING AND COMMUNITY FEVER SURVEILLANCE

The methodology for community fever surveillance is different based on the epidemiological situation. The following scenarios are considered in this document:

A. Imported Zika fever
B. One Autochthonous Case
C. Cluster of Suspected Zika fever

A. Imported Zika Fever

Imported Zika fever cases (suspected and confirmed) should be investigated and a case investigation completed using the Case Investigation Form as a guide. The investigation is to be reviewed by the Parish Medical Officer of Health (MO(H)) and forwarded to the National Surveillance Unit (NSU)

*Travel Companions:* persons with similar exposure, that is persons who travelled with the case should be followed for at least 12 days (maximum intrinsic incubation period) for the development of symptoms of Zika fever.

*Household Contacts:* household contacts should be followed for at least 22 days (total of the maximum extrinsic and intrinsic incubation period) after the onset of symptoms or after the person returned from overseas.

*School and Work Contacts:* If persons with the diagnosis of Zika fever during the likely period for transmission went to work or school the appropriate officer (nurse, HR Department, Manager, Principal, Guidance Counsellor) should be sensitized to report any new case or reported illness to the Health Department.

*Community:* Households/Premises within a 200m radius from the case should be visited at least eight days after the onset of symptoms. Persons fitting the case definition should have a case investigation form completed at first contact. Blood should be taken from 1 in 10 persons that fit the case definition. That is a case investigation form should be completed for all suspected cases and blood from 1 in 10 of the cases. Community health alert cards should be distributed to each household visited.

The following information should be obtained for each community surveyed:

- Total number of households in the 200m radius
- Number of households visited
- Number of households interviewed
- Number of persons with fever
- Number with fever and joint pain
- Number of community health alert cards distributed
Note Well: The symptoms of Zika fever are non-specific and the following should be considered in the differential:

1. Dengue - often cases fit the definition for Zika virus infection, chikungunya fever and dengue fever.
2. Chikungunya - often cases fit the definition for Zika virus infection, chikungunya fever and dengue fever.
3. Fever and rash persons presenting fitting the case definition for this class 1 notifiable disease and should be investigated on first contact and blood taken (first contact) for all.
4. Malaria
5. Leptospirosis

**Health Alert Card Sample**

**Front**

Community Health Alert Card

To: The Resident
The ********** Health Department is conducting surveilllance for a mosquito borne disease in your area. If you become ill with fever in the next three (3) weeks, please visit your health center or health care provider and present this card.

**Back**

Community Health Alert Card

To: The Physician
The patient presenting this card may have been exposed to a communicable disease. Please contact the Medical Officer of Health for the Parish.

Medical Officer of Health

Address: _________________________

_____________________________

Telephone: ###_####
B. One Autochthonous Case

Zika fever cases (suspected and confirmed) should be investigated and a case investigation completed using the Case Investigation Form as a guide. The investigation is to reviewed by the Parish Medical Officer of Health (MO(H)) and forwarded to the National Surveillance Unit (NSU).

**Household Contacts:** household contacts should be followed for at least 22 days after the onset of symptoms or after the person returned from overseas.

**School and Work Contacts:** If persons with the diagnosis of Zika fever during the likely period for transmission went to work or school the appropriate officer (nurse, HR Department, Manager, Principal, Guidance Counsellor) should be sensitized to report any new case or reported illness to the Health Department.

**Community:** Households/Premises within a 200m radius from the case should be visited at least eight days after the onset of symptoms. Persons fitting the case definition should have a case investigation form completed at first contact. Blood should be taken from 1 in 10 persons that fit the case definition. That is a case investigation form should be completed for all suspected cases and blood for 1 in 10 of the cases. Community health alert cards should be distributed to each household visited.

The following information should be obtained for each community surveyed:
- Total number of households in the 200m radius
- Number of households visited
- Number of households interviewed
- Number of persons with fever
- Number with fever and joint pain
- Number of community health alert cards distributed

**Note Well:** The symptoms of Zika fever are non-specific and the following should be considered in the differential:
1. Dengue — often cases fit the definition for Zika virus infection, chikungunya fever and dengue fever.
2. Chikungunya — often cases fit the definition for Zika virus infection, chikungunya fever and dengue fever.
3. Fever and rash — persons presenting fitting the case definition for this class 1 notifiable disease and should be investigated on first contact and blood taken (first contact) for all.
4. Malaria
5. Leptospirosis
C. Cluster of Suspected Zika Fever

In the event that there is a cluster of cases (2 or more cases) with symptoms suggestive of Zika fever the parish team should investigate as an outbreak. An outbreak report (see outbreak reporting form on pages 16 and 17) should be written and include a line listing, an epidemiological curve for the cases, hypothesis as to the cause and spread and interventions/actions taken or to be taken. The investigation should be reviewed by the MO(H) and forwarded to the NSU.

Example of a Line Listing:

![Line Listing Example](image)

Based on the report received about the cluster a geographical area for community surveillance should be defined. A map of the area and the defined boundaries would be useful for the investigating team and for the reviewing team.

A house-to-house (premises-to-premises) fever surveillance should be conducted in the defined area. Persons fitting the case definition should have a case investigation form completed at first contact. Blood should be taken from 1 in 10 persons that fit the case definition. Please note that a case investigation form is to be completed for all suspected cases and blood taken from 1 in 10 of the suspected cases. Community health alert cards should be distributed to each household visited.

The following information should be obtained for each community surveyed:

- Total number of households in the defined area
- Number of households visited
Given that the symptoms for Zika fever are non-specific and the following conditions should be considered in the differential:

1. Dengue - often cases fit the definition for Zika virus infection, chikungunya fever and dengue fever.
2. Chikungunya - often cases fit the definition for Zika virus infection, chikungunya fever and dengue fever.
3. Fever and rash - persons presenting fitting the case definition for this Class 1 Notifiable Disease and should be investigated on first contact and blood taken (first contact) for all.
4. Malaria
5. Leptospirosis

It is likely that follow-up visits will need to be done in the communities with clusters.
OUTBREAK REPORTING FORM

A. Reporting Details
1. Agency submitting report: ____________________________________________
2. Region: ____________________________________________________________
3. Parish: _____________________________________________________________
4. Name of person submitting report: ____________________________________
5. Contact telephone number: __________________________________________
6. Date this form was completed: ________________________________
7. Is this ☐ a first report or ☐ an updated/amended report?

B. Type of Outbreak
8. ☐ Food-borne ☐ Respiratory
☐ Water-borne ☐ Sexually transmitted infection
☐ Vector-borne ☐ Unknown at this stage
☐ EPI disease ☐ Other, please specify below
9. Was a vehicle/vector/source identified? ☐ Yes ☐ No
10. If yes, please specify:

C. Descriptive Epidemiology (person, place)
11. Number of cases: ☐ Suspected or Probable ☐ Confirmed
12. List number of cases (suspect, probable and confirmed) by age group and gender:

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Male</th>
<th>Female</th>
<th>Unknown</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; 1 year</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 - 4 years</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 - 14 years</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15 - 24 years</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>25 - 44 years</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>45 - 64 years</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>65+ years</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Unknown</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Total</td>
<td></td>
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</tbody>
</table>

13. Was the whole country affected? ☐ Yes ☐ No
14. If no, describe the areas affected: ________________________________

D. Clinical Details
16. Common Symptoms/Syndromes (check all that apply)
☐ Nausea ☐ Vomiting
☐ Diarrhea ☐ Abdominal cramps
☐ Fever ☐ Rash
☐ Respiratory symptoms ☐ Hemorrhagic symptoms
☐ Genital ulcer ☐ Genital discharge
☐ Neurological symptoms ☐ Headache
☐ Other, specify:

17. Number of cases hospitalized: _________
    (including cases that died)
18. Number of cases that died: _________
    (including cases hospitalized)

19. Incubation period (circle appropriate units)
    Average: _________ hours / days
    Range: _________ hours / days - _________ hours / days
20. Duration of illness (circle appropriate units)
    Average: _________ hours / days
    Range: _________ hours / days - _________ hours / days

E. Case Summary (time)
21. Please record number of cases per unit time (attach epi curve). Record time interval as:
    - Month (i.e. Jan 04, Feb 04, Mar 04), or
    - Epidemiological week (i.e. 23, 24, 25), or
    - Day (record as exact date, i.e. 23/06/04)

<table>
<thead>
<tr>
<th>Time Interval</th>
<th>Number of Susceptible/Probable Cases</th>
<th>Number of Confirmed Cases</th>
</tr>
</thead>
</table>

17
OUTBREAK REPORTING FORM

**F. Etiology**

22. Was a primary causative pathogen identified in the outbreak? □ Yes □ No
23. If yes, please specify the name and subtype (if known) of the pathogen

**G. Clinical Specimens** (*e.g. stool, blood, urine, nasal aspirate, etc*)

<table>
<thead>
<tr>
<th>Type of Specimen</th>
<th>Number Tested</th>
<th>Number Positive</th>
<th>Etiologic Agent</th>
<th>Subtype 1</th>
<th>Subtype 2</th>
<th>Antimicrobial Resistance Profile</th>
</tr>
</thead>
<tbody>
<tr>
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**H. Food or Environmental Specimens** (*e.g. ground beef, raw chicken, water, surface swab, etc*)

<table>
<thead>
<tr>
<th>Type of Specimen</th>
<th>Number Tested</th>
<th>Number Positive</th>
<th>Etiologic Agent</th>
<th>Subtype 1</th>
<th>Subtype 2</th>
<th>Antimicrobial Resistance Profile</th>
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**I. Results of an epidemiological study**

26. What type of epidemiological study was conducted?
   □ Cohort study □ Other, please specify
   □ Case Control Study □ No epidemiological study was conducted
27. If a cohort study was conducted, what was the overall attack rate? __________ %
   (note, attack rate = [number ill/total persons at risk] × 100)
28. If a cohort or case control study was conducted, please complete the following table

<table>
<thead>
<tr>
<th>Risk Factor</th>
<th>Odds Ratio or Relative Risk</th>
<th>95% Confidence Intervals</th>
<th>p-value</th>
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